Assessing the Effects of Public Participation

This article presents the results of research designed to test participatory democracy assertions that high-quality public participation can affect participants' beliefs in desirable ways. It examines the relationships between exposure to quality participation and participant beliefs about the trustworthiness and responsiveness of a public agency and the value of including different viewpoints in public meetings. After participation in quality project meetings, participants were significantly more likely to believe the agency was responsive to public concerns. The results indicate that some specific aspects of quality participation are positively associated with expectations about the agency's responsiveness and performance. Positive associations were also found with tolerance for differences of opinion. These results have important implications for public administrators and theorists of participatory democracy.

Introduction

Many public administrators worry about their relationships with the citizenry they serve. They fear the public does not trust their agency and that agency proposals will inevitably face resistance, regardless of their quality. This is particularly true of the U.S. Department of Agriculture Forest Service (USFS). In recent decades, the agency has experienced a loss of public trust in its performance and its responsiveness to public concerns (Clary 1986, 195– 99). Repairing these relationships is complicated by the high degree of public conflict over the appropriate objectives for USFS national forest management. For instance, some would like to see the forests managed for maximum economic benefits through intensive timber extraction, whereas others favor a moratorium on timber harvesting in national forests.

This article presents the results of a study designed to test the idea that high-quality public participation could begin to solve these problems by positively transforming citizen beliefs about the USFS and other citizen participants. The study centered on surveying participants before and after a series of public meetings with USFS personnel. Respondents assessed the research project meetings, as well as previously attended public meetings. The surveys measured participants' beliefs about the performance of the USFS, its responsiveness, and the inclusion of conflicting viewpoints within public meetings. These measures were replicated in pre- and post-project-meeting surveys, allowing an assessment of changes in group means. Regression modeling allowed analysis of the relative contributions of exposure to various meeting qualities in explaining variation in participant beliefs.

To understand the nature of the Forest Service's current relationship to the American public, a short history is necessary. It makes sense to begin in the late 1950s, when Herbert Kaufman studied the agency to learn how it maintained a highly cohesive, efficient workforce within a very decentralized organizational structure (1960). At this time, many employees worked in small groups in back-country offices with only primitive communication technology. USFS national forest management policies emphasized intensive timber production and extraction. Kaufman found that one of the ways the agency ensured workforce cohesion, efficiency, and conformance with these policies was by hiring a homogeneous workforce. For instance, until the 1970s, nearly all professional staff were white, male, and trained as foresters or forest engineers by a limited number of forestry programs (Halvorsen 2001b, 260). This ensured their pre-employment values and beliefs were consistent with the agency's policies. The USFS also fostered workforce cohesiveness and consistent policy implementation through socialization practices that transmitted and

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reinforced agency goals. During the late 1950s, there was strong public support for the agency's timber production focus, and the agency fulfilled this goal effectively. As a result, the USFS enjoyed high levels of public respect. However, Kaufman wrote that the very characteristics that made the workforce efficient and cohesive could also make the agency inflexible in the face of external social changes (1960, 234–38). Such changes occurred in the 1960s, when the environmental movement emerged as a major political force and challenged USFS forest management policies on the basis of their environmental destructiveness (Clary 1986, 195–99).

By the late 1970s, the movement had changed public expectations of Forest Service management. It also contributed to the passage of environmental laws requiring changes in USFS practices. Many of the laws also required public participation. As Kaufman had predicted, the USFS was unable to respond effectively to these changes in its sociopolitical environment. Over the next years, the negative environmental consequences of USFS decisions were the basis of myriad lawsuits (Parker 1995, 216–19). Federal courts found the agency in violation of various environmental laws. By the 1980s, the USFS roiled with internal conflict over its decisions and felt under siege from competing external constituencies (Debonis 1995, 159–70). These conflicts culminated in the highly publicized spotted owl issue, which pitted environmentalists and the timber industry against each other and against the USFS (Yaffee 1994, 115–51). In the early 1990s, with no clear solution in sight, a USFS workforce survey found low employee morale, resulting partly from the widespread belief that the agency had lost the public's respect (Halvorsen 1996, 133). These events form the backdrop of this examination of the ability of public participation to transform participant beliefs regarding USFS performance and its responsiveness to public concerns, as well as those regarding other USFS constituents with whom they disagree.

