# Public Input for Municipal Policymaking: Engagement Methods and Their Impact on Trust and Confidence

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### **ABSTRACT**

Municipalities across the country use various methods of public input to inform managers and elected policymakers about citizen's preferences and perspectives regarding budget matters or performance measures. One benefit of actively involving the public on key governmental decisions is the belief that it enhances the public's trust and/or confidence in government. Does it make a difference in the public's confidence assessments which public engagement technique is used? If enhancing the public's trust/confidence is a specific objective of a public engagement, which technique is to be preferred? This article presents public trust and confidence data we have been collecting as part of ongoing public engagements in Lincoln, Nebraska, USA. We compare differences in the public's trust and confidence in government as a function of online input versus phone surveys versus face-to-face discussions. Results suggest that there are significant differences in the public's trust and confidence in government as a function of the type of engagement. Engagements that expose residents to governmental officials in a more salient way may be superior for increasing public trust and confidence compared to those engagements that involve less exposure to governmental officials.

### **Categories and Subject Descriptors**

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### **General Terms**

Management, Theory.

### **Keywords**

Online, deliberative discussions, public trust and confidence, procedural fairness

### 1. INTRODUCTION

Municipalities across the country use various methods of public input to inform managers and elected policymakers (e.g., mayors, councils, commissioners, etc.) about citizen's preferences and perspectives regarding budgets, performance measures, and other municipal matters, or use such methods simply to gauge the public's satisfaction with governmental activities, services, and so on [1-14]. Some cities use surveys [15, 16]: For example, Eugene, Oregon, randomly samples residents via telephone [17, 18]. Other

cities make use of online opportunities [19]: For example, Los Angeles asked residents to indicate online which programs and services should be prioritized, preserved, or cut [20], and the government in Clearwater, Florida, invited its residents to answer specific questions online throughout the year [18, 21]. A few cities use focus groups [22]: For example, Olympia, Washington, conducted focus groups, paying residents \$50 to concentrate on specific issues on which the jurisdiction sought input [18]. A small number of communities invite citizens to participate in face-to-face, small group dialogues [23, 24] [see also, 9, pp. 23-29]. In short, the public's input, whether via the mail, over the telephone, online, or in person, is becoming increasingly common.

Involving the public in governmental decision making is one way to further the democratic ideal [25-27] [for classic works discussing issues related to public participation and the democratic ideal, see 28-31]. One benefit of actively involving the public on key governmental decisions is that it enhances the public's trust and confidence in government. 1 Although there is no single accepted definition of trust or confidence in institutions [34], reviews of the literature suggest that public confidence in institutions typically refers to beliefs about the trustworthiness (including assessments of the integrity, competence and motives) of the institution and its members or leaders [35]. These trustworthiness beliefs then are thought to contribute to expectations that those institutions will live up to the specific responsibilities that people ascribe to them [32, 33, 35]. Because it has been argued the public's confidence in government is critical for the optimal functioning of democratic society [36, 37], the potential of increasing the public's confidence is enticing. This is especially true in light of the concerns that have been expressed over its apparent decline [38-41].

Does it make a difference in the public's confidence assessments which public engagement technique is used? If enhancing the public's confidence is a specific objective of a public engagement, which technique is to be preferred? Might we prefer online input? After all, online input is comparatively cheaper, can be structured so that the public's participation is done at the public's, not government's, convenience, and, in the case of online discussions, can be asynchronous rather than requiring all participants to be available at the same time. Alternatively, are there reasons to recommend face-to-face or other techniques if enhancing the

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<sup>&</sup>lt;sup>1</sup> A few researchers have distinguished between the terms trust and confidence [e.g., 32, 33]. However, most researchers use the terms interchangeably, as we will here, throughout this article.

public's trust and confidence is one of the goals desired from a public engagement?<sup>2</sup>

Although some advise using certain engagement techniques over others [8, 9, 19, 24, 42-45], neither theories nor the empirical research literature adequately predicts or explains differences in trust/confidence outcomes across public engagement techniques. We know from studies examining different methods separately there are different beneficial outcomes for participants and policymakers (including but not restricted to increases in public confidence), yet there is little empirical research directly comparing engagement techniques to one another [see especially 26, 46-48; for examples of comparative research efforts, see 49, 50].

