



Københavns Universitet



Human Interest or Hard Numbers?

Olsen, Asmus Leth

Publication date:
2015

Document Version
Peer reviewed version

Citation for published version (APA):
Olsen, A. L. (2015). Human Interest or Hard Numbers? Experiments on Citizens' Selection, Exposure, and Recall of Performance Information. Copenhagen: Department of Political Science, University of Copenhagen .

Human Interest or Hard Numbers? Experiments on Citizens' Selection, Exposure, and Recall of Performance Information

Asmus Leth Olsen
Department of Political Science
University of Copenhagen
Denmark
ajlo@ifs.ku.dk / www.asmusolsen.com

Abstract

The abundance of quantitative performance information has motivated multiple studies about how citizens make sense of “hard” data. However, research in psychology emphasizes that vivid episodic information (e.g., case stories) often leaves a greater mark on citizens than pallid statistics. We test this contradiction with multiple experiments embedded in a large nationally representative sample of citizens (n=1013). The results stress three striking differences between quantitative and episodic data: Citizens have strong *preferences* for statistical data if asked to evaluate an organization. However, episodic information has a stronger *impact* on citizens' actual evaluations and is more *emotionally* engaging than statistics. Finally, if asked to immediately recall recent performance information about public services, citizens report more nuanced and elaborate information about personalized stories and experiences than about statistics and numbers. Overall, the results raise questions about the ability of hard performance data to dominate and crowd out episodic performance information.

PRACTITIONER POINTS:

- Providing citizens with quantitative performance data will not automatically crowd out citizens' reliance on personal experience or media case stories.
- Exemplars and other episodic experiences with public services provide a more vivid account of performance, which is more emotionally engaging and easier to recall for citizens.
- Policy makers and managers must pay closer attention to how their performance data can provide citizens with a more vivid and emotional account of public services to complement the often more pallid performance data.

ACKNOWLEDGEMENT: The author thanks Carolyn J. Heinrich, Oliver James, Donald Moynihan, and Gregg Van Ryzin for their very helpful comments and suggestions about earlier drafts of the manuscript. An earlier version was presented at the Public Management Research Conference (PMRC) June 11-13, 2015, Minneapolis, Minnesota. The author would also like to thank participants at the panel for their helpful comments and suggestions.

FUNDING: This research was made possible by a grant from the Master of Public Governance (MPG) at the University of Copenhagen and Copenhagen Business School in Denmark. Project title: The Psychology of the Public Sector and by grant 0602-02577B from the Danish Council for Independent Research.

“...numbers represent dry statistics, ‘human beings with the tears dried off,’ that lack feeling and fail to motivate action.”

– Slovic (2007, 86)

Performance measurement is fundamentally about assigning numbers to the inputs, outputs, and outcomes of public organizations. Accordingly, when we refer to performance information, we essentially imply *quantitative* performance information. Increasingly, performance data is intended for the public at large. This trend has sparked a natural research interest in how citizens make sense of such numbers. Key experimental findings show that performance data clearly affects citizens’ attitudes (James 2011; Bækgaard 2015). Moreover, citizens draw on reference points for comparisons (James and Moseley 2014; Hansen et al. 2014; Charbonneau and Van Ryzin 2015), and motivated reasoning along with implicit attitudes guide their interpretations of performance data (Marvel 2015; Bækgaard and Serritzlew 2015). In addition, simple framing effects can alter the inferences that these citizens draw from the data (James and Van Ryzin 2015; Olsen 2013; 2015a).

On the other hand, while the abundance of public performance data motivates these studies, we have overlooked the fact that “hard” performance data is only a subset of the information about public services that is available to citizens. In fact, empirical studies show that the dominant source of information for citizens is often the exact opposite of statistical numbers: Informal “human interest” stories from personal experience, word-of-mouth accounts from friends and family, and coverage of public services in the media (Slattery and Hakanen 1994; Grosso and Van Ryzin 2011). At the managerial level, it has also been noted that narrative information attracts considerable attention (Moynihan 2008; Kroll 2013). In psychology, there has been a longstanding interest in contrasting the effect of such “episodic” information with more pallid and abstract statistical information (Nisbett and Ross 1980). Here, the evidence points to episodic information being more potent than statistical

information on multiple dimensions. For one, episodic information is generally more vivid, and vividness is an important determinant of evaluative impact (Pettus and Diener 1977; Nisbett and Ross 1980). Secondly, episodic information is more emotionally engaging than abstract numbers (Gross 2008; Slovic 2007; Aarøe 2011). Moreover, episodic information is more easily stored in and retrieved from our memories (Taylor and Thomson 1982; Aaroe and Petersen 2013). Taken together, existing work outside of public administration on episodic information calls into question the relative effectiveness of numerical performance information.

We directly confront this challenge and undertake the first experimental test, which compares how citizens rely on “episodic” and “statistical” information about public-sector performance. Our test of episodic and statistical data focuses on three distinct dimensions: selection, exposure, and recall. First, we investigate citizens’ stated preferences for either statistical or episodic information when asked to evaluate a service. Second, we test how episodic and statistical information changes evaluations of public services and induces different emotional responses. Third, we look at the probability of recalling episodic and statistical-performance information and observe differences in how elaborate the recalled information is. In order to do so, we will employ a set of novel experiments imbedded in a survey. The survey is fielded in a large, nationally representative sample of the Danish population (n=1013). This nationally representative sample provides strong external validity in terms of generalizing the experimental findings to the public at large. At the same time, the experiments are general enough to allow for replication and extension in different contexts and countries.

Our findings point to numerical-performance information across many dimensions being less influential than episodic descriptions of individual experiences with public services. On one hand, citizens have stronger stated preferences for statistical performance information, but apart from explicit information selections, we find that episodic performance

information tends to be more potent. Citizens' evaluations of public services are more easily affected by episodic information, and if people are faced with negative information, it also elicits a stronger emotional response. In terms of recall, we find that citizens are more likely to recall episodic information, and their memories are more elaborate and detailed regarding episodic information instead of statistical information. In short, episodic performance information affects human minds and sticks.

The findings of this study have implications for future research and practitioners' views of performance data. First, the findings indicate that while numerical performance information diffuses across countries, sectors, and levels of government, it will not automatically crowd out existing sources of episodic information. As practitioners and researchers, we have a task ahead of us in trying to understand how to balance human interest and hard numbers when communicating performance information to the public. Second, while our focus is on the effect of episodic and statistical information at the citizen level, the findings have implications for how performance information may affect leaders and employees as well. These implications are discussed further in the concluding section.

