

# The Lessons and Limitations of Experiments in Democratic Deliberation

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## Keywords

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## Abstract

Experiments are essential to the practice of democratic deliberation, which itself is an experimental remedy to the problem of self-governance. This field, however, is constrained by the impossibility of conducting ecologically valid experiments that take into account the full complexity of deliberative theory, which spans different levels of analysis and has a multidimensional variable at its core. Nonetheless, informative patterns have emerged from the dozens of lab studies, survey experiments, and quasi-experiments in the field conducted to date. This body of work shows the feasibility of gathering diverse samples of people to deliberate, but it also underscores the difficulties that arise in deliberation, including extreme disagreement, poor conflict management, and how a lack of diversity can forestall meaningful disagreement. When public engagement strategies and discussion formats mitigate those hazards, deliberation can improve participants' understanding of issues, sharpen their judgments, and change their attitudes toward civic engagement. Well-publicized deliberative minipublics can even influence wider public opinion and voting intentions.

## INTRODUCTION

As a model for political systems, deliberative democracy “affirms the need to justify decisions made by citizens and their representatives” (Gutmann & Thompson 2004, p. 3). Broadly defined, deliberative democracy stresses the value of procedures or systems that ensure a robust and inclusive public decision-making process. In small group settings, democratic deliberation involves carefully analyzing problems and considering alternative solutions while maintaining equality and respect among participants (Burkhalter et al. 2002). On larger social scales, deliberative systems include a robust public sphere, dense civic networks, independent news media, cultural traditions of both dialogue and disagreement, and related institutions and practices (Felicetti et al. 2016, Gastil 2008, Parkinson & Mansbridge 2012).

This body of scholarship has grown rapidly and has as much significance as ever at a time when the public sphere features uncritical thinking, misinformation, and flawed decision making (Gutmann & Thompson 2004, Hochschild & Einstein 2015). Deliberative democratic scholarship provides a timely critique of existing public discourse, civic engagement, and political institutions in modern political systems (Dryzek 2010). This interdisciplinary body of work now features more than 300 peer-reviewed articles each year (Gastil et al. 2017a), and new textbooks use deliberation as a frame for American government, public participation, and political communication (Nabatchi & Leighninger 2015).

Even so, there exists no integrated theoretical account of what forces obstruct deliberative practices, nor precisely what benefits more deliberation might yield (Levine 2013, Neblo 2015, Thompson 2008). Lacking a clear theory of political change, only a handful of deliberative reform efforts have had a lasting impact (Nabatchi et al. 2012). Some have even produced countervailing effects (Karpowitz & Raphael 2014, Lee 2014).

This literature began in political philosophy and abstract social theory, and debates about such ideas have too often remained disconnected from empirical investigation (Dahlberg 2005). Meanwhile, the most abstract empirical formulations of deliberative democracy sometimes lack falsifiability; some research, such as quasi-deliberative online experiments, connects only loosely back to deliberative ideals (Mutz 2008, Thompson 2008). The widespread appeal of deliberative theory across disciplines also has resulted in lines of empirical research developing within silos, with no central body of interdisciplinary work on which to build future studies. Finally, the interplay of deliberative theory with practical political reform has encouraged a proliferation of case study evaluations, which add rich detail to the research record without, as of yet, painting a clear picture of how deliberation operates across different political contexts and on larger social scales (but see Font et al. 2016, Gastil et al. 2017c).

The experimental method provides one of the most effective means for developing stronger deliberative theory. In this article, I endeavor to explain the necessity, difficulty, and insights gleaned already from deliberative experiments. I begin this review with a historical perspective on experimentation and democracy, move on to contemporary methodological questions, and then summarize the most substantial experimental research programs on deliberation. I conclude by underscoring the gaps in our knowledge future research will need to fill.

## THE DEMOCRATIC EXPERIMENT

The experimental ethos of democracy can be seen in the American Revolution and the Founders’ interest in ancient Greece. As the United States grew from colonies to confederation to constitution, John Adams continued to write in defense of his nation’s revolution and the novel political institutions it spawned. At the end of the eighteenth century, a London publisher

released a collection of his letters, and these show that a touchstone for Adams's thought was ancient Athens, a prototype well studied by American intellectuals in his day.

In one such letter, Adams (1797, p. 281) wrote that “the republic of Athens, the school-mistress of the whole civilized world, for more than three thousand years . . . was, for a short period of her duration, the most democratical [sic] commonwealth of Greece.” The problem, Adams concluded, was that the Athenians had relied too heavily on the Assembly, rather than balancing it with effective judicial and executive branches. Of necessity, Americans took a different course:

Planted as they are over large dominions, [the] people in each of the United States . . . cannot meet in one assembly, and therefore are not exposed to those tumultuous commotions, like the raging waves of the sea, which always agitated the ecclesia at Athens . . . The legislature is so divided into three branches, that no law can be passed in a passion, nor inconsistent with the constitution . . . This will be a fair trial, whether a government so popular can preserve itself. If it can, there is reason to hope for all the equality, all the liberty, and every other good fruit of an Athenian democracy, without any of its ingratitude, levity, convulsions, or factions. (Adams 1797, p. 285)

Whereas the new American system constituted a fair trial of democratic principles in practice, its ancient forerunner was a more radical experiment in political chemistry. As Ober (2006) explains, Greece was “just about as close as we can get to a laboratory.” Its local governments tried to cope with foreign threats and domestic instability by “experimenting with a variety of constitutional forms, with more and less extensive participation by citizens.” The most promising results of this experimentation appeared in Athens, which was distinguished by its participatory ethos:

Over three hundred years of Athenian history, democratic participation is closely correlated with Athens' effectiveness at addressing economic, military, and social problems. Moreover, the Athenian democracy became more participatory over the course of its history, and we find that the increase in participation precedes the growth in effectiveness. (Ober 2006)

More than two centuries removed from such events, one can forget how much influence the American colonists had on the rest of the world. The publisher of John Adams's letters knew those ideas had a ready readership. A half-century later, Tocqueville's *De la démocratie en Amérique* rewarded its Parisian publisher by offering inspiration to French revolutionaries. As Wood (2011, pp. 5–6) recounts, “In destroying monarchy and establishing republics,” Americans were “changing their society as well as their governments, and they knew it,” yet “they did not know—they could scarcely have imagined—how much of their society they would change.”