One theoretical approach for predicting which engagement techniques would be more likely to result in increased public trust and confidence is procedural fairness theory [51]. According to procedural fairness theory,3 public trust and confidence will increase when four critical factors are present in governmental interactions: voice in and dignified, respectful treatment during the process; and an authority that is neutral and is acting in the best interests of the public [37, 52-54]. It has long been established that individuals are more likely to accept outcomes and follow directives when they perceive a process to be procedurally fair [55]. Other research has found that fairness perceptions also relate to increases in satisfaction with outcomes and trust in authority [56-58]. Although the research is equivocal on whether procedural fairness is an antecedent to trust in institutions [58, 59] or whether the two constructs simply are significantly correlated [52, 56], there is a large body of research showing procedural fairness and trust in government to be related [37, 52].

In this article, we examine procedural fairness and public trust and confidence assessments over a two-year period as part of the evaluation of public engagement processes used in Lincoln, Nebraska, USA. In these engagement efforts, the public provided the City with their prioritizations, perspectives, and suggestions regarding various performance measurement and budgeting issues. Over the two years, three different engagement techniques were used: telephone surveys, online surveys, and face-to-face, deliberative discussions. Based on procedural fairness theory, we anticipated that certain engagement techniques would be more apt to affect elements of procedural fairness – impacting participants' perceptions of voice, dignified and respectful treatment, the authority's neutrality and the authority's desire to act in the best interests of the community - and thus also would be more likely to impact levels of public trust and confidence. For example, we anticipated that face-to-face discussion engagements would make the authority most salient to participants, and would be more likely to communicate these elements of procedural fairness to participants than telephone or online survey engagements. Therefore, we predicted that we would find significantly greater assessments of procedural fairness in face-to-face discussions than in the other two forms of engagements. We also predicted that participants would have greater trust and confidence ratings for face-to-face engagements than for telephone or online engagements. Finally, we predicted both direct effects of engagement technique on procedural fairness and trust/confidence, as well as indirect effects of engagement technique, through procedural fairness, on trust/confidence.

The engagements we conducted were not specifically designed to test these research hypotheses, and thus are not optimal tests of our predicted relationships. Neither confirmation nor rejection of our hypotheses could definitively address the relationships among engagement type, procedural fairness, and public trust and confidence. Nonetheless, despite this inquiry's inherent limitations, given the paucity of research in the area, this study provides important preliminary information indicating the need for more direct and better controlled studies in the future.

### 2. METHODS

### 2.1 Study 1<sup>4</sup>

### 2.1.1 Telephone Survey (2008)

Six-hundred and five Lincoln residents provided input about the City's service priorities and other related questions over a six-week period in the winter/spring of 2008. A random-digit-dial (RDD) sampling procedure was used, and respondents who participated in the 20-minute interview were randomly selected from among eligible residents (i.e., resident over Lincoln over 19 years of age) in the household. Calls were made at different times of the day and different days of the week, including the weekend, to increase the potential that a call would reach a respondent during an available time. Thirty-eight percent of the residents contacted completed the interview. In addition to questions during the interview about governmental services and budget issues, respondents were asked to indicate their feelings about trust/confidence in government.

### 2.1.2 Face-to-Face Discussions (2008)

Two hundred eighty-six of the 605 respondents from the 2008 winter/spring telephone survey were invited to participate in a daylong, deliberative discussion on a Saturday in April 2008. Residents were informed that the discussion would allow them, not only to learn more about the City's budgeting process, but also to discuss their perspectives about Lincoln's budgeting priorities with each other and share their preferences and ideas with representatives from the City. Residents were offered \$75 as an incentive to participate in the discussion and to compensate them for their time. One-hundred and two (36%) residents accepted the invitation, and the remaining 184 (64%) individuals either declined or did not answer affirmatively. Of the 102 invitees, 51 (50%) individuals actually attended the discussion and stayed the entire day.

Before coming to the discussion, residents were provided with background materials about the City's budget, services, and related

<sup>&</sup>lt;sup>2</sup> In addition to goals already mentioned, other goals might include public education, compliance with laws requiring public consultation, obtaining actionable information for governance, and so on. Other objectives might also be more or less likely using certain engagement techniques versus others.

It also is called procedural *justice* theory as much of the work has been conducted in the context of the legal system. Because the focus of the work here is related to municipal governments, we use the term procedural fairness rather than procedural justice.

<sup>&</sup>lt;sup>4</sup> A public report of Study 1 and the findings can be downloaded from the website of the University of Nebraska Public Policy Center:

 $<sup>\</sup>frac{http://ppc.nebraska.edu/userfiles/file/Documents/projects/BudgetingOutcomes and Priorities/reports/PriorityLincolnFinalReport.pd \\f$ 

information. A pre-survey and post-survey to measure changes in participants' opinions about these issues were administered before and after the day's activities.

