



eCOMMONS

Loyola University Chicago  
Loyola eCommons

Psychology: Faculty Publications and Other Works

Faculty Publications

1996

# Groups are Unpredictably Transformed by Their Internal Dynamics

R Scott Tindale

Loyola University Chicago, [rtindal@luc.edu](mailto:rtindal@luc.edu)

## Recommended Citation

Tindale, RS. "Groups are Unpredictably Transformed by Their Internal Dynamics." *The Public Perspective* 7, 1996.

This Article is brought to you for free and open access by the Faculty Publications at Loyola eCommons. It has been accepted for inclusion in Psychology: Faculty Publications and Other Works by an authorized administrator of Loyola eCommons. For more information, please contact [ecommons@luc.edu](mailto:ecommons@luc.edu).



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License](https://creativecommons.org/licenses/by-nc-nd/3.0/).

© R. Scott Tindale, 1996.

ies very little researcher-participant bias is required to produce significant amounts of artifact. These examples from the laboratory apply equally to field experimentation and expand our understanding of artifact in social research.

### Fishkin Meets Hawthorne

The desire in any social experimentation such as the Fishkin experiment is for the research participants to behave veridically, independently, and normally. The researcher has designed the project so that these conditions, and hence the goals of his research, will be realized. Yet the three components of the Hawthorne Effect may be inescapably present. Participants in the Fishkin experiment, like the five specially-selected relay assembly test-room workers, have been selected and separated from their peers to participate in an experiment—a highly publicized, novel social experiment. Like the Hawthorne participants, they are receiving abun-

dant special attention—a free trip, national media attention, and an enormous boost to self-esteem. Not only the social scientist's "microscope," but America's television sets will be focused on their behavior. They know this is a novel experiment, and that its success depends on their behavior. They will be highly sensitive to cues to guide their responses. Will the evidence they are to judge be truly balanced, or will subtle expectancies be transmitted? In short, will they respond normally "on stage," independent of any biases, or be susceptible to the pressures known to produce social artifact? These are questions one must consider in evaluating the Fishkin experiment.

### Endnotes

<sup>1</sup> E. Mayo, *The Social Problems of an Industrial Civilization* (Cambridge, MA: Harvard University Press, 1945).

<sup>2</sup> F.J. Roethlisberger and W.J. Dickson, *Management and the Worker*, (Cambridge, MA: Harvard University Press, 1939).

<sup>3</sup> See D. Cook, "The Hawthorne Effect in Educational Research," *Phi Delta Kappan*,

Vol. 44, 1962, pp. 116-122; and W.R. Borg and M.D. Gall, *Educational Research: An Introduction* (3rd ed.) (New York: Longman, 1979), respectively.

<sup>4</sup> J.G. Adair, D. Sharpe, and C.L. Huynh, "Hawthorne Control Procedures in Educational Experiments: A Reconsideration of Their Use and Effectiveness," *Review of Educational Research*, Vol. 59, 1989, pp. 215-228.

<sup>5</sup> *Ibid.*

<sup>6</sup> J.G. Adair, *The Human Subject: The Social Psychology of the Psychological Experiment*, (Boston: Little Brown, 1973).

<sup>7</sup> M.T. Orme, "On the Social Psychology of the Psychological Experiment: With Particular Reference to Demand Characteristics and Their Implications," *American Psychologist*, Vol. 17, 1962, pp. 776-783.

<sup>8</sup> R. Rosenthal, *Experimenter Effects in Behavioural Research*, (New York: Appleton-Century-Crofts, 1966).



*John G. Adair is professor,  
Department of Psychology  
University of Manitoba  
Winnipeg, Canada*

## Groups are Unpredictably Transformed by Their Internal Dynamics

By R. Scott Tindale

Small groups are used in our society in many contexts. Juries, school boards, planning commissions, cabinets, advisory councils, etc., all play central roles in the institutions for which they are formed. The prevalence of small groups in the US is partly a function of political ideology: As compared to lone individuals, they provide a better representation of constituency interests and can encompass a wider diversity of opinion. However, they are also seen as effective for solving problems, making important decisions, and the like. Although there is an abundance of evidence supporting the effectiveness of groups, there is also a growing body of research showing that using small groups can sometimes lead to unexpected, and occasionally problematic, outcomes.<sup>1</sup> As James Fishkin embarks on his delibera-

“Recent research has shown that faulty information or biased information processing strategies can produce polarization toward incorrect or biased positions. Thus, group discussion does not always lead group members to hold more “reasoned and informed” positions on an issue.

tive poll, recognition of the potential for such unexpected outcomes in relation to the planned small group discussions leads to questions about what can be generalized from the results.