How Statistical Performance Information Affects Citizens

Most definitions of performance measurement or performance information stress the importance of assigning numbers to the inputs, outputs, and outcomes of public organizations (Davies 1999; Hood 2007; James 2011; Moynihan 2008; Perrin 1998; Van Dooren, Bouckaert, and Halligan 2010). As noted by Radin (2006, 27), "There is perhaps no element within the performance measurement process that is more important than the reliance on numbers and quantitative presentations of accomplishments." Accordingly, the numerical aspect has often been stressed as a potent driver that affects the perceptions, evaluations, and behavior of managers; employees; and citizens. At the organizational and managerial level, this sentiment is captured in the notion of "What gets measured gets done" (Osborne and

Gaebler 1992, 146). This quote implicitly conveys the idea that performance information is able to crowd out other sources of unmeasured information about public services. Holzer and Yang (2004, 284) note how “measurement helps to move the basis of decision-making from personal experience to proof of measurable accomplishment or lack thereof.” However, numbers have also been noted as forces for unintended, albeit still powerful, consequences. For instance, in research on gaming, Smith (1995, 284) raised concerns about “tunnel vision,” which takes the center stage of attention “at the expense of unquantified aspects of performance.” In other words, numbers have the potential to crowd out the episodic pieces of information that remain uncounted.

What could explain the fact that quantitative performance information is successful in affecting *citizens*? One view is that the assignment of numbers to complex social outcomes has the advantage of absorbing potential uncertainties and diverging signals of the underlying data (March and Simon 1958; Stone 2012; Moynihan 2008). Espeland and Sauder (2007, 17) mention how quantitative “information appears more robust and definitive than it would if presented in more complicated forms,” and Jackson (2011, 23) adds how “ambiguous concepts, however, make deceptive statistics.” The experimental work on how performance information affects citizens has also stressed the heuristical qualities of performance data: It helps simplify the otherwise complex task of evaluating if a public organization is performing well or poorly (James 2011; James and Moseley 2014). Quantification also hints at an implicit cue about the importance of the information as only important matters are worth counting (Stone 2012, 192). An extension of this argument stresses the scientific and thoughtful aspects of performance numbers: “Numbers generated by sophisticated statistical techniques can give a false sense of objectivity and reliability” (Jackson 2011, 24). In contrast to anecdotes or personal experience, numbers seem more objective and have a more decisive nature (Herbst 1993, 2).

From social psychology, we know that precision—even when unwarranted—can be very persuasive because it carries implicit cues about the knowledge of the communicator (Zhang and Schwarz 2013). In other words, if we assign a number to the performance of an organization, we communicate to the world that we have highly accurate information about that organization’s performance.¹ Stone (2012, 191-196) noted this observation as well since “numbers, by seeming to be so precise, help bolster authority of those who count...numbers impart an aura of expertise and authority to the people who produce and use them.” Taken together, we encounter a view in which numbers seem objective, unambiguous, and precise to the receiver of the information. We predict that these qualities are important when citizens engage in *explicit* information selection. That is, cues about simplicity, objectivity, importance, and accuracy will make statistics more appealing in direct comparison with episodic information that usually scores lower on these dimensions. This realization leads us to our first hypothesis: *When making deliberate decisions about what information to engage with, citizens are more likely to select statistical information over episodic information* (H1). However, as we will discuss in the following section, there are good reasons to believe that statistical performance information—for citizens—will be less persuasive in actual evaluations, less emotionally engaging, and more difficult to recall.

How Episodic Performance Information Affects Citizens

There been little to no systematic attempt to compare the effects of episodic and statistical performance information. Even so, we can trace a concern about the ability of numbers to impact citizens in the very early works on performance reporting. Clarence Ridley is well known for his extensive work on municipal and city reporting from the 1920s and onwards. Ridley had an eye for the attractiveness of vivid episodic information and called for the importance of “human interest treatment of other-wise dull factual data” (Ridley 1937, 113). He also acknowledged that many city reports actually succeed by not merely being a

“...compilation but narratives...” (Ridley 1937, 34). Others were more fundamentally concerned with the ability of statistics to engage citizens. This matter was seen as problematic because most reports were “...dull, statistics-impregnated affairs...” (Roher 1941, 196). However, while the fundamental division between the two forms of information exists and dates back to the early days, we have to turn to communication studies and political psychology to find studies that test and compare their impact on citizens.

In these neighboring fields, the contrast to numbers is reflected in the focus on “episodic” information vs. “thematic” (e.g., statistical or abstract) information.² Communication research has a natural interest in episodic information because cases and exemplars are central to modern mass-media journalism (Iyengar 1991). The main difference between episodic and statistical information lies in their degree of vividness (Pettus and Diener 1977). Episodic information is highly vivid, for it draws upon “personalized case histories,” while statistical information is seen as pallid data that deals with “abstract concepts and general trends” (Iyengar 1990). Vivid information is high on “concreteness,” which includes the “degree of detail and specificity about actor, actions, and situational context” (Nisbett and Ross 1980, 47). Moreover, vivid information means imaginable information that has a “tendency to prompt sensory information” (Nisbett and Ross 1980, 47). Across multiple studies such “image-provoking” episodic information has been found to be more persuasive than statistical information (Pettus and Diener 1977; Herr et al. 1991; Zillmann 2006). For instance, Zillmann (1999) finds that exemplars have a strong effect on citizens and interprets the underlying cause as being the disproportional attention given to concrete and vividly displayed information. Daschmann (2000, 160) has experimentally compared the effect of vox pop information and a public opinion poll. He explains that vox pop information is “considerably stronger, to the point of overriding the effects of poll results.” Drawing upon the existing body of evidence regarding the effects of vivid information can help guide our expectations as to how citizens are affected when exposed to

either episodic and statistical information. This aim leads us to our second hypothesis: *Insofar as episodic performance information is perceived as more vivid, we will expect it to have a stronger effect on evaluations of public services than more pallid statistical information (H2)*. Importantly, an overreliance on informational vividness is to be considered a bias since vividness can be integral to importance, relevance, or some other dimension that individuals should care about (Nisbett and Ross 1980, 62). We should therefore also expect our hypothesis to hold true even if the episodic and statistical information is similar in their objective content.

Another dimension of episodic information is the ability to evoke affective and emotional responses beyond what pallid statistical information can achieve (Gross 2008). Indeed, vivid information is often seen as more “emotionally interesting” (Nisbett and Ross 1980, 45). As an example, in political communication, Aarøe (2011) has found that an episodic framing of policy changes to immigration elicited stronger emotional responses in terms of compassion, pity, anger, and disgust. We also find a related argument in studies on how statistical information induces “psychic numbing” and “compassion fade” (Jenni and Loewenstein 1997). As Slovic (2007, 80) notes, “Numbers fail to spark emotion or feeling and thus fail to motivate action.” For instance, we are less willing to “save statistical victims” because we find it difficult to be emotionally engaged with their suffering and pain. In contrast, we often see an “identifiable victim effect,” which denotes an enhanced willingness to spend more money on saving lives of identifiable victims rather than to comparable statistical lives (Kogut and Ritov 2005). We expect to find a similar difference in the emotional arousal of statistical and episodic information. This leads to our third hypothesis: *Episodic information about performance should be more emotionally engaging than statistical information (H3)*.

