

Perceived Procedural Fairness in Deliberation: Predictors and Effects

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Abstract

This article provides a focused analysis of perceived procedural fairness, including both its predictors and effects, within a context of moderated online deliberation. The article starts with a theoretical discussion about the concept, procedural fairness, against the background of deliberative democracy. Furthermore, the potential competitive relationship between procedural fairness and disagreement is reviewed in light of previous empirical evidence. The findings are made up of two parts: First, the predictors of perceived procedural fairness were explored among demographic variables, political involvement, and discussion activities. Second, the effects of perceived procedural fairness and perceived disagreement on outcomes such as enjoyment, satisfaction with group decisions, as well as intention of future participation are shown. A discussion on the roles of procedural fairness and disagreement in deliberation as well as the importance of experience in political participation is provided at the end of this article.

Keywords

deliberation, disagreement, enjoyment, procedural fairness, satisfaction

A “deliberative turn” (Dryzek, 2000) has emerged in both academic thinking and practical initiatives with regard to political communication and participation. Theorists of deliberative democracy (Gutmann & Thompson, 1996; Habermas, 1984, 1996) argued that the mechanism of deliberative discussion works better than both the aggregative mechanism (i.e., voting) and the bargaining mechanism (i.e., lobby groups) in terms of generating decisions that enjoy both legitimacy and quality. Practitioners initiated various projects trying to apply this model of democracy, ranging from Deliberative Polls (Fishkin, 1991), AmericaSpeaks (D’Agostino, Schwester, & Holzer, 2006), Minnesota e-Democracy (Dahlberg, 2001), and

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many other online discussion forums (e.g., Zhang, 2006). Deliberation, if defined in its most rudimentary form as discussions¹ (Kim & Kim, 2008; Mansbridge, 1999; Marques & Maia, 2010), can be observed in a variety of practices, from everyday political conversation, to loosely structured group meetings, to formal deliberative events (e.g., juries).

Empirical research on broadly defined deliberation has focused on verifying the effects of such discussions. Cognitive effects such as those on information gain (Luskin, Fishkin, & Jowell, 2002), opinion shift (Barabas, 2004; Fishkin & Luskin, 1999), political sophistication (Gastil & Dillard, 1999; Luskin, 1987), attitude constraints (Stugris, Roberts, & Allum, 2005), political knowledge (Feldman & Price, 2008), and argument quality (Price, Cappella, & Nir, 2002) were found to follow deliberative discussions. Socioaffective effects such as satisfaction with the experience (Hickerson & Gastil, 2008; Stromer-Galley & Muhlberger, 2009) were confirmed. Behavioral effects measured as intentions, such as political participation (Wojcieszak, 2011) and future engagement in deliberation (Stromer-Galley & Muhlberger, 2009), were identified. However, evidence suggesting the opposite was also present: Mendelberg and Oleske (2000) found that an integrated town hall meeting that included heterogeneous opinion holders maintained the conflict without much equal respect perceived. Sunstein (2006, pp. 45-48) reported multiple cases to show that deliberation produced opinion polarization and poor decisions. Considering the existing evidence, it is necessary to first understand the internal mechanism of deliberative discussions before we can provide a fair interpretation of the effects observed. The inconsistency of empirical findings may result from the different implementations of deliberation activities that vary in their key dimensions, including disagreement and procedural fairness.

One important component of deliberative discussion is disagreement. The diversity embraced by deliberative discussions not only enhances the normative legitimacy of political decisions but also possesses the epistemic potential other decision-making mechanisms do not enjoy (Bohman, 2007). Political disagreement (Huckfeldt, Johnson, & Sprague, 2004), which is often measured as exposure to disagreeing opinions during everyday political conversation (e.g., Lee, 2009), was shown to positively link to acquisition of information (Kwak, Williams, Wang, & Lee, 2005) and political tolerance (Mutz, 2002), on one hand, and indecision and decreased participation in politics (Mutz, 2006), on the other hand. Another way to gauge diversity is to examine the heterogeneity of discussion networks. Demographic and ideological diversity within respondents' social networks were found to be associated with an increase in political participation (Huckfeldt, Mendez, & Osborn, 2004; McLeod et al., 1999; Scheufele, Nisbet, Brossard, & Nisbet, 2004). Diversity experienced during deliberation activities is somewhat different from that encountered in natural social settings. The information gain seemed to be confirmed when disagreement in online discussion groups increased the awareness of rationales for one's own and others' opinions (Price, Nir, & Cappella, 2006). Hickerson and Gastil (2008) surveyed 3,000 jurors and found that demographic heterogeneity (e.g., gender) was a poor predictor of jurors' satisfaction with their service experience. Disagreement interacted with either opinion extremity (Wojcieszak, 2011) or agreement (Stromer-Galley & Muhlberger, 2009) to influence after-deliberation outcomes such as intended future participation. Again, the inconsistent findings suggest that these different forms of diversity are experienced in different social settings that

have different internal mechanisms. Formal deliberations differ from everyday political conversations and casual group discussions in conditions that not only include disagreement but also foster procedural fairness.