Experiments in public deliberation could radically change the shape of government—and public life—once again. Far from mere tinkering, experiments in democratic methods could prove the remedy that saves democratic systems from themselves, as public trust in democratic institutions begins to wane, particularly for younger generations (Foa & Mounk 2017). Democracy has to demonstrate its ability to provide effective governance, as compared with more technocratic systems (Bell 2016).

Deliberative democratic theory faces its own version of this legitimacy problem. There exists no morally neutral standpoint from which to judge the quality of decisions a democratic system might render (Ingham 2013), so deliberative reforms need to justify themselves as improving process quality. This means more inclusion and procedural integrity, increasing participants' knowledge and their commitment to democratic norms, and providing symbolic value as a means of legitimizing institutions forced to make difficult decisions (Richards & Gastil 2015).

## EXPERIMENTAL METHODS AND THEIR HAZARDS

Experimental methods provide one means for testing the efficacy of deliberative methods. Compared with the colonial era, modern social science should provide surer guidance on how to conduct and interpret deliberative interventions. This returns the focus from the principle of experimentation to the details of its practice.

### The Elusive Randomized Trial

Much of the promise—and a few of the pitfalls—of experimentation can be found in a landmark experiment in public deliberation that came from the massive research effort undertaken by Carman et al. (2015). They undertook a randomized trial to compare the efficacy of alternative deliberative discussion methods for eliciting public input on the importance of evidence-based medicine.

Carman et al. (2015) assembled 961 study participants into 76 groups in sites across the United States, with another 377 in a control group that read materials without discussion, and they compared the impact of these different experiences on participants' policy-relevant knowledge and attitudes. The discussion methods included (a) a 2-hour face-to-face forum; (b) a 2-session face-to-face study circle, with asynchronous online expert consultation in between; (c) a 5-hour, synchronous online Deliberative Poll, which emphasized Q&A with experts; and (d) a 3-day face-to-face Citizens' Panel, featuring presentations and Q&A with 7 experts. The first 3 processes used 12-person groups, with the panel having 24.

All of these experiences, including the reading-materials-only control, increased participants' knowledge. The proportion of items answered correctly rose, on average, just 8% in the control, with higher figures for each discussion method, led by a 17% increase in the Citizens' Panel. Mean attitude averages shifted on two of three items (both concerning the efficacy of low- versus high-volume hospitals), though only the Citizens' Panel condition yielded significant changes on both of these. The Citizens' Panel also yielded two of the largest changes in attitudes toward evidence-based healthcare, and it received the highest participant evaluations of perceived value and impact.

The differences found in this study, however, were quite small, which makes the study's practical takeaway equivocal. The authors simply note that "diverse groups of individuals can convene and successfully debate challenging healthcare issues, share ideas for their resolution, and learn from experts and from each other," which yields for policy makers "different input based on increased knowledge and reconsidered attitudes" (Carman et al. 2015, p. 18). Given the relative expense of merely assembling booklets for individual readers versus convening a multiday Citizens' Panel, one might ask whether the deliberative event warrants the cost. In such cases, relative effect size matters, and the differences found in this study were slight.

Nevertheless, one might take heart that a randomized trial yielded a familiar conclusion: Well-designed discussion procedures can yield robust deliberation. That same pattern of results can be found in the edited volumes chronicling deliberative events, such as the 1996 National Issues Convention (McCombs & Reynolds 1999), the 2004 British Columbia Citizens' Assembly (Warren & Pearse 2008), or the 2009 Australian Citizens' Parliament (Carson et al. 2013). Organizers and observers often label such a singular event as a "bold experiment" (e.g., Ward 2008, p. 301), but this usage of the term is more vernacular than precise.

Whichever way one chooses to read the results of Carman et al. (2015), the study showcases nearly all of the challenges of deliberative experiments. Though experiments can add incrementally to our knowledge about deliberation, not even the most ambitious study can test deliberative theory fully, resolve disputes about what to measure (and how to measure it), or manage a unit-of-analysis problem that worsens as one moves up to higher social scales. The following sections examine those problems in more detail.

## Theoretical Abstraction, Complexity, and Embeddedness

Philosopher of science Imre Lakatos (1978) explained that most studies serve vast “research programs.” These programs contain a hard core of abstract theoretical claims surrounded by a protective belt of numerous derivative theories. One can formulate testable hypotheses from those theories, but only the hypotheses can be falsified in any meaningful sense. Even if the theories from which they derive become tattered over time, the hard core remains intact. Scholars abandon research programs not because data force their rejection but only because they fail to generate novel predictions, reveal exciting anomalies, or prove useful in practice. Bad theories never die, they just fall out of use. The broadest deliberative democratic theories principally concern the hard core of this research program (Carcasson & Sprain 2015, Chambers 2003, Cohen 1997, Dryzek 2010, Fishkin 1991, Landemore 2013). These theories draw on empirical research but intertwine substantive and moral philosophical claims to say both how deliberation works and why a society should value it. Surrounding these lie more empirical theoretical accounts of deliberation, which still draw normative implications but focus on empirical statements about the causes, processes, and effects of deliberation at various social scales (Burkhalter et al. 2002, Fishkin 2009, Gastil 2008, Jacobs et al. 2009, Neblo 2015, Steiner 2012, Thompson 2008).