This is a tall order, but some have argued that it can be filled by high-quality participation that is satisfying, accessible, and deliberative. Access is important because it is closely linked to representation (Moote and McClaran 1997, 475–76). Representation is important to public perceptions of fairness (Tuler and Webler 1999, 443), and it can be essential to effective decisions based on a thorough understanding of the problem. Local meetings that use time efficiently and are carefully scheduled, comfortable sites for discussion tend to be accessible to a wide variety of people. In addition, on-site child care and low-cost catered meals can increase accessibility (King, Feltey, and Susel 1998, 13). Good-quality participation is also satisfying to participants. This means different things to different people. For some, the opportunity to learn from others with simi-

lar and dissimilar views is satisfying (McCool and Guthrie 2001, 320–21). For many, interactive, face-to-face discussion is more satisfying than one-way techniques such as submitting written comments (Blahna and Yonts-Shepard 1989, 212; Cortner 1996, 170). Believing the decision makers take citizen comments seriously and that the resulting decisions reflect their consideration can also increase satisfaction (Lauber and Knuth 1999, 34). Finally, high-quality participation is deliberative (Ruscio 1996, 473; Stanley 1990, 30). Deliberation is characterized by an open, respectful, and thorough "discussion in which participants engage in reasoned discourse about what action serves the common good" (Poisner 1996, 56). To be open and thorough, those with different viewpoints must have the opportunity to fully voice their thoughts. Respectful discussion includes careful listening and the acknowledgment of the value of different viewpoints, even when they conflict. Deliberative discussion is essential to the development of a collective vision of the public good which public managers are charged with protecting (Ruscio 1996, 473–74; Shannon 1990, 235).

High-quality participation contributes positively to effective, legitimate decision making (Rabe 1994, 154-55; Stivers 1990, 104). It has also been argued to have the capacity to transform participants in specific ways. Warren refers to this participatory democracy argument as the "selftransformation thesis" (1992, 8–9). He argues that public goods with characteristics like those of public land management are particularly likely to facilitate this transformation (Warren 1992, 19). Others have described specific ways that transformation might take place. For instance, quality participation may change citizens' beliefs about government responsiveness (King, Feltey, and Susel 1998, 8). Citizens who previously were unaware of participatory opportunities should be more likely to believe that an agency is responsive after attending an accessible meeting where agency officials ask for and listen to public concerns. This also may be true of citizens who see officials working hard to identify and understand the public interest during a deliberative discussion (Ruscio 1996, 474). Satisfying participation that meets participants' goals is also likely to increase their sense that the organizing agency is responsive (Lauber and Knuth 1999, 34).

Related to—but distinct from beliefs about government responsiveness—is the belief that government can be trusted to do the right thing and to perform well (Thomas 1998, 170–72). An absence of this belief is reflected in the many legal appeals to which USFS decisions are subject. Each asserts the agency made a bad or improper decision. There are several ways that high-quality public participation might change the public's understanding of the agency's decisions. For instance, deliberative discussion could make participants more aware of views that are dif-

ferent from their own (Warren 1992, 8). They might then be more likely to view agency decisions as reasonable responses to complicated situations. Satisfying participation could help to create more personal relationships between citizens and decision makers. Citizens might then be more likely to give them the benefit of the doubt when decisions fail to meet their every concern (Ruscio 1996, 475). A citizen who sees an agency carefully planning and implementing accessible participation may be more likely to believe the agency will behave appropriately in other situations (Thomas 1998, 181).

Finally, high-quality participation opportunities may build tolerance for and understanding of those with conflicting viewpoints (Warren 1992, 8). First, accessible participation is likely to attract people with a variety of viewpoints. Taking part in a comfortable process is more likely to diffuse conflict than one that is adversarial. Satisfying, deliberative participation can help people to see that success is possible even when people disagree. Finally, deliberative participation allows participants to present concerns thoughtfully. This may allow others to more fully appreciate these concerns, even if they disagree (Barber 1984, 137). As a result, participants may "become more public-spirited [and] tolerant ... than they would otherwise be" (Warren 1992, 8).