The final dimension is the recall of episodic and statistical information from memory. For Nisbett and Ross (1980), an important aspect of episodic information's potency is that it

is more likely to be recalled. Ease of recall is consequently part of the explanation as to why vivid information can have a disproportional effect on judgment and evaluations: memorable information will be given more weight in judgment.³ At the same time, the fact that vivid information can be more image provoking and elicit stronger emotional responses makes it more memorable (Taylor and Thomson 1982, 162).⁴ A special case of this involves instances from our own lives that will be even more easily recalled and with much greater detail—often referred to as “episodic memory” (Tulvig 2002). Statistical information, on the other hand, is marked by totally opposite characteristics. This should mean that statistical information will be less likely to be stored in our memories and thus less likely to be retrieved for later evaluation. In fact, it has been noted in public administration that numerical performance information may be much more difficult to remember (Lee 2006; Van Ryzin and Grosso 2011). For the same reason, early studies of performance data argued for the relevance of including photographs and other colorful material in order to make the data more memorable (Upton 1914; Roher 1941). Along the same lines, we expect a difference in citizens' ability to recall episodic and statistical information in our fourth hypothesis: *Episodic information is more easily recalled and done so with greater nuance than statistical information about public sector performance* (H4).

Data and Design: Three Experimental Studies in a Nationally Representative Sample

In order to test our four hypotheses, we will conduct three experiments with a sample of citizens representative of the Danish population. In Study 1, the focus is on citizens' stated preferences for either statistical or episodic performance information when evaluating a public service. This allows us to test if statistical information is in fact preferred over episodic information in explicit choice situations (H1). Study 2 is devoted to the differences in how statistical and episodic performance information affect citizens' evaluation of a service (H2) and their emotional response to both types of information (H3). Finally, Study 3 addresses

differences in the probability and degree of recall concerning episodic and statistical information (H4).

Subjects

All three experiments were imbedded in a large nationally representative sample recruited via YouGov's Danish online panel (n=1,013). Subjects were randomly assigned to different experiments and different treatment conditions within the survey. All subjects participated in a maximum of two of the three experiments reported there. The data was collected in late May, 2015, over the course of five days.⁵ Our sample was restricted to citizens between the ages of 18 and 74 and was pre-stratified regarding gender, age, geographical region, and political party choice in order to achieve a near-representative sample of the Danish population.⁶ By applying a large representative sample of the general population, we can ensure that any results obtained are externally valid to the public at large. Furthermore, by applying a nationally representative sample, the results are more easily compared to experimental evidence obtained in other contexts and settings.

Study 1: Citizens' Preferences for Statistical and Episodic Performance Information

The purpose of the first experiment is to determine if citizens prefer episodic or statistical information when asked to rate a public service (H1). The focus is thusly on active selection of performance information rather than exposure. The experiment is a simple between-subjects-design with three conditions (n=307). The conditions are described in Table 1 seen below. All subjects are asked to imagine that they have to evaluate the performance of a hospital. In order to do so, they are permitted to choose one of two distinct pieces of information. In all three conditions, one of the two pieces of information is a report on the satisfaction of 100 former patients. It represents a typical form of numerical performance data that is usually available to citizens. Across the three conditions, the alternative information is

one of three case stories representing episodic data. One story is about an unnamed former patient while the two other stories involve an identifiable older female (“Birgitte”) and a younger male (“Erik”).

In the experiment, the different forms of episodic conditions are employed in order to verify if potential differences are robust across very diverse types of episodic information. An example of one of the treatment conditions, as it was shown to the subjects, is reported in Appendix A. As such, median response time across all conditions was 15 seconds. In addition, the order of presentation of the two options is randomized for each subject in order to avoid sequence effects and keep from implicitly indicating to the subject that one piece of information is more important than the other (Krosnick and Duane 1987). Subjects had to choose one of the two options in order to proceed in the survey. The experiment is not necessarily intended to be the optimal way of capturing the type of information that citizens *actually* draw on. Instead, the purpose is to capture what form of performance information citizens prefer when asked to make an explicit information selection.

Table 1: Experimental Conditions

Question for all subjects		
<i>Imagine that you have to evaluate how good or bad a hospital is. You can choose between two of the following pieces of information. What would you choose?</i>		
Treatment conditions (randomly assigned):		
Statistical vs. case of “former patient” (n=102)	Statistical vs. case of “Birgitte” (n=98)	Statistical vs. case of “Erik” (n=107)
<i>-Results from a satisfaction report with 100 former patients</i>	<i>- Results from a satisfaction report with 100 former patients</i>	<i>- Results from a satisfaction report with 100 former patients</i>
<i>- The experience of a former patient</i>	<i>- The experience that 51-year-old Birgitte had as a patient</i>	<i>- The experience that 31-year-old Erik had as a patient</i>

Empirical Results for Study 1

The results of this experiment are reported in Table 2 as seen below. Across all three conditions, we find that citizens strongly prefer statistical information from the satisfaction

survey over the episodic description of a former patient. For the condition with an unidentifiable former patient, 79.4% prefer statistical information. For the condition with a 51-year-old woman, around 87.8% prefer statistical information, and in the 31-year-old male condition, the same estimate is 92.5%. If we combine all three conditions, then 86.6% (CI=82.2%-90%) of the subjects chose the statistical information. Overall, this outcome provides strong evidence of citizens’ stated preference for statistical information over single case stories when sorting out information about a public service (H1). Furthermore, the numbers indicate that episodic information with an identifiable patient is even less preferable than a “faceless” former patient. Thus, citizens not only state that they prefer statistical information over single cases, but also among single cases they are more inclined to choose ones with unidentifiable information.

Table 2: Main Results from Study 1

	Statistical	Episodic	<i>Difference</i>
Statistics vs. the case of “a patient” (n=102)	79.4%	20.6%	58.8 pp***
Statistics vs. the case of “Birgitte” (n=98)	87.8%	12.2%	75.5 pp***
Statistics vs. the case of “Erik” (n=107)	92.5%	7.5%	85.0 pp***

Note: Numbers in brackets are 95%-CIs. Significance levels denote *p < .05, **p < .01, and ***p < .001.

Study 2: Evaluative and Emotional Responses to Statistical and Episodic Information

Study 1 was a simple test of citizens’ stated preferences for performance information regarding public services. In Study 2, we flip the question and ask how citizens’ evaluation of public services is affected (H2). We then note differences in their emotional responses (H3) when being exposed to either statistical or episodic information. The experiment is a between-subjects-design with five conditions (n=706). All subjects are provided a piece of performance information about an unnamed hospital as shown in Table 3 below. The

experimental conditions reflect different segments of information that subjects can choose in Study 1. We hereby receive a very direct comparison between differences in information *selection* and the *effects* of randomly assigned information exposure. In order to avoid spillover effects, subjects from Study 1 were excluded from participating in Study 2. This is because prior knowledge of similar information would most likely influence subsequent exposure effects.