However, procedural fairness, as the other important component of deliberative discussion, has not received much attention from empirical scholars. Because disagreement is almost always present, how the disagreement is handled becomes a significant characteristic that distinguishes formal deliberation from other forms of talks on public issues. Theorists of deliberative democracy emphasized that the procedure of deliberative discussion has to be fair. For instance, Gutmann and Thompson (1996) stated that a major principle of deliberative democracy is reciprocity, which assumes a procedure in which all participants should be given fair opportunity to voice their reasons. Habermas (1990) proposed the ideal speech situation, which indicates criteria such as equal opportunity to fully express one's ideas and equal consideration of different ideas (Chang & Jacobson, 2010). Although Besley and McComas (2005) called for a thorough examination of procedural fairness in political communication research, empirical evidence regarding both the antecedents and impacts of procedure fairness is still scarce.

It is this article's purpose to provide a focused analysis of perceived procedural fairness, including both its predictors and effects, in contrast to perceived disagreement. A focus on the perceptions of procedural fairness and disagreement is made in this study because of both theoretical and empirical reasons. Chang and Jacobson (2010) argued that Habermasian speech conditions are satisfied when participants develop a feeling that the process is fair. In addition, what actually has a direct impact is the perception. For example, small group studies show that the perception of conflicts is more important than the actual conflicts in affecting group members' satisfaction with many group outcomes (Wall, Galanes, & Love, 1987). The article thus starts with a theoretical discussion about the concept, procedural fairness, against the background of deliberative democracy. Furthermore, the potential competitive relationship between procedural fairness and disagreement is reviewed in light of previous empirical evidence. The findings are made up of two parts: First, the predictors of perceived procedural fairness were explored among demographic variables, political involvement, and discussion activities. Second, the effects of perceived procedural fairness and perceived disagreement on outcomes such as enjoyment, satisfaction with group decisions, as well as intention of future participation are shown, after controlling for demographics, political involvement, and discussion activities. A discussion on the roles of perceived disagreement and perceived procedural fairness in public deliberation as well as the importance of experience in political participation is provided at the end of this article.

Procedural Fairness, Disagreement, and Deliberation Outcomes

Among the norms that define deliberative democracy, validity claims, including comprehensibility, truth, appropriateness, and sincerity (Habermas, 1979, pp. 58-59), provide substantial content to the Habermasian notion of deliberativeness. Meanwhile, speech conditions refer to a procedure that allows validity claims to be exchanged. Habermas

(1990, p. 89) explicitly states the characteristics of such procedure as follows: First, all subjects without exception who have the capacity to take part in argumentation should be included; second, all participants should be guaranteed equal opportunity to contribute to the argumentation; and third, no participants may be subject to repression. Although there is not much empirical evidence directly testing speech conditions, an exception (Chang & Jacobson, 2010) supplies a finding that perceived speech conditions leads to perceived policy legitimacy.

Procedural fairness, in the context of deliberative democracy, refers to the degree to which a decision-making procedure approaches the ideal speech conditions. Perceived procedural fairness is defined in contrast to perceived distributive fairness: Whereas the former focuses on the extent to which procedures used to make decisions are perceived as fair, the latter concerns the extent to which people evaluate the outcomes they receive as fair (Besley & McComas, 2005). Tyler (1994) found that evaluations regarding the experiences with both legal and managerial authority were more related to the perception of procedural fairness than to that of distributive fairness. Also, perceived inequity was negatively related to satisfaction (Wall & Nolan, 1987). Roberson, Moye, and Locke (1999) provided experimental evidence for the mediating role of perceived procedural fairness. They found that perceived influence/control over decisions affected satisfaction through perceived fairness of participation in the decision-making procedure. Additionally, two surveys and an experiment consistently suggested that even if people had low control over outcomes, increasing control over procedure heightened the satisfaction with leaders (Tyler, Rasinski, & Spodick, 1985).

As Gutmann and Thompson (2004, pp. 127-132) suggested, procedural fairness not only is a norm of deliberative democracy but also provides a different response to addressing disagreements. Instead of offering a substantial judgment about who is right and who is wrong in a disagreement, procedural fairness only promises that the disagreeing parties are treated equally during the group decision-making process. This treatment offered by procedural fairness is able to modify the influence of disagreements in deliberation. The role that disagreements play in deliberative democracy is complicated. First of all, disagreements are by default in any modern pluralist society in which people are even moderately free. Formal deliberation differs from everyday political talk in its purposive inclusion of diversity that almost guarantees disagreeing opinions being confronted. However, exposure to disagreements seems to induce both positive and negative outcomes, in both everyday and formally deliberative settings. Disagreements encountered in everyday setting, such as opinion conflicts or network heterogeneity, are positively associated with mostly cognitive outcomes (e.g., information gain or familiarity with different arguments). However, such disagreements are also positively associated with ambivalence, indecision, and withdrawal from political participation (Huckfeldt et al., 2004; Mutz, 2002) due to crosscutting pressure from disagreeing social contacts.