After completing the pre-event survey, all participants received a budget briefing by Lincoln's Mayor. Participants were randomly assigned to small groups of six to ten people per group. In their groups, the participants discussed City budget and service matters and identified questions they wished to pose to City officials. The questions then were asked of City officials and department heads in a plenary panel discussion. Following the plenary session, the residents reconvened in their small groups to prioritize the City's budget issues and service areas. Finally, another plenary session was held during which the residents presented their list of prioritizations to the Mayor and department heads.

### 2.1.3 Measures

Eight questions were used to assess participant perceptions of perceptions of procedural fairness (5 items) and confidence (3 items) (see Table 1). The items we used were similar to those used in the literature. For example, confidence in an institution is sometimes assessed using single item indicators that simply ask people to report how much confidence they have in the institution [60], similar to the "confidence" and "trust" items listed in Table 1. Others have used multiple-item scales that ask about beliefs about the competence and integrity of institution members and leaders [35, 61, 62] (as shown in Table 1, we added such items in Study 2).

Though not all participants received all questions, these questions were asked during the phone survey, as well as before and after attending the face-to-face public participation event. Participants in the discussions completed all eight items prior to the event, responding to the items using a 5-point scale ranging from 1 =Strongly Agree to 5 =Strongly Disagree. However, to reduce survey length, persons in the phone survey were randomly assigned to two groups, and administered one of two sets of four of the eight questions, such that each of the questions were answered by approximately 300 phone participants. In addition, only a randomly selected one-half sub-sample (n = 27) of attendee participants completed the eight items at post; the other half (n = 24) did not. When participants were administered only some of the items, they were always administered at least one confidence item and at least two procedural fairness items.

### 2.1.4 Comparability of the Samples

We compared telephone respondents who do not attend the discussion (n = 554) with telephone respondents who did (n = 51). Chi-square tests of independence showed the two groups to be similar in age, race, education, and years lived in Lincoln. Independent group t-test comparisons of the eight questions designed to assess perceptions of procedural fairness and trust/confidence in city government were also conducted. These tests revealed only one significant between-group difference at the time of the phone survey: Face-to-face discussion attendees disagreed more than non-attendees that government officials have residents' best interests in mind when they make decisions (t(301) = 2.75, p = .006). On the other seven items, there were no significant differences (ps > .35).

Table 1. Items used in Studies 1 and 2 to assess trust/confidence and procedural fairness

Tru	st/Confidence	Questions
1	Confidence	I have great confidence in the Lincoln City government.
1	Satisfied	I am satisfied with the Lincoln City government.
1,2	Trust	Lincoln City government can usually be trusted to make decisions that are right for the residents as a whole.
2	Count on	Lincoln residents can count on the City government to get the job done.
2	Competent	Most Lincoln City government officials are competent to do their jobs.
2	Qualified	The Lincoln City government is made up of highly qualified individuals.
2	Integrity (-)	Most Lincoln City government officials lack integrity.

Pro	cedural Fairn	ess Questions										
1	Care what	Public officials in Lincoln City government										
	I think	care about what people like me think.										
1	Great say	Residents have a great say in important										
		Lincoln City government decisions.										
1,2	Respect	Lincoln City government officials treat residents with respect.										
1,2	Decisions	Lincoln City government officials base their										
	on facts	decisions on the facts, not their personal										
		interests.										
1,2	Best interests	Lincoln City government officials have										
		residents' best interests in mind when they										
		make decisions.										
2	Biased (-)	The decisions made by the Lincoln City										
		government are biased.										
2	Influence	Citizens can influence the Lincoln City										
		government's decisions.										

*Note:* In the first column, the numerals 1 and 2 refer to the study or studies in which the item was used. The second provides a short title used subsequently, throughout the paper, to refer to the item; (-) refers to an item reflecting a negative (undesirable) belief or perception. Participants responded to the items using a five or seven point scale to indicate their level of agreement or disagreement.

## 2.2 Study 2<sup>6</sup>

### 2.2.1 Online Survey (2009)

In the spring of 2009, residents of Lincoln were invited to provide the Mayor and department heads with their perspectives on city budget, service, and performance measure issues via an online survey (also available in paper form). The invitation to participate were made via press releases [63] and media interviews; personal appeals across the community by the Mayor, his staff, and City Department heads; through media advertisements available on the City's cable television channel and also posted on YouTube<sup>7</sup>; and as a message broadcast when a caller was placed on hold when

<sup>&</sup>lt;sup>5</sup> This procedures followed are very similar to the ones used by Stanford Professor James Fishkin and his colleagues. See http://cdd.stanford.edu/.