Formulating a deliberative theory in more precise terms, however, does not usually escape the problem of complexity. The trickiest of these problems concerns the empirical interconnections among theories that operate at different social levels (Neblo 2015, Parkinson & Mansbridge 2012) and how they interconnect, such as when a deliberative minipublic fits into a larger political process (Curato & Böker 2016, Warren & Gastil 2015). Even if one sets aside that problem, any deliberative theory that spans all the way from causes to consequences has a complexity that makes formal experimentation nearly impossible.

By analogy, consider the case of Janis’s (1982) famous groupthink theory. In its original version, as well as in various reformulations, the theory begins with a complex set of antecedents, such as high group cohesion, various structural faults in an organization, and a provocative situation context. When all of these interact in combination, it results in a flow through groupthink symptoms to defective decision making. The problem lies in the complexity of the theory’s posited interactions among independent variables. One reviewer estimated that if an experimenter could manipulate each variable in the model, with only two levels (low versus high) for each, with 10 three-person groups per cell in a crossed design, the study would require 7,680 research participants (Park 1990; see also Aldag & Fuller 1993).

Deliberative theories compound this problem by featuring complexity in the key process variable (i.e., deliberation itself), but they share with groupthink the problem of characterizing human behavior in particular situations and environments. One infamous example of this problem comes from an article intended to cast doubt on the wisdom of deliberative interventions. Schkade et al. (2007) showed that like-minded groups of citizens who discussed politically heated issues, such as affirmative action, tended to polarize rather than find common ground. The purported takeaway was that deliberative designs required thoughtful procedural safeguards (e.g., a trained facilitator, a diverse group of participants, and a structured discussion agenda), which the experiment had failed to put in place. Such procedures are close to routine even among the wide variety of deliberative designs (Gastil & Levine 2005). A study of like-minded small groups showed how balanced briefing materials and a more sustained (four-hour) discussion can yield thoughtful opinion shifts, rather than the in-group posturing that leads group members to express increasingly extreme views (Grönlund et al. 2015).

Even if one includes the structural features presumed necessary for a deliberative design (without varying them), a problem often remains when the rest of the study lacks ecological validity.

Some experiments aim to address this problem by giving groups a real economic stake in their decision, such as through cash payments conditional on behavior and outcomes. Sulkin & Simon (2001), for example, showed that a period of initial deliberation resulted in more equitable offers in the “ultimatum game,” wherein one person makes a take-it-or-leave-it proposal for how to allocate \$100. Participants perceived the relatively even payouts as more fair, but such findings come from a lab setting so removed from real public debate that it is difficult to tie them back to deliberative theory and practice.

Karpowitz & Mendelberg (2014) took the lab approach much further by having five-person groups discuss the distributive justice of different payment allocations they might use for their assigned task. Many group discussions went well beyond the five-minute minimum duration for deliberation, with a few going past an hour (p. 105). Such a study can glean insight into key variables of interest, and this one showed a complex interaction between decision rule, group membership, and differences in male and female member participation and influence. To get a sufficient sample size and a feasible design, however, the groups had to remain unfacilitated and stay focused on the narrow payment question placed before them (though lab instructions encouraged extrapolation to larger social inequalities).

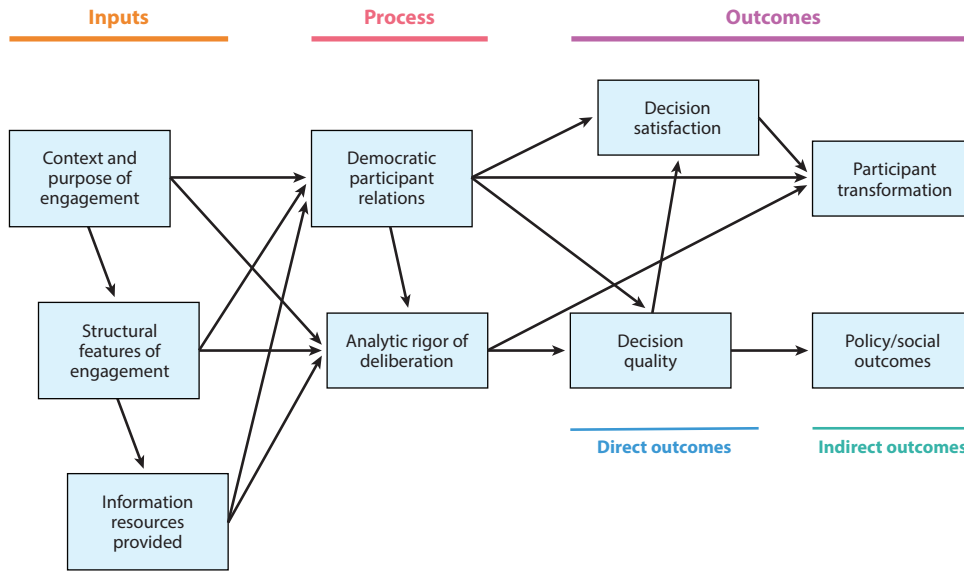
Finally, all experimentally manipulated groups hoping to learn about democracy face a problem that dates back to Kurt Lewin’s World War II–era studies on democratic group leadership (Lewin & Lippitt 1939). Having an experimenter assign an authoritarian leader to a group makes a kind of sense, as it suits the arbitrary authority of a dictator. In group decision-making experiments comparing leadership styles, it is common to assign a democratic leader to a group (Gastil 1993). Such a leader is instructed to enact egalitarian behaviors, but a democratic group should, by definition, have control over its own leadership and decision-making procedures. As Sager & Gastil (2006, p. 4) argued in their study of group decision rules, it can be “problematic to conceptualize democratic decision rules as procedures that are determined by persons outside of the group itself.” Jurors might “perceive the consensus decision rule as appropriate” for their criminal trial “because it was chosen through a legitimate political process (e.g., written into a state constitution),” but “an experimentally manipulated decision rule lacks such precedent.”

