



Research Article

Testing the open government recipe: Are vision and voice good governance ingredients?

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Abstract: Existing research shows that open government can result in better governance outcomes. However, there remains a gap in our understanding of how open government's two component dimensions of transparency and participation – “vision” and “voice” – affect governance outcomes, and how they relate to each other within public decision-making. We use a survey experiment to test the impact of transparency and participation on a range of governance outcomes (satisfaction, perception of fairness, and trust) in a municipal decision-making process. The findings show that both transparency and participation positively affect these governance outcomes. However, we do not find support for an interaction effect of transparency and participation. Implications for research and practitioners are discussed.

Keywords: Open government, Transparency, Participation, Survey experiment

Supplements: [Open data](#)

The growth of the open government movement in the international policy sphere has heightened scholarly attention to the relationship between transparency and participation. According to Meijer, Curtin, & Hillebrandt (2012, p. 13), an open government is one in “which citizens can monitor and influence government processes through access to government information and access to decision-making arenas”. Open government scholars have thus highlighted the need to institutionally integrate transparency and participation (Lee & Kwak, 2012; McDermott, 2010), and investigated the conspicuous preference that governments frequently have for transparency over participation policies in open government initiatives (Evans & Campos, 2013; Piotrowski, Rosenbloom, Kang, & Ingrams, 2018).

While governments may prefer one open government dimension over another, Meijer, Curtin, & Hillebrandt (2012) argue that open government is

about both these things – transparency and participation – *together*. In their theory, borrowing from the language of Albert Hirschman (1970), open government is about giving citizens “vision” into and “voice” toward what goes on inside government agencies regarding topics such as how public services are being planned, or how laws and regulations are being formed. Yet, there remains a dearth of research on the relationship between transparency and participation, on the one hand, and governance outcomes, on the other. Are transparency and participation equal in terms of their governance benefits, and, secondly, does their combination in a government decision-making process augment the effects beyond the two of them separately?

We seek to contribute to the field by answering these two questions. We use a survey experiment administered to an online citizen panel (Amazon's Mechanical Turk) to test the impact of transparency and participation on citizen trust, satisfaction, and perception of fairness in a best case municipal decision-making scenario. In so doing, we shed light on the relative importance of transparency and participation, as well as on their interaction, as drivers of citizen perceptions of government.

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Theoretical Background

Empirical research reveals extensive ways in which transparency and public participation are associated with better decision-making outcomes such as trust, satisfaction, or perception of fairness. Though these mechanisms are central to open government research, that research tends to build on studies from transparency and/or participation literature. We draw on a similar literature but explicitly pay attention to how transparency and participation can be understood within an open government framework.

Transparency and the Decision-Making Processes

The relationship between transparency and an individual's perception of a decision-making process is shaped by a combination of knowledge-based and feelings-based factors (Grimmelikhuijsen, 2012). The very act of sharing information (and the content of the information) to enlighten citizens about how public policy processes are implemented thus can enhance perceptions that those processes are trustworthy (Grimmelikhuijsen, 2012; Grimmelikhuijsen, Porumbescu, Hong, & Im, 2013).

We also argue that the positive effect of transparency is not limited to citizen perception of trustworthiness, where most research has been focused, but includes citizen satisfaction and perception of fairness. Satisfaction and fairness are understudied in open government research but have received extensive attention in other research on governance outcomes because of their importance as perceptual and attitudinal correlates of public decision-making (e.g., Herian, Hamm, Tomkins, & Pytlik Zillig, 2012; Magalhães, 2016; Serra, 1995). For example, Bouckaert & Van de Walle (2003) argue that citizen dissatisfaction often stems from the fact that citizens are not well informed about how public sector systems actually operate. As they become better informed, citizens know better what to expect.

When it comes to perception of fairness of a decision-making process, there is also evidence supporting a positive association with transparency. De Fine Licht (2011) argues that transparent decision-making processes give citizens an opportunity to understand how decisions can be reasonable even if the outcome of the decision was not what the citizens expected.

H1: Transparency in a public decision-making process increases citizen trust, satisfaction, and perception of fairness.

Participation and the Decision-Making Process

Research has shown that higher responsiveness to citizens is more likely to create better decision-making outcomes (e.g., King, Feltey, & Susel, 1998; Lee & Kwak, 2012; Moynihan, 2003). Many studies confirm that higher citizen satisfaction (e.g., Halvorsen, 2003), trust (e.g., Kim & Lee, 2012; Moynihan, 2003), and perception of fairness (e.g., Grimes, 2006; Herian et al., 2012) is achieved when citizens are given a chance to “have a say” in things that affect them. For example, satisfaction of citizens in interactions with non-elected politicians is determined by assessments of the quality of participation processes (e.g., efficiency, fairness, and promptness) (Serra, 1995). An analogous line of theorizing exists in the sphere of research on effects on perception of fairness. Previous work suggests that policy implementation is likely to be viewed as fairer and less politically contested if citizens participate in public planning projects (e.g., Roberts, 2011; Whitaker, 1980).