<sup>&</sup>lt;sup>6</sup> A public report of Study 2 and the findings can be downloaded from the University of Nebraska Public Policy Center website: <a href="http://ppc.nebraska.edu/userfiles/file/Documents/mayorsproject/TakingChargeFINALREPORTJune2009.pdf">http://ppc.nebraska.edu/userfiles/file/Documents/mayorsproject/TakingChargeFINALREPORTJune2009.pdf</a>

<sup>&</sup>lt;sup>7</sup> http://www.youtube.com/watch?v=fFbW\_S82mHM

phoning the City's offices. The invitation prompted interest and controversy: An editorial in the local newspaper [64] and a newspaper column by a radio talk-show host and head of the Lincoln Independent Business Association [65] criticized the public input effort. The Mayor responded with columns of his own in the paper [66, 67]. Together, these public exchanges raised awareness of the online survey. In addition, the 605 random telephone survey respondents from Lincoln's 2008 public input project [68, see p. 10 and Appendix A, pp. 24-55] were recontacted and invited to take the online survey. Eighty-six of the online survey respondents self-identified as being part of the random sample of residents in the 2008 phone survey. In fact, 498 respondents reported they had been involved in at least one of the previous year's public input activities. Nearly 2,000 (n = 1,812) surveys were completed, including 33 [2%] that were paper versions of the survey made available at public locations such as at local libraries.

### 2.2.2 Face-to-Face Discussions (2009)

Approximately two weeks after the online survey was closed, a day-long, deliberative discussion was once again held on a Saturday. Everyone who took the initial 2009 survey was invited to participate in group discussions about the City's budget, programs, services, and performance measures. As in the previous year, residents were informed they would be able to share their preferences and ideas with representatives from the City. Participants were offered \$35 compensation. One hundred eighty residents agreed to participate, 234 indicated they might attend, and the remaining 1,309 respondents declined to participate. One hundred eleven individuals – 6% of survey respondents – showed up to participate, but four had to leave during the course of the day, leaving a final sample size of 107 residents.

Before coming to the discussion, residents were again provided with background materials. The discussion groups at the event were facilitated by trained moderators. Upon arrival, participants were randomly assigned to one of 16 small discussion groups, with group sizes ranging from five to ten people per group. An initial briefing about the City's budget was presented by the Mayor and his Chief of Staff. In the first portion of the discussions, city budget and performance measure issues were discussed, and questions were prepared for City officials about these and other issues. A pre-survey and post-survey to measure changes in participants' opinions about these issues were administered before and after the day's activities.

### 2.2.3 Measures

Ten items were used to assess residents' trust/confidence in the city government and perceptions of procedural fairness. Four of the items were included from Study 1. New items in Study 2 were included to examine the impact of assessing certain hypothesized components of trustworthiness (integrity and competence) [33, 35] and to include negative as well as positive perceptions of the government [69-71]. As in Study 1, because of the large number of questions on our city survey, the 10 questions were not administered to all of the online participants. However, the

sampling was more random than in Study 1. The questions were grouped according to content (e.g., procedural fairness or confidence) and then a certain number of questions (typically 1 to 3 questions) were randomly selected from each of the groups to be administered. Those who attended the face-to-face discussion completed all questions at pre and post event. However, the response scale used online was a 1-5 (1 = strongly agree to 5 = strongly disagree) scale, while the scale used at the face-to-face event was a 1-7 scale valenced in the opposite direction (1 = strongly disagree to 7 = strongly agree). Because both scales had a neutral midpoint, we converted both scales to a 3-point scale in which 1 = disagree, 2 = neutral, and 3 = agree. Thus, in contrast to Study 1, in this study (Study 2), higher numbers indicate greater agreement.

### 2.2.4 Comparability of the Samples

We compared the online respondents who did not attend the deliberative discussion (n=1,714) with those who did (n=98). Chi-square tests of independence indicate that those who participated in the discussion were significantly older than online respondents  $(x^2(3) = 10.94, p = .012))$ , but otherwise the two samples were similar in race, education, the number of years lived in Lincoln, and whether they had participated in the City's engagement activities in 2008. As in Study 1, we also compared the groups on the trust/confidence and procedural fairness questions completed online. We found three questions upon which there were significant differences (integrity, decision on facts, influence), and one question that was marginally different between the samples (biased). In each case, the direction of the difference was such that attendees held more positive fairness perceptions and trust in the government than the non-attendees.

