

Article

# Are Citizens More Negative About Failing Service Delivery by Public Than Private Organizations? Evidence From a Large-Scale Survey Experiment

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## Abstract

Citizens' perceptions of the performance of public service providers are a central concern for academics and policy-makers alike. A growing body of behavioral public administration research emphasizes the psychological biases that shape the perceptions of citizens. This article makes a novel contribution to this debate by examining the interaction between politically motivated bias and cognitive bias in citizens' performance appraisals. It asks: Are citizens more negative about failing service delivery by public organizations than by private organizations, and if so, why? This is investigated through a survey experiment conducted among a representative sample of 2,623 Dutch citizens. The main finding of the study is that public organizations are punished more severely by citizens for negative performance information than private organizations, but this tendency is concentrated among citizens who have a preference for private service provision and varies across service areas. Our study shows not only that citizens' processing of information about public services is subject to various forms of bias, but also that these biases interact in shaping how citizens view public organizations. Further investigating these complex dynamics is an important task for behavioral public administration scholars seeking to understand the specific implications of behavioral dynamics for the broad range of organizations providing public services.

## Introduction

Despite the complex and challenging nature of public service delivery, public organizations are expected to satisfy a large and varied range of public values, such as effectiveness, efficiency, equity, and responsiveness. The importance of satisfactory public performance is perhaps best demonstrated in its absence: failing service delivery by public organizations spurs media attention, scrutiny by political principals, and dissatisfaction among citizens. Whereas public management research has uncovered many factors that affect objective measures of public performance (Walker and Andrews 2013), public performance is also in the eye

of the beholder. Although empirical research indicates that public organizations typically perform adequately, citizens tend to associate public organizations with ineffectiveness, unresponsiveness, and waste (Marvel 2015a). To better understand the mechanisms that shape citizens' perceptions of public performance, this article addresses an overlooked question that is fundamental to public administration theory and practice: Are citizens more negative about failing service delivery by public organizations than by private organizations, and if so, why?

There is a rich tradition of public administration research examining how public organizations differ

from private organizations in terms of organizational characteristics, management, and performance (e.g., Brewer and Brewer 2011; Boyne 2002). With the advent of *Behavioral Public Administration* (BPA) research (Grimmelikhuijzen et al. 2017; Moynihan 2018), attention has shifted from comparing objective performance of public and private organizations to understanding the performance *perceptions* of citizens (e.g., Andrews and Van de Walle 2013). A prominent feature of BPA research is the emphasis on psychological biases that shape the perceptions, attitudes, and behaviors of citizens. Psychological biases are key to understanding how performance perceptions of public service delivery come about, and also condition how citizens process and respond to performance information. By emphasizing citizens' information processing and the biases inherent in this process, BPA research has pointed to mechanisms that may explain why citizens have negative perceptions of public organizations. However, this research is divided between two "schools" that have remained unconnected.

The first school emphasizes the "*public*" aspect in understanding negative views about public organizations. Recent studies have suggested that, all else equal, there may be a general tendency among citizens to perceive public service providers as performing worse than their private counterparts (Marvel 2015a). The argument is that widespread, negative stereotypes influence citizens' ratings of public service delivery, and some studies have found direct relationships between publicness and citizens' performance perceptions (Hvidman and Andersen 2016; Hvidman 2019, study 2). Studies that draw on the theory of politically motivated reasoning have provided a different explanation, asserting that negative views on public organizations are not general but highly dependent on individuals' attitudes, beliefs, and preferences (Hvidman 2019, study 1). Several studies have provided compelling evidence of motivated reasoning in the interpretation of objective, non-ambiguous performance information among citizens (Baekgaard and Serritzlew 2016; Bisgaard 2015; James and Van Ryzin 2017; Jilke 2018). By contrast, the second school links citizens' negative views about public organizations to the "*information*" aspect. This research points to general cognitive biases rather than motivated biases in the information processing of individuals (e.g., Olsen 2013; Van Ryzin 2016). Most prominently, public administration researchers have found evidence that negative performance information more strongly shapes the perceptions and satisfaction of citizens than positive information (James and Moseley 2014), and that citizens may react more strongly to negatively framed performance information (Olsen 2015a, 2015b).

To date, these two schools have remained separate in BPA research. As Nielsen and Moynihan (2017, 280) observe, "there have not been definitive studies on whether the negativity bias is more prominent in public organizations than private organizations." Yet, to gain a more comprehensive understanding of how citizens form perceptions of public organizations, cognitive and politically motivated biases need to be examined in concert. The objective of this article is, therefore, to advance our understanding of how citizens perceive public performance by combining these schools of BPA research. In doing so, we contribute to the development of BPA research that is specifically about *public administration*: Rather than repeating studies of psychological biases from other fields, we examine to what extent these biases are of any special relevance for the public sector. Our core theoretical argument is that negative performance information may be more consequential for citizens' performance perceptions concerning public organizations than for private organizations, because processes of politically motivated reasoning may reinforce negative performance information (cf. Taber and Lodge 2006).

The article possesses the following research question: Do citizens attach greater weight to negative performance information when assessing the performance of public organizations than when assessing private organizations, and to what extent can this be explained by politically motivated reasoning? To test the interaction of cognitive bias and politically motivated bias in the assessment of public performance, we conducted a large survey experimental study among a representative sample of 2,623 Dutch citizens. To ensure robustness and theoretical generalizability, we randomized participants across three different types of services, which in the Netherlands are provided by both public and private organizations: mass transit, maintaining public order and safety, and emergency ambulances. Participants were randomly assigned cues about whether the service was delivered by a public or a private organization and about the performance of the organization (positive, neutral, or negative performance information). Participants were then asked to rate the service provider on a set of items tapping into four dimensions of performance: effectiveness, efficiency, equity, and responsiveness.

Our study produces four findings that corroborate and advance the literature. First, we do not find support for claims about a systematic, general effect of publicness on citizens' performance perceptions. Instead, we find strong evidence that negative perceptions of effectiveness, efficiency, equity, and responsiveness come about through processes of politically motivated reasoning. Second, for all four dimensions of performance, our results indicate that citizens respond

asymmetrically to negative and positive performance information. Citizens strongly adjust their performance perceptions downward in response to negative performance information, whereas positive performance information of comparable magnitude does not result in more positive performance perceptions. Third, the main contribution of the study is the finding that citizens react more negatively to negative performance information when this information concerns a public organization than a private organization, but that this tendency is concentrated among citizens who prefer private service provision. In other words, public organizations are punished more severely for bad performance than private organizations, but mainly so by citizens who prefer private service provision.

Yet, fourth, our study also shows intriguing differences between different types of services. Whereas existing studies tend to assume that citizens have universal and fixed preferences about public versus private service delivery, we observe that preferences depend strongly on service area. These differences also condition perceptions of failing service delivery: For mass transit services, citizens condemn failing public organizations more harshly regardless of sector preference; for emergency ambulances and public order and safety services, this tendency is limited to citizens who prefer private service delivery. The applicability of motivated reasoning as an explanation for the tendency to more harshly condemn failing public providers thus appears to depend on the type of service. To better understand the mechanisms underlying these differences, we draw on four explorative focus groups with citizens. Overall, the findings advance our understanding of citizen perceptions of public service delivery and raise important questions for future research on publicness and performance perceptions across public services.

## Theoretical Framework

### Publicness and Politically Motivated Bias

One of the most salient debates about public service delivery is whether services are best provided by a public organization that is formally part of the administrative hierarchy or by contracting out to a private actor that operates in a market (Rainey 2009). Several scholars have argued that citizens evaluate service delivery by public organizations more negatively than private organizations. For instance, Marvel (2015a, 143) states that individual citizens tend to have deep-seated negative attitudes towards public organizations: “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.” “Publicness” is thus believed to have a direct, negative effect on citizens’ performance perceptions.

In a survey experimental study conducted among Danish students, Hvidman and Andersen (2016) provide initial evidence for this argument. They find that productivity-related aspects of performance (efficiency and low red tape) are rated significantly lower for public hospitals than private hospitals, whereas other dimensions of performance (e.g., benevolence) are not perceived in a more negative light. A more recent experiment carried out among a representative sample of Danish citizens produces similar results: citizens rate the effectiveness of public providers of in-home elderly care significantly more negatively than private providers, but simultaneously rate public providers as more equitable (Hvidman 2019, study 2). These experiments thus indicate that publicness can have a negative effect on performance perceptions, but that this effect varies by performance dimension. However, a recent replication of the Danish hospital experiment in the United States does not find any significant differences in the assessment of public and private hospitals (Meier, Johnson, and An 2019). Given the conflicting evidence, the effect of publicness on performance perceptions is important to test. Since the direction of the effect may depend on the dimension of performance, we test the hypothesis that there is a general effect of publicness on the performance perceptions of citizens:

**Hypothesis 1:** Publicness affects citizens’ performance perceptions.

A different position is that the performance effects of publicness depend on citizens’ prior beliefs. Rather than a general publicness effect that is shared across citizens, the theory of motivated reasoning posits that individuals tend to overemphasize information that is congruent with their existing beliefs (Kunda 1990). According to this theory, individuals’ information processing is driven by directional goals, rather than accuracy goals (Taber and Lodge 2006). Whereas an accuracy goal means to carefully interpret information to reach a factually correct conclusion, directional goals refer to reasoning that is intended to reach a conclusion that fits prior beliefs or attitudes (Kunda 1990). This implies that individuals may incorrectly interpret, overlook, or ignore information that is not consistent with their worldview (Baekgaard and Settitzlew 2016). Motivated reasoning research thus refutes that citizens objectively interpret the performance of public organizations: “All reasoning is motivated” (Taber and Lodge 2006, 756).

