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Article

Unconscious Bias in Citizens' Evaluations of Public Sector Performance

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Abstract

The premise of our article is that repeated exposure to antipublic sector messages affects the way people evaluate the performance of public sector organizations. More specifically, we argue that individuals' *implicit* attitudes regarding public sector organizations are biased: Citizens *automatically* and *unconsciously* associate public sector organizations with inefficiency, inflexibility, and other pejoratives, and these automatic associations color their assessments of public sector performance. Implicit antipublic sector bias has important theoretical implications. It may help to explain whether, and to what degree, individuals respond favorably to positive public sector performance information. More specifically, it suggests that individuals' evaluations of government performance will be weighed down by their deep-seated, unconscious views of the public sector; that the effect of information on individuals' performance evaluations will be short-lived; and that individuals' underlying beliefs about public sector performance will be difficult to change. We design three survey experiments to investigate these propositions, focusing on individuals' evaluations of United States Postal Service (USPS) performance. We find evidence for each proposition.

Public administration scholars have long noted that popular, political, and academic discourses in the United States portray public sector organizations and their employees negatively (see, e.g. Goodsell 2004; Hall 2002; Milward and Rainey 1983; Rainey and Bozeman 2000; Van de Walle 2004). In contemporary American culture, "Government organizations, or bureaucracies, have virtually an archetypical status as cumbersome, bungling entities" (Rainey and Steinbauer 1999, 2). Goodsell (2004) argues that exposure to this negativity begins in childhood and continues unceasingly into adulthood:

> We Americans are taught throughout our lives, from hearth and home on through school and career, that our government is a sea of waste, a swamp of incompetence, a mountain of unchecked power, an endless plain of mediocrity. Our media and politicians tell us that public bureaucracy is bloated in size, inefficient compared to business, a stifling place to work, indifferent to ordinary citizens, the problem rather than the solution (25).

From birth to death, the idea that public sector organizations are inefficient, wasteful, and inferior to private sector organizations is consistently drilled into Americans' heads.

The premise of our article is that repeated exposure to antipublic sector messages affects the way people evaluate the performance of public sector organizations. More specifically, we argue that individuals' *implicit* attitudes regarding public sector organizations are biased: Citizens *automatically* and *unconsciously* associate public sector organizations with inefficiency, inflexibility, and other pejoratives, and these automatic associations color their assessments of public sector performance (we will discuss implicit attitudes in more detail below. Here, we note that they exist outside of conscious awareness, are deeply ingrained, and

are typically contrasted with explicit attitudes, which are the product of conscious deliberation). We use the word bias to emphasize that individuals' attitudes about public sector performance tend to be negative even as public sector organizations tend to perform quite well (Goodsell 2004, 2013).

Implicit antipublic sector bias has far-reaching practical implications for public administration. Reflexively negative views of government performance can hamper the recruitment and retention of talented public sector employees (Chetkovich 2003; Garrett et al. 2006); they can breed citizen cynicism and disengagement (Berman 1997); and, to the extent that they make the collection of tax revenue politically unpopular, can lead to resource constraints for public sector organizations. Implicit antipublic sector bias also has important theoretical implications. In general, it may help to explain whether, and to what degree, individuals respond favorably to positive public sector performance information. More specifically, it suggests that individuals' evaluations of government performance will be weighed down by their deep-seated, unconscious views of the public sector; that the effect of information on individuals' performance evaluations will be short-lived; and that individuals' underlying beliefs about public sector performance will be difficult to change.

We design three survey experiments to test the above propositions. In each of these experiments, we use a method that is frequently employed in psychology—the Implicit Association Test or IAT—to measure individuals' implicit attitudes about the United States Postal Service (USPS).[1] In our first experiment, we examine whether the provision of favorable USPS performance information attenuates the degree to which individuals' implicit attitudes taint their evaluations of USPS performance. Put differently, we examine whether performance information overrides individuals' implicit attitudes in the evaluative process. In our first experiment, we also examine whether performance information has a short- or long-lasting effect on individuals' performance evaluations. In our second experiment, we examine whether USPS advertising overrides individuals' implicit attitudes. Typically, survey experiments focusing on the provision of public sector performance information have provided subjects with discrete pieces of information, such as graphs, pictures, or numbers (e.g. James 2011; Van Ryzin and Lavena 2013). To our knowledge, no published experimental research bears on the question of whether government advertising affects individuals' evaluations of government performance. In our third and final experiment, we examine whether performance information and USPS advertising can change individuals' implicit attitudes. Given that implicit attitudes are deeply ingrained, we expect that this will be unlikely.

Below, we define implicit attitudes and develop hypotheses regarding their influence on individuals' evaluations of public sector performance. We then describe our survey experiments and the data used in our analyses. After presenting our results, we close the paper with a discussion of our findings' practical and theoretical implications and with suggestions for future research.

IMPLICIT ATTITUDES

What Are They and Where Do They Come From?

Implicit attitudes are automatic, spontaneously activated mental associations of a target concept with feelings (positive or negative) or traits—for instance, the automatic mental association of government with waste and inefficiency. They exist outside of conscious awareness and are not accessible to introspection; consequently, they cannot be measured using standard social science methods, such as survey questionnaires (Greenwald and Banaji 1995; Lane et al. 2007). Implicit attitudes can refer to general attitude objects (e.g. the public sector, food) or specific attitude objects (e.g. the USPS, Dannon yogurt). They are typically contrasted with explicit attitudes, which are the product of deliberate, controlled thought processes. Though social science research has traditionally focused on explicit attitudes, some psychologists argue that most human cognition is implicit (see, e.g. Bargh and Chartrand 1999). As Freud famously noted, "The mind is like an iceberg; it floats with one-seventh of its bulk above the water."

There is no consensus among psychologists about where implicit attitudes come from; however, one theory is that they are influenced by prevailing cultural beliefs (Arkes and Tetlock 2004; Karpinski and Hilton 2001; Olson and Fazio 2004; Rudman 2004). Karpinski and Hilton (2001) suggest, for instance, that implicit attitudes reflect "environmental associations," or "associations a person has been exposed to in his or her environment" (776). Similarly, Rudman (2004) identifies "cultural biases" as an antecedent of implicit attitudes (80). Arkes and Tetlock (2004) point to "shared cultural stereotypes" as sources of these attitudes (263). More generally, as Nosek and Banaji (2009) note, "Implicit attitudes are thought to derive from the basic mental operations of seeing relationships between concepts and evaluations in everyday experience and accumulating those associations into summary assessments" (84). Given that prevailing cultural beliefs about the public sector and its constituent organizations are negative, we expect that individuals'

1 For an introduction to the IAT, see Lane et al. (2007).

implicit attitudes regarding the USPS will be negative (see, e.g. Fox 1996; Goodsell 2004, 2014; Van de Walle 2004).