### 3. RESULTS AND DISCUSSION

Our first two hypotheses were that participants in face-to-face engagements would give higher ratings of procedural fairness and trust/confidence than participants in the phone or online conditions. Our third hypothesis was that engagement type would have an indirect impact on trust/confidence through procedural fairness perceptions.

### 3.1 Study 1

Table 2 reports the mean phone responses and pre and post responses of the face-to-face public participation event. Significance levels are determined by comparing each column of means with the means in the column to the left. Recall that in Study 1, phone participants who did not attend the face-to-face discussion (non-attendees) and those who did attend differed on only one of the attitude items assessed during the phone survey. That difference is shown in Table 2 (compare M(a) and M(b), with significance level of that comparison indicated in column M(b)). Table 2 also shows changes in attitudes for those who answered the questions in both the phone survey and prior to the face-to-face participation event (compare M(b) to M(c), with significance levels indicated in M(c)). Though there was little change on most of the items (only "great confidence" and "best interests" showed significant change), there was a trend for attitudes to become more

<sup>&</sup>lt;sup>8</sup> A study was conducted to determine whether groups asked to come to consensus differed in process, input quality, and satisfaction compared to groups that were not instructed to come to consensus (PytlikZillig, Tomkins, Muhlberger, Herian, Abdel-Monem, Marincic, & Hamm, 2010).

<sup>&</sup>lt;sup>9</sup> We report several levels of significance in our tables. However we do not use corrections for multiple comparisons in reporting the data because of the exploratory nature of the studies and our analyses.

Table 2. Study 1 means (SDs) of responses to survey questions across time and engagement type

		esponses		Pre-Post Face-to-Face Event Responses								
	Non-attendee		Attendee		Pre-event <sup>a</sup>		Pre-event b		Post-event			
Question	M(a)	(SD)	M(b)	(SD)	M(c)	(SD)	M(d)	(SD)	M(e)	(SD)		
Confidence/trust												
Great Confidence	2.87*	(.95)	2.91	(1.07)	2.59*	(1.05)	2.81	(.92)	2.44*	(.80)		
Satisfied	2.76*	(.98)	2.95	(.95)	$2.55^{+}$	(1.01)	2.70	(.82)	2.37*	(.79)		
Trust	2.76	(.98)	2.69	(1.07)	2.83	(.76)	2.85	(.82)	2.52*	(.80)		
Procedural fairness												
Care what I think	2.59*	(.97)	2.77	(1.07)	2.45	(1.06)	2.85	(.99)	2.15***	(.95)		
Great say	2.97+	(1.01)	3.14	(.99)	3.45	(.63)	3.37	(.93)	2.59**	(1.05)		
Decision on facts	3.03	(.98)	3.10	(.98)	3.07	(.80)	3.00	(.89)	3.42*	(.86)		
Respect	2.44	(.85)	2.36	(1.00)	2.32	(.95)	2.44	(.75)	2.30	(.78)		
Best interests	2.72	(.95)	3.24**	(1.12)	2.83*	(.71)	3.00	(.88)	2.52**	(.80)		

<sup>+</sup>p < .10, \*p < .05, \*\*p < .01, \*\*\*p < .001, two-tailed, uncorrected for multiple comparisons.

Notes. Attendee n = 22 or 29, non-attendee n = 268 to 275. Significances refer to a difference between that mean and the mean in the column to its left, as detailed in the text. M(a) significance levels refer to the comparison between M(a) and M(e).

Table 3. Example mediation analyses for Study 1

Predictor variable = Engagement type (e)			Model 1 Mediator regressed on engagement			Mod on regres and enga	diator	Sobel Test Indirect effect of engagement through mediator to criterion			Takal		
Mediator variable (m)	Criterion variable (c)	$r_{\rm ec}$	Path A e→m	(SE)	Path B m→c	(SE)	Path C e→c	(SE)	Test- statistic	(SE)	p	Total Model 2 R <sup>2</sup>	
Care what I think	Confidence	13*	454*	(.193)	.599***	(.046)	161	(.150)	-2.31*	(.12)	.021	.396***	
Respect	Confidence	13*	144	(.171)	.655***	(.052)	328*	(.154)	840	(.11)	.401	.360***	
Great say	Trust	07	382+	(.205)	.475***	(.048)	054	(.169)	-1.55	(.11)	.120	.256***	
Pro. fair. scale	Confidence scale	08+	305+	(.173)	.730***	(.034)	140	(.143)	-1.76+	(.13)	.079	.443***	