Research Methodology

No published, empirically based study is known to test high-quality public participation's capacity to create all of these transformations. This article presents the results of such research. Just as exposure to high-quality public participation is expected to have the capacity to affect positive transformation, exposure to low-quality meetings should have the opposite effect. When quality or high-quality participation is discussed in this article, the reader should keep in mind that low-quality participation is at the other end of the quality spectrum.

This research consisted of pre- and post-meeting surveys administered at a series of public land management meetings. They took place in three rural communities adjacent to a single upper Midwest national forest. The meetings were organized and facilitated by the researcher in conjunction with local USFS employees. The meetings included 10 "focused conversation" meetings with existing community groups and three community dinners that were open to the public. Both techniques featured extensive participant discussion of questions about their community's future, desired national forest management goals, and links between the two. The community dinners were modeled on a technique developed by the Wisconsin Clearinghouse for Prevention Resources (1995). Attendees sat at separate tables in small groups and answered

questions over dinner. At least one USFS employee sat at each table, listened to the discussion, and answered an occasional question. One participant facilitated the table's discussion and took notes. Each dinner lasted about two hours. At the end of the evening, the tables presented their answers to the larger group. The answers were recorded on flip charts. The focused conversations were adapted from a technique designed by Maureen McDonough for the Huron Manistee National Forest. The research-facilitator and a USFS employee met with natural resource focus groups such as hunting and environmentalist groups. They also met with generalist groups including Kiwanis and women's groups. Participants discussed their answers to questions similar to those used at the dinners. The researcher facilitated these conversations while a USFS employee listened and answered questions. The discussions were taped and transcribed. They lasted between 45 minutes and two hours. A total of 181 people attended 13 meetings, with 47 at three community dinners and 134 in 10 different focused conversations with community groups.

Both techniques were chosen for their expected accessible, satisfying, and deliberative qualities. They were expected to be deliberative because they encouraged full and thorough discussion of community and national forest management issues. Differences of opinion were anticipated especially in the community dinners and conversations with "generalist" community groups. However, the relaxed nature of the settings was designed to foster a respectful exchange. The comfort and convenience of the techniques was anticipated to enhance their accessibility. The focused conversations were expected to be comfortable and convenient since they took place in settings, times, and with people familiar to participants. Talking over food was anticipated to provide a comfortable setting that was an efficient, convenient use of time for dinner participants. Finally, the techniques were expected to be satisfying because participants would have ample time to talk about their hopes and fears for their community and local national forest with a USFS employee and fellow community members.

Participants completed pre-meeting surveys on-site and took home post-meeting surveys. A reminder postcard was sent out several weeks later. The post-survey return rate was 51 percent. Some survey questions were potentially sensitive. To reassure respondents of confidentiality, the surveys were anonymous. However, the logistics of the two techniques made it difficult to link pre- and post-meeting surveys without asking for names. Therefore, they were not linked. The pre-meeting, on-site survey contained questions regarding USFS performance and responsiveness, as well as the value of including people with differing opinions in public meetings. These questions were repeated in the take-home post-meeting survey. This allowed a determination of whether exposure to the project meeting transformed these beliefs in the group as a whole. Some of these questions were adapted from existing surveys (Craig, Niemi, and Silver 1990, 307; Kornberg and Clarke 1994, 552; Lowery, DeHoog, and Lyons 1992, 98).

If participants assessed the meetings as satisfying, comfortable, convenient, and deliberative, these qualities were expected to result in positive transformations of participants' beliefs. Respondents, therefore, were asked to assess the project meeting they had attended. These are referred to as assessment questions. Those who previously had attended other public meetings answered a series of parallel questions about those meetings. These are referred to as *past exposure* questions. Both sets of questions covered participant comfort and satisfaction with the meetings, as well as the degree to which the meetings were convenient and deliberative. All respondents answered a series of questions about their previous exposure to public land management agencies and meetings. For brevity's sake, the questions are not included in this article; however, they can be obtained from the author.