Implicit Attitudes Influence Explicit Attitudes

Empirical research suggests that individuals' implicit attitudes influence their explicit attitudes and their decision-making, including their explicit attitudes regarding public policies and their political decision-making. Pérez (2010) has shown, for instance, that individuals' implicit attitudes about Latino immigrants predict their support for various immigration policies. In the realm of political decision-making, Arcuri et al. (2008) have shown that implicit preferences for political candidates are associated with individuals' actual vote choices. More recently, Hawkins and Nosek (2012) demonstrate that individuals' implicit party identification predicts their preferences for liberal versus conservative welfare policies. Importantly, individuals' implicit attitudes influence their stated policy preferences and their political decision-making unconsciously. As Pérez (2010) notes, implicit attitudes "lurk in our subconscious, ready to color our judgments without our control or awareness" (517). Our first hypothesis tests whether this is the case for the USPS:

> H1: Individuals' implicit attitudes about the United States Postal Service will factor into their evaluations of Postal Service performance.

For public administration, the potential influence of implicit attitudes in the evaluative process has a troubling implication; namely, that individuals' explicit evaluations of public sector performance—even good performance—will be weighed down by antipublic sector feelings that are deeply ingrained.

Does Favorable Performance Information Supersede Implicit Attitudes in the Evaluative Process?

In addition to acting as a direct influence on explicit attitudes, implicit attitudes affect explicit attitudes by distorting the manner in which individuals process information (Galdi, Arcuri, and Gawronski 2008; Gawronski, Geschke, and Banse 2003; Hugenberg and Bodenhausen 2003). Individuals may, for instance, (unconsciously) seek out and emphasize information that confirms their prior beliefs while downplaying or ignoring information that is at odds with those beliefs. In the context of our study, this suggests that favorable public sector performance information will not supplant individuals' implicit attitudes in the evaluative process, since individuals will discount favorable performance information that is inconsistent with implicit antipublic sector attitudes. Instead, implicit antipublic sector attitudes will continue to weigh down individuals' evaluations of public sector performance even when individuals are confronted with favorable performance information.

On the other hand, research in public administration suggests that favorable performance information *will* supersede—or at least will attenuate—the influence of implicit attitudes in the evaluative process. This research, which shows that individuals' assessments of government performance are more favorable for specific attitude objects (e.g. the local police department) than general attitude objects (e.g. local government), indicates that individuals do factor positive performance information into their evaluations of specific organizations' performance (see, e.g. Goodsell 2004; Poister and Henry 1994; Willis-Walton and Bayer 2003). Contrary to prevailing stereotypes, government agencies tend to perform quite well, and individuals' evaluations of specific agencies' performance appear to acknowledge this. When confronted with favorable performance information, individuals *do not* appear to completely ignore or discount it in the evaluative process.

The preceding reasoning motivates our second hypothesis:

> H2: Favorable performance information will attenuate, though not completely eliminate, the influence of implicit antipublic sector attitudes in the evaluative process.

The magnitude of this attenuation is important. If it is small, we would infer that the pull of implicit antipublic sector attitudes on individuals' performance evaluations is insistent and difficult to counter. If large, we would have evidence that favorable performance information can mute the impact of implicit antipublic sector attitudes on individuals' evaluations of public sector performance.

Can Performance Information Change Implicit Attitudes?

Implicit attitudes are thought to be more durable and less malleable than explicit attitudes (Gregg, Seibt, and Banaji 2006; Hanson and Yeboah 2012; Joy-Gaba and Nosek 2010; Smith, Dijksterhuis, and Chaiken 2008; Wilson, Lindsey, and Schooler 2000). They have been characterized as "well-crystallized," "stable," and "intractable" (Albertson 2011, 112; Ma-Kellams, Spencer-Rodgers, and Peng 2011; Pérez 2010, 519). Moreover, they are believed to have "old roots" that are "continually reinforced" (Albertson 2011, 112). Consequently, there is reason to expect that favorable public sector performance information will not alter individuals' implicit attitudes. Instead, individuals' negative implicit attitudes are likely to persist in memory and are therefore likely to persist in coloring their evaluations of public sector performance.

Wilson, Lindsey, and Schooler (2000) offer the following analogy to illustrate how implicit attitudes endure even as explicit attitudes change:

> Consider an experienced female tennis player who has a well-learned way of serving the ball. Her serve has become automatic; she consistently executes it with little thought during a match. In an effort to strengthen her game, she takes some lessons and learns to position her elbow differently and to snap her wrist more forcefully while serving. With practice, the tennis player learns the new serve and is able to use it in her next match, as long as she pays close attention and reminds herself of what she has learned. The new serve, however, has not fully replaced the old one. Well-ingrained habits are hard to overcome, and when she is tired or engrossed in the heat of the match, she serves the ball the old way (104).

In our view, implicit antipublic sector attitudes are like a well-learned tennis serve. They are habitual and are therefore difficult to displace.

The above line of reasoning has two empirical implications, which we list below as hypotheses 3 and 4.

> H3: The impact of favorable performance information on individuals' explicit evaluations of public sector performance will be short-lived.
>
> H4: Favorable performance information will not change individuals' implicit attitudes.

Again, both of these hypotheses have troubling implications for how individuals evaluate public sector performance. Each suggests that using information to bring about a long-term brightening of individuals' attitudes regarding the public sector will be ineffective.

Before proceeding, it is important to emphasize that we are not working with a well-established theoretical definition of the term "short-lived." Extant theories of public opinion are not specific about the potential duration of information effects, nor are there any preexisting panel experiments in this area to guide us. In this regard, our panel experiments are exploratory and might be viewed as an initial attempt at establishing a lower limit for the duration of these effects. Until theory offers stronger guidelines about the duration of these effects, we think it is useful to view the term "short-lived" as analogous to the economic term "short run." Though not typically assigned a specific duration in economics texts, this term usually denotes economic behavior or events that unfold over a period of time that a reasonable/knowledgeable observer would consider short. While we do not specifically define the term short-lived, we think reasonable/knowledgeable observers would consider the time-lags we use in our panel experiments to be brief.

RESEARCH DESIGN

Experimental Structure

We use three survey experiments to test our hypotheses. In certain respects, these three experiments are the same. They all measure subjects' implicit attitudes about the USPS using the IAT, which we will shortly describe. Additionally, they all include an information manipulation of some kind. They differ in the type of IAT they use, in the information manipulations they employ, and in their outcome variables. Our three experiments are depicted in figure 1.

In experiments I and II, subjects begin by taking an IAT. Subjects are then randomly assigned to a treatment or control group. In experiment I, there are two groups—*information* (treatment) and *no information* (control). In experiment II, there are three groups—*information*, *no information*, and *advertising*. Subjects in the *information* groups are told that the USPS package delivery success rate is 96%, a figure that is realistic.[2] Subjects in the *no information* groups are told nothing. Subjects in experiment II's *advertising* group are shown a 1-min television commercial that emphasizes the USPS commitment to high-quality service and customer satisfaction (the commercial's tagline is "Our priority is you").[3] All subjects then provide a performance evaluation by answering a simple ratings question: "How would you rate the performance of the United States Postal Service?" Subjects respond on a 7-point scale, where 1 refers to low performance and 7 refers to high performance.

It is important to note that experiment I, unlike experiment II, has a longitudinal dimension. In experiment I, subjects are randomly assigned to provide a performance rating at either time 1 ($t1$) or time 2 ($t2$). Time 1 individuals evaluate Postal Service performance immediately after receiving performance information, while time 2 individuals evaluate Postal Service performance after a lag of 2 days. The purpose of experiment

2 While package delivery success rates (i.e. the percentage of packages that are delivered on time) vary over time and across space, these rates are consistently in the range of 88%–96% for the USPS. See http://about.usps.com/what-we-are-doing/service-performance/welcome.htm for recent quarterly performance data, broken down by place and by parcel type. Previous research by the authors suggests that subjects will perceive a 96% success rate to be high. In this research, we asked approximately 1,600 US adults to guess the Postal Service's package delivery success rate. The average of their guesses was about 77%.