Citizen assessments of government are also affected by citizen participation design and implementation choices. Hence, the positive effect of participation on decision-making outcomes may be strengthened or weakened by specific design and implementation factors such as the kinds of actors and modes of participation that take place. This leads to our second hypothesis.

H2: Participation in a public decision-making process increases citizen trust, satisfaction, and perception of fairness.

Transparency and Participation Working Together

We argue that transparency and participation separately have a positive effect on government outcomes. But what happens when both these qualities are present at the same time in a decision-making process? Evidence from scholarship on how transparency and participation link together is sparse, but there is theoretical and empirical evidence to suggest that they have similar direct effects and that they may also interact together because one is necessary or strengthening for the other or vice-versa. Two types of interactive linkages emerge from this research. These are a *complementing* relationship and a *reinforcing* relationship, and both relationships would theoretically be expected to augment certain positive governance effects.

First, transparency and participation complement each other in important ways because increased availability of relevant information is a kind of gate-

way to the exercise of participation (e.g. Stirton & Lodge 2001). For example, Coglianese (2009, 535) argues that precisely “[b]y making more information available, the public can then participate more thoughtfully in the governmental process, sharing new information or raising questions about the adequacy of proposed governmental solutions.” Coglianese’s quote suggests that transparency is in a sense causally prior to participation in its effect on governance. But other research from Welch (2012) suggests that this works the other way around too as, logically, when citizens participate, they likely get access to new information in the process.

At the same time, other research suggests that transparency and participation are not merely a complementary working together of information and action, but, more than this, there is a mutual reinforcing effect so that, when transparency and participation are combined, one or the other can be ‘turned up’ to augment positive governance outcomes. For example, De Fine Licht, Naurin, Esaiasson, & Gilljam, (2014) found that when policymakers discussed the relevance of decision-relevant information with citizens and invited feedback, decision-making outcomes were better compared to simple one-way informational transparency or closed decision-making where citizens only received post-decisional justifications.

There is a shortage of research findings regarding the types of significant dependent variables that pertain to combined effects of transparency and participation, but we hypothesize logically that the same variables that are frequently connected to transparency and participation separately also pertain in the case of combined effects. This line of reasoning leads to our third hypothesis.

H3: The combined effect of transparency and participation on citizen trust, satisfaction, and perception of fairness is greater than the effect of transparency or participation alone.

Data and Methods

We tested our hypotheses using an online survey experiment. In the experiment, participants were presented with a vignette about a fictional, but highly realistic, municipal decision-making process about developing a brownfield site into a recreational park. Such a scenario allows for testing of citizen perceptions in a quite typical and politically non-contentious type of public decision-making situation (De Sousa,

2002). During the experiment, participants were randomly assigned to one of four different treatment groups. Thus, participants could receive information about the decision-making process including no transparency and no participation (Group 1), including transparency but no participation (Group 2), including participation but no transparency (Group 3), or including transparency and participation (Group 4).

We varied the critical information about transparency and participation to enhance the impression for participants that the decision-making process to develop the brownfield site was either transparent and/or participative (see Appendix A). The transparency manipulation involved details about how key facts and reports were published on a website for citizens to look at. The participation manipulation involved details about how citizens were given an opportunity to share their views at a series of digital town hall events. These treatments were consistent with the real-world implementation of transparency and participation in a public decision-making process.

Transparency in open government decision making often means sharing key data under consideration that has a meaningful impact on the consequences of the decision (Coglianese, 2009; Piotrowski et al., 2018). Similarly, participation in open government frequently involves using online deliberation forums such as electronic town halls or other platforms where citizen ideas can be solicited (Coglianese, 2009; Piotrowski et al., 2018). Both manipulations are also highly plausible types of transparency (e.g., Evans & Campos, 2013) and public participation (e.g., Mossberger, Wu, & Crawford, 2013) practice in the context of U.S. municipalities where the vignette takes place. That being said, we are well aware of the fact that both transparency and participation can take many different forms in practice. We return to this issue in the conclusion section.