All five experimental conditions focus on instances of a simple surgery performed by a hospital. Hereafter follows a description in which a single individual or a sample of patients experience serious pain due to maltreatment. Three of the conditions are simple case examples with one unidentifiable “patient” and two identifiable cases of “Birgitte” and “Erik” as used in Study 1. The two identifiable cases are intended to increase the vividness of the information by providing concrete details with names (and thus indirectly gender) and age. This is a conservative test of the vividness effect, which draws upon similar tests conducted in psychological research (Kogut and Ritov 2005, 161; Slovic 2007). The treatment conditions are much more subtle than those found in recent studies of episodic framing in political psychology. Such cases usually implement colorful and emotionally charged language in order to manipulate vividness and human interest (Gross 2008; Aaroe 2011).

The two final conditions present statistical information for 100 patients from the hospital with varying percentages of maltreatment (1% or 10%). The differing degrees of maltreatment provide an indication of how robust the results are if episodic information of maltreatment is compared to both mild and severe statistical evidence of maltreatment. Across all conditions, the description of the surgery and the maltreatment are held constant in order to only manipulate the form of information (i.e., episodic/statistical) and not the actual content. An example of one of the treatment conditions, as they are shown to the subjects, is reported in Appendix B.

Table 3: Experimental Conditions in Study 2

Information provided to all respondents:				
<i>Imagine that you know the following about a hospital:</i>				
Treatment conditions (randomly assigned):				
Episodic I: “A patient” (n=142)	Episodic II: “Birgitte” (n=144)	Episodic III: “Erik” (n=137)	Statistical I: “1%” (n=139)	Statistical II: “10%” (n=144)
<i>A patient was admitted to the hospital last year in order to have a simple surgery.</i>	<i>51-year-old Birgitte was admitted to the hospital last year in order to have a simple surgery.</i>	<i>31-year-old Erik was admitted to the hospital last year in order to have a simple surgery done.</i>	<i>100 patients were admitted to the hospital last year in order to have a simple surgery.</i>	<i>100 patients were admitted to the hospital last year in order to have a simple surgery.</i>
<i>Following the surgery, the patient was in great pain due to maltreatment.</i>	<i>Following the surgery, Birgitte was in great pain due to maltreatment.</i>	<i>Following the surgery, Erik was in great pain due to maltreatment.</i>	<i>Following the surgery, 1% of the patients were in great pain due to maltreatment.</i>	<i>Following the surgery, 10% of the patients were in great pain due to maltreatment.</i>
<i>How good do you think the hospital is?</i>				
[Slider scale: 0=Very bad, 100=Very good]				
On the following page:				
<i>To what extent does this information make you feel:</i>				
<i>Compassion</i> <i>Disgust</i> <i>Anger</i>				
[Scale: 0=Not at all, 10=Very much]				

Beneath the various maltreatment descriptions, subjects are asked to provide an evaluation of the hospital in question. The evaluation is our dependent variable and is done on a slider scale ranging from 0 (“very bad”) to 100 (“very good”) with no possibility of not providing a response. Across all conditions, the average evaluation is 38.4 (SD=23.5). The low average is expected given the negative emphasis on “great pain” and “maltreatment” across all conditions. It underlines that in terms of negative information, all conditions are successful in manipulating a negative view of the hospital.

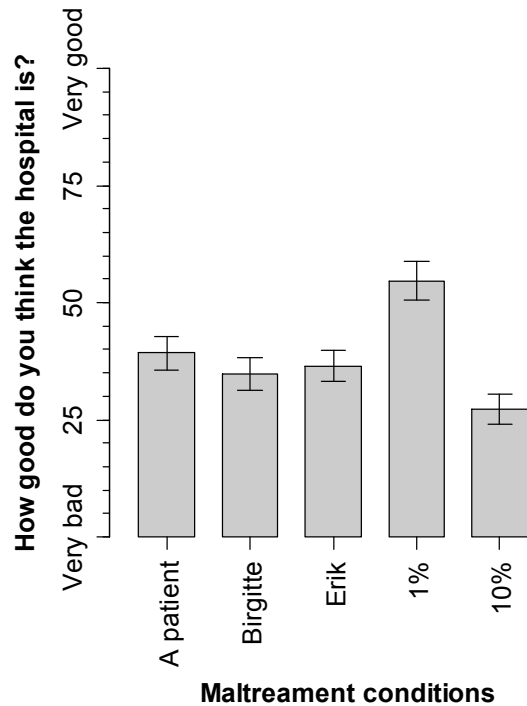
On the following page, all subjects are asked the extent to which the information induced three distinct emotional responses, namely “compassion,” “disgust,” and “anger.” These emotional responses have been applied in similar studies of episodic and statistical information (Gross 2008; Aaroe 2011). The three emotions are presented in random order for

each subject in order to cancel out any sequence or anchoring effects between emotions. Subjects rate the extent to which they feel the three emotions on a 11-point scale ranging from “not at all” (0) to “very much” (10). Mean evaluations across all conditions indicate that all three emotional responses have been activated: Compassion (M=7.1, SD=2.6), disgust (M=6.0, SD=3.0), and anger (M=5.4, SD=3.1). Again, the relative high scores for the three negative emotions confirm that, on average, the negative wording of the treatment conditions has had a negative emotional response on subjects.

Empirical Results for Study 2

The findings from Study 2 on overall hospital evaluation is reported in Figure 1. Here are shown the mean evaluations with 95% confidence intervals for all treatment conditions. The figure shows great variation in average evaluations between the episodic and statistical conditions. Each of the three episodic conditions cause significantly and substantially lower evaluations than the comparable 1% statistical condition, which receives the most favorable rating of 54.6 points (SD=24.8). If we combine the three single-cases and test directly against the 1%-maltreatment condition, we obtain an estimate of a 17.8-point-lower evaluation ($p<0.001$). The condition with severe maltreatment of 10% receives the lowest evaluation of 27.4 (SD=20.1), which is significantly lower than both of the individual single cases and in combination with an estimated difference of 9.5 points ($p<0.01$). However, if we create a combined test, the three single cases receive a lower evaluation than the two statistical conditions (3.9 point difference, $p<0.05$). Finally, we can note that the two identifiable cases receive a slightly lower evaluation than the unidentifiable one—although the difference is not significant or substantial of magnitude (3.6 points, $p=0.11$). Overall, we will note that episodic information has had a substantially stronger negative impact on citizens’ evaluations of public services than statistical information of comparable magnitude (H2). Only if the

statistical information indicates severe performance problems (i.e., 10% maltreatment rate) does it have a slightly stronger negative impact.