3 Readers can view the commercial at https://www.youtube.com/watch?v=UGPsAX-n1dI. Many Postal Service commercials are either seasonal (e.g. those airing near Christmas), focus on particular products (e.g. flat-rate Priority Mail shipping), or have cross-industry promotional tie-ins (e.g. Postal Service commercials in which clips from *The Amazing Spiderman* movie appear). We selected a commercial with a general, nonseasonal theme to avoid idiosyncratic subject responses (some subjects may strongly dislike Christmas; others may strongly dislike *The Amazing Spiderman*).

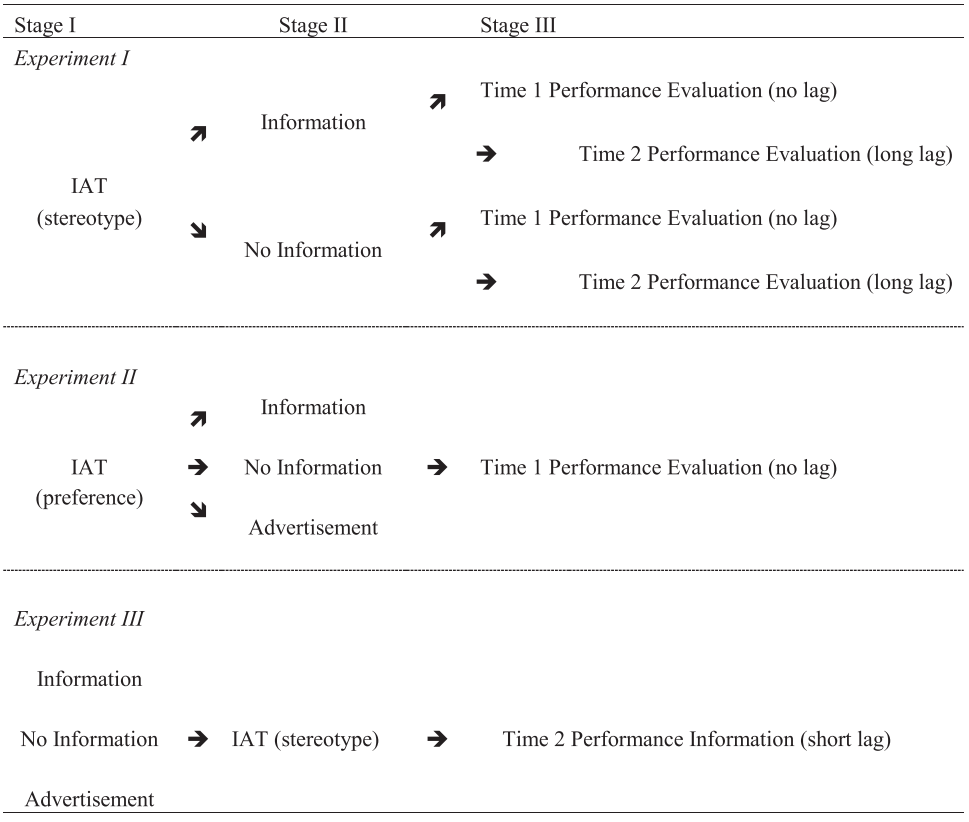

Figure 1. Experimental Design. *Note: No lag* subjects evaluate performance immediately after receiving information or advertising. *Short lag* subjects evaluate performance approximately 5–7 min after receiving information or advertising. *Long lag* subjects evaluate performance approximately 2 days after receiving information or advertising.

I's longitudinal component is to assess whether our information treatment persists over time.

Experiment III is designed to test whether individuals' implicit public sector attitudes are malleable; therefore, it treats these attitudes as an outcome variable. Subjects are first randomly assigned to either an *information* group, a *no information* group, or an *advertising* group. Subjects then complete an IAT.

Experiment III also has a longitudinal dimension that is incidental to its main objective. Since the IAT typically takes subjects about 5–7 min to complete, we thought it could serve a useful secondary purpose by imposing a short time-lag between our information and advertising treatments and subjects' performance evaluations. Therefore, we designed experiment III so that subjects would provide explicit performance evaluations immediately after completing the IAT. In providing their performance evaluations immediately after the IAT, subjects are providing performance evaluations 5–7 min after receiving our treatments. This allows us to test whether our information and advertising treatments persist over a relatively brief period of time, as opposed to the longer time-lag that is built into experiment I.

The IAT: An Overview

The IAT is designed to measure automatic associations between two concept categories and two attribute categories (Greenwald, McGhee, and Schwartz 1998). It is a timed sorting task in which individuals are instructed to correctly classify items from each of the four categories as quickly as possible. The IAT is usually taken on a computer, and so individuals classify items by pressing a key that has been assigned to a category. To get a feel for how the IAT is administered, readers can navigate to https://implicit.harvard.edu/implicit/ and experience an IAT for themselves.

An IAT's two concept categories can be anything that a researcher is interested in, though they typically oppose each other in some theoretically relevant way. Examples include *Black people* and *White people*; *Coke* and *Pepsi*; and *Bush* and *Gore*. Typically, an IAT's attribute categories denote opposing valences. Common attribute categories are *good* and *bad*, *pleasant* and *unpleasant*, *positive* and *negative*, and *favorable* and *unfavorable*. Each of an IAT's four categories is represented by a group of items; these items can be words, pictures, or phrases. Suppose, for example, we were interested in measuring individuals' implicit attitudes about flowers and insects. In this scenario, *flower*

and *insect* would be our two concept categories. Items representing the flower category might include the words rose, lily, and carnation; items representing the insect category might include the words ant, mosquito, and beetle. Further, assume that our two attribute categories are *good* and *bad*. Items representing the *good* category might be the words happy, glorious, and joy; items representing the *bad* category might be the words nightmare, agony, and prison.

An IAT is composed of seven rounds, or blocks. In the first block, individuals are instructed to rapidly classify items representing the two concept categories. Typically, a keyboard's "E" key is assigned to one category and its "I" key to the other—here, "E" might be assigned to flower and "I" to insect. A randomly drawn item flashes onto subjects' computer screens (say, "rose"), and subjects are supposed to quickly classify that item (here, by pressing the "E" key). Once the first item is correctly classified, a second item appears. Subjects classify 20 items before moving to the second block.

The crucial parts of the IAT are blocks 3, 4, 6, and 7. In these blocks, concept categories are paired with attribute categories—*flower with good* and *insect with bad* in blocks 3 and 4; *insect with good* and *flower with bad* in blocks 6 and 7. In this example, *flower/good* and *insect/bad* are theoretically matched pairs—we expect that individuals will have positive implicit attitudes about flowers and negative implicit attitudes about insects. In block 3 of the example IAT, the "E" key would now be assigned to *flower* and *good*; the "I" key would now be assigned to *insect* and *bad*. Items representing the four categories would flash onto the screen and subjects would again classify them by pressing the correct key. Now, however, subjects would have to press the "E" key if the flashed item represented *either the flower category or the good category*; conversely, subjects would have to press the "I" key if the flashed item represented *either the insect category or the bad category*.