As an initial caveat, I should point out that Fishkin's use of small groups is somewhat outside the range of the types of groups that have received the majority of research attention. Although information exchange and social influence are integral parts of small group dynamics in most contexts, rarely are such things the sole purpose of the group task. For example, jury members exchange ideas about evidence and attempt to influence each other, but such processes are invoked for the purpose of reaching a unanimous verdict. More recently, focus groups have been used to generate information, but rarely are the consumers of such information the group members themselves. Probably the clos-

est research analog to the small groups in Fishkin's experiment is the research by Kurt Lewin and his associates that attempted to use small group discussions to change members' attitudes and behaviors during World War II.<sup>2</sup> However, even here the purpose was to change attitudes and behaviors in a pre-specified way—not just to allow the members to become more informed—and one of the key findings of the research was that public commitment to the pre-specified behavior was central to lasting behavior change. Thus, many of my comments will stem from inferences drawn from research using groups that differ from those proposed by Fishkin in some potentially important, but not yet known ways.

Fishkin sees the role of group discussions in his deliberative experiment as serving two functions, both of which should aid in the final goal of the overall project.<sup>3</sup> First, members will become better informed by hearing the ideas and information espoused by the other group members. Second, the discussion process itself will force members to think more thoroughly about their own positions. Fishkin sees such groups as similar to the "town meetings" of old where community members came together to deliberate on important community issues. As mentioned above, one key difference between town meetings and Fishkin's experimental groups is that town meetings typically attempted to reach a consensus on some decision alternative or new policy. However, the dynamics of the discussions in Fishkin's groups are likely similar, though probably less intense, than those in town meetings. The final outcome of these discussions (in conjunction with the information presented to group members from outside experts and politicians) is supposedly a more informed and reasoned set of individuals (both within and across each group of 20 participants), which can serve as a polling surrogate

for what a more informed and reasoned populace would be. Under consideration is the degree to which small group discussions serve the two functions hypothesized, and subsequently, the likelihood of their adding to the achievement of the overall goal of the project.

### Information Exchange

Concerning information exchange, it is well documented that group members do exchange information during discussion.<sup>4</sup> Discussions involve the exchange of facts, ideas, experiences, values, preferences, etc., in most small group contexts. However, it is also quite clear that small groups are neither efficient nor optimal at sharing information. Research has demonstrated quite convincingly that most group discussion

---

“ *The strong claim made by Fishkin concerning the similitude of his experimental sample to a “theoretically” informed populace would seem to require some empirical evidence, and the literature on small group dynamics to date surely would not support such a claim under many, if not most, circumstances.* ”

---

tends to focus on information that is already largely shared among the group members.<sup>5</sup> This is largely a function of the fact that information shared by multiple members is more likely to be mentioned during the discussion. By contrast, information held by only one individual is much less likely to be presented to the group. In addition, one of the most consistent findings in the small group literature is that group members participate in discussions at very different rates. In a major jury simulation study using 12-person groups, the most talkative members provided about 22-25% of the discussions while the least talkative members provided about 2-3%.<sup>6</sup> As this difference should increase with group size, the 20-person groups used by Fishkin will probably show even greater disparities. Thus, unique information held by less talkative group members has only a minute chance of being shared with the other group members. Furthermore, socioeconomic indicators tend to

predict participation rates, so the use of small groups will not lead to the degree of equal representation that Fishkin envisions.

### Normative Opinion Formation

It has also been well documented that the information exchanged in small group discussions does influence group members' opinions.<sup>7</sup> However, groups also produce other types of influence that tend to have little to do with information. Normative influence—influence stemming from the knowledge that one holds a position at odds with the majority of group members—has also been shown to be present in many if not most small group contexts.<sup>8</sup> Thus, group members may change their positions to be closer to the group norm without being exposed to any new or convincing information. Normative influence within a group often stems from group members perceiving themselves (or wanting to perceive themselves) as similar to the other group members. In

local town meetings, such normative pressure could be rather strong. However, it has recently been shown that normative pressures from people who are perceived as different in some way (e.g., people from a different social class, location, or any other salient subgroup within the population) may have the effect of polarizing opinions in the opposite direction—away from majority opinion.<sup>9</sup> Therefore, the direction of influence stemming from normative pressures would depend on whether a particular member identified more with the current group, or more with some other reference group deemed salient on a particular issue.

### Group Polarization

One of the most consistent findings in small group research has been termed the “group polarization” effect.<sup>10</sup> Given a substantial skew in the distribution of attitudes about a particular issue within

a group, group discussion tends to polarize opinions within the group such that group members end up more extreme on an issue after discussion than they were before. Again, it seems that both normative and informational influences come into play in producing such polarizing effects. Larger factions within the group both hold more normative power and contain a greater amount of information. To the degree that polarization occurs due to information exchange, such opinion changes would be consistent with the goals of Fishkin's experiment. However, the normative component seems antithetical to the experiment's purpose. In addition, recent research has shown that faulty information or biased information processing strategies can produce polarization toward incorrect or biased positions.<sup>11</sup> Thus, group discussion does not always lead group members to hold more "reasoned and informed" positions on an issue.