Group communication (as many deliberation activities are by nature small group discussions) literatures suggest that social pressure can be used to explain why disagreements are often considered as impolite or face-threatening occurrences (Goffman, 1959) that harm the group cohesiveness. A meta-analysis (De Dreu & Weingart, 2003) shows that both relationship conflicts (e.g., those about individual political preference) and task

conflicts (e.g., those about the distribution of resources) are strongly and negatively correlated with team member satisfaction and team performance. In addition, when disagreement is operationalized as member heterogeneity, similar results emerge. Keinan and Koren (2002) found that teaming up ambitious and competitive members (Type As) with relaxed and nonaggressive members (Type Bs) resulted in less satisfaction compared to both Type As-only and Type Bs-only groups. Chatman and Flynn (2001) found that greater demographic heterogeneity led to group norms emphasizing lower cooperation among the team members. The evidence suggests that disagreement in formal deliberation should relate to negative socioaffective perceptions among the participants.

A crucial advantage of deliberative democracy, claimed by theorists (e.g., Bohman, 2007), is that it can generate decisions that enjoy legitimacy and quality even in front of fundamental disagreements, largely thanks to procedural fairness. This claim has yet to be verified empirically in a formal deliberation setting. But previous studies on group conflict management give us some hints regarding how procedural fairness can work. For example, Wall and Nolan (1987) reported that there was no difference in terms of satisfaction between the groups that experienced no conflict and groups that experienced conflicts but were treated with an integrative style of conflict management. This particular management style elicits input from all parties to facilitate mutual understanding and encourages solutions that are mutually acceptable to all the parties. Behfar, Peterson, Mannix, and Trochim (2008) also concluded that the pluralistic conflict management strategies, which take a whole-group perspective in establishing processes that apply to everyone in the team (in other words, fair processes), tended to be better at preventing the conflicts from continuing to affect the group, compared to the particularistic perspective in which decisions are made to contain or respond to a particular person or situational conflict. The evidence suggests that although disagreement may lead to negative outcomes, procedural fairness shall be able to counteract the negative effects of disagreement.

Research Questions and Hypotheses

This article centers on a thorough analysis of perceived procedural fairness in deliberation. The first question to be asked is what shapes the perception of procedural fairness among participants who engage in deliberative discussions. Although there is little previous evidence regarding this question, it could be argued that deliberative discussion is a form of political participation that is subject to the same influence we see in other participatory acts such as voting. Therefore, the predictors of perceived procedural fairness have to include common factors examined in political participation studies, including demographics and political involvement variables such as interest, knowledge, and so on (Verba & Nie, 1972). The uniqueness about deliberative participation is that it often lasts over a longer time period compared to participatory acts such as voting. Therefore, the discussion activities themselves are supposed to have influence on how participants perceive their experience. For that reason, a set of measures regarding discussion activities is also included. How many discussions in which one participated and how vocal one has been during the discussions are expected to affect one's perceived procedural fairness. In addition, one of this

article's goals is to examine the potential competitive relationship between perceived disagreement and perceived procedural fairness. Thus, perceived disagreement becomes a potential predictor, too. The first research question tries to explore the antecedents of perceived procedural fairness in deliberation.

Research Question 1: What are the predictors of perceived procedural fairness?

According to group communication studies, procedural fairness shows many positive effects on socioaffective outcomes such as satisfaction. Therefore, it is first hypothesized that perceived procedural fairness will have a positive correlation with deliberation outcomes.

Hypothesis 1: Perceived procedural fairness is positively related to deliberation outcomes, including enjoyment, decision satisfaction, and intention of future participation.

Group communication studies and political disagreement literature suggest that disagreements, especially those experienced during an actual social setting, induce social pressure and lead to negative responses. This article hypothesizes that the same will be found in deliberative discussions, considering the fact that small group deliberation is by nature a social setting regardless of the mode of communication (face-to-face or via the Internet).

Hypothesis 2: Perceived disagreement is negatively related to deliberation outcomes, including enjoyment, decision satisfaction, and intention of future participation.

There is little known about how perceived procedural fairness should interact with disagreement in deliberation. Group communication literature suggests that conflict management style similar to procedural fairness reduces the negative impact of conflicts. However, the groups studied were not necessarily confined to deliberative discussions on public issues. Therefore, a second research question is asked to explore the relationship between perceived procedural fairness and perceived disagreement in a deliberative setting.

Research Question 2: How does perceived procedural fairness moderate the effects of perceived disagreement on deliberation outcomes, including enjoyment, decision satisfaction, and intention of future participation?