The core logic of the IAT is that in blocks 3, 4, 6, and 7, it should be easier for subjects to quickly classify items from matched pairs than items from mismatched pairs, since matched pairs are strongly associated in memory and mismatched pairs are weakly associated in memory. Consequently, response times on an IAT's matched tasks should be shorter than response times on its mismatched tasks. If response times on matched tasks are in fact shorter than response times on mismatched tasks, implicit attitudes are inferred. In the example IAT, shorter response times on matched tasks would constitute evidence of positive implicit attitudes about flowers and negative implicit attitudes about insects.

It is important to note that the IAT can be constructed to measure implicit preferences or implicit stereotypes. "Preference IATs" typically use the valenced attribute categories noted above, such as *good* and *bad*, *positive* and *negative*, and *favorable* and *unfavorable*. "Stereotype IATs" use, instead of valenced attribute categories, trait categories that embody theoretically relevant stereotypes. For example, Nosek, Banaji, and Greenwald (2002) use the trait categories *science* and *liberal arts* alongside the concept categories *female* and *male* to show that individuals automatically associate females with liberal arts and males with science. Similarly, they use the trait categories *career* and *family* to show that individuals automatically associate males with career and females with family. In experiment I, we use public sector stereotypes as trait categories. In experiment II, we use a standard preference IAT in which *good* and *bad* serve as valenced attribute categories. In experiment III, we use the same stereotype IAT as in experiment I.

Antipublic Sector Bias: An IAT

The two concept categories for both of our IATs are the USPS and FedEx, a prominent private sector shipper and therefore a natural foil for the USPS. The items representing these concept categories are pictures (five per category), which are shown in our online supplementary appendix. In our stereotype IAT, the two trait categories are *fast* and *slow*. The items representing the *fast* category are the words quick, speedy, rapid, rocket, and cheetah; the items representing the *slow* category are the words sluggish, delayed, gradual, snail, and turtle.[4] In our preference IAT, the two valenced attribute categories are *good* and *bad*, which are commonly used attribute categories in research on implicit attitudes. The items representing the *good* category are the words wonderful, happy, joyful, laughter, and love; the items representing the *bad* category are the words awful, nasty, terrible, horrible, and nightmare.

In our stereotype IAT, USPS is matched with *slow* and FedEx is matched with *fast*. We presume that individuals automatically associate the Postal Service with *slow* pejoratives. Consequently, we expect to observe shorter response times when USPS is matched with *slow* (and FedEx is matched with *fast*) than when USPS is matched with *fast* (and FedEx is matched with *slow*). It is important to note that we counterbalance our IAT—the order of the matched and mismatched tasks

[4] We focus on the trait categories *fast* and *slow* because public sector stereotypes often emphasize the unhurried pace of government operations. Perhaps the most commonly used antipublic sector pejorative is "inefficient," a term whose dictionary definition includes "wasting or failing to make the best use of time" (see the online Oxford English Dictionary). In fact, the online Oxford English Dictionary's usage example actually assails government: "The *government* was both *inefficient* and corrupt" (italics ours). Additionally, speed is a salient consideration when it comes to evaluating organizations that ship packages. It is therefore reasonable to assume that whatever mental associations individuals harbor about the USPS involve this trait.

is randomized. Some individuals perform the USPS/slow (FedEx/fast) matched task first; others perform the USPS/fast (FedEx/slow) task first.

In our preference IAT, USPS is matched with *bad* and FedEx is matched with *good*. Since we presume that individuals' implicit attitudes regarding the public sector are negative, we expect to observe shorter response times when USPS is matched with *bad* (and FedEx is matched with *good*) than when USPS is matched with *good* (and FedEx is matched with *bad*). We again counterbalance the order in which subjects complete our matched and mismatched tasks.

Data

For each of three experiments, we recruited subjects via Amazon's Mechanical Turk (MTurk),[5] an online labor market in which people receive small payments in return for participating in market research, academic surveys, and related work (the sample sizes for these experiments are 400, 300, and 299, respectively. Each sample is unique—that is, we did not allow subjects to participate in more than one experiment). While our three samples are nonrandom and therefore not representative of the US population (or any pre-specified population, for that matter), MTurk samples tend to be more demographically diverse and representative than other nonrandom samples, such as those composed of college students. Moreover, scholars have replicated key experimental findings from political science and social psychology using MTurk samples, suggesting that these samples produce valid estimates in the context of survey experiments (Berinsky, Huber, and Lenz 2012; Buhrmester, Kwang, and Gosling, 2011). Importantly, we are interested in estimating causal effects, not descriptive population parameters, and so a descriptively representative sample is not crucial to our study's generalizability. Nevertheless, it is important to consider how the causal effects we are interested in estimating might vary across different subgroups. The specific question we must ask about our study's external causal validity is the following: Is it reasonable to expect that some individuals will respond differently to our experimental treatments than other individuals? It strikes us as plausible that individuals' responses could be contingent on their beliefs about the credibility of the performance information they are presented with. Thus, the question becomes the following: Which subgroups are likely (or unlikely) to view favorable performance information about the USPS as credible?[6]

In general, Republicans and political conservatives tend to express more negativity about government than Democrats and political liberals (Jost, Federico, and Napier 2009); it is plausible that this negativity could be correlated with whether individuals view performance information from a government organization as credible. Recent research in the area of expectations management seems to support this presumption, suggesting as it does that individuals respond differently to public sector performance information depending on their partisan affiliations (Van Ryzin 2013). Recent research also suggests that income, education, and government distrust are associated with skepticism about government-provided performance information (Van Ryzin and Lavena 2013). Finally, it is reasonable to assume that frequent prior interactions with a particular public sector organization might affect whether individuals view information about that organization as credible. In our case, individuals who frequently patronize the Postal Service (for instance, by using its various package delivery services) may be predisposed to view favorable information about it as credible. By contrast, individuals who rarely patronize the Postal Service may be predisposed to discount favorable information. In view of these possibilities, we estimate a series of *treatment* × *moderator* interactions, one for each of the potential moderators referenced above.[7] Descriptive statistics for our three samples are given in table 1.

As is typical with MTurk samples, our subjects tend to be male, White, educated, Democratic, and liberal. Our IAT score descriptives are of particular interest. It is important to note that a positive IAT score indicates unfavorable implicit attitudes about the USPS, whereas a negative IAT score indicates favorable implicit attitudes. This is because IAT scores are computed by subtracting the mean of individuals' response times on matched tasks from the mean of individuals' response times on mismatched tasks[8]: IAT score = Mismatched mean time – Matched mean time. Matched response times are expected to be shorter because it should be easier for individuals to sort IAT items into categories that *are associated* strongly in memory—such as USPS and slow. Mismatched response times are expected to be longer because it should be more difficult for

[5] For more information, visit https://www.mturk.com/mturk/welcome.

[6] Inasmuch as implicit attitudes capture individuals' preexisting beliefs about the public sector, they may reflect whether individuals are inclined to view favorable performance information as credible. Consequently, our study indirectly addresses this question.

[7] We also examine whether geographic region moderates individuals' responses to performance information. All moderator results appear in our online supplementary appendix. We find evidence that prior use, education, and region moderate the effect of information on performance ratings.