Public administration research on motivated reasoning has recently shown that citizens’ prior beliefs are important determinants of their interpretation of factual performance information (Baekgaard and Serritzlew 2016), service satisfaction (Jilke 2018), the performance of policy programs (James and Van Ryzin 2017) and the state of the economy (Bisgaard 2015). Baekgaard and

Serritzlew (2016, 74), therefore, conclude that public administration research on performance information should take prior beliefs into account. The preferences of citizens regarding private or public service provision may be shaped by their prior experiences with a public service, their broader political beliefs about the role of the state in society, and by performance feedback through media coverage, political debate, and their personal network. In a study of Danish citizens, Hvidman (2019, study 1) provides evidence for the position that publicness effects should be understood as a politically motivated bias, finding that the effects of publicness on performance perceptions are highly dependent on individuals' personal beliefs about the public sector. We summarize these theoretical assertions and research findings in the following hypothesis:

**Hypothesis 2:** The effect of publicness on citizens' performance perceptions is moderated by citizens' preferences regarding public and private service delivery.

#### Performance Information Use and Cognitive Bias

A different school of BPA research does not emphasize the role of publicness as a determinant of citizens' performance perceptions but rather stresses the influence of performance information. Under New Public Management, the measurement and use of performance information has become a core element of administrative management (Hood 1991). The public management literature often emphasizes the necessity—and benefits—of the internal use of performance information in public organizations (e.g., Moynihan 2008; Van Dooren and Van de Walle 2008; Boyne 2010).

Performance information also has important external uses, as an instrument to shape citizens' perceptions of public service performance (James 2011a). Citizens may use performance information to increase their knowledge about service delivery and to compare and choose between different service providers (James 2011a; James and John 2007). Empirical research indicates that citizens may adjust their performance perceptions when performance information is interpreted to be positive or negative (James and Mosely 2014; James 2011b). Positive performance information is expected to raise the performance perceptions of citizens, whereas negative performance information is expected to lower performance perceptions.

However, BPA research argues that citizens' interpretation of performance information is not fully rational or objective, but rather distorted by several types of unconscious biases. This line of research has focused attention on cognitive biases (Olsen 2013; Grimmelikhuisen et al. 2017), of which negativity bias has arguably been most intensively studied and empirically demonstrated (James and Mosely 2014; James

and John 2007; James 2011b; Boyne, James, John and Petrovsky 2009). Negativity bias entails that individuals attach greater weight to equivalent events that are negatively rather than positively presented (Kahneman and Tversky 1979; Rozin and Royzman 2001). Most studies have emphasized negative potency as the dominant aspect of negativity bias. Negative potency implies that "given inverse negative and positive events of equal objective magnitude, the negative event is subjectively more potent and of higher salience than its positive counterpart" (Rozin and Royzman 2001, 298). Positive events are argued to have a greater frequency but lower urgency than negative events. Negative events are thus perceived to be more consequential than positive events of comparable magnitude (Rozin and Royzman 2001).

The principle of negativity bias is often invoked, but it is difficult to empirically demonstrate: "The logic of argument for negativity bias is complex, largely because of the difficulty of equating negative and positive events" (Rozin and Royzman 2001, 300). One way to empirically observe negativity bias is by comparing logically equivalent information that is differently framed (e.g., an 80% chance of success versus a 20% chance of failure). Using such equivalence-framing designs, Olsen (2015b) finds that citizens react more strongly to negatively framed information about hospital services than to positively framed information. Recent studies that do not make use of equivalence-framing designs have also interpreted asymmetric responses to performance information as negativity bias. Rather than logically equivalent information, such studies provide individuals with cues of positive or negative information that are objectively distinct but of comparable magnitude (George et al. 2020; James 2011b; James and Moseley 2014; Nielsen and Moynihan 2017).

As empirical evidence for negativity bias is well established, it is not our objective to provide another test of negativity bias regarding logically equivalent information. Rather, we derive from the above discussion the expectation that objectively distinct negative and positive information of comparable magnitude may result in asymmetric reactions. Applied to citizens' interpretation of performance information, we expect that negative performance information will evoke stronger negative reactions among citizens than positive performance information will cause positive reactions. We formulate the following hypothesis:

**Hypothesis 3:** Relative to neutral performance information, the negative effect of negative performance information on citizens' perceptions of the performance of services is stronger than the positive effect of positive performance information.

### Towards a Synthesis: Are Citizens More Negative About Failing Service Delivery by Public Organizations?

Above, we have taken stock of the theoretical expectations concerning the effects of publicness and performance information on performance perceptions, and the politically motivated and cognitive bias inherent to these relationships. To advance the literature, we proceed to connect these schools of behavioral public administration by examining the interactions between them. Specifically, we argue that the effects of negative performance information may be stronger for public organizations than private organizations. In line with assertions of a generic effect of publicness on performance perceptions (Hvidman and Andersen 2016; Marvel 2015a), we hypothesize that citizens have a general tendency to emphasize negative information about public organizations more than negative information about private organizations. Negative performance information about public organizations may fit narratives and stereotypes propagated by politicians and the media. Alternatively, the monopolistic nature and the importance of public tasks may cause citizens to be less tolerant of failing public organizations. We test the following hypothesis:

**Hypothesis 4:** The negative effect of negative performance information on performance perceptions is stronger for public organizations than for private organizations.

An alternative view is that an amplified effect of negative performance information for public organizations is not a general phenomenon but a result of motivated reasoning. Citizens' directional goals drive their processing of negative performance information (cf. Taber and Lodge 2006, 756). Our argument is, therefore, that performance information that is congruent with existing attitudes is evaluated as stronger than performance information that is incongruent with existing attitudes (Baekgaard and Serritzlew 2016). Put differently, when performance information does not fit prior beliefs, citizens may pay less attention to the information or may attempt to denigrate and counter-argue the information. This tendency to interpret, favor, and recall information in a way that confirms one's preexisting beliefs can be referred to as "disconfirmation bias" (Taber and Lodge 2006). Applied to performance perceptions about public and private service providers, we expect the effects of negative performance information to be moderated by preference congruence: Citizens who prefer service provision by private organizations will be more susceptible to negative performance information about public organizations than negative information about private organizations. In other words, negative performance information is more harmful for public organizations than private organizations when it corresponds to citizens' sector preferences. The following hypothesis is formulated:

**Hypothesis 5:** The negative effect of negative performance information is stronger for public organizations than for private organizations, if performance information is congruent with preferences for private service provision.

## Methods

### Survey Experiment

To assess the effects of publicness, preferences regarding public and private service delivery, and performance information on citizens' performance perceptions, we conducted a survey experiment in February 2018. Citizens were presented with a vignette about a fictitious service provider. There were two experimental treatments: whether the organization was described as public or private, and whether the performance information provided was neutral, positive, or negative. This  $2 \times 3$  design resulted in six experimental conditions (table 1). Participants were randomly assigned to one of the experimental conditions. To test the robustness of our results, we also randomly assigned the participants to one of three types of services: mass transit, emergency ambulances, or maintaining public order and safety. In contrast to the first two experimental treatments, we have no theoretical expectations about differences between the three types of services. After the vignette, all participants were asked the same questions about the performance of the organization and two manipulation checks. The data and codebook (including the vignettes and the survey questions in both Dutch and English) can be accessed via: [https://www.dataarchive.lissdata.nl/study\\_units/view/803](https://www.dataarchive.lissdata.nl/study_units/view/803).

### Sample

The experiment was conducted as an online survey administered to a representative sample of 2,623 Dutch citizens. The survey was administered through the LISS panel (Longitudinal Internet Studies for the Social sciences), which is a representative panel comprising 7,000 Dutch-speaking individuals in the Netherlands aged 16 or older (CentERdata n.d.). To ensure the representativeness of the sample for the overall Dutch population, membership is by invitation only. Members of the LISS receive a 15- or 30-minute questionnaire each month and are compensated for their participation (€1.50 for a 15-minute questionnaire and €3.00 for a 30-minute questionnaire). [Supplementary Appendix 1](#) compares the composition of the sample to data from CBS statline, which is the electronic databank of Statistics Netherlands. It shows that the sample is largely representative, although some specific groups, for example, people living in single-person households and people living in highly urbanized regions, are somewhat underrepresented in our sample.

**Table 1.** Design of the Survey Experiment

		Performance Information Treatment		
		Neutral	Positive	Negative
Sector treatment	Public	1: Public baseline	2: Public positive	3: Public negative
	Private	4: Private baseline	5: Private positive	6: Private negative

Conducting the survey experiment among a representative sample of the population enhances the external validity of the experiment. Many survey-experiments are carried out among students, which raises questions about whether the reactions to experimental treatments of a particular age and social segment of the population are representative for the broader population. That our experiment concerns citizens' perceptions of public and private services makes this especially relevant, given that students have less experience with public services than middle-aged or older people.

#### Empirical Context

To warrant the generalizability of the findings, we randomly assigned participants to one of three types of services: mass transit, emergency ambulances, and maintaining public order and safety. These services were chosen for two main reasons. First, all three services are offered by both public and private providers in the Netherlands. For mass transit, such as bus transportation, some organizations are fully owned by municipal and/or regional governments, whereas other are fully private. Emergency ambulance care is carried out by a public service provider in 10 regions, a private provider in seven regions, and by a mix of public and private providers in eight regions. Maintaining public order and safety is the responsibility of municipal governments, but since 2014, these governments have increased authority to contract-out basic law enforcement tasks, such as parking enforcement, to privately employed security personnel. Second, these services are the same when carried out by public and private providers. For example, public and private emergency ambulances are perfectly comparable. The experimental treatment is therefore not confounded by other differences between publicly and privately provided services, such as may be the case, for instance, with Dutch hospitals, where private and public hospitals often differ in the types of services they provide and in staff and patient characteristics.