Method

Data and Sample

The data for this study come from the Health Care Dialogue project, a multiwave panel project lasting roughly 1 year during 2004-2005. The project employed a stratified sampling strategy, such that the final baseline sample represents both a general population

sample of adult citizens (aged 18 or older) and a purposive sample of health care policy elites with special experience, knowledge, and influence in the domain of health care policy and reform.² The general population sample was drawn from a nationally representative sample of survey respondents maintained by Knowledge Networks, Inc., of Menlo Park, California. The Knowledge Networks panel was recruited through random-digit dialing and includes tens of thousands of households. The response rate of the Knowledge Network recruitment process is about 55% (Feldman & Price, 2008).

A baseline survey was operated on all respondents included in the stratified sample. A subset of the baseline panel ($N = 1,491$: 262 health care policy elites, 1,229 general citizens) was randomly assigned within strata to participate in the two rounds of four moderated online group discussions. However, only some of the invited respondents actually attended at least one of the discussions in one of the 80 online groups ($N = 614$; 123 elites, 491 citizens). A comparison between the final sample of participants and census data shows that the participants were somewhat more likely to be middle aged and to follow politics more frequently (Price, 2009). In the first round of discussions (conducted in September and November 2004), respondents were assigned to either a homogeneous (elites or citizens only) or a heterogeneous (a mixture of both elites and citizens) group. In the second round of two discussions (conducted in February and April 2005), respondents were either switched to the opposite type of group (homogeneous to heterogeneous, or heterogeneous to homogeneous) or remained in the same groups as the previous round.³

The online groups were designed to consist of 6 to 10 people, with participants meeting for about 1 hour to discuss health care issues. The group deliberations, which happened in an online chat room, were moderated by a trained moderator (a graduate student from the communication major) who has gone through multiple rounds of trainings. During the trainings of moderators, they were taught how to use the software to lead discussions, how to follow a standardized discussion guideline, and how to make sure equal opportunities are given to all participants (e.g., ask silent members for their opinions). All the discussions were recorded in a text format. Respondents were asked to fill out an end-of-project survey after all the discussions finished.

The analyses in this article use data from both the baseline survey, held in summer 2004 and the end-of-project (EOP) survey, held in summer 2005. The surveys included extensive measures of media use, political engagement, a wide range of attitudes and opinions, as well as a variety of evaluation items on the project experience. In addition, discussion activities data such as number of discussions attended and number of words spoken were also included in the analyses.

Measures

*Perceived procedural fairness.*⁴ Perceived procedural fairness was executed as a self-reported measure in the EOP survey. Three Likert-type items were used (5 points from 1 = *strongly disagree* to 5 = *strongly agree*) to measure a perception of procedural fairness: (a) The group's decisions were made in a fair way; (b) My views on issues were given serious consideration by the group; (c) Other group members ignored my positions on the issues for the most part

(reverse-coded). An average over the three items was taken to indicate this measure (Cronbach's $\alpha = .70$, $M = 3.86$, $SD = 0.69$).

Perceived disagreement. Exposure to disagreement was measured by a self-reported question in the EOP survey, using a 5-point scale (1 = *almost never* to 5 = *almost all the time*). The question asks, "When you participated in the online discussion, how often did you disagree with other people's points of view?" ($M = 2.60$, $SD = 0.74$)

Enjoyment.⁵ In the EOP survey, respondents were asked to evaluate their enjoyment of the experience on four items using a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*): (a) The discussion was interesting; (b) The moderator was helpful; (c) The discussion was enjoyable; (d) I learned a lot from the discussions. Responses to the items were aggregated and averaged to form this measure (Cronbach's $\alpha = .84$, $M = 3.88$, $SD = 0.81$).

Satisfaction with group decisions. This measure asked respondents, "When your group voted at the end of the discussions, how satisfied were you with your group's choices?" ($M = 3.13$, $SD = 0.65$) using a 4-point scale (1 = *not at all satisfied* to 4 = *very satisfied*) in the EOP survey.

Intention of future participation.⁶ In the EOP survey, respondents who attended at least one discussion were asked one question: "If you were offered the opportunity to participate again in a series of online political discussions, how likely would you be to accept?" The question has four response categories, ranging from 1 = *not at all likely* to 4 = *very likely* ($M = 3.31$, $SD = 0.86$).

Demographics. A typical set of demographic measures includes *age* ($M = 46.72$, $SD = 14.06$), *gender* (55.7% female), *education* (54.7% bachelor's degree and higher), *race* (83.7% White), and *income* (54.2% with \$60,000 and more per year).