[8] We use the algorithm developed by Greenwald, Nosek, and Banaji (2003) to compute IAT scores. This algorithm is more complex than the simple difference calculation noted above, but the essence of the IAT is a comparison between the time taken to complete matched tasks and the time taken to complete mismatched tasks.

Table 1. Descriptive Statistics

	Experiment I		Experiment II		Experiment III	
	Mean	SD	Mean	SD	Mean	SD
IAT score	0.13	0.43	-0.17	0.41	0.10	0.38
Age	34.01	12.45	31.40	10.60	34.1	12.5
	Frequency	%	Frequency	%	Frequency	%
Gender						
Male	231	57.8	187	62.3	153	51.2
Female	169	42.3	113	37.7	146	48.8
Education						
Less than high school	1	0.3	0	0.0	1	0.3
High school/GED	39	9.8	28	9.3	39	13.0
Some college	124	31.0	105	35.0	86	28.8
2-year college degree	50	12.5	46	15.3	32	10.7
4-year college degree	150	37.5	87	29.0	98	32.8
Postgraduate	36	9.0	34	11.3	43	14.4
Race						
White	324	81.0	225	75.0	237	79.3
African-American	18	4.5	22	7.3	29	9.7
Hispanic	26	6.5	20	6.7	8	2.7
Asian-American	25	6.3	25	8.3	18	6.0
Native American	0	0.0	1	0.3	2.0	0.7
Pacific Islander	4	1.0	1	0.3	0	0
Other	3	0.8	6	2	5	1.7
Party ID						
Democrat	181	45.3	144	48.0	125	41.8
Republican	53	13.3	43	14.3	57	19.1
Independent	142	35.5	97	32.3	106	35.5
Other	24	6.0	16	5.3	11	3.7
Ideology						
Extremely liberal	47	11.8	38	12.7	27	9.0
Liberal	104	26.0	61	20.3	71	23.7
Slightly liberal	87	21.8	71	23.7	51	17.1
Moderate	67	16.8	64	21.3	76	25.4
Slightly conservative	47	11.8	27	9.0	32	10.7
Conservative	29	7.2	22	7.3	31	10.4
Extremely conservative	8	2.0	7	2.3	9	3.0
Haven't thought much about it	11	2.8	10	3.3	2	0.7
Income						
Less than $50,000	—	—	233	77.7	212	70.9
$50,000–$100,000	—	—	50	16.7	76	25.4
More than $100,000	—	—	17	5.7	11	3.7

Note: $N = 400$ for experiment I; $N = 300$ for experiment II; and $N = 299$ for experiment III. We did not collect income data in experiment I.

individuals to sort IAT items into categories that *are not associated* strongly in memory—such as USPS and fast.

As table 1 shows, it was in fact easier for subjects to sort items when USPS was matched with *slow* than when it was mismatched with *fast*. The mean IAT scores for our first and third experiments, in which subjects completed a "Stereotype IAT," are 0.13 and 0.10, respectively. To put these means in context, it is useful to consider scores that have been compiled from previously validated IATs. Nosek et al. (2007) present data from 17 IATs taken by hundreds of thousands of individuals. The highest mean IAT score is 0.49 (for an IAT about age attitudes), while the lowest is (in absolute value) 0.07 (for an IAT about Presidential attitudes). Juxtaposed with these figures, our own mean IAT scores of 0.13 and 0.10 are relatively low. On average, the subjects in our first and third experiments exhibit weakly negative implicit stereotypic attitudes about the Postal Service. By contrast, the mean IAT score among subjects who participated in our second experiment, which featured a "Preference IAT,"

is –0.17, indicating implicit preferences *for* the Postal Service. We emphasize that these descriptive findings come from three convenience samples, and so we cannot draw any generalizable conclusions from them. Nevertheless, that our three samples are composed predominantly of Democrats and ideological liberals suggests that we are more likely to underestimate than overestimate implicit antipublic sector bias, if it exists. Consequently, we consider our descriptive results to be conservative in the sense that they are unlikely to generate false positives.

RESULTS

Before proceeding to a formal statistical analysis of our data, it is useful to examine subjects' mean performance evaluations for all three of our experiments. Doing so should provide readers with an initial feel for how our experimental manipulations affect subjects' evaluations of USPS performance. Recall that in each of our experiments, all subjects answer the following question: "How would you rate the performance of the United States Postal Service?" Response options range from 1 (low performance) to 7 (high performance). Figure 2 plots the mean performance rating for all of our experimental groups, of which there are 10 in total.

A couple of findings are worth noting. First, subjects who receive favorable performance information and evaluate Postal Service performance at time *t*1—that is, immediately after receiving the information—tend to provide the highest performance ratings: Figure 2's two tallest peaks are for groups 2 and 6 (counting from the left). The next highest mean rating is for group 7, which is made up of subjects who watched a 1-min USPS commercial and evaluated Postal Service performance at time *t*1. Importantly, information and advertising appear to have positive short-run effects on subjects' performance ratings: figure 2's *information t1* and *advertising t1* group means are markedly higher than their respective *no information t1* group means. In experiment I, for example, the *information t1* group mean is just under 5.5, while the *no information t1* group mean is about 4.9. The 0.6 units that separate these two means represent a difference of approximately 12.2%.

Second, information and advertising do not appear to have long-run—or even medium-run—effects on subjects' performance ratings. Among subjects who evaluate USPS performance at time *t*2, there are trivially small differences between those who receive information or watch a USPS commercial and those who do not. In experiment I, the *no information t2* and *information t2* group means are both between 4.8 and 4.9. In experiment II, the three *t2* group means are similarly close together. In fact, experiment II's *information t2* and *advertising t2* group means are lower than experiment II's *no information t2* group mean. Recall that in experiment I, we use a time-lag of 2 days; in experiment II, we use a time-lag of approximately 5–7 min. It appears, then, that information and advertising effects dissipate very quickly. With these findings as a reference point, we now move to a systematic review of our hypothesis tests.

H1: Individuals' Implicit Attitudes About the United States Postal Service Will Factor Into Their Evaluations of Postal Service Performance

We begin by testing whether individuals' implicit public sector attitudes color their judgments of public sector performance. To do so, we regress individuals' performance ratings on their IAT scores. If individuals' implicit public sector attitudes do factor into their evaluations of public sector performance, we should

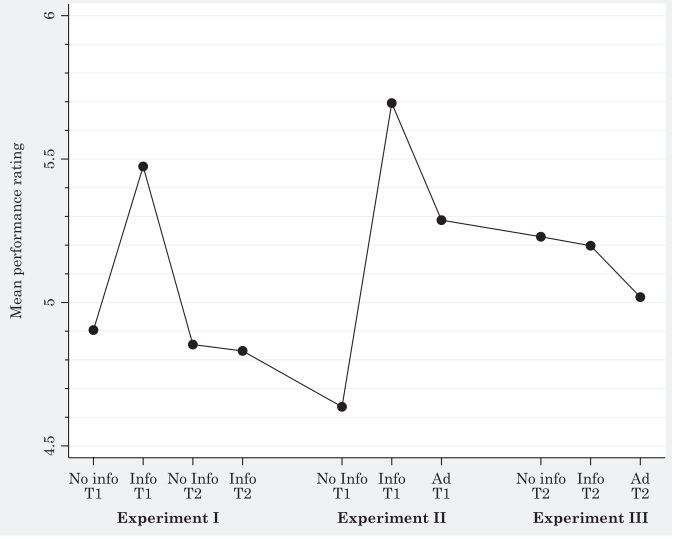

Figure 2. Mean Performance Ratings, by Experiment and Experimental Group.

observe a negative coefficient for the IAT score variable. This would indicate that as individuals' implicit public sector attitudes become more unfavorable (recall that a positive IAT score reflects negative implicit public sector attitudes), their performance evaluations also become more unfavorable. Results appear in table 2.