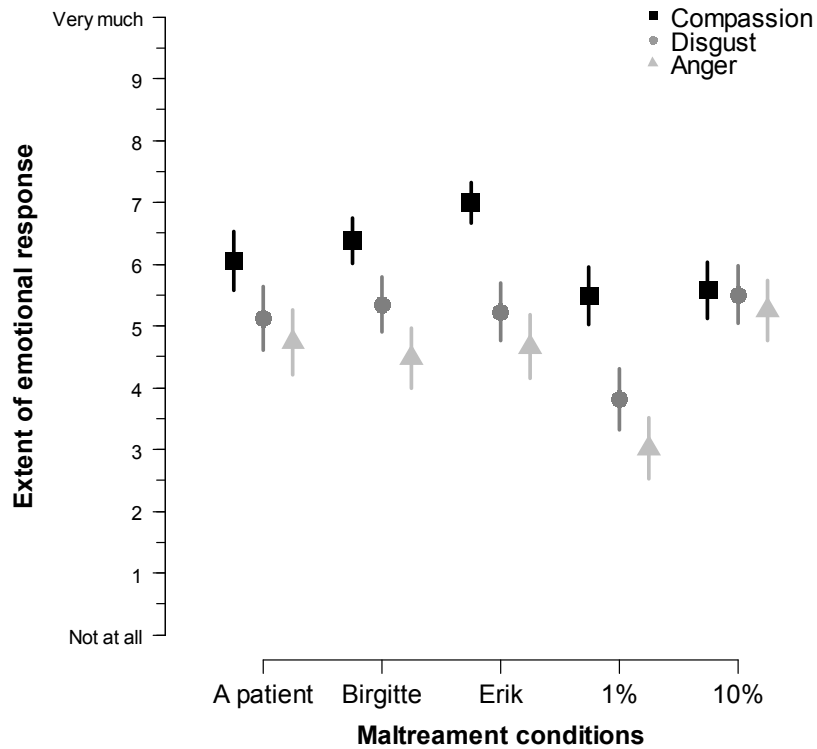
Note: Bars represent mean evaluations of hospital performance for each experimental condition. Arrows constitute 95%-confidence intervals (n=706).

Figure 1: Citizens' Evaluation of a Hospital for Five “Maltreatment” Conditions

Next we turn to the question of how the conditions affected citizens’ emotional response. These results are shown in Figure 2 seen below. Overall, the results highlight great variation across emotional responses between the five conditions. The most striking difference is the substantively and significantly higher level of “compassion” across the three single cases if compared with both of the statistical conditions. The difference amounts to about 1 point on the 11-point scale ($p < 0.01$). For “disgust,” the combined difference is smaller at 0.56 points ($p < 0.05$) and for anger at 0.47 points ($p < 0.05$). However, for “disgust” and “anger,” the emotional difference is mainly driven by a substantively lower level for the 1% maltreatment condition. In summary, we can note that the episodic information induces much stronger emotional responses on the compassion dimension than does any form of

statistical information. Statistical information that dramatically increases the severity of the performance failure (from 1% to 10%) does not enhance citizens' sense of compassion.

Overall, episodic information gives a stronger emotional response than statistical information of comparable magnitude (H3).



Note: Dots represent mean emotional responses for each experimental condition. Arrows constitute 95%-confidence intervals (n=706).

Figure 2: Extent of Emotional Responses Across the Five Maltreatment Conditions.

Study 3: Immediate Recall of Statistical and Episodic Performance Information

In Study 3, we turn to the question of differences in the recall of episodic and statistical information (H4). This experiment is a two (episodic/statistical) times three (positive/neutral/negative) between-subject design (n=674). The wording of the treatments in the six groups is outlined in Table 4 below. An example of one the screens, as it was shown to the subjects, is reported in Appendix C.

Table 4: Experimental Conditions

Treatment conditions (randomly assigned):					
Episodic			Statistical		
Positive (n=107)	Neutral (n=107)	Negative (n=111)	Positive (n=116)	Neutral (n=118)	Negative (n=115)
<i>There are many positive stories and experiences about how good public services are in Denmark.</i>	<i>There are many positive and negative stories and experiences about how good or bad public services are in Denmark.</i>	<i>There are many negative stories and experiences about how bad public services are in Denmark.</i>	<i>There are many positive numbers and statistics about how good public services are in Denmark.</i>	<i>There are many positive and negative numbers and statistics about how good or bad public services are in Denmark.</i>	<i>There are many negative numbers and statistics about how bad public services are in Denmark.</i>
<i>Describe the story or experience that immediately comes to mind here in the box below: [Textbox]</i>			<i>Describe the number or statistic that immediately comes to mind here in the box below: [Textbox]</i>		

In the episodic conditions, subjects are probed with concepts of “stories” or “experiences” with public services that are either positive, negative, or both (neutral). In the three statistical conditions, subjects are asked the same but with regards to “numbers and statistics.” The divisions on negative, positive, and neutral are made in order to confirm if there are systematic differences in the valence of the episodic and thematic information that citizens recall. For instance, we could imagine that potential memory-based negativity bias could work differently across the two types of information (Olsen 2015a).

In the experiment, subjects are then asked to report what immediately comes to their mind in large text box. Subjects have to report *something* in order to proceed in the survey. Open-ended questions are infrequently applied in survey experiments since it can be time consuming to code and categorize the responses (Geer 1991). However, the questions are well suited for recording what is on the subjects' minds without making cues in the response scale that implicitly link to treatments embedded in the question (RePass 1971).

In the analysis, we rely on four measures of how citizens recall and report the information: First, an independent coder records if subjects provide a response to the posed question. Specifically, all “don’t know” replies or other indications of inability to recall any information are non-responses. If subjects give any form of response, no matter how short, it

is classified as a recall. Across all conditions the average number of actual recalls turns out to be 53.6%. Second, an independent coder provides an assessment of the concreteness and level of detail in each response. The coder is blinded to the treatment conditions and is only provided the open-ended responses in random order during the coding process. We hereby make sure that the coding is independent of knowledge about which treatment condition each response belongs to. Concreteness is coded on an 11-point scale ranging from “not at all concrete” (0) to “very concrete” (10). Moreover, the coder is instructed to provide higher scores for responses that contain more details.

The average concreteness for actual recalls across all conditions is 4.7 (SD=2.1, n=361). We apply the concreteness measure as a subjective indicator of how elaborate the recalled information is. Third, we count the number of words that each subject applies in their responses. Across all conditions, respondents who actually recall information use on average 17.3 words. Word count is used as an alternative measure of how elaborate the responses are. This measure is validated by the fact that it is positively and significantly correlated with the subjectively coded concreteness score (Adj. $R^2=0.21$, $p<.001$). Finally, as an additional objective measure, we obtain the response time in seconds for each subject. Hence, the trimmed mean response time for valid responses is about 98 seconds.⁷ Longer response times is an indication of more thorough processing (Petersen et al. 2013; Rubinstein 2013).

Empirical Results for Study 3

Results across the treatment groups are reported in Table 5 and are further outlined in Figures 3 and 4. First, we look at the percent of respondents providing an answer to the inquiry in the treatment text. The results show that around twice as many citizens are able to recall information when asked about stories or experiences rather than if asked about statistics and numbers. The difference in reporting is highly significant and confirms the expectation that episodic information is more likely to be recalled.