The experiment was carried out using the online survey tool Qualtrics, and 465 participants were recruited through Amazon’s Mechanical Turk (MTurk). MTurk is an online marketplace for running knowledge-, marketing-, or science-based research. It offers a convenient and reliable way to carry out online survey experiments with samples that tend to be more demographically diverse than traditional Internet surveys (Buhrmester, Kwang, & Gosling, 2011). For this reason, MTurk has frequently been used for experiments in the public administration field (Funk, 2019; Jilke et al., 2016; Stritch et al., 2017).

Variables

We operationalize our three dependent variables using well-established measures from the open government and transparency literature. Citizen perception of trustworthiness is measured on three dimensions. These dimensions are competence, honesty, and benevolence (Grimmelikhuijsen & Meijer, 2012). Participants are asked to indicate their level of agreement on a 7-point Likert-type scale with statements about the public decision-making process described in the vignettes. To arrive at a single perception of trustworthiness score, we first calculated the average score for each of the underlying dimensions (competence, benevolence, and honesty). Next, we averaged these three scores¹ to arrive at an overall trustworthiness score (Cronbach's $\alpha = 0.96$).

Satisfaction is calculated as the average of responses to three questions asking participants about their level of satisfaction (on a 7-point Likert scale) with the public decision-making process described in the vignette (Cronbach's $\alpha = 0.95$) (Kaufmann & Tummers, 2017). Similarly, we measure perception of fairness as the average of responses to two questions (Cronbach's $\alpha = 0.93$) (de Fine Licht et al., 2014). The Cronbach's α scores for our dependent variables are all high, which is in line with the studies from which these measures are taken. All the measures used for our dependent variables can be found in Appendix B.

We asked two questions to check whether our manipulations were successful. For transparency, we asked: "How did the council inform citizens about the Wibbers Fields development?" (The council added a new webpage to the city's website / This was not mentioned in the scenario). For participation, we asked: "How were citizens included in the Wibbers Fields development decision-making process?" (A series of digital town hall events were organized / This was not mentioned in the scenario). We also used an adapted version of the Instructional Manipulation Check (Oppenheimer et al. 2009; Kaufmann et al. 2019) to ensure that people were paying attention. Finally, we asked participants for their age, gender, and political views to determine ex post if randomization was successful.

Pilot Study

To test our design, we conducted a pilot study. The design of this pilot study mirrored the design of our main study and was similarly administered to a citizen sample from Amazon's MTurk. 160 MTurk users participated in the pilot study. The average completion time was about 7 minutes. Only 1 participant

failed the attention check, while 50 participants failed either one or both manipulation checks. Since the latter could not be attributed to any particular manipulation, we decided not to alter the vignettes based on the findings from the pilot study.

Participants

Participation in the experiment was limited to participants located in the United States. Participants were required to have a 99% approval rate on previous MTurk assignments, and to have completed at least 1,000 MTurk tasks successfully prior. The study was advertised as taking about 10 minutes to complete, and participants were paid \$0.60 for completing the study. 465 MTurkers participated in the study. The data were trimmed to exclude the 1% fastest and slowest response times, and responses from duplicate IP-addresses were also removed. This resulted in 29 participants being removed from the sample. 6 participants failed the attention check question and were subsequently removed. Finally, 138 participants failed on one or both manipulation checks and were therefore excluded.² As a result, our final dataset consists of 285 participants.

We checked the effects of randomization on age, gender, and political views across the four experimental groups. As shown in Table 1, randomization on these background characteristics was successful. The average age in our sample is 38.32 years (SD = 12.25), and 51% of our participants is male. Participants had, on average, slightly more liberal than conservative political views (mean = 3.59; SD = 1.91).

Results

The data were analysed using a series of factorial ANOVAs (see Table 2). The results support our first hypothesis. We find that transparency has a significant effect on perception of fairness ($F(1,281) = 10.89, p < .01$). Although the effect size is small ($\eta^2_{\text{partial}} = .04$)³, a public decision-making process with a high level of transparency is perceived as fairer (M = 5.33, SD = 1.40) than a decision-making lacking in transparency (M = 4.49, SD = 1.54). Transparency has a similar effect on satisfaction ($F(1,281) = 7.86, p < .01$). While the effect size is again small ($\eta^2_{\text{partial}} = .03$), transparency results in more satisfaction (M = 5.00, SD = 1.51), than not having transparency (M = 4.24, SD = 1.59). The same is true for trust ($F(1,281) = 9.42, p < .01$). In spite of the small effect size ($\eta^2_{\text{partial}} = .03$), participants who were ass-

Table 1
Background Characteristics of Sample

	N	% Male	Age	Political Orientation
Group 1 (no transparency and no participation)	84	47	39.64	3.69
Group 2 (transparency and no participation)	62	57	39.87	3.67
Group 3 (no transparency and participation)	48	58	38.00	3.54
Group 4 (transparency and participation)	91	47	36.26	3.52
F		1.02	1.50	0.11
<i>p</i>		.39	.22	.96