Political involvement. A scale of two items was used to examine *political interest*, including following of government and public affairs and caring which party wins in the 2004 elections (Pearson's $r = .33$, $p < .001$, $M = 3.55$, $SD = 0.60$). A five-item scale, including questions such as who has the final responsibility to decide whether a law is Constitutional or not, was used to gauge *political knowledge* (Cronbach's $\alpha = .62$, $M = 4.19$, $SD = 1.09$). Participants were asked about their party identification and a 5-point scale (1 = *Republican* to 5 = *Democrat*) was used to assess the strength of *partisanship* ($M = 3.08$, $SD = 1.36$). Three forced-choice items commonly used in the General Social Survey were used to measure *interpersonal trust* (e.g., "Generally speaking, most people can be trusted" vs. "You can't be too careful in dealing with people"). Trustful selections were coded "1," and mistrustful selections were coded "0." The scale was the average of the three items (Cronbach's $\alpha = .74$, $M = 0.64$, $SD = 0.38$). *News exposure* was measured by seven different items inquiring about the respondents' self-reported media use in days during the past week (0-7 days). Newspaper reading, political talk radio exposure, exposure to Neighborhood Public Radio, exposure to television national network news, cable news, local news, and Internet news were aggregated together (Cronbach's $\alpha = .59$; $M = 19.37$, $SD = 9.64$).

Discussion activities. *Total number of attendance* was recorded to show how many discussions one respondent participated ($M = 0.97$, $SD = 1.37$). An attendance was confirmed if a respondent logged into the online discussion group for more than 5 minutes. For the respondents who attended at least one discussion event, the number of words entered into each discussion was tallied electronically (only for substantive sections of the discussion,

omitting casual interchanges at the beginning and ending of each event). A total word count was summed, for each participant, across all discussions events included in the analyses. Considering that total number of words is highly correlated with total number of attendance, the *average number of words* was calculated by dividing total word count by total attendance ($M = 305.11$, $SD = 178.13$)

Results

Predictors of Perceived Procedural Fairness

To test the antecedents of perceived procedural fairness, an ordinary least square regression was used to regress the dependent variable on four sets of predictors, namely, demographics, political involvement, discussion activities, and perceived disagreement. The results of this regression are presented in Table 1 (zero-order correlations among the dependent variable and predictors can be found in the appendix). As can be seen in the first block in Table 1, two demographic factors, age ($\beta = .007$, $p < .001$) and being female ($\beta = .145$, $p < .05$), have significant impact on perceived procedural fairness. Those participants who are older perceived more procedural fairness. Female participants perceived more procedural fairness than males. Other demographic factors, including education, income, and being White, show no impact on the dependent variable. The second block of predictors includes political involvement variables. Interpersonal trust is a positive predictor of perceived procedural fairness ($\beta = .170$, $p < .05$), and the significance of the positive impact of being Democrat ($\beta = .043$, $p < .10$) only approaches the borderline. Other involvement measures, including political interest, knowledge, and news attention, do not show any significant impact on the dependent variable.

Whereas traditional predictors of political participation do not show very strong effects, variables pertinent to the deliberative practices manifest significant influence. The total number of attendance is a positive predictor of perceived procedural fairness ($\beta = .170$, $p < .001$); and after taking the frequency of attendance into account, how much one talked during the deliberative discussion also has a positive impact ($\beta = .001$, $p < .001$). The strongest predictor, interestingly, is the variable of perceived disagreement ($\beta = -.293$, $p < .001$). It is also the only negative predictor in the model, showing that the more one perceived disagreement during the discussions, the less one perceived the procedure as fair.

In sum, the first research question can be answered that traditional predictors of political participation such as demographics and political involvement only show partial impact on perceived procedural fairness. What seems to be more influential is the discussions themselves, including the times of discussions one participated, the number of words one talked, and the amount of disagreement one perceived.

Effects of Perceived Procedural Fairness and Perceived Disagreement on Deliberation Outcomes

To now address the key concern of the influence of perceived procedural fairness, with the presence of perceived disagreement, another regression model was set up to test the

Table 1. An Ordinary Least Squares Regression Predicting Procedural Fairness.

	Procedural fairness (β)
Block 1	
Age	.007***
Female	.145*
Education	.008
Income	-.001
White	.041
R ² change	.029*
Block 2	
Political interest	-.069
Political knowledge	.012
Partisanship (Democrat)	.043 [†]
Interpersonal trust	.170*
News attention	.005
R ² change	.022 [†]
Block 3	
Total number of attendance	.170***
Average number of words	.001***
R ² change	.108***
Block 4	
Disagreement	-.293***
R ² change	.085***
N	483
Adjusted R ²	.22

Note. The coefficients presented in the table are standardized and from the last all-inclusive regression. Cases were excluded listwise.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

effects. Considering that demographics, political involvement, and discussion activities are impactful on perceived procedural fairness, these variables were entered into the model as control factors. In addition, an interaction term between perceived procedural fairness and perceived disagreement was created and included in the model. The centering method (Aiken & West, 1991) was used to address the concern of multicollinearity when interaction terms were calculated. Table 2 presents regression results for three different deliberation outcomes in each of the three columns (zero-order correlations between the outcome variables and predictors can be found in the appendix). With regard to enjoyment of the deliberative discussions, most demographic factors, including age ($\beta = .010$, $p < .001$), being female ($\beta = .153$, $p < .05$), education ($\beta = -.064$, $p < .001$), and income ($\beta = -.019$, $p < .05$), show significant impacts. Only being White is not able to predict enjoyment. There is merely one political involvement variable, namely, news attention, that shows a significant impact ($\beta = .010$, $p < .05$) on enjoyment. The total number of attendance has a

Table 2. Ordinary Least Squares Regressions Predicting Deliberation Outcomes.