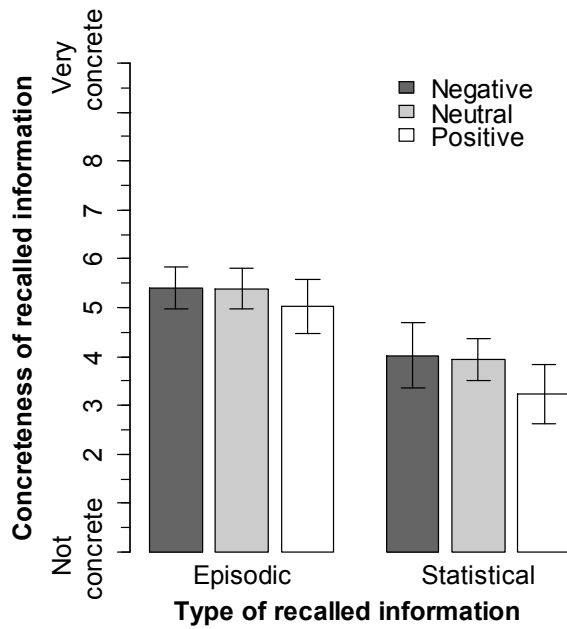
Table 5: Main Results from Study 3

	Episodic	Statistical	<i>Difference</i>
Percent recalling information	63.2% (n=325)	31.0% (n=349)	32.1%*** [24.7%–39.6%]
Mean concreteness of response (0–10)	5.3 (n= 228)	3.8 (n=133)	1.5*** [1.1–1.9]
Mean number of words in response	21.2 (n= 228)	10.8 (n=133)	10.4*** [6.0–14.9]
Trimmed mean response latency (sec.)	112.0 (n=211)	77.4 (n=116)	34.6** [12.6–56.7]

Note: Numbers in brackets are 95%-CIs. Significance levels denote * $p < .05$, ** $p < .01$, and *** $p < .001$.

Next, we examine how elaborate the responses are *among* those citizens who actually provide a response. The first indicator is the coded concreteness of the response. Our results show that episodic responses have more elaborate details than the statistical ones. On average, the concreteness of the episodic recall is 1.5 points higher, which is a substantial and significant difference on an 11-point scale. The average concrete response across all six groups is plotted in Figure 3. Here, we can see that the difference in concreteness between episodic and statistical recall is very constant across negative, neutral, and positive responses. Just to give a sense of what this measurement captures, we can consider instances of a less concrete statistical response and a highly concrete episodic response. As an example of a typical less concrete statistical response, one subject notes, “Treatment time in health care.” On the other hand, a typical concrete episodic recall example from another subject states, “Had a very positive story myself about 18:13 some 9 months ago. Called 18:13 on a Sunday, had to wait 7-8 minutes, but it was thereafter quickly and competently determined that I was going to be examined and in which emergency reception – next Friday I was sent back home without gallbladder.” While these are just two examples, they indicate great differences in the

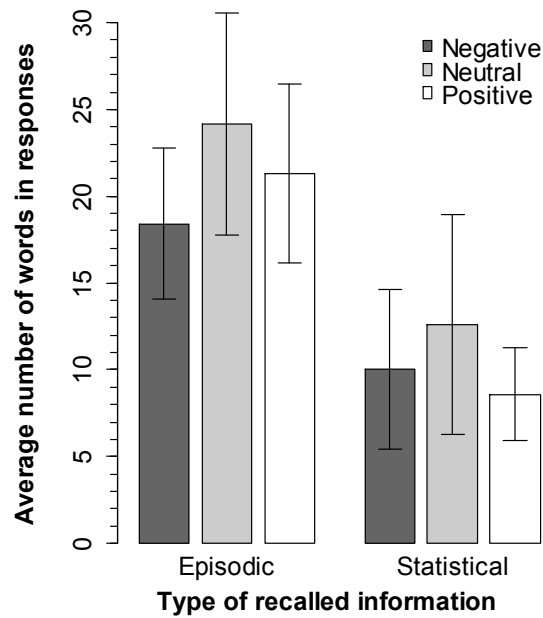
detail of citizens’ recall. This disparity underpins the differences in average concreteness as seen in Table 5 and Figure 3 below.



Note: Bars represent mean coded “concreteness” in each condition. Arrows constitute 95%-confidence intervals (n=361).

Figure 3: Concreteness of the Recalled Information Across the Six Groups

The average number of words across all six groups is plotted in Figure 4 below. In the episodic treatments, citizens use around 20 words in their immediate recall of recent stories or experiences with public services. This is significantly more and about twice as many that citizens use when recalling statistics or numbers about public services. Again, we can see that the main difference in word usage between episodic and statistical recall is stable across negative, positive, and neutral categories.



Note: Bars represent average number of words for responses in each condition. Arrows constitute 95%-confidence intervals (n=361).

Figure 4: Number of Recalled Words Across the Six Groups

Finally, as a second objective indicator of thoughtful and elaborate responses, we can compare response latencies across groups for citizens who provided responses. These numbers confirm the impression from the concreteness coding and the word count: Citizens asked to engage in episodic recall of public service performance take around 112 seconds (cf. Table 4). This is much longer than those asked to retrieve statistics or numbers about public services who take around 77 seconds. In summary, we find a very consistent pattern where episodic information is more likely to be recalled, and the recall is more detailed and elaborate (H4).

Discussion and Conclusion

For better or worse, most scholars agree that numerical performance information has a large impact on citizens’ perceptions and behaviors in relation to public services. The findings of this article challenge this belief with evidence from a large-scale representative survey

experiment. When asked to evaluate a public organization, citizens overwhelmingly choose statistical information over episodic information with identifiable and unidentifiable individual information. Citizens' stated preferences are geared towards numerical performance information. Nonetheless, the subsequent findings highlight that the information that citizens *select* for performance evaluation is very different from the information that actually *affects* their evaluation and *recall* of public sector performance. In terms of impact on citizens' evaluations, we find that episodic information has a stronger effect than statistical information. In particular, this is true if compared with statistical information that highlights a performance problem of the same order of magnitude. Only statistical information that indicates severe negative performance can elicit a stronger negative response than a description of a single bad experience.

These results echo findings in psychology on the importance of informational vividness (Nisbett and Ross 1980) and extend into the realm of performance data. The results also highlight how statistical information fails to induce an emotional response to the same degree that episodic information does. This outcome is particularly true for the emotional response of compassion. Statistics fail to elicit emotions for negative performance—a result much in line with the notion that numbers easily represent “human beings with the tears dried off” (Slovic 2007). Finally, when asked to recall either individually based stories or statistical facts about the public sector, citizens find it much easier to recall the former than the latter. The difference is substantive and spans many dimensions. Citizens are much more able to describe stories and experiences with greater concreteness than statistics about public services. Indeed, episodic information remains in the memory.

Naturally, results from a survey experiment are limited in terms of their external validity across contexts and methods of delivering the treatment. This being said, the experimental conditions applied in this study would be easy to use in a conceptual replication within an actual political-administrative setting. For instance, with field experiments, one

could test how the very same treatment texts affect citizens if delivered as randomly assigned government reports with different degrees of episodic and statistical information. Another natural extension and test of the external validity would be to validate other modes of communicating vivid performance information. To illustrate, both episodic and statistical information could be manipulated in terms of vividness by presenting graphical data illustrations, or photographs.