#### Vignette

For each service, the vignette provided some basic information about the organization, including its size, tasks, and goals and the fact that it is assessed every

year by an independent regulator. The experimental treatment consisted of a sector cue and a performance information cue. Apart from the experimental cues, the name of the service provider and the organization's task (which both depend on the type of service), the description of the organization was identical for all experimental conditions. Below, we discuss the experimental treatments.

#### Publicness

Groups 1, 2, and 3 in the experiment (table 1) were told that the fictitious service provider is "a public organization that is formally part of the municipality." Groups 4, 5, and 6 were told that the organization is "a private company that operates based on a contract with the municipality." A dummy variable was created with a value of "1" for a public organization and a value of "0" for a private organization.

#### Performance Information

Groups 1 and 4 (the baseline groups) received neutral performance information. Groups 2 and 5 received positive performance information about the organization, in the form of a final sentence, which stated: "The regulator concludes that [name of service provider] based on its overall performance ranks 17th on a list of 100 [type of service providers]." Groups 3 and 6 received negative performance information about the organization: "The regulator concludes that [name of service provider] based on its overall performance ranks 83rd on a list of 100 [type of service providers]." One dummy variable was created for each performance information cue. The negative and positive performance information cues are not objectively equivalent (cf. Olsen 2015b), but were designed to be of comparable magnitude. We reflect on this in the discussion section.

#### Measurement of Performance Perceptions

Participants were subsequently asked to rate the performance of the organization. They were presented with 14 statements about the organization that tap into the dimensions of effectiveness, efficiency, responsiveness, and equity. Each dimension is covered by 3 to 5 items (table 2). Participants were asked to assess each statement on a six-point scale, ranging from 1 "completely disagree" to 6 "completely agree."

**Table 2.** Measurement of the Four Perceived Performance Dimensions

Dimension	Items	Alpha
Effectiveness	This organization carries out its task very well.	.95
Effectiveness	This organization is capable.	
Effectiveness	This organization is competent.	
Effectiveness	This organization is effective.	
Effectiveness	This organization is skilled.	
Efficiency	In its provision of services, this organization emphasizes a healthy budget.	.89
Efficiency	In its provision of services, this organization is very cost-aware.	
Efficiency	In its provision of services, this organization manages its money well.	
Equity	In its provision of services, this organization treats all citizens honestly.	.93
Equity	In its provision of services, this organization treats all citizens the same.	
Equity	In its provision of services, this organization treats all citizens in a just way.	
Responsiveness	In its provision of services, this organization responds seriously to criticism and suggestions for improvement.	.90
Responsiveness	In its provision of services, this organization treats citizens with respect and attention.	
Responsiveness	In its provision of services, this organization responds quickly and adequately to requests from citizens.	

To test the validity of the four performance dimensions, we conducted a confirmatory factor analysis, which indicates a good overall fit (for the results of the factor analysis, see [Supplementary Appendix 2](#)). Moreover, reliability, as measured by Cronbach's alpha is satisfactory ([table 2](#)). We computed sum-scales, which we standardized with respect to the number of items in the scale.<sup>1</sup>

#### Measurement of Sector Preference

The question about individuals' preferences about public versus private provision of the type of service that was presented in the vignette (mass transit, emergency ambulances, or maintaining public order and safety) was asked at the end of the survey. Following the measurement of demographic variables about bureaucratic tolerance, public service motivation, employment status, and political preference, participants were asked whether the service, in general, should be carried out by "a public organization that is formally part of the municipality," by "a private company that operates based on a contract with the municipality" or "no preference." Dummy variables were created for each answer. We underline that sector preference is an observed variable in the sense that we do not attempt to experimentally manipulate individuals' sector preferences. As a consequence, our study does not allow us to make causal inferences regarding the moderating role of sector preference. Measuring the moderator after the manipulation increases the risk of sector preferences being affected by information given in the experimental treatment, whereas measuring

the moderator before the treatment increases the risk of inadvertently priming respondents on publicness. Because prior studies assume that citizens have unconscious biases about public organizations, we chose to measure sector preferences at the end of the survey rather than before the experimental vignette to avoid priming respondents on public-private differences when reading the vignette.

[Table 3](#) presents the distribution of answers across the three types of services. First, we observe that, overall, 57.3% of the respondents believe that the service they were asked about should be carried out by a public organization, whereas 26.0% had no preference and 16.7% preferred private sector provision. Second, we observe that preferences differ by the type of service. The percentage of respondents without a sector preference is approximately the same for all three types of services; however, respondents who were presented a vignette about mass transit are more likely to express a preference for private provision (26.4%) than respondents who were presented vignettes about public order and safety (10.6%) and emergency ambulances (12.6%). In other words, the preferences regarding whether services should be publicly or privately delivered are not uniform; they vary considerably across services. We discuss the implications of these differences across services in the discussion section.

#### Demographic Variables

To check for randomization, we also asked the participants about different background characteristics. The survey included eight items measuring *public service motivation* ([Vandenabeele 2008](#)) and *bureaucratic tolerance* ([Baker et al. 1973](#)). We expect participants who have high levels of public service motivation and bureaucratic tolerance to be generally

1 The main assumption made when using sum-scales instead of factor-scores is that the items loading on a factor are of equal importance. The confirmatory factor analysis indicates that the observed items explain variance in the latent constructs to a highly similar degree.

**Table 3.** Distribution of Sector Preference Across Types of Services

	The Service Should be Carried Out by:			Total
	A Public Organization That is Formally Part of the Municipality	A Private Company That Operates Based on a Contract With the Municipality	No Preference	
	%	%	%	
Mass transit	47.4	26.4	26.3	899
Public order and safety	63.7	10.6	25.7	840
Emergency ambulances	61.3	12.6	26.1	884
Total	1,503	437	683	2,623
%	57.3	16.7	26.0	
<i>F</i>	28.55***	48.65***	0.04	
<i>p</i> -value	.000	.000	.965	

Note: \*\*\* $p < .01$ .

more positive towards service delivery by public organizations. Participants were asked to assess a set of statements using the same six-point scale as above (for the exact items see [Supplementary Appendix 3](#)). Participants were also asked about whether they currently *work in the public sector*, and about their experience in general with either mass transit, emergency ambulances, or maintaining public order and safety (1 = very negative, 2 = negative, 3 = neutral, 4 = positive, 5 = very positive, 6 = inapplicable). The latter was transformed into two variables: *overall experience with service* (ranging from 1 to 5) and a dummy variable *experience with service yes/no* (yes is coded “1”). The LISS panel also provided data on the background characteristics of the participants, including age and gender.

#### Ethical Considerations

As in any survey experiment that relies on a fictitious scenario, a trade-off between transparency and experimental control exists. While transparency would suggest making explicit to the respondents that the vignette concerns a fictitious organization, this would, in our view, distort respondents’ reactions to the experimental treatment and prevent the accurate examination of their unconscious biases regarding public and private service providers. Concerning this trade-off, literature on survey experiments in political science argues that deception is permissible as long as potential harm to participants is minimized ([McDermott 2013](#); [Mutz 2011](#); see also [Marvel 2015b](#), 218). Our survey experiment adheres to this principle: The vignette does not provide inaccurate information about an actual organization or an organization in a specific geographical location. Rather, the organization in our vignette has a non-descript name (“ABW [type of service]”), is active in a “medium-sized Dutch municipality” and is assessed by an unnamed “independent

regulator.” This information cannot, in any significant way, affect respondents’ use of the services of actual service providers in the Netherlands. The fictitious nature of the organization was, therefore, not made explicit to respondents.

#### Focus Groups

We also organized focus groups with citizens about their perceptions of service provision by public and private organizations. The aim of the focus groups was to explore the mechanisms underlying the results from the survey experiment. Given the theoretical argument that performance perceptions reflect unconscious and automatic biases (what [Kahneman \(2011\)](#) calls “System 1” biases), the focus groups were designed to gain additional insight into what citizens associate with public and private service delivery and with different services, and what heuristics they use to assess failing public and private service delivery. The focus groups consisted of group discussions with citizens about statements regarding public and private service provision, their preferences and experiences concerning different types of services, and their reactions to positive and negative news messages about the performance of public and private service providers.

We organized four focus groups with a total of 17 participants in September 2018. Among the participants, 65% were female, the average age was 29 years, and 41% worked in the public sector. The focus group participants were thus younger and more likely to be female and work in the public sector than the participants in the survey experiment ([table 4](#)). After the focus groups, each participant received 40 Euros worth of gift cards. Discussions were fully recorded and transcribed (complete transcripts in Dutch are available upon request). The results from the focus groups are drawn upon in the discussion section.



**Table 4.** Descriptive Statistics ( $n = 2,623$ )

Variable	Mean	SD	Min	Max
Effectiveness	4.07	1.06	1	6
Efficiency	3.74	1.01	1	6
Equity	4.15	1.03	1	6
Responsiveness	3.98	1.01	1	6
Sector preference = public <sup>a</sup>	0.57	0.49	0	1
Sector preference = private <sup>a</sup>	0.17	0.37	0	1
Sector preference = none <sup>a</sup>	0.26	0.44	0	1
Public service motivation	4.03	0.68	1	6
Bureaucratic tolerance	3.90	0.68	1.25	6
Works in public sector = yes <sup>a</sup>	0.16	0.37	0	1
Age	51.20	18.23	16	100
Gender = female <sup>a</sup>	0.53	0.50	0	1
Overall experience with service	3.52	0.92	1	5
Experience with service yes/no = yes <sup>a</sup>	0.71	0.46	0	1

Note: <sup>a</sup>The means of the dummy variables should be interpreted as proportions.