Table 2
Factorial ANOVAs for the Effect of Transparency and Participation on Trust, Satisfaction, and Perceived Fairness

Dependent Variable		Main/Interaction effect	Effect Size
Trust	Transparency	$F(1, 281) = 9.42, p < .001$	$\eta^2_{\text{partial}} = .03$
	Participation	$F(1, 281) = 31.55, p < .001$	$\eta^2_{\text{partial}} = .10$
	Transparency * Participation	$F(1, 281) = 0.26, p = 0.61$	
Satisfaction	Transparency	$F(1, 281) = 7.86, p < .001$	$\eta^2_{\text{partial}} = .03$
	Participation	$F(1, 281) = 43.19, p < .001$	$\eta^2_{\text{partial}} = .13$
	Transparency * Participation	$F(1, 281) = 0.34, p = 0.56$	
Fairness	Transparency	$F(1, 281) = 10.89, p < .001$	$\eta^2_{\text{partial}} = .04$
	Participation	$F(1, 281) = 59.88, p < .001$	$\eta^2_{\text{partial}} = .18$
	Transparency * Participation	$F(1, 281) = 0.02, p = 0.90$	

igned to a high transparency condition perceive the council as more trustworthy ($M = 5.37, SD = 1.19$) than participants who were assigned to a no transparency condition ($M = 4.73, SD = 1.35$).

The results also support our second hypothesis. Like transparency, participation has a significant effect on perception of fairness ($F(1,281) = 59.88, p < .001$). When participants were told that citizens were involved in the decision-making process, they perceived the system as fairer ($M = 5.65, SD = 1.13$) than when they were told that citizens were not involved ($M = 4.27, SD = 1.54$). The effect size is medium ($\eta^2_{\text{partial}} = .18$). Participation also has a significant effect on satisfaction ($F(1,281) = 43.19, p$

$< .001$). The effect size is again medium ($\eta^2_{\text{partial}} = .13$), and citizen participation results in higher satisfaction ($M = 5.31, SD = 1.31$) than no citizen participation ($M = 4.03, SD = 1.58$). Participation has the same effect on trust ($F(1,281) = 31.55, p < .001$). A high level of participation leads to higher citizen trust ($M = 5.56, SD = 1.04$) compared to not providing participation opportunities ($M = 4.62, SD = 1.37$). This effect size is also medium ($\eta^2_{\text{partial}} = .10$).⁴

The results provide very little support for our third hypothesis. The interaction effects for perceived fairness ($F(1,281) = .02, p = .90$), satisfaction ($F(1,281) = .34, p = 0.56$) and trust ($F(1,281) = .26, p = .61$) are not statistically significant. This suggests

that the effect of transparency does not increase if a decision process includes participation, and vice versa.

In sum, our empirical results provide strong support for our hypotheses that providing transparency and giving citizens voice in a public decision-making process has a positive effect on fairness, satisfaction, and citizen trust. Effect sizes range from small to medium. Finally, we find no support for an interaction effect between transparency and participation (hypothesis 3). Apparently, an open government policy design that includes both transparency and participation is not necessarily stronger than the sum of its two parts.

Discussion and Conclusions

In this study, we aim to show what an open government approach contributes to a public decision-making process in terms of governance quality. In many countries over the last decade, open government approaches – combining transparency (“vision”) and participation (“voice”) – have made inroads into new policymaking initiatives in the public sector. By experimentally testing the effect of open government, we have shown what sort of impact open government has in terms of essential measures of governance outcomes: satisfaction, trustworthiness, and perception of fairness. Whereas existing research has mostly focused on trustworthiness as a salient governance outcome, we look at several different outcomes simultaneously to compare them within the same case (in this case, a municipal public policy issue).

We found that satisfaction, trustworthiness, and perception of fairness were all enhanced by open government approaches. These results thus mirror earlier findings on the positive association of transparency and participation with these three governance outcomes (e.g., De Fine Licht, 2011; Grimme-likhuijsen et al., 2013; Porumbescu, 2017). We also find that the pattern of open government influence is similar across all studied outcomes: participation has a much stronger influence than transparency. We are not aware of prior research that has compared transparency and participation in this way. However, this finding does echo the older work of Arnstein (1969) and, later, the work of Lee & Kwak (2012) on how more participative forms of citizen-government relationship are more powerful for citizens than simple one-way information sharing.