As a result of these problems, every deliberative experiment must admit to a common set of limitations. Each study excludes some variables, has only a partial range of values for any measured or manipulated variable, and uses potentially problematic methods of manipulation in the context of a democratic group—or resorts to natural variation and dispenses with manipulation altogether.

### **Unit of Analysis and Operationalization**

As a researcher moves down from theory to the level of executing a study, more choices lie ahead—each of which further limits the generalizability of findings. Foremost among these concerns is the preferred unit of analysis. Because deliberative democratic theories entail variables that rise upward from the individual to the group, organization, political unit, and ever-larger social scales, no single study has purported to have sufficient statistical power across all such levels. The most ambitious to date simply offer multilevel modeling of the individual, group, and/or network, as Karpowitz & Mendelberg (2014) did in their experiments and as others have done for large-scale deliberative events to disaggregate individual differences from group-level effects (Bonito et al. 2014, Farrar et al. 2010, Tucker & Gastil 2013).

Most of the studies reviewed herein, however, posit group-level effects (e.g., outcomes as a consequence of a deliberative experience) while measuring and testing variables at the individual level. Looking at structural differences among groups can reveal patterns otherwise missed, as when Hans et al. (2014) reanalyzed data to show how the civic impact of deliberating on civil



**Figure 1**

An input-process-outcome model of democratic deliberation.

juries varied according to the features of those juries (e.g., their size and decision rule) and the nature of their task (e.g., what kind of case came before them).

Once an investigator settles on one or two levels of analysis, the selection of focal variables requires careful consideration, given the impossibility of testing fully articulated models of deliberation even at a single level of analysis. The vast majority of the deliberation studies focus on deliberation at the scale of a small or large discussion group, and they select variables from the sets shown in **Figure 1** (Gastil et al. 2017c). The most common independent variables manipulated (or permitted to vary naturally) concern discussion topic, briefing materials, group composition/size, and procedural rules. Process variables measured—but rarely manipulated—concern the social relations among participants (e.g., levels of respect and equality of participation) and the rigor of the deliberative process itself. Key outcome variables typically measure process satisfaction and short-term changes in participants’ knowledge and beliefs. Some studies, however, aim to link deliberation to longer-term effects on participants, public policy, or the wider community.

Missing from such variable lists are what one might call the key moderator variables that condition the effect of any deliberative intervention or institution. These contextual variables show up in exceptional natural quasi-experimental investigations (e.g., Putnam 1993) or field surveys (Karpowitz & Raphael 2014) but rarely in conventional experiments. Levine (2017) provides a partial list of these factors: the motivations, commitment, and incentives of the organizers and the participants; how surrounding institutions and communities treat the intervention; human capital (who is involved and how well they are prepared); social capital (how the various participants relate to each other); and cultural norms, meanings, and expectations.

For example, Ugarriza & Nussio (2016) found that in the Colombian context, the extreme distrust, marginalization, and polarization resulting from a bitter political and military conflict undermined the effectiveness of even careful deliberative interventions. They concluded that more favorable preconditions, including public education and real policy change, would need to occur before one could expect robust deliberation across such divides. Whereas Abelson et al.’s

(2007) quasi-experimental study across varied institutional and political contexts suggests that participatory and deliberative methods can take root in widely different settings, the Colombian example suggests the existence of scope conditions at the extremes.

## Summary and Preview

With all the aforementioned caveats in mind, there now exists a massive body of experimental research on public deliberation. In the following section, those studies are arrayed in terms of common lines of inquiry, and experimental findings are interspersed with other empirical research to provide more complete accounts. I begin by reviewing basic questions about deliberative forums and discussion groups, then turn to the key participant effects posited for deliberation. Finally, I consider briefly the evidence on how publicizing the findings of a deliberative body can influence a larger public, such as an electorate.

## BASIC DELIBERATIVE FORUM DESIGN AND FUNCTION

This empirical review begins with basic questions about who will participate in public discussions. This is followed by a review of simple issues forums—the one- to two-hour policy-centered discussions that are the nucleus for more elaborate minipublics, which use random samples and more elaborate—often multiday—designs, such as Citizens’ Juries and Deliberative Polls, featured in work by Carman et al. (2015). After reviewing studies of online forums and minipublics, I then consider the quality of deliberation these events achieve and review experiments that feature variations in institutional design.

### Recruitment for Deliberation

A fundamental question concerns the viability of recruiting people into deliberative processes at all. Critics had doubted whether the general public would want to engage in deliberation (Denver et al. 1995), particularly if it meant disagreement with strangers (Karjalainen & Rapeli 2015, Mutz 2006). By various estimates, only a minority of US citizens seem willing to show up for deliberative public events, and those who do tend to be more engaged in public affairs, though almost by definition (Jacobs et al. 2009). That said, those who decline invitations to participate are not clearly distinct demographically from those who accept, as seen in a recent study of a UK Citizens’ Assembly (Flinders et al. 2016).

Neblo (2015) used a series of survey questions to explore this issue and found that a sizable majority of citizens claimed a willingness to participate in political discussions. Many citizens were more inclined to take part if—and for some, only if—they believed that public policy making was unlikely to be “influenced by self-serving officials and powerful special interests” (p. 128). In other words, their willingness to participate was conditional on a minimal expectation of potential influence.

Neblo (2015) followed up those results with a survey experiment, which crossed five different features for a promised deliberative forum: attendance payment incentive (\$25 versus nothing), session duration (an hour versus a full day), face-to-face versus online, general versus specific topic (immigration), and meeting with fellow citizens versus a congressional representative. Across all conditions, roughly a quarter of respondents (27%) said they were “extremely” interested in participating, with roughly the same proportions “quite” or “somewhat” inclined to take part. Of the experimental manipulations, the keys to boosting attendance were offering the financial incentive and having a member of Congress present during the forum. Not surprisingly, those participants



suspicious of government were unmoved by the promise of meeting with an elected official. A subsequent study in this series examined whether willingness to participate could translate into actual attendance, and 34% of those who expressed at least some interest in participating did so—particularly those with a stronger interest in politics and more trust in government (Neblo 2015).