## Analysis

### Descriptive Statistics, Balance, and Manipulation Checks

After a listwise deletion of 16 participants with missing values on the variables used in the analyses, the total number of observations is 2,623. Table 4 provides summaries of the descriptive statistics of the observed variables in the analysis. The results indicate that the average values of the four dimensions of perceived performance are above the mid-point of the six-point scale. The mean scores for effectiveness, efficiency, equity, and responsiveness are 4.07, 3.74, 4.15, and 3.98, respectively.

To check whether the experimental groups were balanced, we used an *F*-test and compared the means of the demographic variables and the three-sector preference dummy variables across the experimental groups. As table 5 shows, we do not find any systematic differences in the distribution of the demographic variables. Hence, the randomization of participants across the six experimental groups was successful and we do not control for these variables in the regression analysis.

Table 5 also shows that there is a slight imbalance with regard to the distribution of participants with a public sector preference. This finding suggests that the publicness treatment had a small effect on the sector preferences of respondents across the experimental groups. To test whether the main treatment groups “public” and “private” differ from one another in terms of sector preference, we carried out a *t*-test for the full sample and for each service area (Supplementary Appendix 4). The results show that respondents in the “public” treatment group ( $M = 0.60$ ,  $SD = 0.50$ ) more often believe that a service should be carried out by a public organization compared to respondents in the “private” treatment group ( $M = 0.55$ ,  $SD = 0.50$ ),  $t(2621) = -2.70$ ,

$p = .007$ . The publicness treatment explains 0.3% of the difference in public sector preference ( $d = -0.11$ ;  $r = -0.053$ ). This effect is comparable to the *t*-test results for the sub-groups mass transit and public order and safety. In addition, we find that that respondents in the “public” treatment group ( $M = 0.15$ ,  $SD = 0.36$ ) less often believe that a service should be carried out by a private organization compared to respondents in the “private” treatment group ( $M = 0.18$ ,  $SD = 0.39$ ),  $t(2621) = 2.19$ ,  $p = .03$ . The publicness treatment explains 0.2% of the difference in public sector preference ( $d = 0.09$ ;  $r = 0.043$ ). This effect only holds for emergency ambulances. These results indicate that sector preference is, to some extent, endogenous to the publicness treatment; however, the effects are very small. We reflect on the endogenous nature of sector preference in the discussion and conclusion sections.

At the end of the survey, we included two questions to assess whether participants had perceived the experimental manipulations as intended. The first manipulation check asked whether the organization was a “public organization,” a “private organization,” or “don’t know.” The second manipulation check—which was only given to participants in groups 2, 3, 5, and 6—asked whether the organization belonged to “the 20 highest ranked service providers,” “the 20 lowest ranked service providers,” or “don’t know.” Among the participants, 14.3% misidentified the sector of the organization, 29.4% responded that they did not know, and 56.2% correctly identified the sector.<sup>2</sup> Moreover, 11.1% misidentified the ranking of the organization,

2 Compared to the study by Hvidman and Andersen (2016), our participants misidentified the treatments more often (in their study 9% of the respondent misidentified publicness). However, their experiment was conducted among political science students who may be to a greater extent primed to recognize public–private differences.

**Table 5.** Balance Across Experimental Groups

	Public - Neutral	Public - Positive Info	Public - Negative Info	Private - Neutral	Private - Positive info	Private - Negative info	F	p-Value
Sector preference = public <sup>a</sup>	0.59	0.59	0.62	0.52	0.54	0.58	2.37**	.037
Sector preference = private <sup>a</sup>	0.14	0.15	0.16	0.20	0.18	0.17	1.41	.217
Sector preference = no <sup>a</sup>	0.27	0.26	0.22	0.28	0.29	0.25	1.33	.247
Public service motivation	4.03	3.99	4.00	4.02	4.06	4.05	0.69	.628
Bureaucratic tolerance	3.97	3.93	3.85	3.88	3.87	3.89	1.82	.106
Works in the public sector = yes <sup>a</sup>	0.15	0.16	0.15	0.15	0.19	0.18	1.01	.412
Age	51.74	49.72	51.18	51.82	51.73	51.13	0.87	.498
Gender = female <sup>a</sup>	0.54	0.56	0.51	0.52	0.54	0.54	0.52	.763
Overall experience with service	4.30	4.18	4.26	4.32	4.21	4.23	0.73	.273
Experience with service yes/no = yes <sup>a</sup>	0.71	0.72	0.71	0.69	0.70	0.70	0.27	.931
Total	438	475	413	438	422	437	2623	

Note: <sup>a</sup>The means of the dummy variables should be interpreted as proportions.

\*\* $p < .05$ .

26.2% stated that they did not know, and 62.7% correctly identified the ranking of the organization. Hence, for the majority of our participants, the manipulations were successful.

#### Testing the Hypotheses

In tables 6 and 7, ordinary least squares (OLS) regression analyses are presented with effectiveness, efficiency, equity, and responsiveness as dependent variables. All models control for the type of service, with emergency ambulances as the reference category. The order of the models mirrors the order of our hypotheses. Next to examining the results from the main analyses that pool the three services, we also examine the service-level results. [Supplementary Appendix 5](#) (marginal effects plots) and [Supplementary Appendix 6](#) (regression tables) present the separate analyses for each type of service.

#### Publicness and Sector Preferences

Hypothesis 1 predicts that publicness affects citizens' perceptions of the performance of services. Model 1 tests the effect of publicness. We observe that all the coefficients of the dummy variable publicness are negative for effectiveness and efficiency and positive for equity and responsiveness, but all four coefficients lack statistical significance. Hence, the results do not corroborate hypothesis 1. These results suggest that public organizations, in general, are not on average seen to perform worse or better than their private counterparts. The separate analyses for each type of service (see [Supplementary Appendix 5](#) and [Supplementary Appendix 6](#) for all analyses by service) show that publicness only has a statistically significant, negative effect on the perceived efficiency of public order and

safety services. None of the other coefficients are statistically significant.

Hypothesis 2 predicts that the effect of publicness is moderated by citizens' preferences regarding public and private service delivery. Model 2 adds the dummy variables for sector preference (with public sector preference as the reference category) and the interactions between publicness and sector preference. The coefficients of the interactions between the dummy variables publicness and private sector preference are negative and statistically significant for all four performance dimensions. [Figure 1](#) presents the marginal effects of publicness on all four performance dimensions conditional on participants' sector preference. It shows that participants with a private sector preference are significantly more negative about the performance of public organizations relative to private organizations than participants with a public sector preference. Moreover, for both effectiveness and efficiency, we find that participants with a private sector preference are significantly more negative about the performance of public organizations than the performance of private organizations. As for equity and responsiveness, we find that participants with a public sector preference are significantly more positive about the performance of public organizations than the performance of their private counterparts. These results provide strong evidence for hypothesis 2. The results across the different types of services are fairly robust. The coefficients of the interactions between the dummy variables publicness and private sector preference are always negative, but some lack statistical significance. The effects are most pronounced for public order and safety.

**Table 6.** OLS Regression Analysis of Citizens' Performance Perceptions (Unstandardized Coefficients; Standard Errors and *p*-Values Between Parentheses; *n* = 2,623)

	Effectiveness			Efficiency			
	<i>b</i> /SE/ <i>p</i>	<i>b</i> /SE/ <i>p</i>	<i>b</i> /SE/ <i>p</i>	<i>b</i> /SE/ <i>p</i>	<i>b</i> /SE/ <i>p</i>	<i>b</i> /SE/ <i>p</i>	
Publicness <sup>a</sup>	-.005 (.040) (.902)	.082 (.053) (.122)	.074 (.067) (.267)	.148* (.089) (.099)	-.045 (.039) (.248)	.013 (.052) (.806)	.095 (.067) (.156)
Sector preference none <sup>b</sup>		.045 (.067) (.506)		-.081 (.111) (.463)		.060 (.065) (.355)	-.120 (.111) (.280)
Sector preference private <sup>b</sup>		.199** (.078) (.011)		.140 (.124) (.258)		.142* (.076) (.060)	.038 (.124) (.758)
Publicness * Sector preference none		-.147 (.095) (.124)		-.153 (.155) (.324)		-.072 (.092) (.434)	.027 (.156) (.862)
Publicness * Sector preference private		-.287** (.112) (.011)		-.169 (.187) (.366)		-.224** (.109) (.040)	-.087 (.187) (.644)
Positive performance information <sup>c</sup>			.076 (.047) (.107)	.179* (.092) (.053)		.024 (.047) (.607)	.114* (.067) (.091)
Negative performance information <sup>c</sup>			-.599*** (.048) (.000)	-.641*** (.090) (.000)		-.269*** (.048) (.000)	-.136** (.067) (.042)
Publicness * Positive performance information			-.121 (.094) (.198)	-.146 (.125) (.243)		-.175* (.094) (.063)	-.106 (.126) (.400)
Publicness * Negative performance information			-.169* (.095) (.075)	-.129 (.125) (.300)		-.269*** (.095) (.005)	-.192 (.125) (.125)
Positive performance information * Sector preference none				-.142 (.156) (.362)			.161 (.157) (.305)
Positive performance information * Sector preference private				.026 (.180) (.887)			.078 (.181) (.669)
Negative performance information * Sector preference none				.451*** (.158) (.004)			.356** (.159) (.025)
Negative performance information * Sector preference private				.090 (.179)			.221 (.180)

Table 6. Continued

	Effectiveness			Efficiency		
	b/SE/p	b/SE/p	b/SE/p	b/SE/p	b/SE/p	b/SE/p
Publicness * Positive performance information * Sector preference none	(.613) .109	(.218) (.617)	(.264) (.793)	(.613) .109	(.218) (.617)	(.264) (.793)
Publicness * Positive performance information * Sector preference private	(.218) (.617)	(.264) (.793)	(.264) (.793)	(.218) (.617)	(.264) (.793)	(.264) (.793)
Publicness * Negative performance information * Sector preference none	(.264) (.793)	(.264) (.793)	(.264) (.793)	(.264) (.793)	(.264) (.793)	(.264) (.793)
Publicness * Negative performance information * Sector preference private	(.264) (.793)	(.264) (.793)	(.264) (.793)	(.264) (.793)	(.264) (.793)	(.264) (.793)
Mass transit <sup>d</sup>	-.264*** (.049)	-.271*** (.050)	-.274*** (.047)	-.273*** (.047)	-.085* (.048)	-.087* (.047)
Public order and safety <sup>d</sup>	-.564*** (.050)	-.565*** (.050)	-.551*** (.048)	-.553*** (.048)	-.378*** (.048)	-.377*** (.048)
Constant	4.341*** (.040)	4.295*** (.047)	4.506*** (.043)	4.470*** (.054)	3.873*** (.045)	3.923*** (.054)
R <sup>2</sup>	.047	.050	.127	.129	.028	.046

Note: (a) reference category is private organization, (b) reference category is public sector preference, (c) reference category is neutral performance information, and (d) reference category is emergency ambulances.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .

**Table 7.** OLS Regression Analysis of Citizens' Performance Perceptions (Unstandardized Coefficients; Standard Errors and *p*-Values Between Parentheses; *n* = 2,623)

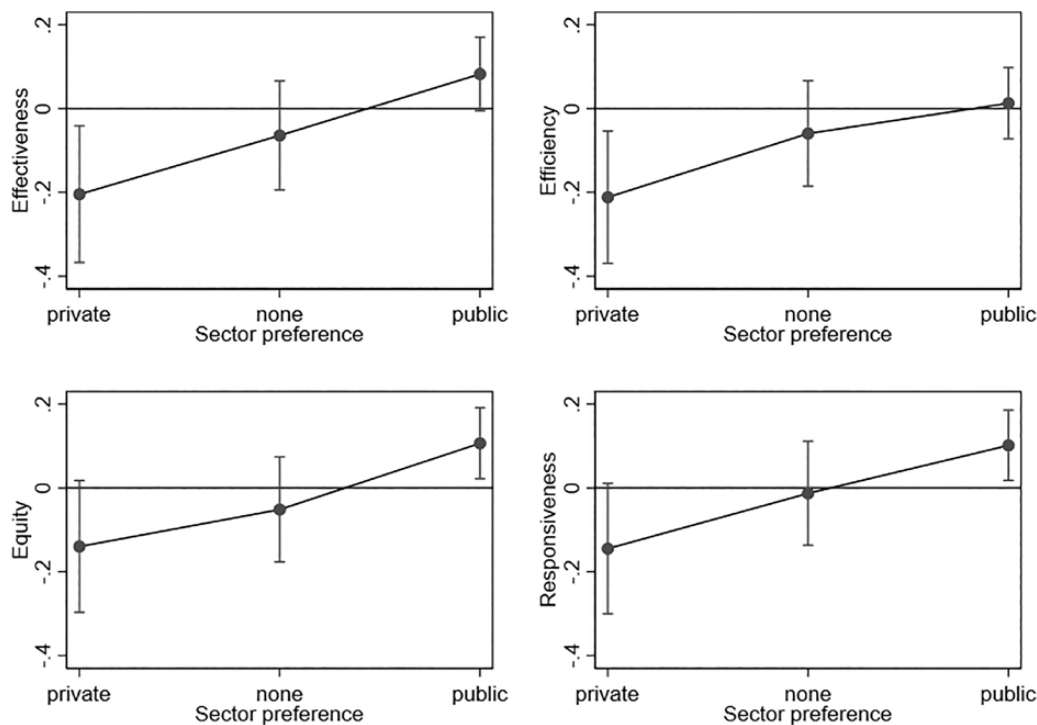
	Equity			Responsiveness			
	<i>b</i> / <i>SE</i> / <i>p</i>	<i>b</i> / <i>SE</i> / <i>p</i>	<i>b</i> / <i>SE</i> / <i>p</i>	<i>b</i> / <i>SE</i> / <i>p</i>	<i>b</i> / <i>SE</i> / <i>p</i>	<i>b</i> / <i>SE</i> / <i>p</i>	
Publicness <sup>a</sup>	.025 (.039) (.515)	.106** (.051) (.039)	.125* (.067) (.061)	.167* (.089) (.062)	.029 (.039) (.451)	.101** (.051) (.046)	.110* (.065) (.091)
Sector preference none <sup>b</sup>		-.028 (.065) (.661)		-.096 (.111) (.385)		.037 (.064) (.570)	-.056 (.108) (.605)
Sector preference private <sup>b</sup>		.152** (.075) (.043)		.062 (.124) (.615)		.179** (.075) (.016)	.064 (.121) (.596)
Publicness * Sector preference none		-.158* (.092) (.086)		-.133 (.155) (.392)		-.114 (.091) (.209)	-.100 (.152) (.509)
Publicness * Sector preference private		-.246** (.108) (.023)		-.016 (.187) (.930)		-.246** (.107) (.022)	.012 (.183) (.948)
Positive performance information <sup>c</sup>		.018 (.047) (.696)	.088 (.067) (.193)	.113 (.092) (.219)	.033 (.046) (.468)	.111* (.066) (.092)	.101 (.090) (.264)
Negative performance information <sup>c</sup>		-.293*** (.048) (.000)	-.201*** (.067) (.003)	-.307*** (.090) (.001)	-.397*** (.047) (.000)	-.336*** (.065) (.000)	-.433*** (.088) (.000)
Publicness * Positive performance information			-.138 (.094) (.142)	-.106 (.125) (.399)		-.153* (.092) (.095)	-.095 (.123) (.439)
Publicness * Negative performance information			-.186* (.095) (.051)	-.116 (.125) (.352)		-.122 (.093) (.189)	-.071 (.122) (.560)
Positive performance information * Sector preference none				-.105 (.156) (.501)			-.086 (.153) (.573)
Positive performance information * Sector preference private				.042 (.181) (.818)			.215 (.177) (.225)
Negative performance information * Sector preference none				.278* (.158) (.078)			.320** (.155) (.039)
Negative performance information * Sector preference private				.211 (.179)			.105 (.175)

Table 7. Continued

	Equity			Responsiveness		
	b/SE/p	b/SE/p	b/SE/p	b/SE/p	b/SE/p	b/SE/p
Publicness * Positive performance information * Sector preference none		(.238) -.005				(.548) .021
Publicness * Positive performance information * Sector preference private		(.218) (.980) -.260				(.214) (.923) --.440*
Publicness * Negative performance information * Sector preference none		(.263) (.322) -.049				(.257) (.087) -.033
Publicness * Negative performance information * Sector preference private		(.226) (.828) -.379				(.222) (.882) -.270
Mass transit <sup>d</sup>		(.264) (.152)				(.259) (.297)
Public order and safety <sup>d</sup>		-.281*** (.047) (.000)				-.288*** (.046) (.000)
Constant		4.432*** (.038) (.000)				4.318*** (.068) (.000)
R <sup>2</sup>		.059				.099

Note: (a) reference category is private organization, (b) reference category is public sector preference, (c) reference category is neutral performance information, and (d) reference category is emergency ambulances.

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ .



**Figure 1.** Marginal Effects of Publicness on Performance Evaluation Conditional on Sector Preference, With 90% Confidence Intervals. *Notes:* The y-axis represents the difference in perceived performance (ref. = private organization). A negative value indicates that the performance of public organizations is perceived more negatively than the performance of private organizations.

#### Publicness and Performance Information

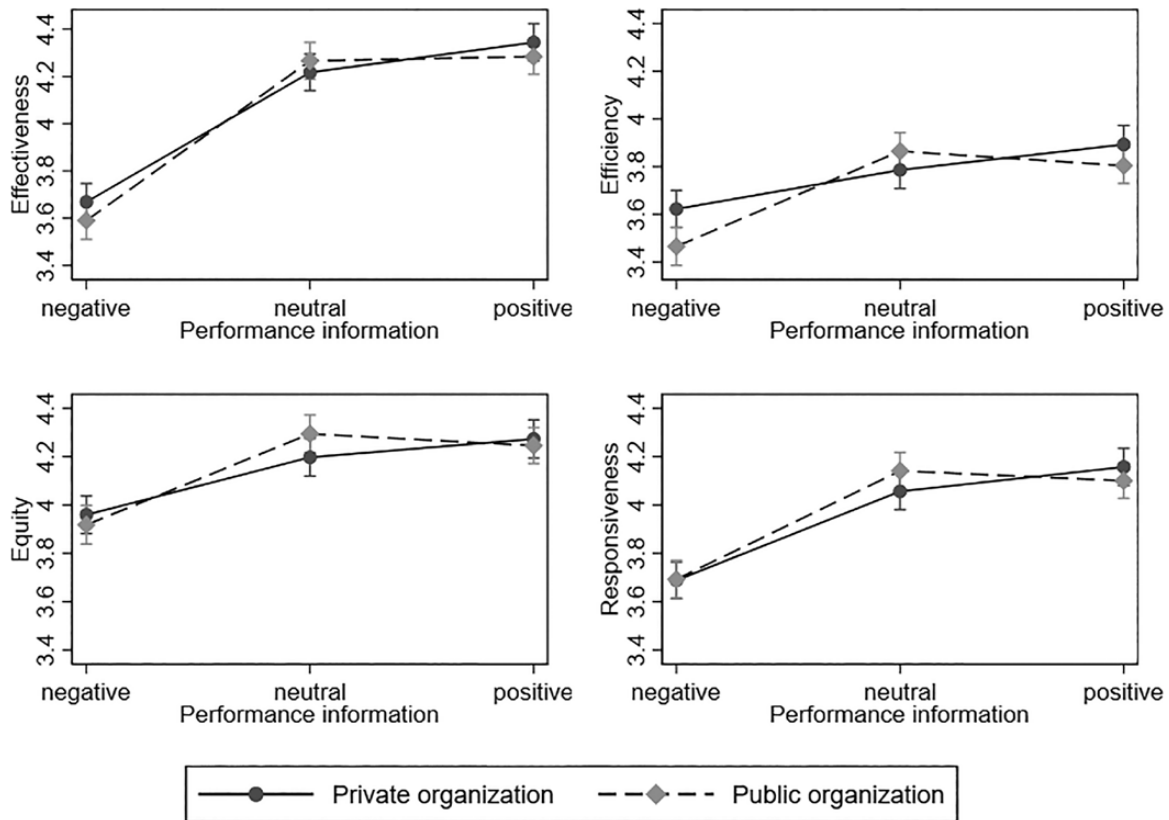
In model 3, we test the effect of the dummy variable's negative and positive performance information (with neutral performance information as the reference category). The coefficients of negative performance information are negative and statistically significant for all performance dimensions. These results indicate that participants who were given negative performance information rate the performance of organizations significantly more negatively than those who were given neutral performance information. The coefficients for positive performance information are all positive, but lack statistical significance. We find that in all cases, relative to neutral performance information, the effect of negative performance information on perceived performance is stronger than the effect of positive performance information, which corroborates hypothesis 3. The results thus show that there is a strong asymmetry in the interpretation of performance information. The effects of negative and positive performance information are highly robust across services.