While both transparency and participation have separately had a positive association with the governance outcomes, we find no support for our third hypothesis on the combined effect of transparency and participation. Theoretically, it is possible that a larger experiment sample size would detect very small effect sizes at work. A G*power test suggested an effect size of $\eta_{\text{partial}}^2 = .02$ or smaller would require a larger sample to be detected. An interaction mechanism therefore does not appear to be at work unless it has an extremely small influence. Our theory was that an interactive effect would derive from the way that transparency and participation complement and reinforce each other; information and action typically come together, and it is hard to separate them.

Overall, our findings have important implications for government–citizen interactions. We find that citizen participation has the strongest positive effect on governance outcomes, even though prior research suggests that transparency is used most often in practice. If the aim of open government is to truly improve citizen assessments of government, then it may be necessary to invest more heavily in citizen participation efforts.

The article takes the new step of addressing three key governance outcomes in the same study. But, by the same token, it also raises a measurement and conceptual problem – so far seemingly circumvented in prior work – of whether trust, satisfaction, or perception of fairness respond in identical ways to transparency and participation. In general, we find that the dependent variables all respond in similar ways, being positively associated with transparency and participation. We also find the three outcomes to be highly correlated. Prior research suggests that trust and satisfaction (e.g., Bouckaert & Van de Walle, 2003; Welch, Hinnant, & Moon, 2004) and trust and perception of fairness are conceptually distinct but interrelated (Grimes, 2006). There is therefore likely to be some overlap in their relationship with transparency and participation.

The current study also has a number of limitations. As with all survey experiments, we are cautious in generalizing our findings from this fictitious setting to the public at large. The specific wording of our vignettes also affects external validity. The decision-making procedure described in the vignettes captures a best-case scenario in which thorough analyses are said to have been conducted, and costs and benefits for various stakeholders are said to have been carefully assessed. Similarly, our vignettes as-

sume that the decision-making process and its outcome is “fair”, in the sense that there is no corruption, powerful actors do not stand to gain disproportionately at the expense of other actors, etc. Other research has shown that in some cases involving low political participation or corruption, transparency can actually have negative consequences (e.g., Ingrams & Schachter, 2019). In such settings, the outcomes for citizen perceptions may also be more mixed.

Furthermore, we are aware that our results from this particular decision-making process may not translate directly to other decision-making contexts. In particular, while we have focused on ideal characteristics of a decision-making process to see the possible effects of transparency and participation in a best-case scenario, in practice decision-making is “messy”. Prior research such as De Fine Licht (2014) has shown that more politically contentious and less trivial open government initiatives have much more ambiguous relationships with good governance outcomes such as trust. As such, it could be worthwhile to replicate and extend our findings to different samples and decision-making contexts.

In addition to their theoretical relevance, the findings from this research come with some practical implications for open government practitioners: If done correctly, enhancing transparency and participation in public decision-making processes is helpful for improving citizen perceptions of government. Using both dimensions at the same time is also plausible and we have no reason to believe they would combine to create a negative influence by perhaps crowding each other out. If including both transparency and participation in public decision-making is unfeasible (e.g. due to a lack of governmental resources), it is worthwhile to improve on either dimension.

Notes

1. As a robustness check, we also conducted our analyses using factor loadings instead of averaged

ed scores. The results of these analyses were very similar and are available on request.

2. To ensure that participants who passed the manipulation check did not do so by chance alone, we conducted a series of ANOVAs to check for differences between the composition of our original and final samples. Such a difference only exists for gender ($F(1, 417) = 4.23, p = .04$), with our final sample being more balanced ($M = .51, SD = .51$) than our original sample ($M = .62, SD = .49$). To see if this is likely to have had an impact on our results, we re-ran our main analyses with gender as a control variable. The results are qualitatively similar to our original analyses and are available on request.
3. Due to the factorial design of this study, η^2_{partial} was used to measure the size of reported effects. In line with standing practice (see Miles & Shevlin 2001), we consider effects with $\eta^2_{\text{partial}} = .02$ to be small, effects with $\eta^2_{\text{partial}} = .13$ to be medium and effects with $\eta^2_{\text{partial}} = .26$ to be large.
4. The results of a Levene's test suggest that the variances of our scales for perceived fairness ($F(3,281) = 6.93, p < .001$), satisfaction ($F(3,281) = 5.87, p < .01$), and trust ($F(3,281) = 6.14, p < .001$) are unequal. As a robustness check, we therefore conducted Welch's ANOVAs for the effect of transparency and participation on each of the three scales. The results are qualitatively similar to the results of our main analysis and are available upon request.