Our results bring forth two important implications for the field of study centered on the effects of performance information: First, the results question the overall potency of statistical information to affect citizens' evaluations and recall of performance information relative to more idiosyncratic and personalized pieces of information. Numbers can no doubt be powerful and can affect citizens' evaluations of public services. Still, the results confront practitioners with the daunting task of thinking carefully about how to engage citizens with the available performance data. As we have already noted, public administration scholars have early on acknowledged the challenge of balancing "human interest" with "dull statistics" (Upton 1915; Ridley 1927; Roher 1941). For researchers, the results point to the importance of broadening research programs on how citizens draw inferences from performance information about public services. Here, the results tie into recent studies that stress how motivated reasoning and prior beliefs color citizens' interpretations of performance data (Marvel 2015; Bækgaard and Serritzlew 2015). With our findings on episodic information and the general importance of informational vividness, we have yet another obstacle for hard performance data to set its mark on the public at large.

Another important implication of the findings is to understand their reach beyond the citizen level. For example, are employees or managers affected differently by episodic and statistical information than citizens are? Moynihan (2008, 167) has pointed to the potential strength of human-interest data at the managerial level: "Managers prefer to spend their time interacting with people and collecting oral data, not contemplating quantitative data."

Another recent observational study also points to the fact that managers often draw upon non-routine episodic information (Kroll 2013). The obvious next step is to make a direct experimental comparison to how episodic and statistical information feeds into the decisions made by managers, employees, and organizations at large (Olsen 2015b). Managers and organizations often signal a great interest in hard performance data and spend many resources collecting them. But perhaps they are no different than the public at large: They state a preference for hard numerical data, while in reality, they allow their judgments, emotions, and memory to be swayed by the episodic information of everyday life.

Notes:

1. The use of numbers to impress and signal competence has also been recognized as a strategy of politicians in budgetary negotiations (Wildavsky 1964, 95).
2. Stone (2012) applies a similar dichotomy by contrasting “symbols” and “numbers.” Here, symbols refer to stories and narratives.
3. A similar argument is stressed in the availability bias, which states that individuals draw more heavily on exemplars that easily come to mind (Taylor and Thomson 1982).
4. In a review, Taylor and Thomson (1982, 162) summarize this fundamental difference as follows: “Case histories are assumed to be more vivid than their dry statistical counterparts (base-rate information) by virtue of the fact that they contain more concrete information and more imaginable material than does base-rate information. They may also arouse more of an emotional response in the perceiver and, for all three of the above reasons, may have a stronger representation in memory.”
5. Participating subjects received 25 points, which can be used for purchases and lotteries conducted by YouGov.

6. A total of 3,502 subjects were invited to participate in the survey, yielding a response rate of 28.9% of fully completed surveys. The survey had a median response time of 5 minutes for full completes.

7. We rely on trimmed means where the top and bottom 5% are removed. It is standard practice to rely on trimmed means, medians, or some other transformation for the response time in order to account for some subjects spending very long amounts of time (Rubenstein 2013). This could happen if respondents were to pause in the middle of the survey.

References

- Aarøe, Lene. 2011. Investigating frame strength: The case of episodic and thematic frames. *Political Communication* 28(2), 207–26.
- Aarøe, Lene and Pedersen, Michael B. 2013. Episodic bias and the social transmission of political communication. *Paper presented at the Annual Meeting of the Danish Political Science Association, Vejle, Denmark.*
- Borgida, Eugene, and Richard E. Nisbett. 1977. The differential impact of abstract vs. concrete information on decisions. *Journal of Applied Social Psychology* 7(3), 258–271.
- Bækgaard, Martin. 2015. Performance information and citizen service attitudes: Do cost information and service use affect the relationship? *International Public Management Journal.*
- Bækgaard, Martin and Søren Serritzlew. 2015. Interpreting performance information: Motivated reasoning or unbiased comprehension. *Public Administration Review.*
- Charbonneau, Étienne, and Gregg G. Van Ryzin. 2015. Benchmarks and citizen judgments of local government performance: Findings from a survey experiment. *Public Management Review* 17(2), 288–304.
- Daschmann, Gregor. 2000. Vox pop and polls: The impact of poll results and voter statements in the media on the perception of a climate of opinion. *International Journal of Public Opinion Research* 12(2), 160–181.
- Davies, Ian C. 1999. Evaluation and performance management in government. *Evaluation* 5 (2), 150–159.
- Espeland, Wendy N. and Michael Sauder. 2007. Rankings and reactivity: How public measures recreate social worlds. *American Journal of Sociology* 133(1), 1–40.
- Geer, John G. 1991. Do open-ended questions measure “salient” issues? *Public Opinion Quarterly* 55(3), 360–370.
- Gross, Kimberly. 2008. Framing persuasive appeals: Episodic and thematic framing,

- emotional response, and policy opinion. *Political Psychology* 29(2), 169–192.
- Grosso, Ashley L., and Gregg G. Van Ryzin. 2011. How citizens view government performance reporting: Results of a national survey. *Public Performance and Management Review* 35(2), 235–250.
- Hansen, Kasper M., Asmus Leth Olsen, and Mickael Bech. 2015. Cross-national yardstick comparisons: A choice experiment on a forgotten voter heuristic. *Political Behavior*.
- Herbst, Susan. 1993. *Numbered voices: How opinion polling has shaped American politics*. University of Chicago Press.
- Herr, Paul M., Frank R. Kardes, and John Kim. 1991. Effects of word-of-mouth and product-attribute information on persuasion: An accessibility-diagnostics perspective. *Journal of Consumer Research* 17(4), 454–462.
- Hood, Christopher. 2007. Public service management by numbers: Why does it vary? Where has it come from? What are the gaps and the puzzles? *Public Money and Management* 27(2), 95–102.
- Holzer, Marc, and Kaifeng Yang. 2004. Performance measurement and improvement: An assessment of the state of the art. *International Review of Administrative Sciences* 70(1), 15–31.
- Iyengar, Shanto. 1990. Framing responsibility for political issues: The case of poverty. *Political Behavior* 12, 19–40.
- Iyengar, Shanto. 1991. *Is anyone responsible? How television frames political issues*. Chicago: University of Chicago Press.
- James, Oliver. 2011. 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 Van Ryzin, Gregg G. 2015. Incredibly good performance: An experimental study of source and level effects on the credibility of government. *The American Review of Public Administration*.
- Jackson, Peter M. 2011. Governance by numbers: What have we learned over the past 30 years? *Public Money and Management* 31(1), 13–26.
- Jenni, Karen E. and George Loewenstein. 1997. Explaining the “Identifiable victim effect.” *Journal of Risk and Uncertainty* 14, 235–257.
- Kogut, Tehila and Ilana Ritov. 2005. The “identified victim” effect: An identified group, or just a single individual? *Journal of Behavioral Decision Making* 18, 157–167.
- Kroll, Alexander. 2013. The other type of performance information: Non-routine feedback, its relevance and use. *Public Administration Review* 73(2), 265–276.
- Krosnick, Jon A., and Duane F. Alwin. 1987. An evaluation of a cognitive theory of response-order effects in survey measurement. *Public Opinion Quarterly* 51(2), 201–219.
- Lee, Mordecai. 2006. Empirical experiments in public reporting: Reconstructing the results of survey research, 1941–1942. *Public Administration Review* 66(2), 252–262.
- March, James G., and Herbert A. Simon. 1958. *Organizations*. New York: Wiley
- Marvel, John D. 2015. Unconscious bias in citizens’ evaluations of public sector performance. *Journal of Public Administration Research and Theory*.
- Moynihan, Donald P. 2008. *The dynamics of performance management: Constructing information and reform*. Washington, DC: Georgetown University Press.
- Nisbett, Richard E., and Lee Ross. 1980. *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, NJ: Prentice-Hall.
- Olsen, Asmus L. 2013. Leftmost–digit–bias in an enumerated public sector? An experiment on citizens judgment of performance information. *Judgment and Decision Making* 8(3), 365–371.