Hypothesis 4 predicts that the negative effects of negative performance information are stronger for public organizations than for private organizations. Model 4 tests the interaction effect between publicness and both negative and positive performance information (with neutral performance information as the reference category). The coefficients for the interactions

between publicness and negative performance information are negative and statistically significant for effectiveness, efficiency, and equity. Moreover, the coefficient of the interaction effect of publicness and positive performance information on efficiency and responsiveness is also negative and statistically significant. Figure 2 presents the predictive margins of public and private organizations for all four performance dimensions conditional on the performance information cue.

As the coefficients in Model 4 and the predictive margins in figure 2 show, relative to participants who received the neutral performance information cue, participants who were asked to rate the performance of public organizations react significantly more negatively to negative performance information than participants evaluating negative performance information about private service delivery. In addition, relative to the neutral performance information cue, public organizations are perceived to perform significantly worse on efficiency and responsiveness than their private counterparts when people are presented positive performance information. Although we cannot fully corroborate hypothesis 4, our results indicate that, compared to private organizations, public organizations, in general, are punished more harshly for poor performance and rewarded less for good performance.

The results vary across services. The results are highly robust for mass transit: relative to neutral



**Figure 2.** Predicted Performance Evaluation of Public and Private Organizations Conditional on Performance Information, With 90% Confidence Intervals. *Notes:* The y-axis represents the predicted value on the dependent variable.

performance information, the coefficients for negative and positive performance information are all negative and statistically significant. Hence, public mass transit organizations are punished more harshly for poor performance and rewarded less for good performance. Yet, the results for public order and safety and emergency ambulances are not statistically significant. We return to these results in the discussion section.

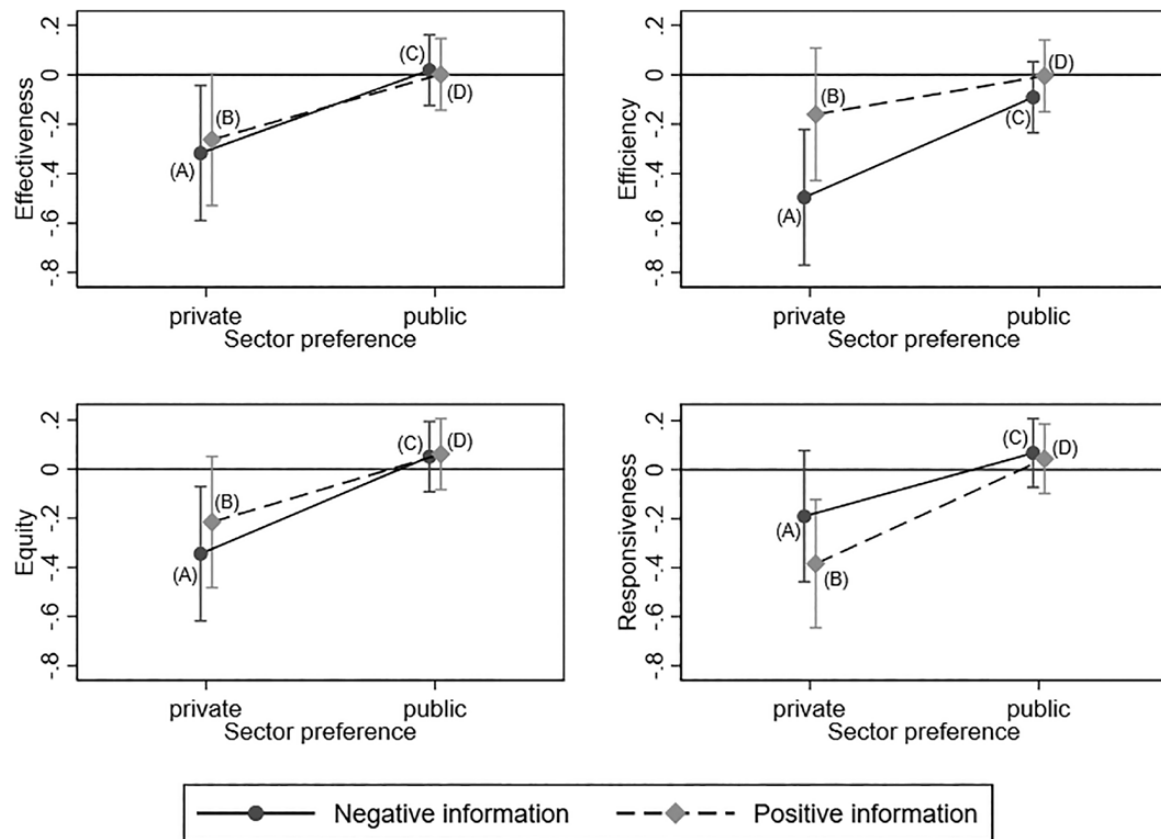
#### Publicness, Performance Information, and Sector Preferences

Hypothesis 5 predicts that the negative effect of negative performance information is stronger for public organizations than for private organizations, if performance information is congruent with citizens' preferences for private service provision. When citizens with a preference for private-sector delivery are presented with negative performance information about a public service provider, this *confirms* their preferences about service delivery (e.g., public services should not be provided by public organizations). Consequently, these citizens will be even more negative about negative performance of public organizations compared to citizens without this private sector preference. When these same citizens are confronted with negative performance information about their preferred private sector organizations,

we expect them to pay less attention to this negative information because this *disconfirms* their beliefs, and consequently, the effect of negative performance information will be less strong.

To test hypothesis 5, we test the effects of three-way interactions between publicness, performance information, and sector preference. Model 5 adds the interactions between publicness, performance information, and sector preference. To simplify the interpretation of these three-way interactions, we visualized the marginal effects of publicness in [figure 3](#). Given that we are mainly interested in the confirmation or disconfirmation of negative or positive performance information by participants with either a private or public sector preference, we do not present the marginal effects of the interactions that include the categories “no sector preference” and “neutral performance information” (results are available upon request). Hence, [figure 3](#) displays the marginal effects of publicness (with private sector as the reference category) for the remaining four sector preference and performance information combinations: private preference \* negative information (interaction “A”), private preference \* positive information (interaction “B”), public preference \* negative information (interaction “C”), and public preference \* positive information (interaction “D”). In accordance





**Figure 3.** Marginal Effects of Publicness on Performance Evaluation Conditional on Sector Preference and Performance Information, with 90% Confidence Intervals. *Notes:* The y-axis represents the difference in perceived performance between public organizations and private organizations. A negative value indicates that the performance of public organizations is perceived more negatively than the performance of private organizations. A = private preference \* negative information, B = private preference \* positive information, C = public preference \* negative information, D = public preference \* positive information.

with hypothesis 5, we only expect interaction “A” to be statistically significant. The results show that, for effectiveness, efficiency, and equity, the marginal effect of publicness for interaction “A” is negative and significantly different from zero. Hence, participants with a private sector preference who were presented negative performance information are significantly more negative about the performance of public organizations than the performance of private organizations. In addition, we find that, when rating how responsive an organization is, participants with a private sector preference who were presented positive performance information are also significantly more negative about the performance of public organizations (interaction “B” in figure 3). We find no statistically significant differences for participants with a public sector preference (interactions “C” and “D” in figure 3). That means that, on average, participants with a public sector preference do not respond more negatively to negative performance information about public organizations than negative information about private organizations. Neither do they have the opposite bias: they do not respond more negatively to negative performance

information about *private* organizations than negative information about *public* organizations. We conclude that hypothesis 5 is corroborated for effectiveness, efficiency, and equity: the effect of negative performance information is, in general, stronger for public organizations than for private organizations if participants prefer service provision by private organizations.