Implicit attitudes are associated with individuals' USPS performance evaluations in all three of our samples. In our first sample, the estimated IAT coefficient is –0.35, indicating that a 1 unit increase in IAT scores is associated, on average, with a decrease in performance ratings of 0.35 units (to get a feel for the magnitude of this result, consider that the mean performance rating of all experiment I subjects is 5.03. A decrease of 0.35 units in this mean would represent a reduction of about 7%). The estimated coefficients for our second and third samples are larger. In our second sample, a 1 unit increase in IAT scores is associated, on average, with a decrease in performance ratings of 0.63 units. In our third sample, a 1 unit increase in IAT scores is associated, on average, with a decrease in performance ratings of 0.44 units. The mean performance ratings for our second and third samples are 5.16 and 5.14, respectively, and so in percentage terms, decreases of 0.63 and 0.44 units would represent mean-anchored changes of about 12.2% and 8.6%, respectively. The practical implication of these findings is that individuals' unconscious attitudes about the USPS weigh down, or taint, their evaluations of Postal Service performance—performance that is, in the real world, objectively quite good.

H2: Favorable Performance Information Will Attenuate, Though Not Completely Eliminate, the Influence of Implicit Antipublic Sector Attitudes in the Evaluative Process

As discussed in our theory section, individuals' implicit attitudes distort the way they process information. In general, individuals tend to discount new data that is inconsistent with their prior beliefs. In the context of our study, this suggests that favorable performance information about the USPS will not completely eliminate the influence of individuals' implicit antipublic sector attitudes in the evaluative process. On the other hand, people do appear to acknowledge good public sector performance when they experience it firsthand. After all, individuals tend to rate their experiences with specific government agencies positively. This suggests that performance information *does* attenuate the influence of implicit antipublic sector attitudes in the evaluative process.

To test whether (and to what extent) favorable performance information attenuates the influence of implicit attitudes in the evaluative process, we regressed subjects' performance ratings on three variables: (1) their IAT scores, (2) a treatment variable corresponding to the information manipulation subjects received via random assignment, and (3) an *IAT score* × *treatment* interaction. We estimated this regression for experiment I's time 1 subjects and for all of experiment II's subjects.[9] Results appear in table 3.

For each set of results, the IAT score coefficient represents the relationship between implicit attitudes and performance ratings among control group subjects—that is, subjects *who received neither information nor advertising*. Among control group subjects in experiment I, a 1 unit increase in IAT scores is associated, on average, with a decrease in performance ratings of –0.54 units ($p < .10$). Table 3's interaction terms capture whether—and to what degree—our experimental treatments attenuate the influence of implicit attitudes on performance ratings. Experiment I's interaction term coefficient—0.40—implies that the linear relationship between implicit attitudes and performance *among subjects who received information* is –0.14, or –0.54 + 0.40. While this is substantively consistent with our second hypothesis, suggesting as it does that information attenuates the influence of implicit attitudes on performance ratings, the interaction term's coefficient is not statistically significant.

Among experiment II's control group subjects, a 1 unit increase in IAT scores is associated, on average, with a decrease in performance ratings of –0.20. However, this coefficient is not statistically significant. Counter to our expectations, experiment II's interaction terms imply that information and advertising *amplify* the influence of implicit attitudes on performance ratings. Though we do not have a ready explanation for these counterintuitive findings, they did prompt us to consider whether our IAT score variable should be viewed as a moderator, rather than as a variable whose relationship with performance ratings is moderated by information. In this view, individuals' implicit attitudes about the USPS would amplify or attenuate the effect of new performance information on performance ratings, rather than the other way around.

To investigate this possibility, we first dichotomized subjects' IAT scores into a binary indicator equal to one if a subject's IAT score was greater than zero and equal to zero if a subject's IAT score was less than zero. We then regressed subjects' performance ratings on (1) this binary indicator, (2) a treatment variable

[9] We do not present estimation results for experiment I's time 2 subjects because, as we will discuss in the next section, the effect of information is null for time 2 subjects. Consequently, the interaction effect of IAT scores and information is also null at time 2. Similarly, we do not present estimation results for experiment III's subjects, all of whom rated performance after a time-lag, because the effect of information is null for these subjects.

Table 2. Pooled Regression of Performance Ratings on IAT Scores

	Coefficient	SE	*p*
Experiment I sample			
IAT score	−0.35	0.18	.047
R^2	0.01		
N	341		
Experiment II sample			
IAT score	−0.63	0.2	.002
R^2	0.04		
N	278		
Experiment III sample			
IAT score	−0.44	0.19	.022
R^2	0.02		
N	278		

Note: *N* for experiment I is lower than 400 for two reasons. The first is panel attrition: some subjects assigned to our time 2 condition did not respond to our follow-up survey. The second is that some subjects' IAT scores were discarded, following widely accepted guidelines established by Greenwald, Nosek, and Banaji (2003). *N* for experiments II and III is lower than 300 and 299, respectively, because some subjects' IAT scores were discarded, following established guidelines (*t*-tests indicate that discarded subjects are not systematically different than non-discarded subjects).

Table 3. The Interaction of Information and Implicit Attitudes in the Evaluative Process

	Coefficient	SE	*p*
Experiment I			
Main effects			
IAT score	−0.49	0.25	.047
Information	0.33	0.15	.030
Interaction effect			
Information × IAT score	0.21	0.35	.548
R^2	0.03		
N	341		
Experiment II			
Main effects			
IAT score	−0.20	0.34	.551
Information	1.20	0.22	<.000
Advertising	0.51	0.20	.011
Interaction effects			
Information × IAT score	−0.13	0.50	.790
Advertising × IAT score	−0.70	0.44	.115
R^2	0.17		
N	278		

Note: See table 2 note for an explanation of why *N*s are lower than initial sample sizes. We do not show results for experiment III because subjects in experiment III received information before completing the IAT, as opposed to after completing the IAT. IAT scores are centered at zero for the above regressions.

corresponding to the information manipulation subjects received via random assignment, and (3) an *IAT indicator* × *treatment* interaction. Since IAT scores that are greater than zero imply unfavorable implicit attitudes and IAT scores that are less than zero imply unfavorable implicit attitudes, this interaction tests whether the effects of our information and advertising treatments differ for individuals with unfavorable and favorable implicit attitudes about the USPS. Results appear in table 4.