<sup>+</sup>p < .10, \*p<.05, \*\*p<.01, \*\*\*p<.001

Notes. Pro. fair. = Procedural fairness.  $r_{cc}$  = Pearson correlation between engagement type (e) and criterion (c). Negative paths from engagement type to confidence and procedural fairness indicate less perception of fairness and less confidence in the phone condition relative to the face-to-face condition.

positive between the time of the phone survey and the face-to-face event, as indicated by lower average disagreement scores.

Comparison of M(d) and M(e) shows that significant changes pre to post event were even more common. Only one item, "respect," did not change significantly between pre and post for those surveyed. In addition, compared to non-attendees' phone responses, attendee post-face-to-face event answers were generally more positive (lower disagreement; compare M(e) and M(a), with significance levels given in M(a)). Finally, though the ns were very small due to our sampling and question administration procedure (ns = 11-14 per question), we also compared those who had post-discussion data with their own answers on the phone survey. Those within-group comparisons revealed p < .05 improved attitudes on four of the eight questions: great confidence, satisfied, care what I think, and best interests.

We next explored whether some of engagement type's positive impacts on participant reports of confidence, might be mediated through procedural fairness perceptions. We used multiple regression procedures to estimate the paths from participation condition (phone vs. face-to-face engagement) through observed

procedural fairness perceptions, to trust/confidence (controlling for the direct effect of participation condition on trust/confidence). The results are shown in Table 3. To compute the values in Table 3, we first ran a model (Model 1) in which the mediator was regressed on engagement type (dummy coded as phone = 0, faceto-face = 1), to obtain the path A (path A is the relevant unstandardized beta weight) from engagement type to the procedural fairness mediator (e.g., voice or respect) and its standard error. Then we ran a second model (Model 2) in which the confidence related criterion (i.e., having great confidence, or trusting the government to make right decisions) was regressed on both the procedural fairness mediator and the engagement type dummy code. This gave us another path and its standard error: path B (the unstandardized beta weight) from the mediator to the criterion, controlling for any other independent, direct effects of engagement type. It also gave us path C, indicating the remaining direct effect of engagement type onto the criterion, after controlling for the procedural fairness indicator. Finally, we used the path values and their standard errors to conduct Sobel's test (Preacher & Hayes, 2004, 2008) to test whether the indirect effect (represented by paths A and B) was statistically significant.

<sup>&</sup>lt;sup>a</sup> Listwise means computed matched with phone responses. <sup>b</sup> Listwise means computed matched with post-event responses.

As shown in Table 3, the Model 1 results indicate that engagement type had weak impacts (typically marginal impacts) on the mediator variables (Model 1, path A). In Model 2, the procedural fairness variables had strong impacts on confidence (Model 2, path B). However, findings of indirect effects of engagement type on confidence through the procedural fairness mediator variable depended on how confidence and procedural fairness were operationalized. For example, the indirect effect of engagement type through perceptions that the government "cares what I think" onto reports of "great confidence" in the city government, was significant (p = .02), and appeared to mediate the entire effect of engagement type, leaving no remaining direct effect of engagement type on confidence. However, the indirect impact through procedural fairness perceptions of being treated with "respect" did not approach significance (p = .40), and left engagement type with a significant direct effect on confidence.

The last row in Table 3 reports results based on a scale formed by combining similar items into procedural fairness and confidence scales so that we could examine the entire sample of participants in a single analysis. To create these scales, we computed z-scores for each item across the entire sample of attendees and non-attendees (using phone scores from non-attendees and post-event scores for attendees). Thus, scoring positively on a given item meant that one's answer to the question was above the mean of all respondents who answered the same item in each of the two contexts. To create the confidence score, we then averaged across z-scores for any of three items completed by participants (great confidence, trust, and satisfaction). To create the procedural fairness score we averaged over the remaining items, except for the "decision on facts" item. Internal reliabilities based on the 27 participants who completed all items at the same administration (post-event) were .88 for the 3-item confidence scale and .71 for the 5-items procedural fairness scale. The internal reliability was substantially improved (Cronbach's  $\alpha = .87$ ) by dropping the item regarding perceptions that the city government bases its decisions on the facts. Therefore, that item was not used to estimate procedural fairness. As shown in Table 3 (last rows), our analyses using the scales found similar results as found at the item-level:

engagement type had a marginal impact on confidence, and its indirect impact through procedural fairness was also marginal. Meanwhile the effect of procedural fairness perceptions on confidence was strong.