	Enjoyment (β)	Decision satisfaction (β)	Future participation (β)
Block 1			
Age	.096*	.005*	-.001
Female	.026	.182**	-.009
Education	-.133***	-.024	-.034
Income	-.090*	-.006	-.013
White	-.070*	-.155†	-.111
R ² change	.107***	.046***	.017
Block 2			
Political interest	-.015	-.078	.099
Political knowledge	-.060	-.055†	-.013
Partisanship (Democrat)	-.050	.005	.017
Interpersonal trust	-.059	.020	-.017
News attention	.098***	.003	.010*
R ² change	.021*	.014	.019†
Block 3			
Total number of attendance	.059†	.119***	.171***
Average number of words	-.090*	.000	.000
R ² change	.046***	.035***	.055***
Block 4			
Procedural fairness (PF)	.599***	.394***	.371***
Disagreement (D)	-.008	-.182***	.008
R ² change	.316***	.243***	.072***
Block 5			
Interaction (PF* D)	-.034	.082†	-.009
R ² change	.001	.004†	.000
N	483	480	482
Adjusted R ²	.49	.32	.14

Note. The coefficients presented in the table are standardized and from the last all-inclusive regressions. Cases were excluded listwise. The results are essentially the same if the nonsignificant interaction terms are excluded.
 † $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

significant positive impact on enjoyment ($\beta = .132, p < .001$). The strongest predictor, as expected, is perceived procedural fairness ($\beta = .652, p < .001$). In other words, the more one perceived procedural fairness, the more one enjoyed the discussions.

With regard to the satisfaction with group decisions, three demographic factors are significant: age ($\beta = .005, p < .05$), being female ($\beta = .182, p < .01$), and being White ($\beta = -.155, p < .10$). Political involvement variables, however, have almost no impact on decision satisfaction except that political knowledge shows a borderline significance ($\beta = -.055, p < .10$). The total number of attendance, again, is positively associated with decision satisfaction ($\beta = .119, p < .001$). Both perceived procedural fairness ($\beta = .395, p < .001$) and perceived disagreement ($\beta = -.182, p < .001$) show strong effects on decision satisfaction. In other words, the more one perceived procedural fairness, the more one was satisfied with the decisions his or her groups made. On the contrary, the more one perceived disagreement,

the less one was satisfied with the decisions. A borderline significant effect of the interaction term between perceived procedural fairness and perceived disagreement ($\beta = .082, p < .10$) is also found, suggesting that the negative impact of disagreement is slightly smaller among participants who perceived higher procedural fairness compared to those who perceived lower procedural fairness.

With regard to the third outcome of intention to participate in future deliberation, demographic factors fail to produce any significant impact. News attention, again, shows a positive influence on intention ($\beta = .010, p < .05$). The total number of attendance in past discussions successfully predicts intention for future participation ($\beta = .171, p < .001$). Perceived procedural fairness, again, shows a strong positive effect on intention for future participation ($\beta = .371, p < .001$).

In sum, Hypothesis 1 is fully supported as perceived procedural fairness has a significant positive association with all the outcome variables. Hypothesis 2 is partially supported as one negative association between disagreement and decision satisfaction is found. Research Question 2 is answered that the potential interactions between perceived procedural fairness and perceived disagreement do not approach statistical significance set as $p < .05$.

Conclusions and Discussion

This article provides empirical evidence to confirm that perceived procedural fairness is a central component of deliberation, manifested in its close relationship with both discussion activities and discussion outcomes. Basically the more actively one participated in the discussions, the more one perceived the procedural as fair or vice versa. This positive correlation is not weakened after controlling for demographic and political involvement variables. It means that perceived procedural fairness and discussion activities can reinforce each other regardless of one's preexisting social status. What is more prominent is the consistent and strong effect of perceived procedural fairness on a number of deliberation outcomes. Perceived procedural fairness is always a positive influence in enhancing enjoyment, decision satisfaction, and intention of future participation. A practical implication stemming from this finding is that deliberation practitioners should not only include perceived procedural fairness as an important evaluation item but also design their projects toward the end of a fair procedure.