- Olsen, Asmus L. 2015a. Citizen (Dis)satisfaction: An equivalence framing study. *Public Administration Review* 75(3), 469–478.
- Olsen, Asmus L. 2015b. The Numerical Psychology of Performance Information – Implications for Citizens, Managers, and Policy Makers. *Public Performance and Management Review*.
- Osborne, David, and Ted Gaebler. 1992. *Reinventing government: How the entrepreneurial spirit is transforming government*. Reading Mass. Adison Wesley Public Comp.
- Petersen, M. B., Skov, M., Serritzlew, S., and Ramsøy, T. 2013. Motivated reasoning and political parties: Evidence for increased processing in the face of party cues. *Political Behavior* 35(4), 831–854.
- Perrin, Burt. 1998. Effective use and misuse of performance measurement. *The American Journal of Evaluation* 19(3), 367–379.
- Pettus, Clinton, and Edward Diener. 1977. Factors affecting the effectiveness of abstract versus concrete information. *Journal of Social Psychology* 103(2), 233–242.
- Radin, Beryl. 2006. *Challenging the performance movement: Accountability, complexity, and democratic values*. Georgetown University Press.
- Ridley, Clarence E. 1927. Municipal reports. *National Municipal Review* 16(4), 243–245.
- Ridley, Clarence E. 1937. Municipal reporting taken seriously. *The Public Opinion Quarterly* 1(1), 112–116.
- Roher, Miriam. 1941. Education of a Citizen. *National Municipal Review* 30(4): 192–198.
- RePass, David E. 1971. Issue salience and party choice. *American Political Science Review* 65(2): 389–400.
- Rubinstein, Ariel. 2013. Response time and decision making: An experimental study. *Judgment and Decision Making* 8(5), 540-551.
- Smith, Peter. 1995. On the unintended consequences of publishing performance data in the public sector. *International Journal of Public Administration* 18(2), 277–310.

- Slattery, Karen L., and Ernest A. Hakanen. 1994. Sensationalism versus public affairs content of local TV news: Pennsylvania revisited. *Journal of Broadcasting and Electronic Media* 38(2), 205–216.
- Slovic, Paul. 2007. If I look at the mass I will never act: Psychic numbing and genocide. *Judgment and Decision Making* 2(2), 79–95.
- Stone, Deborah A. 2012. *Policy paradox: The art of political decision making*. New York: WW Norton. Revised edition.
- Taylor, Shelley E., and Suzanne C. Thompson. 1982. Stalking the elusive vividness effect. *Psychological review* 89(2), 155–181.
- Tulving, Endel. 2002. Episodic memory: From mind to brain. *Annual Review of Psychology* 53(1), 1–25.
- Upson, Lent D. 1915. The value of municipal exhibits. *National Municipal Review* 4(1), 65–69.
- Van Dooren, Wouter, Geert Bouckaert, and John Halligan 2010. *Performance management in the public sector*. New York and London: Routledge.
- Wildavsky, Aaron B. 1964. *Politics of the budgetary process*. Boston, MA: Little, Brown, and Company.
- Zhang, Y. Charles, and Norbert Schwarz. 2013. The power of precise numbers: A conversational logic analysis. *Journal of Experimental Social Psychology* 49(5), 944–946.
- Zillmann, Dolf. 1999. Exemplification theory: Judging the whole by some of its parts. *Media Psychology* 1(1), 69–94.
- Zillmann, Dolf. 2006. Exemplification effects in the promotion of safety and health. *Journal of Communication* 56(1), 221–237.

APPENDIX

Appendix A

Study 1: Example of a treatment condition as viewed by the subjects in the survey:

YouGov

Forestil dig, at du skal vurdere, hvor godt eller dårligt et hospital er. Du kan vælge én af to følgende oplysninger. Hvad vælger du?

Resultatet fra en tilfredshedsundersøgelse med 100 tidligere patienter

Historien om 51-årige Birgittes oplevelse som patient

>

Statistics vs. episodic case of “Birgitte”: *“Imagine that you have to evaluate how good or bad a hospital is. You can choose between two of the following pieces of information. What will you choose? [] Results from a satisfaction report with 100 former patients. [] The experience that 51-year-old Birgitte had as a patient”*

Appendix B

Study 2: Example of a treatment condition as viewed by the subjects in the survey:

YouGov

Forestil dig at du ved følgende om et hospital:

*31-årige Erik var sidste år indlagt på hospitalet for at få foretaget en simpel operation.
Efter operationen havde Erik voldsomme smerter på grund af fejlbehandling.*

Hvor godt mener du på den baggrund, at hospitalet er?

Meget dårligt Meget godt

>

Episodic case “Erik”: *“Imagine that you know the following about a hospital: 31-year-old Erik was admitted to the hospital last year in order to have a simple surgery done. Following the surgery, Erik was in great pain due to maltreatment. How good do you think the hospital is?”*

I hvor høj grad får denne information dig til at føle:

	Slet ikke	0	1	2	3	4	5	6	7	8	9	10	I høj grad
Vrede		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Medfølelse		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Ubehag		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	



Emotional response: *“To what extent does this information make you feel: Compassion, Disgust, Anger.”*

Appendix C

Study 3: Example of a treatment condition as viewed by the subjects in the survey:

Man hører mange positive historier og oplevelser med hvor god den offentlige service er i Danmark.

Hvilken positiv historie eller oplevelse om den offentlige service kan du umiddelbart komme i tanke om?

Beskriv den historie eller oplevelse du umiddelbart kommer i tanke om i boksen under her:



Episodic recall – positive: *“There are many positive stories and experiences with how good public services are in Denmark. Describe the story or experience that immediately comes to mind in the box below here:”*