



Equality of Participation in Online Versus Face To Face Deliberation: A Transcript and Experience Survey Analysis



Eric Showers (eshowers@stanford.edu) and Nathan Tindall (ntindall@stanford.edu), Todd Davies (davies@stanford.edu)
Center for the Study of Language and Information, Stanford University

Abstract

Public deliberation involves informed discussion by groups of citizens, representing a general public. Such groups are sometimes convened by decision makers or nongovernmental organizations as inputs to public policy. These groups have traditionally met face to face (F2F), requiring considerable time and expense. Online deliberation environments may provide a more cost-effective and/or less inhibiting environment for public participation. But do online deliberation methods (e.g. discussion boards or Internet-enhanced teleconferences) bias participation toward certain individuals or demographic groups? We compare F2F versus online contribution levels of participants in a large-scale, random assignment, U.S. deliberation experiment that allows for within-participants and cross-modal comparisons. For English speaking adults who were required to have Internet access as a condition of participation, we find no negative effects of online modes on equality of participation (EoP) related to gender, age, or educational level. An asynchronous discussion board/forum appears to have improved EoP for gender relative to F2F discussion. The data suggest a dampening effect of online environments on black participants, as well as amplification for white participants. Synchronous online voice communication EoP is on par with F2F across individuals (measured by Gini index). But individual-level EoP is much lower in the online forum, and greater online forum participation predicts greater F2F participation for individuals. Measured rates of participation are compared to self-reported experiences, and other findings are discussed.

Research Questions

1. Do the medium (online vs. F2F) and/or modality (speech vs. text) have effects on equality of participation across demographic groups (ethnicity, gender, education, age)?
2. Do online methods differ from F2F on individual-level equality of participation (EoP)?
3. Do online methods differ from F2F in the effect of group size on EoP?
4. Do individuals who participate more online also participate more F2F?
5. What is the relationship between objective measures of EoP and self-reported experience?

This research was supported by the Agency for Health-care Research and Quality (AHRQ) under contract #HHS290201000005C, through the American Institutes for Research (AIR), subcontract #641.02916, and by the Vice Provost for Undergraduate Research at Stanford. We thank American Institutes of Research Staff members Coretta Mallery, Rikki Mangrum, Maureen Maurer, Manshu Yang, and Mark Rosenberg for helpful discussions and aid in obtaining the data. The views expressed in this poster are those of the authors, and have not been approved by AHRQ or AIR.

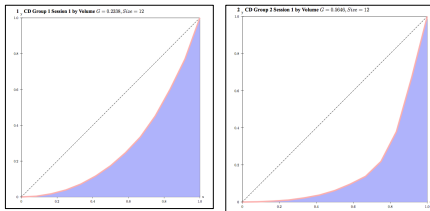
Methods

Community Forum experiment deliberation methods (run in four U.S. cities: Chicago, Sacramento, Silver Spring, and Durham; All groups received educational materials beforehand):

1. **Brief Citizens' Deliberation (BCD)**
 - 24 groups of 12 each, on average, F2F once for 2 hours, active facilitator
2. **Community Deliberation (CD)**
 - 24 groups of around 12 people each, 2 F2F sessions of 2.5 hrs. each, with a week of access to an online asynchronous discussion forum (**Deme**) between sessions, active facilitator F2F
3. **Online Deliberative Polling*(ODP)**
 - 24 groups, around 12 in each group, convened weekly online through a synchronous voice interface for four 75 minute sessions, minimal facilitation
4. **Citizens' Panel (CP)**
 - 4 groups of 24-30 participants met for 2.5 days each, three active facilitators in large group meetings, plus non-facilitated breakout groups
5. **Reading Materials Only Group (RMO)**
 - No discussion with other participants – "control" group

Transcript files from each of the sessions were scraped and the volume (percent of total words said, not including facilitator), frequency (percent of total utterances said, not including facilitator), and average contribution length were compared. Additionally, Gini indices were calculated for each group, as a measure of inequality.

Measures: Frequency, Volume, Average Contribution Length (ACL), Gini Index, Subjective Equality Factor from post-deliberation experience survey

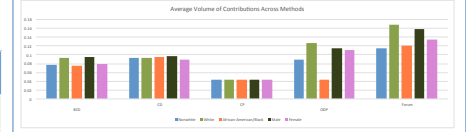
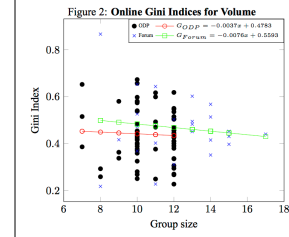
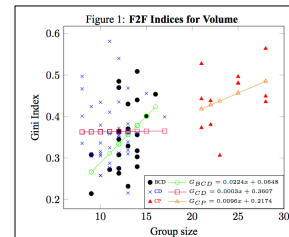


Data

Volume Correlations

Mode	Method	Size	Age	Gender	Educ ation	Hispa nic/Latino	Native Ameri can	Asian Ameri can	Black	White	Other Ethni city
Online	ODP	-.25	.20	-.02	.16	-.07	.04	-.02	-.13	.19	-.13
Online	Deme	.01	.11	-.03	.15	.01	-.07	-.07	-.06	.12	-.07
F2F	CD	-.20	.05	-.06	.14	-.05	.02	-.03	.03	.00	-.04
F2F	BCD	-.14	.09	-.15	.14	.04	.04	-.06	-.13	.15	-.00
F2F	CP	-.12	.02	.00	.19	-.01	---	-.07	.03	.01	.01

p < .05 p < .001



Conclusions

1. **Online effects on demographic groups' participation equality**
 - Gender: No consistent effects of online versus F2F EoP
 - Ethnicity: Online settings appear to reduce black and increase white participation somewhat, relative to F2F, even when controlling for age group and educational level
 - Age: Older participants appear to contribute relatively more online than F2F
 - Education: Online environments do not appear to reduce EoP across levels
2. **Online effects on individual-level participation equality**
 - Synchronous voice deliberation on par with F2F as measured by Gini indices
 - Optional online forum (Deme) in CD strongly increased Gini index over F2F, including the CD-F2F environment that included the same participants.
3. **Online environments and group size effects**
 - Online environments (ODP and CD-Deme) eliminated the group size amplification of inequality seen in BCD and CP methods
4. **Online posting as a predictor of F2F participation**
 - Deme forum posters in the CD method outparticipated nonposters on all three contribution measures, indicating that the tendency for an individual to participate is correlated across online and F2F contexts.
5. **Relationship of self-reported experience to measures of participation equality**
 - Gini indices for frequency, volume, and ACL, as measures of individual-level EoP, were good predictors both of each other and of the subjective equality factor
 - But black participants rated all but one of the methods more equal than did white participants, even when they participated less by volume than white identified participants did

Further Reading:

K.L. Carman, C. Mallery, M. Maurer, G. Wang, S. Garfinkel, M. Yang, D. Gilmore, A. Windham, M. Ginsburg, S. Sofer, M. Gold, E. Pathak-Sen, T. Davies, J. Siegel, R. Mangrum, J. Fernandez, J. Richmond, J. Fishkin, A. Siu Chao, "Effectiveness of Public Deliberation Methods for Gathering Input on Issues in Healthcare: Findings From a Randomized Trial", *Social Science & Medicine*, 133:11-20, May 2015