### 3.2 Study 2

As previously noted, there were some differences between the online sample in general and those who attended the face-to-face discussion. Again, these differences are shown in Table 4, which shows a trend for attendees to report more positive (or less negative) opinions and perceptions of city government than those who did not attend (compare M(a) and M(b), significant differences between these are indicated in the M(b) column). Comparison of the attendees' answers online to their answers prior to the face-to-face event on the day of the event (compare M(b)and M(c), significant differences indicated in M(c)) revealed a trend for additional increases in positive attitudes between the survey and the event. Comparison of M(d) and M(e), shows that participants even further improved attitudes pre to post the face-toface event. Thus, it is not a surprise that, compared to the online answers of participants who did not attend the event, attitudes of attendees were significantly better after the event (compare M(e)and M(a), with significance levels indicated in M(a)).

Using the same regression procedures as in Study 1, we next explored whether engagement type might have indirect effects on participant reports of confidence, through procedural fairness perceptions. The results of our mediation analyses are shown in Table 5. As shown, Model 1 results indicate that engagement type had highly significant impacts on the mediator variables (Model 1, path A). Though the samples differ between tables due to the effects of listwise deletion, these findings are consistent with Table 4's reports of significant differences based on engagement type. In Model 2, the procedural fairness variables also had highly significant impacts on confidence (Model 2, path B). All indirect effects are also significant. However, there is still variability in the amount of variance accounted for depending on how confidence and procedural fairness were operationalized. For example, with no other predictors in the model, engagement type accounted for

Table 4. Study 2 means (SDs) of responses to survey questions across time and engagement type

	Online Responses				Pre-Post Face-to-Face Event Responses							
	Non-attendee		Attendee		Pre-ev	ent <sup>a</sup>	Pre-event b		Post-event			
Question	M(a)	(SD)	M(b)	(SD)	M(c)	(SD)	M(d)	(SD)	M(e)	(SD)		
Confidence/trust												
Count on	2.03*	(.82)	2.14	(.85)	1.92*	(1.29)	1.89	(1.30)	2.34**	(1.15)		
Trust	2.00+	(.86)	2.11	(.84)	2.09	(1.24)	2.09	(1.24)	2.25	(1.20)		
Competent	2.37***	(.75)	2.25	(.76)	2.72***	(.57)	2.68	(.62)	2.78	(.56)		
Qualified	2.24***	(.73)	2.20	(.81)	2.58**	(.72)	2.58	(.67)	2.78**	(.53)		
Integrity (-)	1.56***	(.73)	1.37*	(.64)	1.28	(.54)	1.37	(.63)	1.21*	(.51)		
Procedural fairness												
Best interests	2.00***	(.85)	1.98	(.82)	2.48***	(.80)	2.47	(.82)	2.74**	(.63)		
Decision on facts	1.81***	(.80)	2.07*	(.89)	2.23	(.87)	2.08	(.90)	2.45***	(.85)		
Biased (-)	2.14**	(.80)	1.99+	(.76)	2.04	(.87)	1.99	(.86)	1.84+	(.87)		
Respect	2.34***	(.78)	2.29	(.83)	2.48+	(.81)	2.47	(.81)	2.74**	(.61)		
Influence	2.30***	(.85)	2.65**	(.65)	2.67	(.74)	2.67	(.70)	2.78+	(.57)		

<sup>+</sup>p < .10, \*p < .05, \*\*p < .01, \*\*\*p < .001, two-tailed, uncorrected for multiple comparisons.

Notes. Attendee n = 43-98, non-attendee n = 787 to 1613. Significances refer to a difference between that mean and the mean in the column to its left, as detailed in the text. M(a) significance levels refer to the comparison between M(a) and M(e).

<sup>&</sup>lt;sup>a</sup> Listwise means computed matched with phone responses. <sup>b</sup> Listwise means computed matched with post-event responses.