The separate analyses for each type of service (Supplementary Appendix 5) show that the results of interaction “A” (the effect of publicness for participants with a private sector preference and negative performance information) are fairly robust: the coefficients are negative across the different types of services, yet, not always statistically significant. Moreover, the separate analyses for emergency ambulances and mass transit provide some interesting results. First, participants with a private sector preference are significantly more negative about the effectiveness, efficiency, and responsiveness of well-performing public emergency ambulances than well-performing private emergency ambulances (interaction “B”). Second, participants with a public sector preference are significantly more positive about equity and responsiveness of poorly

performing public emergency ambulances (interaction “C”). Third, participants with a public sector preference are significantly more negative about the efficiency of poorly performing public mass transit service providers than poorly performing private mass transit service providers (interaction “C”). The findings for emergency ambulances thus show that the interpretation of negative performance varies according to respondents’ sector preference. For mass transit services, however, we find that even participants with a public sector preference have a bias against poorly performing public mass transit service providers. We return to this variation in the discussion section.

## Discussion

The survey experimental study produces four main findings. First, the results contradict claims about a systematic, general effect of publicness on citizens’ performance perceptions; instead, they provide evidence that performance assessments are strongly dependent on the sector preferences of citizens. Our results suggest that public organizations are *not* on average seen to perform worse than private organizations delivering the same services. This null finding contradicts [Marvel’s \(2015a\)](#) argument that citizens hold deep-seated negative views of the public sector and, therefore, automatically associate public organizations with bad performance. It also runs counter to the empirical findings in [Hvidman and Andersen \(2016\)](#) and [Hvidman \(2019, study 2\)](#) that citizens rate public service providers as less effective than private ones. Instead, our results echo the null findings of [Meier and colleagues \(2019\)](#).

Why do we not see a general negative effect of publicness on performance perceptions? The focus groups with citizens offer some clues: Citizens certainly hold certain negative views about public organizations, for instance, that public organizations lack the competitive pressures to improve their services and react quickly to requests from citizens. Yet, they also have negative beliefs about private organizations that deliver public services. They see private organizations as driven by profit, which is perceived to have a negative impact on quality and equal access to services. As one participant stated: “Mostly private organizations think more about their pocketbook than about the general interest [...] Public organizations think more about public interests: that you care about citizens, [...] that you are more sincere, honest towards everyone, less discrimination” (participant, focus group 2).<sup>3</sup> In sum, citizens do not automatically associate public organizations with negative performance; they have a

range of positive and negative associations regarding public and private organizations that color their performance assessments. Yet, as our experimental results show, these associations are less straightforward than the view that public organizations are less productive but more equal and, as we discuss below, vary considerably across services.

By contrast, we find strong empirical support for the argument that the assessment of the performance of public and private organizations depends on the sector preferences of citizens. This confirms the results in [Hvidman \(2019, study 1\)](#) and provides support for the argument that citizens’ information processing is driven by politically motivated reasoning ([Baekgaard and Settitzlew 2016](#); [Kunda 1990](#); [Taber and Lodge 2006](#)). Politically motivated reasoning emerges as a more important explanation for negative perceptions of the performance of public organizations than any universally held negative views of the public sector. Whereas prior research assumes that citizens’ sector preferences are deep-rooted and stable (e.g., [Marvel 2015a, 2015b](#)), an additional explorative finding of the experiment is that sector preferences are not fully fixed. The balance check revealed that citizens who read the vignette about a public organization had slightly higher preferences for public service delivery. Citizens may thus update their preference for public or private service delivery based on exposure to or interaction with service providers.

Our second finding is that citizens’ evaluations of performance are more strongly affected by negative than positive performance information. Whereas negative performance information has a strong negative impact on how citizens assess the performance of service providers, positive performance information does not have a significant positive effect. This result is in line with BPA research that has found that negative information is more consequential for citizens than positive information ([James and Mosely 2014](#)) and resonates with research that has shown evidence of negativity bias using equivalence-framing designs ([Olsen 2015a, 2015b](#)). Since our experimental treatments of positive and negative performance information are not based on objectively equivalent information that is framed differently (cf. [Olsen 2015b](#)), a limitation is that we cannot be certain if the respondents interpreted the positive and negative performance information treatment as having equivalent magnitude in comparison to the control group.

The third and most important finding concerns the interaction between publicness, negative performance information, and sector preferences. Going beyond existing research, our experimental study shows that citizens interpret performance information about public and private organizations in an asymmetrical

3 All quotes from the focus groups are translated by the authors.

way and depending on sector preferences: *Public organizations are punished more severely by citizens for negative performance information than private organizations, but this tendency is concentrated among citizens who prefer private service provision.* Yet, and this is our fourth finding, *perceptions of failing service delivery also vary across service areas.* Whereas studies of motivated reasoning and sector preferences tend to assume general preferences for public versus private service delivery, we observe that views of whether a service should be publicly provided depend strongly on service area. Citizens have a much stronger preference for public provision of ambulances and public order than for publicly provided mass transit. These differences also condition citizen perceptions of failing service delivery. In all three service areas, people with a preference for private service provision punish public organizations harder for poor performance than private organizations. Yet, the reactions of people with a preference for public service provision differ across services: in mass transit, this group judges public organizations more severely than private organizations for bad performance, just like people with a private sector preference; in public safety, they assess failing public and private organizations equally; whereas in ambulance services, they are more lenient in their assessment of failing public organizations than private ones.

How can we make sense of these findings? The explanation that failing public organizations fit general negative stereotypes about the public service and therefore elicit stronger negative assessments than failing private organizations finds limited support. Only in one service area—mass transit—do citizens judge poor performance by a public provider more negatively than poor performance by a private provider *regardless* of their sector preferences. In the other service areas, the tendency to condemn failing public organizations more strongly is *not* shared by all citizens. Moreover, the focus groups with citizens suggest that assessments of failing public organizations are guided not only by negative stereotypes but also by other heuristics. One such heuristic was that you as a citizen are dependent on public organizations, whereas with private organizations, you have a choice. This makes it worse if a public organization fails, since you have nowhere else to go: “As a citizen you are in the hands of [the organization] if it’s publicly provided” (participant, focus group 4); “with a public organization [...] you don’t have much choice” (participant, focus group 4). Another heuristic was that public organizations are financed by taxpayers’ money. As a result, they are judged more severely for waste and inefficiency: “With public organizations [...] if it goes wrong then I think, well, it’s also my tax money that goes there so I want services to be provided in a good way” (participant, focus group 4); “of course you feel extra cheated if you pay taxes

for something and then people fill their pockets” (participant, focus group 2). Some participants also used a third heuristic, namely judging the performance of public organizations against their high expectations about public services. This led them to judge failing public organizations more severely: “I think that I take public services much more for granted. I simply assume that it’s there, that it works as it should. [...] A public service will never strike me in a positive way. I assume that it works” (participant, focus group 3).

The alternative explanation that the assessment of failing public service delivery is subject to motivated reasoning and thus varies across groups of citizens finds stronger support. The finding that people who prefer private service provision punish poorly performing public organizations more severely than poorly performing private organizations—which holds for all services—supports the argument that citizens put greater emphasis on information that confirms their beliefs than on information that does not match beliefs. We also find in two of the three service areas that people with a preference for public service provision do not punish failing public organizations more severely than private ones, or even are more tolerant towards failing public organizations than private organizations.

Our findings thus suggest that under certain conditions, motivated reasoning prevails, whereas under other conditions, general negative stereotypes about the public sector take the upper hand. What are these conditions? The focus groups point to service characteristics as one possible explanation. Whereas participants considered some services core public tasks that at all costs should be publicly delivered, they were less preoccupied about who delivered other services. More specifically, ambulance care and public order were seen as core public tasks, mass transit less so. For instance, one participant observed:

Public safety should really remain in public hands. [...] To a lesser extent I would say the same about ambulance services. One thing needs to be guiding, that is medical care and that everyone that comes to lie in that ambulance gets the best possible chance to survive. The more financial interests come into play, the more these concerns could come into conflict. [...] By contrast, I would say that public transport you could – and this is already to a large extent the case in the Netherlands – outsource. I wouldn’t say that I have a preference for it becoming private, but it’s something that you could turn into a profitable service.” (participant, focus group 3)

If a service is seen as a core public task—such as ambulance care—private companies taking over these tasks may face greater scrutiny and a greater chance of being condemned if they fail, given that failure would

resonate with the view that this task should not be left to private companies. Public organizations, by contrast, may enjoy greater patience and understanding from citizens. In this case, motivated reasoning prevails. By contrast, if a service is not seen as a core public task and private provision, therefore, is seen as feasible (e.g., mass transit), this mechanism may not be triggered and citizens may rather be guided by general negative stereotypes about the public sector.

## Conclusion

This article has studied citizens' perceptions of failing public service delivery. It has examined experimentally citizens' responses to information about whether a service is provided by a public or a private organization and information on the performance of the service provider. The analyses show that, while negative performance information, in general, has strong negative effects on performance perceptions, negative information is even more consequential in the assessment of public organizations than private organizations. Moreover, the negative effect of negative performance information is stronger for public than private organizations when the respondent prefers private service delivery but not when the respondent prefers public provision or has no preference. In other words, citizens punish public organizations more severely for failing service provision than private organizations, but this tendency is concentrated among citizens with a preference for private service provision. However, there are also significant differences across services in how citizens evaluate failing service delivery.

Bringing together two previously separate schools of BPA research, our study shows not only that citizens' processing of information about public services is subject to various forms of bias, but also that these biases interact in shaping how citizens view public organizations. While our results can largely be explained by motivated reasoning, the differences across service areas suggest that motivated reasoning does not prevail under all conditions. Further investigating these complex dynamics is an important task for BPA scholars seeking to understand the specific implications of behavioral dynamics for the broad range of organizations providing public services.