Results

The researcher used a combination of factor and reliability analysis to sort each set of assessment, past exposure, and beliefs questions into multiple indices. This allowed index creation based on respondent answer patterns rather than the researcher's preconceived patterns. Using respondent patterns is a more reliable way to develop multifaceted variables. Varimax rotation yielded the cleanest distributions over the factors. A factor score cutoff of 0.50 determined whether a question fit into an additive index. In cases in which factor scores for an individual question were identical or nearly so, questions were put into the index with the best conceptual fit. The sets of questions used to create the indices were labeled based on the complex variable they appeared to measure (table 1). The analyses yielded question sets that mostly fit the expected parallel assessment and past exposure categories. The deliberative quality questions were an exception. The assessment questions yielded a set focused on the deliberative quality of the project meetings. These questions asked whether the participant had heard from, learned from, and debated with citizens with whom they disagreed. The closest parallel category for the past exposure questions measured whether purposeful and respectful discussion (past exposure to meaningful discussion) had taken place, rather than whether citizens with different opinions deliberated among themselves. The beliefs indices focused on participants' trust in the performance and responsiveness of the Forest Service, as well as their beliefs about the value of including people with differing opinions in public meetings (value of other voices). The value of other voices questions were designed to measure participants' relative tolerance for those with opinions different from their own.

Table 1 Descriptive Statistics for all Indices					
	Mean	Median	Alpha	N	
Assessment of Project Meeting Indices a			•		
Satisfaction with meeting	4.0	4.3	0.81	83	
Comfort and convenience of meeting	4.6	4.8	0.84	80	
Deliberative quality of meeting	3.2	2.6	0.72	71	
Past Exposure to Meetings Indices					
Satisfying public meetings b	3.5	3.4	0.84	63	
Comfortable and convenient public meetings b	3.6	3.5	0.72	67	
Meaningful discussion at public meetings b	3.5	3.6	0.72	59	
Public land agencies ^c	0.9	0.7	0.75	89	
Beliefs Indices					
USFS performance d	2.9	3.0	0.87	72	
USFS responsiveness ^{a,e}	3.3	3.3	0.80	64	
Value of other voices ^a	3.6	3.5	0.53	81	

^aThe scale for the questions is 1 = disagree strongly, 2 = disagree somewhat, 3 = neither agree nor disagree, 4 = agree somewhat, 5 = agree strongly.

^bThe scale for responses to these questions is 1 = never/almost never, 2 = rarely, 3 = sometimes, 4 = frequently, and 5 = almost always/always.

The scale is 0 = never, 0.3 = once or twice, $\geq 0.7 = \text{multiple times}$.

The scale is 1 = low trust, while 4 = high trust.

 $^{\mathrm{e}}$ This is the only beliefs index that changed significantly (p = 0.03) after the project meeting exposure. The pre-meeting means and medians were both 3.0.

To assess whether respondents and nonrespondents differed significantly, late respondents to the reminder postcard mailing were treated as nonrespondents. A comparison of mean index scores between early and late respondents revealed only one statistically significant difference between the two groups. Late respondents rated the meetings as significantly less comfortable and convenient than did early respondents. However, they still rated the meetings, on average, as "somewhat" comfortable and convenient. These results suggest that differences between respondents and nonrespondents were minimal.

Table 1 contains descriptive statistics for the assessment, past exposure, and beliefs indices. With one exception, the indices have Chronbach's alphas of greater than 0.70, indicating they are reliable. Reliability measures the degree to which respondents' answers to the questions comprising an index suggest those questions measure one coherent variable. A "don't know" answer option resulted in variable response rates or N. As measured by the mean index scores, respondents assessed the project meetings as relatively convenient, comfortable, and satisfying. Respondents agreed somewhat (mean of 4.0 out of 5.0) that project meetings were satisfying and agreed strongly (4.6) that they were comfortable and convenient. They gave a neutral assessment of the meetings' deliberative qualities (3.2). These generally high project-meeting assessments suggest that positive transformations in participant beliefs may have occurred as a result of their exposure to the project meeting. However, any changes should have been moderated by participants' exposure to these qualities at past public meetings, especially because 84 percent of respondents had attended at least one prior public meeting.