Table 4's main effects indicate that information and advertising both have statistically significant effects on performance ratings among subjects who have favorable implicit attitudes about the USPS. Favorably disposed subjects who receive information rate performance 1.4 units higher, on average, than favorably disposed control group subjects, while favorably disposed subjects who receive advertising rate performance 0.83 units higher, on average, than favorably disposed control group subjects. Table 4's *IAT indicator* × *information* interaction term implies that information's effect on performance ratings is 0.95 units lower among subjects whose implicit attitudes about the USPS are unfavorable ($p < .05$). Similarly, its *IAT indicator* × *advertising* interaction term, though statistically insignificant, implies that advertising's effect on performance ratings is 0.51 units lower among unfavorably disposed subjects than favorably disposed subjects. Both of these interaction terms strike us as substantively large: The 0.95 unit decrease in information's effect on performance ratings represents a change of about 68%, while the 0.51 unit decrease in advertising's effect represents a change of about 61%.

To make these findings more intuitively accessible, figure 3 plots the effects of information and advertising separately for subjects whose implicit attitudes about the USPS are favorable and subjects whose implicit attitudes about the USPS are unfavorable.

Figure 3's steepest line—that is, the solid line connecting our *no information* group to our *information* group—represents the effect of information on performance ratings among subjects whose implicit

Table 4. The Interaction of Information and Implicit Attitudes in the Evaluative Process: Implicit Attitudes as a Moderator Among Experiment II Subjects

	Coefficient	SE	*p*
Main effects			
Information	1.40	0.24	<.000
Advertising	0.83	0.22	<.000
IAT indicator	0.030	0.24	.891
Interaction effects			
IAT indicator × information	−0.95	0.38	.013
IAT indicator × advertising	−0.51	0.35	.149
R^2	0.14		
N	300		

Note: IAT indicator = 0 if IAT score < 0; IAT indicator = 1 if IAT score > 0. IAT scores that are greater than zero indicate unfavorable implicit public sector attitudes. IAT scores that are less than zero indicate favorable implicit public sector attitudes.

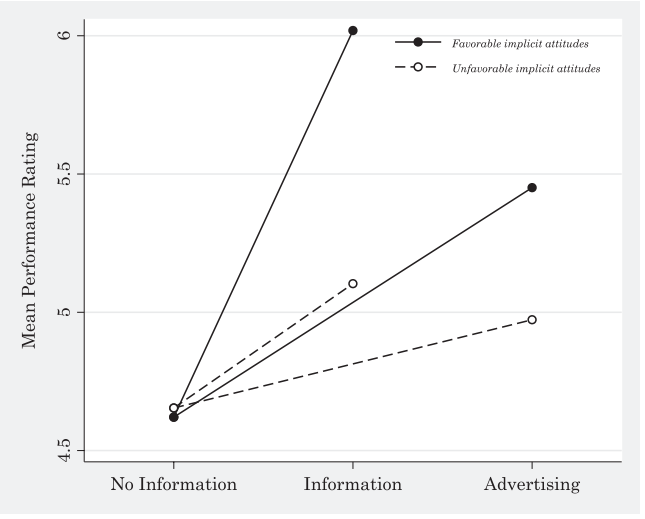

Figure 3. The Effect of Information and Advertising on Performance Ratings, for Subjects With Favorable and Unfavorable Implicit Attitudes About the USPS. Note the larger effects (steeper lines) among subjects with favorable implicit attitudes.

attitudes about the USPS are favorable. The slope of this line is 1.4. The slope of figure 3's corresponding dashed line—that is, the dashed line connecting the *no information* group to the *information* group—represents the effect of information on performance ratings among subjects whose implicit attitudes about the USPS are unfavorable. The slope of this line is 0.55 or 1.4–0.95. As noted above, table 4's IAT *indicator* × *information p* value indicates that the 0.95 unit difference between these two lines' slopes is statistically significant. Figure 3's two remaining lines portray how advertising has a larger effect on performance ratings among favorably disposed subjects than unfavorably disposed subjects. Taken together, these findings provide compelling substantive evidence that individuals' implicit attitudes affect the manner in which they incorporate new information into their performance evaluations.

H3: The Impact of Favorable Performance Information on Individuals' Explicit Evaluations of Public Sector Performance Will Be Short-Lived

In our theoretical discussion, we emphasized that implicit attitudes are typically believed to be more durable and less malleable than explicit attitudes. Consequently, positive explicit attitudes resulting from favorable performance information about public sector organizations do not necessarily replace individuals' negative implicit attitudes; instead, their negative implicit attitudes persist in memory. Following this reasoning, we expect that favorable performance information (and advertising) will have only a temporary effect on individuals' evaluations of Postal Service performance.

Recall how each of our three experiments incorporates a time dimension. In experiment I, subjects are randomly assigned to either a *time 1* or a *time 2* condition (after being randomly assigned to either an *information* or *no information* condition). Those assigned to the *time 1* condition evaluate Postal Service performance immediately after receiving or not receiving information, while those assigned to the *time 2* condition evaluate Postal Service Performance after a lag of approximately 2 days. We test whether favorable performance information has a short-lived effect on performance evaluations by regressing subjects' performance ratings on (1) an *information* treatment variable, (2) a binary time variable that equals one for *time 2* subjects and zero for *time 1* subjects, and (3) an *information* × *time* interaction term.

In experiment II, all subjects provide a performance evaluation immediately after receiving or not receiving information or advertising. In experiment III, all subjects evaluate performance after a lag of approximately 5–7 min. Since experiments II and III do not involve random assignment to different time conditions, we cannot use data from these experiments to formally test whether the effect of information is contingent on time. Nevertheless, we can informally inspect whether information has a larger effect in experiment II, in which there is no lag between subjects' receipt of information and their evaluation of performance, than in experiment III, in which there is a short lag. Table 5 presents results for our formal and informal tests of hypothesis 3.

Our results for experiment I suggest that information's effect on performance ratings is indeed short-lived. The information coefficient indicates that *time 1* subjects who receive favorable information rate performance, on average, 0.57 units higher than *time 1* subjects who do not receive information. The

Table 5. The Interactive Effect of Information and Time on Performance Ratings

	Coefficient	SE	*p*	*N*	R^2
Experiment I					
Information	0.57	0.19	.003	353	0.04
Time (1 = long lag, 0 = no lag)	–0.05	0.2	.803		
Information × time	–0.59	0.29	.039		
Experiment II					
Information time 1 (no lag)	1.06	0.19	<.000	300	0.10
Advertising time 1 (no lag)	0.65	0.17	<.000		
Experiment III					
Information time 2 (short lag)	–0.03	0.18	.862	299	0.01
Advertising time 2 (short lag)	–0.21	0.17	.229		

Note: No information is the reference category for the above coefficients. Only the experiment I results show an interaction effect because only in experiment I were subjects randomly assigned to different time conditions. *No lag* subjects evaluate performance immediately after receiving information or advertising. *Short lag* subjects evaluate performance approximately 5–7 min after receiving information or advertising. *Long lag* subjects evaluate performance approximately 2 days after receiving information or advertising.

information × *time* interaction term, which is statistically significant, implies that information's effect on *time 2* subjects' ratings is 0.59 units lower than its effect on *time 1* subjects' ratings. In other words, the effect of information on *time 2* subjects' performance ratings is 0.57–0.59 or –0.02.

Table 5's remaining results informally corroborate these findings. In experiment II, in which there is no lag between subjects' receipt of information and their evaluation of Postal Service performance, information and advertising both have positive, statistically (and substantively) significant effects on subjects' performance ratings (incidentally, we note that information has a larger effect on performance ratings than advertising. A formal test indicates that the difference between these effects is statistically significant at the 0.05 level). By contrast, in experiment III, which incorporates a lag of only about 5–7 min, information and advertising have no effect on subjects' performance ratings.