Whereas the experimental method, the large scale of the experiment, and the use of a representative sample of citizens rather than students constitute significant strengths of this study, there are also important limits to what inferences can be drawn from our findings. First, the experiment was conducted among citizens within a specific national context. By international standards, The Netherlands is characterized by well-functioning public services and relatively high trust

in government and the public sector. This may limit the extent to which our results travel to other national contexts. Second, the experiment concerned specific types of public services. The observed patterns may not necessarily apply to other services, such as services characterized by repeated, long-term, and more intensive interaction between staff and citizens such as education, health care, or social welfare. Future research may utilize other national contexts in which public-private differences of such high-salient services can be meaningfully and systematically examined.

However, the experiment covered three types of services in different policy areas, which constitutes an improvement on studies that examine a single service. And our study shows that additional insight can be gained from disaggregating different types of services. Our service-level results show considerable variation both in preference for public provision of services and in the perceptions of failing service delivery. This finding suggests that researchers need to be much more attentive to service-specific features both when theorizing and investigating publicness and performance perceptions. In particular, our findings show that preferences for public or private service delivery are not general but differ considerably across service areas. We, therefore, encourage researchers to develop theoretical arguments about cross-service variation that can be tested in multi-service designs.

The findings also have implications for the question of what public organizations can do to improve their reputation in the eyes of citizens—a question currently bedeviling many policy-makers and managers. The results are admittedly discouraging for those who think that citizen perceptions of public organizations can easily be improved through the dissemination of positive performance information. While citizens react negatively to negative performance information, they shrug at positive information of comparable magnitude. Moreover, the negative effect of negative information is even more pronounced for public organizations than for private ones. Does this mean that public organizations are forever condemned to negative assessments by citizens who always punish and never reward? The situation may not be quite that dire. The results show that the more negative responses to poor performance are concentrated among the group of citizens with a preference for private service provision. This group has been assumed to pose a particularly thorny challenge for policy-makers, given their deep-seated negative views of public services (see [Hvidman 2019](#), 11). However, our study indicates that citizens' sector preferences, to some extent, are malleable. Practitioners may, therefore, attempt to indirectly mitigate citizens' tendency to judge failing public service providers more harshly by attempting to influence

their sector preferences. Nonetheless, the question of how public organizations can mitigate negative performance perceptions among citizens—especially among those citizens who strongly disfavor public organizations—remains a pressing practical and theoretical problem on the agenda of behavioral public administration research.

### Supplementary material

Supplementary material is available at the *Journal of Public Administration Research and Theory* online.

### Funding

This work was supported by the Netherlands' Ministry of the Interior and Kingdom Relations.

### Acknowledgments

The authors are grateful to editor Mary K. Feeney, the three anonymous reviewers, as well as Kenneth Meier, Julian Christensen, Asmus Leth Olsen, and Saar Alon Barkat for their constructive and insightful feedback on previous versions of this article. The data and the codebook (in both Dutch and English) are available at [https://www.dataarchive.lissdata.nl/study\\_units/view/803](https://www.dataarchive.lissdata.nl/study_units/view/803).

### References

- Andrews, Rhys, and Steven Van de Walle. 2013. New public management and citizens' perceptions of local service efficiency, responsiveness, equity and effectiveness. *Public Management Review* 15 (5): 762–83.
- Baekgaard, Martin, and Søren Serritzlew. 2016. Interpreting performance information: Motivated reasoning or unbiased comprehension. *Public Administration Review* 76 (1): 73–82.
- Baker Sally H., Amitai Etzioni, Richard A. Hansen, and Marvin Sontag. 1973. Tolerance for bureaucratic structure. *Human Relations* 26 (6): 755–86.
- Bisgaard, Martin. 2015. Bias will find a way: Economic perceptions, attributions of blame, and partisan-motivated reasoning during crisis. *The Journal of Politics* 77 (3): 849–60.
- Boyne, George A. 2002. Public and private management: What's the difference?. *Journal of Management Studies* 39 (1): 97–122.
- . 2010. Performance management: Does it work. In *Public management performance: Research directions*, ed. G. A. Boyne, G. A. Brewer, and R. M. Walker, 207–26. Cambridge: Cambridge Univ. Press.
- Boyne, George A., Oliver James, Peter John, and Nicolai Petrovsky. 2009. Democracy and government performance: Holding incumbents accountable in English local governments. *The Journal of Politics* 71 (4): 1273–84.
- Brewer, Gene A., and Gene A. Brewer Jr. 2011. Parsing public/private differences in work motivation and performance: An experimental study. *Journal of Public Administration Research and Theory* 21 (3): 347–62.
- CentERdata. n.d. *Representativiteit van het LISS panel 2015*. <https://www.lissdata.nl/about-panel/composition-and-response> (accessed January 8, 2019).
- George, Bert, Martin Baekgaard, Adeliën Decramer, Mieke Audenaert, and Stijn Goeminne. 2020. Institutional isomorphism, negativity bias and performance information use by politicians: A survey experiment. *Public Administration* 98 (1): 14–28.
- Grimmelikhuijsen, Stephan, Sebastian Jilke, Asmus Leth Olsen, and Lars Tummers. 2017. Behavioral public administration: Combining insights from public administration and psychology. *Public Administration Review* 77 (1): 45–56.
- Hood, Christopher. 1991. A public management for all seasons?. *Public Administration* 69 (1): 3–19.
- Hvidman, Ulrik. 2019. Citizens' evaluations of the public sector: Evidence from two large-scale experiments. *Journal of Public Administration Research and Theory* 29 (2): 255–267.
- Hvidman, Ulrik, and Simon Calmar Andersen. 2016. Perceptions of public and private performance: Evidence from a survey experiment. *Public Administration Review* 76 (1): 111–20.
- James, Oliver. 2011a. Managing citizens' expectations of public service performance: Evidence from observation and experimentation in local government. *Public Administration* 89 (4): 1419–35.
- . 2011b. Performance measures and democracy: Information effects on citizens in field and laboratory experiments. *Journal of Public Administration Research and Theory* 21 (3): 399–418.
- James, Oliver, and Alice Moseley. 2014. Does performance information about public services affect citizens' perceptions, satisfaction, and voice behaviour? Field experiments with absolute and relative performance information. *Public Administration* 92 (2): 493–511.
- James, Oliver, and Gregg G. Van Ryzin. 2017. Incredibly good performance: An experimental study of source and level effects on the credibility of government. *The American Review of Public Administration* 47 (1): 23–35.
- James, Oliver, and Peter John. 2007. Public management at the ballot box: Performance information and electoral support for incumbent English local governments. *Journal of Public Administration Research and Theory* 17 (4): 567–80.
- Jilke, Sebastian. 2018. Citizen satisfaction under changing political leadership: The role of partisan motivated reasoning. *Governance* 31 (3): 515–33.
- Kahneman, Daniel. 2011. *Thinking, fast and slow*. New York, NY: MacMillan.
- Kahneman, Daniel, and Amos Tversky. 1979. Prospect theory: An analysis of decision under risk. *Econometrica* 47 (2): 263–91.
- Kunda, Ziva. 1990. The case for motivated reasoning. *Psychological Bulletin* 108 (3): 480–98.
- Marvel, John D. 2015a. Unconscious bias in citizens' evaluations of public sector performance. *Journal of Public Administration Research and Theory* 26 (1): 143–58.
- . 2015b. Public opinion and public sector performance: Are individuals' beliefs about performance evidence-based or the product of anti-public sector bias?. *International Public Management Journal* 18 (2): 209–27.
- McDermott, Rose. 2013. The ten commandments of experiments. *Political Science & Politics* 46 (3): 605–10.
- Meier, Kenneth J., Austin P. Johnson, and Seung-Ho An. 2019. Perceptual bias and public programs: The Case of the United States and Hospital Care. *Public Administration Review* Forthcoming. 79 (6): 820–8.
- Moynihan, Donald. P. 2008. *The dynamics of performance management: Constructing information and reform*. Washington, DC: Georgetown Univ. Press.
- . 2018. A great schism approaching? Towards a micro and macro public administration. *Journal of Behavioral Public Administration* 1 (1): 1–8.
- Mutz, Diana C. 2011. *Population-based survey experiments*. Princeton, NJ: Princeton Univ. Press.
- Nielsen, Poul A., and Donald P. Moynihan. 2017. How do politicians attribute bureaucratic responsibility for performance? Negativity bias and interest group advocacy. *Journal of Public Administration Research and Theory* 27 (2): 269–83.

- Olsen, Asmus Leth. 2013. Leftmost-digit-bias in an enumerated public sector? An experiment on citizens' judgment of performance information. *Judgment and Decision Making* 8 (3): 365.
- . 2015a. Negative performance information causes asymmetrical evaluations and elicits strong responsibility attributions. Paper presented at the 111th Annual Meeting of the American Political Science Association, September 3–6, San Francisco, CA.
- . 2015b. Citizen (dis)satisfaction: An experimental equivalence framing study. *Public Administration Review* 75 (3): 469–78.
- Rainey, Hal. G. 2009. *Understanding and managing public organizations*. San Francisco, CA: Jossey-Bass.
- Rozin, Paul, and Edward B. Royzman. 2001. Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review* 5 (4): 296–320.
- Taber, Charles S., and Milton Lodge. 2006. Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science* 50 (3): 755–69.
- Van Dooren, Wouter, and Steven Van de Walle (Eds.). 2008. *Performance information in the public sector: how it is used*. Basingstoke, UK: Palgrave/Macmillan.
- Van Ryzin, Gregg G. 2016. Evidence of an “end of history illusion” in the work motivations of public service professionals. *Public Administration* 94 (1): 263–75.
- Vandenabeele, Wouter. 2008. Development of a public service motivation scale: Corroborating and extending Perry's measurement instrument. *International Public Management Journal* 11 (1): 143–67.
- Walker, Richard M., and Rhys Andrews. 2013. Local government management and performance: A review of evidence. *Journal of Public Administration Research and Theory* 25 (1): 101–33.