Descriptive statistics for participant assessments of these past meetings are presented in table 1 as past exposure indices. With the exception of the past exposure to public land agencies index, all of these indices have a frequency-based response scale ranging from 1.0 (never/almost never) to 5.0 (almost always/always). The mean responses for the non-public land agency exposure indices were in the "frequently" range (3.5 to 3.6). These scores, as well as the median score of 3.4-3.6 indicated that at least half of the respondents with previous public meeting experience had attended meetings that were either satisfying, comfortable, convenient, or at which discussion was meaningful. A score of 0.7 or more on the past exposure to public land agencies index indicated multiple contacts with public land agencies, while a score of 0.0 indicated no contact. All respondents answered these questions because they included one about previous participant contact with Forest Service employees regarding a problem or question. Nearly two-thirds had some past exposure to public land agencies.

Table 1 also contains descriptive statistics for participants' post-project-meeting beliefs about the USFS and the value of other voices. Respondents' trust in USFS performance was fairly high, with a mean index score of 2.9 out of 4.0. The lowest possible level of trust was 1.0. The mean responsiveness index score was in the neutral range (3.3 out of 5.0). Respondents agreed somewhat (3.6 out of 5.0) that it was valuable to include people with differing opinions in public meetings. Pre-project-meeting beliefs index means were not included in the table because only one changed significantly. Post-meeting respondents were significantly more likely (mean = 3.3/5.0, p = 0.03) than premeeting respondents (mean = 3.0) to believe the USFS is responsive to the public. Mean scores for the USFS performance and the value of other voices indices did not change at all.

Thus, the project meetings that participants described as satisfying, comfortable, and convenient resulted in a significant, positive change in one of the three beliefs indices. Because at least half of the respondents had attended high-quality meetings in the past, these exposures may explain the lack of change in two of the beliefs indices. The hypothesized effects of attending quality public meetings may have occurred prior to the project meetings, with little change to be expected as a result of one additional exposure. To determine whether this was the case, linear enter method regression models were created for each of the beliefs indices. They allowed an assessment of the relationships between the assessment, exposure, and postmeeting beliefs indices. It is important to clarify that these

regression models cannot explain *change* in the beliefs indices. This isn't possible because the pre- and post-meeting surveys were purposely not linked. However, the models allowed an assessment of the degree to which exposure to various meeting qualities explain variations in participant beliefs. These results can be interpreted as suggesting which qualities can transform participants' beliefs. As the discussion that follows will show, each of the regression models explained significant portions of variation in beliefs, though with few statistically significant components. While the results are included because they suggest that meeting exposure is a major factor in shaping participants' beliefs, the majority of the variation remains unexplained.

Table 2 Regression Model for Beliefs Regarding the Value of Other Voices ($R^2 = 0.17$, $F = 1.9$, $p = 0.08$)					
	Beta	Sig.			
Assessment of satisfaction with project meeting	0.03	0.80			
Assessment of comfort and convenience of project					
meeting	-0.04	0.74			
Assessment of deliberative quality of project meeting	0.12	0.33			
Past exposure to satisfying public meetings	-0.26*	0.09*			
Past exposure to comfortable and convenient public					
meetings	0.25*	0.09*			
Past exposure to meaningful discussion at public					
meetings	0.02	0.89			
Past exposure to public land agencies	0.25*	0.04*			

* Significant at $p \le 0.10$

The regression model presented in table 2 explains the variation in the value of other voices index (table 2). Betas are standardized coefficients used to assess the relative weights of variables within each regression model. This model accounts for 17 percent of the variation in beliefs about the value of other voices (p = 0.08). Three past exposure indices are statistically significant ($p \le 0.10$) components. Past exposure to comfortable and convenient meetings and to public land agencies are positively associated with believing in the value of other voices, while past exposure to satisfying public meetings is a negative component. All of the significant components are about the same size. The beliefs regarding USFS performance regression model includes the same variables as the value of other voices model. It is not presented in table format because, although the model itself is significant (p = 0.01; $R^2 = 0.25$), only one of the independent variables is significant (participant assessment of the comfort and convenience of the project meeting) with a beta of 0.30 (p = 0.02). Overall, exposure to public meetings, including the project meeting, explains a significant amount (25 percent) of the variation in trust of USFS performance. One final regression model explains the variation in participant beliefs regarding USFS responsiveness. These beliefs increased significantly after exposure to the project meetings. Like the beliefs regarding USFS performance model, this model contains the same variables as the value of other voices model presented in table 2. Also like the beliefs regarding USFS performance, this model is significant ($R^2 = 0.19$; p = 0.04), but only one of the independent variables is a statistically significant component of the model. The sole statistically significant component is past exposure to meaningful discussion at public meetings (beta = 0.25, p = 0.06).