Participating in a deliberative process can, in turn, increase willingness to participate again in the future. Gastil et al. (2010) found this to be true for the oldest institutionalized form of deliberation: jury service. On average, those who took part in jury deliberation experienced a wide range of attitudinal and behavioral changes, but the strongest effects were to heighten their already favorable attitude toward juries and to boost substantially their future willingness to respond to a jury summons. In Finland, Christensen et al. (2016, p. 79) found more qualified support for this pattern, which hinged on participants' prior levels of civic engagement. "Discussing in likeminded groups," they discovered, "better suited those who were already politically engaged, while those with low prior commitment became more positive towards discursive participation when exposed to different opinions in mixed groups."

### **Prototypical Public Issues Forums**

One of the most venerable discussion formats in the United States is the National Issues Forum (NIF). Kettering Foundation president David Mathews can take as much credit as anyone for its establishment in 1981—a full decade before deliberative democracy became a common term. "In looking back at this ongoing experiment," Mathews (2014, p. 3) writes, "I would say that the most powerful insight has been the recognition that democracy depends on constant learning and that deliberation is a form of learning."

My own research career began by accepting that premise and investigating what, more precisely, NIF participants learned from their deliberations together. I began by reviewing three years of official NIF questionnaires collected by forum moderators before and after NIFs. I found that participants emerged from NIFs more confident in attitudes that had become more ideologically coherent (Gastil & Dillard 1999).

That main finding appeared again in a lab simulation using 57 groups of students that discussed public issues for 30 minutes or more (Gastil et al. 2008). That follow-up study also showed moderates shifting in response to the ideological balance of the group, and it found that greater opinion convergence occurred in groups whose members had higher scores on conscientiousness and extraversion measures. Neutral observer ratings of group deliberation did not predict opinion convergence, but group members' perceptions of deliberations were positively associated with this outcome.

To look at a wider range of outcome variables, I complemented these findings with a quasi-experiment among adult learners (Gastil 2004), with half exposed to NIFs in the course of their classes and the others following a standard literacy syllabus. Postexposure measures found that those who used NIFs reported less conversational dominance and more diverse political discussion networks—but also lower levels of group efficacy (i.e., they were less confident in the effectiveness of group discussion and action). Looking at a larger and more diverse sample of NIF participants, the key to attitude and behavior changes was the educational quality of the NIF experience. Variations in participants' exposure to verbal instruction (written materials and spoken guidance), modeling of deliberation (by participants and forum moderators alike), and direct enactment of deliberation were all associated with more deliberative political conversation behaviors. Reading the NIF issue booklet itself was the key to reinforcing deliberative democratic attitudes (i.e., a sense of civic duty coupled with confidence in the efficacy of group discussion of public issues).

## The Emergence of Online Forums

Though face-to-face forums remain a popular choice for civic organizations (Nabatchi & Leighninger 2015), a wave of experiments has begun to compare the relative efficacy of online formats. Grönlund et al. (2009) used a quasi-experimental design to compare these two modes and found that they had similar knowledge and attitudinal effects, though the discussions yielded a broader range of knowledge gains. This accords with other studies showing equivalencies between face-to-face and online forums (Chen et al. 2009, Kies 2010, Min 2007, Nyerges & Aguirre 2011).

The experience of being online, however, can mean many different things (Davies & Chandler 2012). Brinker et al. (2015) found that an interactive discussion format was key to sparking changes in civic attitudes, whereas more passive modes of information transfer more reliably delivered specific information gains. In other words, a more open discussion—or intensive deliberation—can broaden knowledge but prepare participants poorly for a quiz on specific facts better conveyed through a simple booklet. In open discussion forums, however, a key to attitude change may be active participation (e.g., by posting comments); reticent participants gain little from the experience (Smith et al. 2013).

Because online experiments such as these typically grant participants anonymity, their efficacy may surprise readers accustomed to reading about incivility online. One problem is that incivility is often entangled with other variables. In an experiment crossing issue controversiality and anonymity, for example, Berg (2016) found that the former factor was a more serious challenge to discussion quality than was anonymity. The other factor is that online discussion forums too often lack features conducive to deliberation. Lampe et al. (2014) found that in online spaces, the best remedy for incivility (and information overload) was active forum moderation, not only by professional moderators but also distributed among participants committed to enforcing discussion norms. Thus, anonymous online forums using thoughtful discussion designs can sometimes nearly eliminate incivility (e.g., Smith et al. 2013).

## The Quality of Deliberation Itself

Whether online or offline, the basic concept of deliberation concerns robust analysis of a problem and the range of alternative solutions one might take to address it (Gastil 2008). The power of group discussion to induce such behavior was shown in a laboratory experiment contrasting conventional “willingness to pay” survey methods (also known as “contingent valuation”) against a simple round-robin group discussion format (Dietz et al. 2009). Group interaction moved participants away from simple favorable/unfavorable policy evaluations and toward consideration of complex cause-and-effects chains, including unintended consequences. When officially commissioned citizen bodies evaluate ballot measures, they likewise cut right to the heart of the issue and provide complex analytic insights in their summary reports (Gastil et al. 2014).

Because unsuccessful deliberative events too often go unreported in the published scholarly literature (Spada & Ryan 2017), we cannot know for certain the rate of success for such endeavors. We do know, however, that successful events of many varieties abound (Andersen & Hansen 2007, Flinders et al. 2016, Gastil & Levine 2005, Nabatchi et al. 2012, Nyerges & Aguirre 2011). As for the analytic rigor of such processes, Mercier & Landemore (2012) show why group discussions have a better chance of cutting through confirmation biases, and the odds of success may be bolstered by having participants with experience in political discussion (Dutwin 2003) or at least sufficient interest in the topic and some confidence in one’s ability to deliberate (Gastil et al. 2007).