A particularly interesting finding is the competitive relationship between perceived procedural fairness and perceived disagreement. First, there is a negative correlation between the two; and even after controlling for demographics, political involvement, and discussion activities, disagreement still shows a strong negative association with procedural fairness. This finding suggests that for controversial issues that involve a high amount of disagreement, it might be difficult to convince disagreeing parties that the procedure is fair. Extra efforts have to be made in order to build the perception of fair procedure when disagreement is severe. Second, when predicting deliberation outcomes, perceived disagreement and perceived procedural fairness pull the results toward different directions, with perceived disagreement being negative and perceived procedural fairness being positive. The negative effect of perceived disagreement is different from previous findings (Stromer-Galley &

Muhlberger, 2009) showing that objective disagreement had no effect. The discrepancy here certainly suggests that objective and subjective disagreement are two distinct, if not completely irrelevant, measures (see Wojcieszak & Price, 2012, for more evidence). We should examine the sources of the perception of disagreement if it does not correspond to how much disagreement actually occurred. The competition between perceived procedural fairness and perceive disagreement suggests that deliberation is a complex practice that embraces theoretical principles that may generate contradictory empirical consequences. If disagreement has to be a necessary component of deliberation, whether and how the perception of procedural fairness may counteract the negative effects of the perception of disagreement become urgent questions to both deliberation scholars and practitioners.

The significant yet competitive roles of perceived disagreement and perceived procedural fairness in deliberation call for a careful examination of the internal mechanism of deliberative discussions rather than treating the procedure as a black box. This standpoint helps us understand why some contradictory findings regarding deliberation effects do exist. The confusion comes from several sources: First, formal deliberations are different from everyday conversations on political issues in their extent to which disagreeing views are included and a fair procedure is operated. Everyday conversations among family members and friends are supposed to have fewer disagreements than formal deliberations that seek for diversity and sometimes, purposely put disagreeing members into one discussion group. Everyday conversations also differ from formal deliberations in the absence of a third-party moderator who probably fosters perceived procedural fairness. Future research should compare the perceptions regarding disagreement and procedural fairness in the everyday talk versus formal deliberation setting of the same topic. Second, among different attempts to run deliberations, there is also a fair amount of variance along the dimensions of disagreement and procedural fairness. Jury deliberations, for example, do not overtly encourage disagreements, as their purpose is to reach a decision or, sometimes, consensus. Some topics involve fundamental disagreements (e.g., Mendelberg & Oleske, 2000), and others are less controversial. Some discussions do not engage active moderation that treats participants equally (e.g., some examples cited in Sunstein, 2006). By explicitly measuring perceived disagreement and perceived procedural fairness, we are going to be able to clarify many of the seemingly contradictory findings observed so far.

The scrutiny of perceived procedural fairness in deliberation suggests that an individual's experiences with participatory acts are crucial, consistent with what Besley and McComas (2005) have proposed. The examination of political participation shall go beyond the frequency measure of different activities (e.g., whether one voted or not, how many days one talked about politics in the past week) and start assessing participants' perception about their experiences. This study has shown that such perceptions have important impacts on not only whether participants would accept the decisions generated from the activities but also whether participants would continue engaging in the same activities in the future. By shifting our focus to explaining the experiences of political participation, we are able to expand our understanding of civic engagement in addition to Verba and Nie's (1972) classic model of motivation, opportunity, and ability. For instance, younger people were found to be more disengaged with the existing political institutions compared to their

parents (Delli Carpini, 2000), although opportunities are present and ability seems to be improved thanks to civic education. The puzzle cannot be fully solved without looking into young people's experience with political institutions. How has their involvement in political activities been? Did they enjoy it? Was their experience positive or rather discouraging? Which part of the experience shaped their perception of the participatory acts? Future research should tackle the experience question in order to understand why people do or do not get engaged in politics.

If we put our emphasis on the experience rather than the sheer amount of participation, our examination of political communication factors needs to be refocused, too. Besley and McComas (2005) suggested studying how mass media frames influence people's perception about the fairness of political procedures. We can see many communication theories including priming and framing to be used on testing how both mass media and interpersonal communication shape people's experience of participatory acts. In addition, I propose that in order to obtain in-depth knowledge regarding political participation, qualitative research methods can offer us insights into the details of what is actually happening (e.g., Eliasoph, 1998). Whereas political participation literature is dominated by quantitative findings, methods such as interviews and focus groups are expected to contribute to discovering the relatively unknown aspects of political experience such as perceived procedural fairness.

The study has a number of limitations, most of which indicate directions for needed research in the future. For one, the topic, health care issues, may induce moderate to high amount of disagreements. This particular context may limit the generalizability of the findings to deliberations on other topics. Future research should test the effects of perceived disagreement and perceived procedural fairness in the context of deliberations on other issues. Another limitation is that this deliberation project was operated in online chat groups. This particular setting may have influence on both perceived disagreement and perceived procedural fairness. A text-based communication mode may slow down the exchange of disagreements compared to a face-to-face conversation, as an example. Again, future research should test the observed effects in other online and offline deliberation settings. Third, the socioaffective outcomes were the desired dependent variables in the study. But it would be helpful to see how perceptions of disagreement and procedural fairness influence other political psychologies such as tolerance and mutual respect as well as intention to participate in other types of deliberations. In addition, the verification of the role of perceived procedural fairness can be made more carefully if measures such as whether one agrees with the group decision are included as a control variable. It would be even better if actual procedural fairness is measured and compared to perceived procedural fairness in the analysis. Finally, this study focused on citizen deliberation only and did not examine deliberation in legislative bodies. This is because the article is oriented to individual experiences. However, the same measures, perceived disagreement and perceived procedural fairness, can be applied to examining other deliberation contexts too.