Figure 4 more clearly illustrates the temporary nature of our estimated information effects. As the figure shows, there are small, insignificant differences between the mean performance ratings of our *no information*, *information*, and *advertising* groups when those groups provide performance ratings after a time-lag—even a very short time-lag. By contrast, there are large differences between the mean ratings of groups that rate performance immediately after receiving information or advertising.

H4: Favorable Performance Information Will Not Change Individuals' Implicit Attitudes

We designed experiment III, in which subjects are randomly assigned to an information manipulation *before* completing an IAT, to test whether favorable performance information affects individuals' implicit attitudes. Given that implicit attitudes are believed to be more durable and less malleable than explicit attitudes, we expect a null result here. To test hypothesis 4, we regress subject's IAT scores on a treatment variable corresponding to the information manipulation subjects received via random assignment. Our results appear in table 6.

The table's results show that neither our information treatment nor our advertising treatment affects subjects' implicit attitudes. Both coefficients are small and statistically insignificant. As already emphasized, the resistance of implicit attitudes to information interventions has worrisome implications for public administration. It suggests that using information to bring about a long-term brightening of individuals' attitudes regarding the public sector will be ineffective.

Conclusion

Our findings have implications for both theory and practice. Our main theoretical contribution has been to argue that individuals' *implicit* attitudes about the public sector affect the manner in which they evaluate public sector performance. Our findings suggest that individuals' evaluations of government performance are weighed down by their deep-seated, unconscious views of the public sector; that the effect of information on individuals' performance evaluations will be short-lived; and that individuals' underlying beliefs about public sector performance will be difficult to change.

Practically speaking, these findings suggest that public managers and policymakers who hope to brighten individuals' attitudes regarding public sector performance are fighting an uphill battle. In a sense, they are fighting against a hidden opponent—as we have emphasized, individuals' implicit attitudes exist outside of their conscious awareness. The temporary nature of the information effects that we uncover here suggests that public managers need to engage more frequently

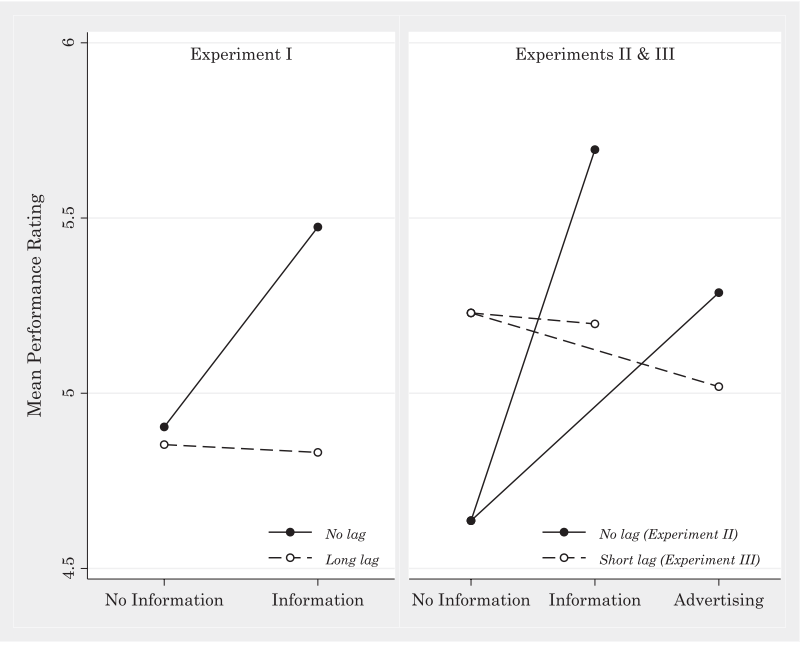

Figure 4. The Effect of Information and Advertising on Performance Ratings, by Time. Note that information and advertising effects are present only when subjects rate performance immediately after receiving one or the other. There are no effects when subjects rate performance after a time-lag.

Table 6. IAT Scores Regressed on Information and Advertising (Experiment III)

	Coefficient	SE	*p*
Information	−0.002	0.057	.975
Advertising	−0.033	0.055	.549
N	278		
R^2	0.002		

Note: *No information* is the reference category for the above coefficients. See table 2 note for an explanation of why *N* is lower than initial sample size.

in the management of citizens' perceptions of performance. If citizens quickly forget favorable information (or government advertising), public managers would need to consistently refresh their memories. We do not want to overstate this implication, though. Our findings emerged from a series of survey experiments. In real settings, and with performance information about other public sector organizations, individuals might be more likely to retain information for longer periods of time. Consider, for instance, a parent receiving information about the performance of his/her child's school. It is plausible that a parent would retain information bearing on their child's education. In general, we suspect that the durability of information effects depends on the type of public sector performance information being consumed. Whether this is true strikes us as a fruitful question for future research.

Future research could also investigate whether individuals' implicit attitudes about other public sector organizations are negative. Extant public opinion data indicate that individuals view the USPS quite favorably relative to other public sector organizations (see, e.g. PEW Research Center 1998, 2010), suggesting that our test for implicit antipublic sector bias is a conservative one. We found only weakly negative implicit stereotypic attitudes about the Postal Service (and implicit preferences *for* the USPS), but it is plausible to think that we would find stronger implicit biases against other specific government agencies that are viewed less favorably than the Postal Service. The Postal Service has a natural private sector foil in FedEx, making the IAT an appropriate tool for our analysis. Many public sector organizations (e.g. a local Department of Motor Vehicles) lack obvious private sector comparison organizations, necessitating the use of other tools, such as a single-category IAT or a "Go/No-Go Association Task" (Karpinski and Steinman 2006; Nosek and Banaji 2001).

Whether our study's findings might generalize to other contexts or cultures is an important and interesting question. The premise of our argument is that individuals' implicit attitudes about the public sector are influenced by the messages they receive from their sociopolitical cultural environments. In the United States, these messages are frequent and frequently negative. It is plausible that the frequency and negativity of these cultural messages will vary across countries, and we expect that this variation will affect the manner in which individuals evaluate performance

across countries. For instance, if individuals are not constantly bombarded with antipublic sector messages, it is plausible that favorable information will have a greater and longer-lasting effect on their evaluations of public sector performance. Instead of viewing good public sector performance as an anomaly, these individuals might come to view it as a matter of course. In cultures that are friendly to the public sector and its mission, public managers may not have to fight uphill battles. Research using subjects from other countries would be a clear way to address these questions. Amazon's Mechanical Turk lets researchers select potential subjects by their country of residence (which can be verified using subjects' IP addresses), and so offers a way forward here.

As we have already emphasized, reflexively negative views of government performance have troublesome practical implications for public administration. In a real sense, they make public managers' jobs more difficult and less rewarding (witness the demoralizing spectacle of our recent government shutdown). Consequently, it is worthwhile to examine how individuals' implicit attitudes contribute to their assessments of public sector performance and whether these implicit attitudes can be overcome.

Supplementary Material

Supplementary material is available at the *Journal of Public Administration Research and Theory* online (www.jpart.oxfordjournals.org).

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