When deliberative forums are measured by the Discourse Quality Index (Steenbergen et al. 2003), which focuses on the rational justifications found in arguments, citizen bodies gathered to discuss issues perform at a level well below that of parliaments, though citizen forums can show

higher levels of mutual respect (Pedrini 2014). Moreover, modest performance on this index can be found across a variety of different forum designs (Himmelroos 2017).

Research on public deliberation has as much interest in its democratic qualities as its analytic function (Gastil 2008). For example, Karpowitz & Mendelberg (2014) found that women in unfacilitated laboratory discussions often end up participating less frequently than men. Such imbalances do not always occur in deliberative settings (Siu 2009), though they have appeared in some (Himmelroos 2017), and the presence of discussion norms and facilitation may be one key to addressing these imbalances (Bonito et al. 2013, 2014). Online settings, with their dampened social cues, may also dampen inequality (Monnoyer-Smith & Wojcik 2012, Showers et al. 2015).

Particularly worrisome are those cases in which a few individuals dominate discussions. Participation imbalances are the norm in issue forums and group discussions generally (Bonito & Hollingshead 1997), but when one side of a debate dominates the other, it can undercut the quality—and benefits—of public deliberation (Gastil 2006). This problem appears most acute in those cases where elected officials or politicians get mixed into forums without having a constrained role (Flinders et al. 2016, Minozzi et al. 2015). Even then, it is important to remember that the sufficiency of each participant's opportunities to speak may be more important than absolute speaking equality (Gastil 1993). Thus, nearly half (45%) of the participants in one European Deliberative Poll said that "a few of the participants dominated the discussions," with more than two-thirds (68%) complaining that "there was too little time to discuss" the issues put before them (Hansen & Andersen 2004).

### Variations in Deliberative Design

Deliberation scholars frequently call for more systematic comparisons of deliberative designs (e.g., Bächtiger et al. 2009), yet few studies have managed the kind of field experiments Carman et al. (2015) conducted, unless the concept of deliberation is stretched to include dyadic interactions, such as what happens during election canvassing (Broockman & Kalla 2016). The rarity of such studies limits the refinement of empirical models of deliberative events. One common observation is that these gatherings vary widely in their ability to generate substantial changes in issue knowledge, policy preferences, and civic attitudes—with some events producing underwhelming levels of such changes—at least on some issues (e.g., Gastil & Wilkerson 2013, Strandberg & Grönlund 2012, Sturgis et al. 2005).

Fortunately, a handful of quasi-experimental studies look at design variations. In one notable example, Grönlund et al. (2010) varied a process feature in three-hour discussions of Finnish energy policy. Half of the 12 discussion groups asked participants to express their final views through secret ballots (akin to a Deliberative Poll), whereas the other forums required participants to produce a single statement in common (akin to a Citizens' Jury). With only this one feature varied, the common statement condition showed stronger issue knowledge gains and greater increases in social trust and the perceived need for organized collective action. Neither condition yielded robust changes in participants' readiness to take political action personally—a finding consistent with research on participants in both Australian and US minipublics (Knobloch & Gastil 2015; see also Strandberg & Grönlund 2012).

Another study permitted the testing of an assumption common to structured deliberation. It is an article of faith that deliberative events require neutral facilitation, though few studies have had a design that makes possible a systematic study of different facilitation strategies. One exception is a field experiment conducted in the African island nation of São Tomé and Príncipe (Humphreys et al. 2006). With over 3,500 citizens participating in day-long group discussions of two dozen members each, the authors were able to randomly assign facilitators across these groups.

These group leaders were “not determined by the researchers but resulted rather from the national political and administrative process that shaped the organization and running of the forum” (p. 596), and in the end, “knowing which member of the country’s political elite was randomly selected to lead the discussions provides an extraordinarily powerful indicator of what policies the participants in each group ostensibly supported” (p. 604). Across a wide range of issues addressed in these group discussions, researchers found a strong positive correlation “between the positions held by discussion leaders and those that resulted from the discussions that they led” (p. 609). Facilitator demographics could also serve as proxy predictors, with groups led by older and/or female facilitators yielding higher rates of consensus and giving greater emphasis to particular policy priorities. Far from an anomaly, another effort to measure the power of facilitator bias found it present in more experimentally controlled discussion groups (Spada & Vreeland 2013).

Another notable experiment varied a subtle feature that distinguishes some deliberative designs. The hallmark of Deliberative Polls is surveying participants before and after deliberation, but other processes, such as the Oregon Citizens’ Initiative Review (Gastil et al. 2015), decline to take prediscussion attitude measures for fear of biasing participants. Baccaro et al. (2016) compared these approaches in a study of public discussions on the political rights of foreigners living in Geneva. Participants took part in discussion in which they were asked to state their positions before discussion, not state their positions, or reflect on their positions (without stating them). Those in the second condition showed the greatest opinion change, but the shifts were due more to group influence (as measured by members’ prediscussion attitudes) than deliberation (as measured by arguments emerging in discussion). The reflection condition produced mixed results, but the authors acknowledged that simply “being asked by a moderator to reflect on the issue of discussion is not enough to generate significant reflection” (Baccaro et al. 2016, p. 562). After all, a brief reflection prompt ensures a moment of silence but cannot guarantee thoughtful consideration of the issue.

In those deliberative bodies that make decisions, such as Citizens’ Juries (Crosby & Nethercutt 2005, Smith & Wales 1999) or planning cells and consensus conferences (Hendriks 2005), more attention could be paid to decision rules, which have been studied far longer than deliberation, per se (Gastil 1993). Recall that Karpowitz & Mendelberg (2014) found complex effects for decision rules, with a majority rule and consensus disadvantaging (or giving an edge to) women in different ways depending on the gender balance of the group as a whole. On juries, majority rule—relative to unanimity—has been found to produce less deliberation and more dissatisfaction (e.g., Hastie et al. 1983, Kaplan & Miller 1987), as well as less civic benefit for the jurors as a consequence of deliberation (Hans et al. 2014).