Despite its limitations, this study yields insights into the internal mechanism of deliberation by identifying both the predictors and effects of perceived procedural fairness. In real life, political decisions are difficult to make when disagreements are present among citizens.

The analysis made here suggests that if a fair procedure is used to make the decisions, participants are more likely to be satisfied with the decisions even if they do not always agree with each other. Guided by the theory of deliberative democracy, the proposed analytical framework bridges the reality of disagreement whereas the ideal of fairness directs our attention toward making political procedures fair in front of diverging views. As illustrated in this online deliberation study, people's perception of their experiences with political procedures is as important as the decisions generated through the procedures. Our examination of political communication and participation should include experience, especially that of procedural fairness, in order to address the modern condition of diversity.

Appendix

Zero-Order Correlations

	Procedural fairness	Enjoyment	Decision satisfaction	Future participation
Age	.129**	.173***	.081†	-.023
Female	.102*	.081†	.119**	-.004
Education	.004	-.242***	-.100*	-.147**
Income	-.010	-.185***	-.078†	-.121**
White	.046	-.036	-.055	-.041
Political interest	.010	-.058	-.075†	.044
Political knowledge	.026	-.128**	-.113*	-.026
Partisanship (Democrat)	.087*	-.029	-.010	-.006
Interpersonal trust	.088*	-.048	-.014	-.066
News attention	.074†	.074†	-.008	.045
Total number of attendance	.312***	.244***	.198***	.242***
Average number of words	.203***	-.022	-.030	.078†
Disagreement	-.274***	-.245***	-.359***	-.012
Procedural fairness	—	.616***	.501***	.332***
N	483	483	480	482

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

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Notes

1. It has to be noted that not all deliberation scholars agree that everyday political discussions could be counted as deliberation. Many deliberation researchers believe that deliberation requires constraints and ordinary political conversation may fail to conform to such constraints. Due to the fact that there is not clear empirical evidence supporting that everyday discussion is not deliberate, this article uses "formal deliberation" to refer to those practices that enforce constraints on discussion procedures.
2. An independent sample *t* test was made to test whether elites have different perception of procedural fairness compared to ordinary citizens. The result shows that such a difference does not exist. This finding is not surprising considering that although our sampling strategy was stratified, participants were not aware of it and did not know that they were involved in groups with different compositions.
3. An analysis of variance was carried out to test whether this design has any effects on perceived procedural fairness. Participants were classified into four groups corresponding to the design. There was no significant difference between participants who belonged to different groups in terms of their perception regarding procedural fairness. This finding is not surprising considering that each of the discussions in all four types of groups was moderated by a trained moderator who has been instructed to follow the same rules no matter which group was concerned.
4. A principle component analysis with varimax rotation was run on all the items that constitute the measures of perceived procedural fairness, perceived disagreement, enjoyment, satisfaction with group decisions, and intention of future participation. Using an eigenvalue of one as the cutoff value, five components were extracted that explained 81% of total variance. The factor loadings show a clear pattern that in the minds of the respondents, the items that formed each component are consistent with the theorized constructs.
5. Whereas the overall shift of public opinion is important to policy making (Fishkin, 1991), Besley and McComas (2005) suggested that our examination of public engagement should take individual experiences into account. Participating in civic activities such as deliberative discussions should be examined in terms of its cognitive, socioaffective, and behavioral effects on the individuals involved. Whereas cognitive effects such as information gain and opinion shift and behavior effects such as political participation have been documented relatively well in deliberation studies (e.g., Fishkin & Luskin, 1999; Gastil & Dillard, 1999), socioaffective effects became being noticed only recently (Hickerson & Gastil, 2008; Stromer-Galley & Muhlberger, 2009). However, group communication literature has long recognized the necessity to include both sets of measures by distinguishing between the task and the social dimensions

of groups (Wheless, Wheless, & Dickson-Markman, 1982). This is because both dimensions have shown influence on many outcomes. For instance, enjoyment with deliberation experience was found to be a significant predictor of both satisfaction with group decisions and willingness to participate in future deliberation (Zhang, 2008). This article thus focuses on socioaffective outcomes such as enjoyment and satisfaction as dependent variables.

6. In addition to the fact that this measure has been used in previous studies (e.g., Stromer-Galley & Muhlberger, 2009), it has a particularly interesting theoretical underpinning in deliberative democracy. Gutmann and Thompson (2004) argued that in cases where moral disagreements are too deep to resolve, a bottom-line product of deliberation should be mutual respect that motivates disagreeing parties to collaborate in the future. This willingness to collaborate in the future is crucial to the sustainability of deliberative democracy and supposed to be highly relevant to procedural fairness.

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