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References

- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4), 216-224.
- Borroy, E. L., DeHart-Davis, L., Kaufmann, W., Merritt, C. C., Mohr, Z., & Tummers, L. (2018). Formalization and consistency heighten organizational rule following: Experimental and survey evidence. *Public Administration*, 96(2), 368-385.
- Bouckaert, G., & Van de Walle, S. (2003). Comparing measures of citizen trust and user satisfaction as in-

- dicators of 'good governance': difficulties in linking trust and satisfaction indicators. *International Review of Administrative Sciences*, 69(3), 329-343.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3-5.
- Coglianesi, C. (2009). The transparency president? The Obama administration and open government. *Governance*, 22(4), 529-544.
- De Fine Licht, J. (2014). Policy area as a potential moderator of transparency effects: An experiment. *Public Administration Review*, 74(3), 361-371.
- De Fine Licht, J., Naurin, D., Esaiasson, P., & Gilljam, M. (2014). When does transparency generate legitimacy? Experimenting on a context-bound relationship. *Governance*, 27(1), 111-134.
- De Sousa, C. A. (2002). Measuring the public costs and benefits of brownfield versus greenfield development in the Greater Toronto area. *Environment and Planning B: Planning and Design*, 29(2), 251-280.
- Evans, A. M., & Campos, A. (2013). Open government initiatives: Challenges of citizen participation. *Journal of Policy Analysis and Management*, 32(1), 172-185.
- Funk, K. (2019). If the shoe fits: Gender role congruity and evaluations of public managers. *Journal of Behavioral Public Administration*, 2(1), <https://doi.org/10.30636/jbpa.21.48>
- Grimes, M. (2006). Organizing consent: The role of procedural fairness in political trust and compliance. *European Journal of Political Research*, 45(2), 285-315.
- Grimmelikhuisen, S. (2012). Linking transparency, knowledge and citizen trust in government: An experiment. *International Review of Administrative Sciences*, 78(1), 50-73.
- Grimmelikhuisen, S. G., & Feeney, M. K. (2017). Developing and testing an integrative framework for open government adoption in local governments. *Public Administration Review*, 77(4), 579-590.
- Grimmelikhuisen, S. G., & Meijer, A. J. (2012). Effects of transparency on the perceived trustworthiness of a government organization: Evidence from an online experiment. *Journal of Public Administration Research and Theory*, 24(1), 137-157.
- Grimmelikhuisen, S., Porumbescu, G., Hong, B., & Im, T. (2013). The effect of transparency on trust in government: A cross-national comparative experiment. *Public Administration Review*, 73(4), 575-586.
- Halvorsen, K. E. (2003). Assessing the effects of public participation. *Public Administration Review*, 63(5), 535-543.
- Herian, M. N., Hamm, J. A., Tomkins, A. J., & Pytlik Zillig, L. M. (2012). Public participation, procedural fairness, and evaluations of local governance: The moderating role of uncertainty. *Journal of Public Administration Research and Theory*, 22(4), 815-840.
- Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. Cambridge, MA: Harvard University Press.
- Hood, C. (1991). A public management for all seasons? *Public Administration*, 69(1), 3-19.
- Ingrams, A. (2017). The legal-normative conditions of police transparency: A configurational approach to open data adoption using qualitative comparative analysis. *Public Administration*, 95(2), 527-545.
- Ingrams, A., & Schachter, H. L. (2019). E-participation opportunities and the ambiguous role of corruption: A model of municipal responsiveness to sociopolitical factors. *Public Administration Review*. DOI: <https://doi.org/10.1111/puar.13049>
- Jilke, S., Van Ryzin, G. G., & Van de Walle, S. (2016). Responses to decline in marketized public services: An experimental evaluation of choice overload. *Journal of Public Administration Research and Theory*, 26(3), 421-432.
- Johnson, D., & Grayson, K. (2005). Cognitive and affective trust in service relationships. *Journal of Business Research*, 58(4), 500-507.
- Kaufmann, W., & Feeney, M. K. (2014). Beyond the rules: The effect of outcome favourability on red tape perceptions. *Public Administration*, 92(1), 178-191.
- Kaufmann, W., Taggart, G. and Bozeman, B. (2019). Administrative delay, red tape, and organizational performance. *Public Performance & Management Review*, 42(3), 529-553.
- Kaufmann, W., & Tummers, L. (2017). The negative effect of red tape on procedural satisfaction. *Public Management Review*, 19(9), 1311-1327.
- Kim, S., & Lee, J. (2012). E-participation, transparency, and trust in local government. *Public Administration Review*, 72(6), 819-828.
- King, C. S., Feltey, K. M., & Susel, B. O. N. (1998). The question of participation: Toward authentic public participation in public administration. *Public Administration Review*, 58(4), 317-326.
- Lee, G., & Kwak, Y. H. (2012). An open government maturity model for social media-based public engagement. *Government Information Quarterly*, 29(4), 492-503.
- Magalhães, P. C. (2016). Economic evaluations, procedural fairness, and satisfaction with democracy. *Political Research Quarterly*, 69(3), 522-534.
- McDermott, P. (2010). Building open government. *Government Information Quarterly*, 27(4), 401-413.
- Meijer, A. J., Curtin, D., & Hillebrandt, M. (2012). Open government: connecting vision and voice. *International Review of Administrative Sciences*, 78(1), 10-29.
- Miles, J., & Shevlin, M. 2001. *Applying regression and correlation: A guide for students and researchers*. Thousand Oaks: Sage.
- Mossberger, K., Wu, Y., & Crawford, J. (2013). Connecting citizens and local governments? Social media and interactivity in major US cities. *Government Information*