Discussion

This research investigated the participatory democracy assertion that quality public participation can positively transform participant beliefs. The results support this assertion. Participants assessed the project meetings as generally of high quality. After attending these meetings, they were significantly more likely to believe the USFS was responsive. Neither their trust in USFS performance nor their beliefs regarding the value of having people with differing opinions in public meetings changed after this single exposure. However, all of the regression models explaining variation in these beliefs through exposure to public meeting qualities were statistically significant. Meeting exposure accounted for 19 percent and 25 percent of the variation in beliefs regarding the USFS's performance and responsiveness, respectively. It explained 17 percent of the variation in beliefs regarding the value of including people with different opinions in public meetings. In sum, although most of the variation in participant beliefs remains unexplained, quality participation explains a significant portion. This research, therefore, supports the idea that quality participation can affect key participant beliefs.

In particular, it demonstrates that beliefs about agency responsiveness can be significantly transformed with one public meeting. Before the meetings, participants were unsure of whether the USFS was responsive to public concerns. Just one meeting spent discussing their hopes and fears with agency employees in a comfortable, convenient, and satisfying setting was enough to make them significantly more likely to believe it was responsive. The strong relationship between exposure to meaningful discussion at previous meetings and beliefs about USFS responsiveness supports the conclusion that giving people opportunities to speak and be listened to affects their beliefs about responsiveness. Because few of these previous public meetings were with the USFS, this effect may extend to elements of government beyond the one organizing the meeting. It is important to note that participant beliefs about USFS responsiveness changed significantly even though the meetings did not result in any immediate decision. However, this should not be interpreted as suggesting that participation need not affect decisions. Even though their beliefs regarding USFS responsiveness were significantly more positive, they were still in the neutral range. It is also important to remember that high-quality citizen involvement can backfire if the public learns over time that their participation is meaningless. A history of participation with no visible impact on agency decisions can be worse than no participation at all.

While beliefs about USFS responsiveness changed significantly, beliefs about its performance and the value of other voices did not. Several factors may explain the lack of change in trust of USFS performance. In contrast to those about USFS responsiveness, participant beliefs about its performance were relatively positive before the meeting. If their beliefs had been more negative, they might have been more changeable. Secondly, participants' beliefs about USFS performance may have been more resistant to change regardless of their initial level. All of the participants lived fairly close to a national forest. Their beliefs about USFS performance probably were based on a variety of information sources, including personal experiences, media reports, and conversations with others in their community. They also may have been based on personally observed land management outcomes. Beliefs based on this accumulated knowledge and experience could be difficult to change with one meeting, particularly when trust was fairly high to begin with. Another important factor was the focus of the project meetings. They were designed primarily to elicit participant views. Unless they asked specific questions, participants received little information about USFS management activities. New information about these activities might be a prerequisite for the transformation of beliefs about agency performance, especially for participants living close to a national forest. As discussed earlier in the article, the researcher expected that high-quality participation with public employees might result in a "spillover" of increased trust in the performance of their agency. This was not the case with the project meetings.

Beliefs regarding the value of incorporating different viewpoints into meetings also did not change as a result of exposure to a project meeting. However, pre-meeting surveys established that participants saw this as valuable before they attended the project meetings. Their beliefs, therefore, may have been fairly resistant to change. Participants' neutral assessment of the deliberative quality of the project meetings also made it less likely these beliefs would change after exposure to a project meeting. However, the results show these beliefs were significantly associated with public meeting quality exposures prior to the project meetings. Previous exposures to comfortable, convenient, and public land management meetings were significantly and positively associated with this belief. Transformation of this belief may require more than one exposure to a quality meeting. The positive nature of these relationships was expected. Getting to interact in a setting that is comfortable and convenient is likely to allow people to become comfortable with others, even when they disagree with each other. Attending public land agency meetings is likely to make people more aware of the high level of disagreement about public lands issues. They might then conclude this disagreement needs to be represented in public meetings. The negative relationship between these beliefs and satisfying public meetings and beliefs, however, is somewhat surprising. It may be that meetings where people don't disagree are particularly satisfying. This lack of disagreement may make meetings more efficient, and therefore more satisfying. This conclusion is supported by participant assessments of the project meetings as satisfying, but not particularly deliberative. The deliberative index was based on questions asking whether participants heard from, learned from, and debated with people with whom they disagreed. Unfortunately, if disagreement exists without being voiced, agency decisions may be less effective.