## EFFECTS OF DELIBERATIVE EVENTS ON PARTICIPANTS

The focus now shifts from the deliberative processes themselves to their effects—on knowledge, opinions, satisfaction, civic attitudes, and political behavior. Some of these themes already presented themselves in the previous section, but they get full consideration here. They also represent the bulk of the empirical literature on deliberation, which has always had a strong emphasis on the outcomes it produces for participants (Pincock 2012).

### Knowledge Gains and Policy Judgments

Of the various effects of deliberation, the foremost concerns among researchers are belief changes. Farrar et al. (2010) conducted a Deliberative Poll in Connecticut as a randomized field experiment to test the unique effect of on-site deliberation, apart from the other actions participants take in

anticipation of such an event (e.g., reading an issue guide or discussing the issue with others before attending). The study also compared a low-salience issue (revenue sharing) against the highly salient question of nearby airport expansion. Overall effects were limited for the more salient issue, but for the other, policy attitudes shifted both in anticipation of deliberation and as a consequence of it. That said, it is clear that citizens do often prepare themselves for deliberative discussions, as Esterling et al. (2011) found in the case of forthcoming meetings with elected representatives in the United States, and knowledge gains during deliberation do not always map onto opinion shifts (e.g., Sanders 2012). This disconnection, however, can often result from mismatches between the content of actual deliberation versus the particular knowledge and opinion items included in surveys, which typically are written by researchers before events begin.

Farrar et al. (2010) also showed movement toward single-peaked preferences on the lower-salience issue. This finding appears again in work by List et al. (2013), who added additional data on Deliberative Polls conducted in the United States, Australia, and Britain. As with the issue forum studies noted earlier (Gastil & Dillard 1999), the key was not aggregate attitude convergence but an improvement in the internal coherence of participant policy attitudes. Another study, on Citizens' Juries, found that the attitude shifts stemming from deliberative events can endure many months after the conclusion of the event (French & Laver 2009; also see Fishkin 2009).

The improved structuring of attitudes List et al. (2013) found traces back to participant knowledge gains as a consequence of participating in the deliberative event. Across several Deliberative Polls, participants tended to improve the equivalent of 20 points on a 100-point scale, which is consistent with other studies showing knowledge gains as a result of various deliberative designs in the United States, Finland, and China (e.g., Fishkin et al. 2010, Gastil et al. 2015, Strandberg & Grönlund 2012). Other studies have produced similar findings with regard to the recall and structuring of arguments postdeliberation (Andersen & Hansen 2007, Cappella et al. 2002).

A related question concerns whether opinion shifts within larger deliberative events (involving 100 or more participants) result from the particular small groups in which organizers placed participants. In the case of a British Deliberative Poll, Luskin et al. (2002) showed that across five issues related to criminal justice, the discussion groups varied across issues in their propensity to converge or diverge in their opinions, consistent with the issue dependence of such patterns found by Gastil et al. (2008). A study of the Australian Citizens' Parliament showed that the random assignment of participants to different discussion groups on different days of the event effectively distributed microlevel social influence effects, which were strongest for those citizens most invested in the project's success (Tucker & Gastil 2013, p. 171).

Among the numerous other findings on these subjects, mixed findings have emerged regarding the preconditions for attitude change. Some investigators have found that prior issue awareness can be the key to deliberative reasoning during a forum—and the effect of that deliberation on attitude change (Himmelroos & Christensen 2014). Others have found that younger and less knowledgeable participants are more likely to change their minds (Suiter et al. 2014).

## Disagreement and Satisfaction

Participants in deliberative events generally report high levels of satisfaction with both the process and its short-term outcomes (e.g., Crosby & Nethercutt 2005, Gastil et al. 2015, Halvorsen 2001, Hansen & Andersen 2004), and such satisfaction scores can be higher for underrepresented minorities (Abdel-Monem et al. 2010) and women (Hickerson & Gastil 2008; but see Karpowitz & Mendelberg 2014).

That said, diffuse and trait-specific conflict aversion can affect one's perception of political disagreement and deliberation (Mutz 2008, Neblo 2015, Testa et al. 2014). Esterling et al. (2015)

tested this idea with a natural experiment. Using the small group table discussion assignments in a large-scale California *Speaks* event, they found that “participants’ satisfaction with the deliberative quality at each table is a concave function of disagreement” (p. 541). In other words, a moderate level of disagreement yielded the greatest satisfaction with both the deliberative process and the policy decision made at that event. Intractable—and especially interpersonal—conflict can make deliberation difficult (Gastil 1993), unless event organizers and participants acknowledge and channel the conflict into a strong deliberative process (Suiter et al. 2014). Insufficient disagreement, however, makes difficult the kind of attitude changes that characterize robust deliberative events (Caluwaerts & Deschouwer 2014).

That same study by Esterling et al. (2015) found that the size of the small groups mattered, with groups of four or fewer participants yielding lower overall satisfaction. This accords with Hans et al. (2014), who found that, after controlling for various other factors, civil juries using a full complement of 12 citizens were more likely to have a posttrial impact on jurors’ subsequent civic engagement than were smaller bodies.

Whether owing to group size or other factors, disagreement during forums warrants continued study because it can play countervailing roles. On the one hand, it helps participants deliberate and structure their opinions (Price et al. 2002), and the quality of deliberation on bodies, such as juries, contributes to participants’ process and decision satisfaction (Gastil et al. 2007). Too much disagreement, on the other hand, and even those participants most active in a deliberation can come to doubt the fairness of the process (Zhang 2012).