- Quarterly*, 30(4), 351-358
- Moynihan, D. P. (2003). Normative and instrumental perspectives on public participation: Citizen summits in Washington, DC. *The American Review of Public Administration*, 33(2), 164-188.
- Oppenheimer, D. M., Meyvis, T. and Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, 45(4), 867-872.
- Piotrowski, S., Rosenbloom, D. H., Kang, S., & Ingrams, A. (2018). Levels of value integration in federal agencies' mission and value statements: Is open government a performance target of US federal agencies? *Public Administration Review*, 78(5), 705-716.
- Porumbescu, G. A. (2017). Does transparency improve citizens' perceptions of government performance? Evidence from Seoul, South Korea. *Administration & Society*, 49(3), 443-468.
- Roberts, N. C. (2011). Beyond smokestacks and silos: Open-source, web-enabled coordination in organizations and networks. *Public Administration Review*, 71(5), 677-693.
- Serra, G. (1995). Citizen-initiated contact and satisfaction with bureaucracy: A multivariate analysis. *Journal of Public Administration Research and Theory*, 5(2), 175-188.
- Stirton, L., & Lodge, M. (2001). Transparency mechanisms: Building publicness into public services. *Journal of Law and Society*, 28(4), 471-489.
- Stritch, J. M., Pedersen, M. J., & Taggart, G. (2017). The opportunities and limitations of using Mechanical Turk (Mturk) in public administration and management scholarship. *International Public Management Journal*, 20(3), 489-511.
- Welch, E. W. (2012). The relationship between transparent and participative government: A study of local governments in the United States. *International Review of Administrative Sciences*, 78(1), 93-115.
- Welch, E. W., Hinnant, C. C., & Moon, M. J. (2004). Linking citizen satisfaction with e-government and trust in government. *Journal of Public Administration Research and Theory*, 15(3), 371-391.
- Whitaker, G. P. (1980). Coproduction: Citizen participation in service delivery. *Public Administration Review*, 40(3), 240-246.
- Yang, K. (2005). Public administrators' trust in citizens: A missing link in citizen involvement efforts. *Public Administration Review*, 65(3), 273-285.

Appendix

Appendix A. Experimental vignettes used for the treatment groups (unique treatment texts here highlighted in bold italics)

GROUP 1 (no transparency and no participation)

The council of Essington, a town of 40,000 people located in your state, identified an old industrial area as a potential site for a new park. The old industrial area, which is known as Wibbers Fields, is situated 1.5 miles outside the town center. Wibbers Fields was handed over to the council in 1987 but has been left in an unused state and currently is nothing more than grass and a couple of small buildings in disrepair.

The council hired a management consultancy firm to assess the potential viability, costs, and benefits of a Wibbers Fields park. Thorough analyses were conducted, such as the amount of public money that would be needed and the short- and long-term benefits to different people living in Essington.

Following recommendations gathered by the consulting firm on the whole decision-making process, the council eventually decided not to move ahead with the park. During the process it had emerged that the costs of building and maintaining such a park outweighed the actual benefits that would be felt by different individuals and organizations in the town.

GROUP 2 (transparency and no participation)

The council of Essington, a town of 40,000 people located in your state, identified an old industrial area as a potential site for a new park. The old industrial area, which is known as Wibbers Fields, is situated 1.5 miles outside the town center. Wibbers Fields was handed over to the council in 1987 but has been left in an unused state and currently is nothing more than grass and a couple of small buildings in disrepair.

The council hired a management consultancy firm to assess the potential viability, costs, and benefits of a Wibbers Fields park. Thorough analyses were conducted, such as the amount of public money that would be needed and the short- and long-term benefits to different people living in Essington.