These results have somewhat different implications for participatory democracy theorists and public managers. Theorists of participatory democracy are particularly interested in the effects of participation on individuals. As discussed in the introduction to this article, they assert that participation in quality processes can increase participants' trust in government performance and responsiveness and tolerance regarding those with differing views. These beliefs underlie their overarching framework for a vital, healthy democracy. The results of my research suggest that, to some degree, these theorists are right. Exposure to quality participation explained a significant portion of participants' trust in government and tolerance of different viewpoints. Respect for and tolerance of those with different opinions is the cornerstone of a vital democracy grounded in interaction between citizens with differing goals. Trust in government performance underlies citizens' beliefs about its legitimacy. Trust in its responsiveness is a prerequisite for democratic participation. These results suggest that quality participation can play a positive role in shaping all of these beliefs.

Public managers, on the other hand, are more interested in participation's role in shaping the legitimacy of specific decisions, as well as participants' trust in their organization. They are interested in citizens' tolerance for those with differing views insofar as it affects their expectations of public agency decisions. For instance, if citizens are aware that conflicting citizen expectations exist and are also tolerant of them, they should be more likely to tolerate agency compromises that don't completely satisfy everyone. Additionally, citizen trust in the performance and responsiveness of the agency will help to build public support for that agency. This support can positively affect the agency in many ways. For instance, its decisions should be more likely to be accepted and its relationships to the citizenry improved. Because the results presented in this article suggest that quality public participation can positively affect both citizen trust and tolerance, they provide additional support for arguments that public agencies should be working hard to develop and implement highquality public participation programs.

Conclusion

The results of this research suggest that quality participation may have short- and long-term effects on participants. One exposure to high-quality participation can lead people to see a public agency as significantly more responsive. Exposure to comfortable and convenient meetings is strongly associated with positive expectations of USFS performance. Over the long run, exposure to some meeting qualities may make participants more tolerant of disagreement among those attending meetings. The negative associations between beliefs and exposure to public land agencies and to satisfying meetings deserve further research. It is important to note that even good quality participation may negatively affect some participant beliefs. However, when associations between beliefs and exposure to comfortable, convenient meetings with meaningful discussion were significant, they were also positive. Therefore, public administrators should ensure that public meetings meet these criteria. Doing so may enhance participant views of the organizing agency and make them more tolerant of those with whom they disagree. Both could have positive implications for public agencies.

This research has important limitations. It focused on a small number of participants in public meetings and was not designed to generate conclusions about the general population. The regression models explained 17 percent-25 percent of the variation in beliefs, leaving the majority unexplained. While the project meetings appear to have significantly affected participants' beliefs about USFS responsiveness, explanations of changes in beliefs through specific meeting exposures are only suggested because of the associational nature of the statistics. The lack of links between pre- and post-survey responses precluded definitive explanations of change in individual participant beliefs. These could have changed even though group means did not. This could be remedied with administration of the pre- and post- meeting surveys to participants in an extended process that included a series of meetings. Anonymous links between pre- and post-meeting surveys would be more practical in a longer process with a limited group of participants. Multiple exposures to quality participation may result in significant changes in more key participant beliefs.

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Note

1. Readers of an earlier article (Halvorsen 2001a) focused on comparing participants' assessments of the dinners to those of the focused conversations should note the indices presented in the previous article were researcher derived. The indices presented in the current article were derived differently through factor analysis. The questions used in the indices described in this previous article, therefore, differ from some of the questions used in the indices described in this current article. These differences resulted in different mean scores for the assessment indices. The current derivation of the assessment indices is an improvement over the previous one.

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