### Changing Civic Attitudes and Behaviors

Deliberation can change not only opinions but also civic attitudes and willingness to participate more in public life. Participants themselves report experiencing these changes (Knobloch & Gastil 2015), which include increased political self-confidence and trust in political institutions (e.g., Grönlund et al. 2010, Min 2007), more political tolerance (Caluwaerts & Reuchamps 2014), and stronger confidence in deliberation itself (e.g., Brinker et al. 2015).

The subtler effects of deliberation, however, warrant more tailored measures of such variables. As Morrell (2005) found, deliberation might yield more situation-specific efficacy, such as on the discussion topic itself, and Gastil’s (2004) earlier result showed that an issue forum with inexperienced participants can raise doubts about the efficacy of group discussion.

Likewise, the effect of deliberation on legitimacy perceptions may flow not from the deliberation itself but from the sense of influence. Persson et al. (2013) showed this in a clever classroom experiment in which random assignment had students make a decision by a direct vote versus getting a directive from the teacher, and they crossed those two conditions with giving (or not giving) students the chance to deliberate first. The key to process legitimacy perceptions was perceived influence, whether that flowed from a direct vote or from a deliberation.

Fewer studies have looked at the behavioral impact of deliberation, but one natural experiment showed the link between jury service and voting (Gastil et al. 2010). To understand this particular study, note that even after being selected for a criminal jury in the United States, there are many reasons a person may never get to deliberate: A person can be named as an alternate, or the trial may end without deliberation for legal reasons, such as when charges are withdrawn, a mistrial is declared, or a defendant changes to a guilty plea. Thus, owing to forces beyond their control, this study’s large sample of empaneled jurors were split into two groups: those who got to deliberate and those who did not. Comparing the before- and after-service voting histories of these two groups, using data gathered from electronic voter files, showed that serving on a criminal jury trial increased an infrequent voter’s odds of participating in future elections. The participation effect

of jury service added up to roughly a 5% increase in voter turnout for several years, and the effect came from any deliberating jury, regardless of whether it reached a verdict or became a hung jury. Moreover, the effect was stronger when juries had to return several verdicts for multiple charges. Juries weighing more charges face a more complex deliberative task, as they make more decisions often involving interlocking judgments and mixed verdicts.

Other studies have found that participants report a greater willingness to take part in politics after having deliberated on various bodies (e.g., Min 2007), but there may be a limit to that effect. Beyond the dutiful act of voting or more local community engagement, some studies have found that participants do not feel inspired by their deliberative experience to take part in more conventional partisan collective action (Knobloch & Gastil 2015; also see Christensen et al. 2016, Strandberg & Grönlund 2012).

## MINIPUBLICS' EFFECTS ON LARGER PUBLICS

Finally, there exists a small body of experimental research on how deliberative bodies can influence larger publics. A minipublic is a representative cross section of the public convened to examine an issue, with the hope that its findings might influence policy makers or the public at large (Grönlund et al. 2014). The deliberative minipublic stands in for the larger public, which will never have the same chance to sort through evidence, question experts, and deliberate for multiple days as part of a diverse body of fellow citizens.

Early evidence found that a legally authorized minipublic can carry weight with the public and even influence voting choices, to the extent that its findings get publicized and its process explained to voters (Cutler et al. 2008, Gastil et al. 2017b). Public trust in processes such as the Oregon Citizens' Initiative Review appears to be considerable, but for many citizens, trust is conditional on understanding more fully how such a minipublic operates (Gastil et al. 2016). Experimental surveys that provide limited information about minipublics produce equally limited effects (Boulianne 2017, Ingham & Levin 2017), though those effects can be drowned out by partisan counter-cues (Ingham & Levin 2018). The strongest effects to date appear from the Citizens' Initiative Review statements, which survey experiments show to improve issue knowledge substantially for voters exposed to them, even as compared with official voter guide materials (Gastil et al. 2015).

Also striking are the effects such minipublics can have beyond knowledge and voting choices. Boulianne (2017) found that merely being informed about the convening of a minipublic boosted participants' external political efficacy, as measured by two items: "In general, do you think that politicians care what people like you think?" and "How much can people like you affect what the government does?" Knobloch et al. (2013) found that same result in both cross-sectional and longitudinal surveys regarding the Citizens' Initiative Review, but they also found an effect on internal political efficacy (self-confidence) for those who read the statement written by the Review panelists. Gastil et al. (2016) also found that reading those statements increased readers' intention to vote on that same issue during the upcoming election.

## CONCLUSION

Democracy relies on experiments to refine institutions and practices that must constantly adapt to changing populations and social circumstances. The study of democratic deliberation is constrained by the difficulty of conducting elaborate field experiments that vary systematically in everything from context to design features, yet a good deal has been learned already from the dozens of studies that researchers have undertaken in spite of these limitations.

Summarizing across all these results risks overgeneralization, but patterns have emerged. Gathering diverse samples of people to deliberate is feasible and usually effective as a means of rendering quality discussion and modest, but durable, improvements in participants' issue understandings and judgments. Those effects often come with broader changes in civic attitudes and behaviors, without changing participants' appetites for conventional politics. Difficulties that do arise in deliberation, however, can stem from extreme disagreement, poor facilitation of conflict, or a lack of diversity that forestalls meaningful disagreement in the first place. The stakes of such deliberation are particularly high when convening minipublics, which can influence wider public opinion when publicity about the event effectively conveys key features of the deliberative process itself.

For the future, the challenge remains devising definitive experiments varying deliberative design features across diverse social and political contexts. Returning to the randomized trial conducted by Carman et al. (2015), the hope here is that future studies can isolate key features that distinguish different deliberative designs, as Grönlund et al. (2010) did. Gross comparisons of processes with multiple distinguishing features provide less telling comparisons. Finally, long-term follow-ups with participants remain too rare, yet the most compelling effects of a deliberative process are those that endure over years (Gastil et al. 2010). A study that combines all these virtues will look at how key design features alter the deliberative process in a way that has a lasting impact on participants, or perhaps even on the wider public.

## DISCLOSURE STATEMENT

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## Errata

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