Table 5. Example mediation analyses for Study 2

Predictor variable = Engagement type (e)			Mode Media regresse engager type	ntor ed on ment		_	lel 2 sed on med ement type	iator	Sobel Test Indirect effect of engagement type through mediator to criterion			Total	
Mediator variable (m)	Criterion variable (c)	$r_{ m ec}$	Path A e→m	(SE)	Path B m→c	(SE)	Path C e→c	(SE)	Test- statistic	(SE)	p	Model 2 R <sup>2</sup>	
Best interests	Trust	.06*	.870***	(.105)	.701***	(.026)	323***	(.085)	7.92***	(.077)	< .001	.449***	
Respect	Trust	.06*	.521***	(.117)	.536***	(.035)	015	(.100)	4.39***	(.064)	< .001	.276***	
Respect	Competent	.17***	.521***	(.111)	.542***	(.043)	.278**	(.097)	4.40***	(.064)	< .001	.349***	
Pro. fair. Scale	Confidence scale	.13***	.618***	(.086)	.796***	(.016)	023	(.056)	7.11***	(.069)	< .001	.607***	

+p < .10, \*p<.05, \*\*p< .01, \*\*\*p<.001

Notes. Pro. fair. = procedural fairness. Positive paths from engagement type to confidence and procedural fairness indicate increased perceptions of fairness and confidence in the face-to-face condition relative to the online condition.

about 1% of the variance in the trust in city government item. Additional inclusion of perceptions of the government acting in citizens' best interests increased the variance accounted for to 45%. However inclusion of perceptions that one is treated with respect by the government only increased the variance account for to 28%. These results, taken together with results from Study 1, suggest the potential importance of examining individual components of procedural fairness and different operationalizations of confidence [see also 72].

In the last row in Table 5 we report results from combining similar items into a single scale so that we could examine the entire sample of participants in a single analysis. To create these scales, we first reverse scored the negative items (integrity, biased), and then computed *z*-scores for each item across the entire sample of attendees and non-attendees (using online scores from non-attendees and post-event scores for attendees). Thus, scoring positively on a given item meant that one's answer to the question was above the mean positive response of all respondents who answered the same item in each of the two contexts. To create the confidence score, we then averaged across *z*-scores for any/all of the 5 items completed by participants (count on, trust, competent, qualified, integrity; Cronbach's  $\alpha = .77$  across the 93 attendees with complete data). To create the procedural fairness score we averaged over the remaining 5 items (Cronbach's  $\alpha = .79$ ).

As shown in Table 5 (last rows), engagement type had a significant impact on the procedural fairness scale, and procedural fairness had a significant impact on confidence. The indirect impact of engagement type through procedural fairness on confidence was also significant, and in that mediated model (Model 2), the remaining direct effect of engagement type on confidence was not significant.

### 3.3 Conclusions

We found some preliminary support for our prediction that engagement type would relate to procedural fairness perceptions and trust/confidence measures. In particular, trends emerged to indicate the potentially advantageous impacts of face-to-face events on trust and confidence, relative to phone or online surveys. We also replicated what others [e.g., 52] have found: There is a strong relationship between procedural fairness and trust/confidence. Although we did find some support for our belief

that there would be indirect effects of engagement type via procedural fairness on trust/confidence, the indirect effects, even when they were significant, were quite small. In fact, the estimate of the variance accounted for by trust/confidence by the indirect effect of engagement type through perceived procedural fairness was very small [only .0055 or .55%; computed based on 73]. Much of our ability to detect such small effects is due to the large sample sizes involved in the studies.

The limitations of the current studies for investigating our three hypotheses are considerable. For example, our design did not include any face-to-face participants who were not also surveyed by phone (Study 1) or online (Study 2). Thus, our face-to-face participant answers may have differed from those of participants engaged *only* in face-to-face interaction without other (prior) input opportunities. Also items are typically much less reliable than scales, but most of the analyses reported here were at the item level and involved different subgroups of participants who had completed those items. In addition, we only explored the raw data, which involved a great deal of missing data, without using more sophisticated statistical (e.g., missing-data imputation) techniques.

Our aim in this article was simply to explore the data that we had available to see if there were preliminary evidence that different types of public engagement might have different impacts on public trust and confidence in the government. Despite the limitations of the research, we do think that the preliminary results are suggestive of differences in the public's trust and confidence in government as a function of the type of engagement. Moreover, the data suggest the possibility that engagements that expose residents to governmental officials may be superior for increasing public trust and confidence compared to those engagements that involve less exposure to governmental officials. While such a conclusion would need substantially more research to support it, there is ample reason to undertake such studies to further determine what relationships exist among public engagement techniques, the public's procedural fairness views, and their trust and confidence in government. The data here also suggest that consideration of how different types of engagement impact different components of procedural fairness, or different operationalizations or components of confidence, might be fruitful and could improve our understanding of why and when different types of participation might impact public confidence in the government.

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