The council added a new webpage to the town's website to communicate matters and facts under consideration in the decision-making process. Citizens could look at the costs of different parts of the park, see the potential economic, social, and environmental impacts, and examine different architectural proposals.

Following recommendations gathered by the consulting firm on the whole decision-making process, the council eventually decided not to move ahead with the park. During the process, it had emerged that the costs of building and maintaining such a park outweighed the actual benefits that would be felt by different individuals and organizations in the town.

GROUP 3 (no transparency and participation)

The council of Essington, a town of 40,000 people located in your state, identified an old industrial area as a potential site for a new park. The old industrial area, which is known as Wibbers Fields, is situated 1.5 miles outside the town center. Wibbers Fields was handed over to the council in 1987 but has been left in an unused state and currently is nothing more than grass and a couple of small buildings in disrepair.

The council hired a management consultancy firm to assess the potential viability, costs, and benefits of a Wibbers Fields park. Thorough analyses were conducted, such as the amount of

public money that would be needed and the short- and long-term benefits to different people living in Essington.

A series of digital town hall events were organized to support the decision-making process. During the events, hosted on the town website, citizens were invited to propose items for the agenda and then join council members online to raise questions, discuss responses from the council, and vote in online polls on specific points under consideration.

Following recommendations gathered by the consulting firm on the whole decision-making process, the council eventually decided not to move ahead with the park. During the process it had emerged that the costs of building and maintaining such a park outweighed the actual benefits that would be felt by different individuals and organizations in the town.

GROUP 4 (transparency and participation)

The council of Essington, a town of 40,000 people located in your state, identified an old industrial area as a potential site for a new park. The old industrial area, which is known as Wibbers Fields, is situated 1.5 miles outside the town center. Wibbers Fields was handed over to the council in 1987 but has been left in an unused state and currently is nothing more than grass and a couple of small buildings in disrepair.

The council hired a management consultancy firm to assess the potential viability, costs, and benefits of a Wibbers Fields park. Thorough analyses were conducted, such as the amount of public money that would be needed and the short- and long-term benefits to different people living in Essington.

The council added a new webpage to the town's website to communicate matters and facts under consideration in the decision-making process. Citizens could look at the costs of different parts of the park, see the potential economic, social, and environmental impacts, and examine different architectural proposals.

A series of digital town hall events were organized to support the decision-making process. During the events, hosted on the town website, citizens were invited to propose items for the agenda and then join council members online to raise questions, discuss responses from the council, and vote in online polls on specific points under consideration.

Following recommendations gathered by the consulting firm on the whole decision-making process, the council eventually decided not to move ahead with the park. During the process it had emerged that the costs of building and maintaining such a park outweighed the actual benefits that would be felt by different individuals and organizations in the town.

Appendix B. Measurement items for dependent variables

Dependent variables:

We look at three different dimensions of better governance quality (procedural fairness, satisfaction, and citizen trust). Participants were asked to respond to the following questions on 7-point Likert scales.

1. *Perception of fairness (Cronbach's $\alpha = 0.93$)*

- How fairly do you think citizens were treated in the Wibbers Fields development decision-making process? (not fair at all – very fair)

- How fair do you think the Wibbers Fields development decision-making process was? (not fair at all – very fair)

2. *Satisfaction (Cronbach's $\alpha = 0.95$)*

- How satisfied are you with the Wibbers Fields development decision-making process? (very dissatisfied – very satisfied)
- How satisfied are you with the Wibbers Fields development decision-making process compared to your expectations of a council decision-making process? (very dissatisfied – very satisfied)
- How satisfied are you with the Wibbers Fields development decision-making process compared to an ideal council decision-making process? (very dissatisfied – very satisfied)

3. *Perception of trustworthiness (Cronbach's $\alpha = 0.96$)*

Response options ranged from strongly disagree to strongly agree for all the trustworthiness items.

Competence (Cronbach's $\alpha = 0.95$)

I think that, when it concerns the Wibbers Fields development decision-making process...

- The council is capable.
- The council is effective.
- The council is skillful.
- The council is professional.
- The council carries out its duty very well.

Benevolence (Cronbach's $\alpha = 0.95$)

I think that, when it concerns the Wibbers Fields development decision-making process...

- If citizens need help, the council will do its best to help them.
- The council acts in the interest of citizens.
- The council is genuinely interested in the well-being of citizens.
- The council approaches citizens in a sincere way.

Honesty (Cronbach's $\alpha = 0.94$)

I think that, when it concerns the Wibbers Fields development decision-making process...

- The council is sincere.
- The council honors its commitments.
- The council is honest.