A couple of recent studies have shown that people who either expect to enter, or actually do enter, a group discussion on an issue do spend more time thinking about the issue—particularly focusing on arguments to support their position.<sup>12</sup> In addition, there is a growing body of evidence showing that thought processes are affected by whether one holds a minority or a majority opinion within the group.<sup>13</sup> In terms of more in-depth and diverse thought, it seems that being a member of the majority (thus exposed to minority influence) has an advantage. People exposed to the minority opinion tend to think about the issue more broadly, as evidenced by being able to generate a greater number of thoughts from a greater number of perspectives after being exposed to the minority. Those with opinions in the minority, however, after being exposed to majority influence, tend to think more narrowly about the issue. The processes involved with such effects are not fully understood at this time, but, again, the results indicate that the level and type of thinking produced by being in a group discussion are not as consistent or simple as one might imagine.

### Proceeding with Caution

The research results discussed above question some of the assumptions underlying Fishkin's use of small group discussions in his experiment. Clearly, group discussion does not necessarily lead to more or better information availability or to more well thought-out positions. Thus, depending on the makeup of the group (preference distribution, status differences, member perceptions, etc.), the group discussions could actually inhibit the types of outcomes Fishkin envisions and may lead to survey results that differ substantially from the "theoretical" informed populace he envisions. One could argue that the use of small groups in the Fishkin experiment makes it *unlikely* that the final poll results will represent the opinions of the whole nation, if only they were informed on the issues. Group polarization, poor information sharing and strong differences in participation rates could easily lead a majority of the groups to influence their members in ways very different from simply providing people with unbiased information. The strong claim made by Fishkin concerning the similitude of his experimental sample to a "theoretically" informed populace would seem to require some empirical evidence, and the literature on small group dynamics to date surely would not support such a claim under many, if not most, circumstances. However, for a true empiricist, the only way to really discover the role of small group discussions in such situations is to study them. In that sense, the Fishkin experiment provides an excellent opportunity for further research on influence processes in small groups—an opportunity of which I hope Fishkin takes full advantage.

### Endnotes

<sup>1</sup> See J.H. Davis, *Group Performance* (Reading, MA: Addison-Wesley, 1969) and I. Steiner, *Group Process and Productivity* (New York: Academic Press, 1972) for reviews of group effectiveness research; see R.S. Tindale, "Decision Errors by Individuals and Groups," in N.J. Castellan (ed.), *Individual and Group Decision Making: Current Trends* (Hillsdale, NJ: Lawrence Erlbaum, 1993) for a limited review of some

unexpected problems and biases.

<sup>2</sup> See K. Lewin, "Group Decision and Social Change," and E.B. Pelz, "Some Factors in Group Decision," both in E.E. Maccoby, T.M. Newcomb, and B.L. Hartley (eds.), *Readings in Social Psychology* (New York: Holt, 1958).

<sup>3</sup> J.S. Fishkin, *The Voice of the People* (New Haven, CT: Yale University Press, 1995).

<sup>4</sup> E. Burnstein, "Persuasion and Argument Processing," in H. Brandstatter, J. Davis, and G. Stocker-Kreichgauer (eds.), *Group Decision Making* (London: Academic Press, 1982).

<sup>5</sup> For example, see G. Stasser and W. Titus, "Pooling of Unshared Information in Group Decision Making: Biased Information Sampling During Group Discussion," *Journal of Personality and Social Psychology*, Vol. 48, 1985, pp. 1476-1487.

<sup>6</sup> R. Hastie, S. Penrod, and N. Pennington, *Inside the Jury* (Cambridge, MA: Harvard University Press, 1983).

<sup>7</sup> E. Burnstein, "Persuasion and Argument Processing."

<sup>8</sup> M.F. Kaplan, "The Influencing Process in Group Decision Making," in C. Hendrick (ed.), *Group Processes* (Newbury Park, CA: Sage, 1987).

<sup>9</sup> See J.C. Turner and P.J. Oakes, "Self Categorization Theory and Social Influence," in P. Paulus (ed.), *Psychology of Group Influence* (Hillsdale, NJ: Lawrence Erlbaum, 1989); W. Wood, G. Pool, and K. Leck, "Majorities, Minorities, and the Self: Recipient's Self-Definition Affect Social Influence," in R.S. Tindale (Chair) *Recent Trends in Minority Influence Research*, symposium presented at the Society for Experimental Social Psychology Meetings, Washington DC, 1995.

<sup>10</sup> D.C. Myers and H. Lamm, "The Group Polarization Phenomenon," *Psychological Bulletin*, Vol. 83, 1976, pp. 602-627.

<sup>11</sup> See R.S. Tindale, "Decision Errors by Individuals and Groups," in N.J. Castellan (ed.), *Individual and Group Decision Making: Current Trends* (Hillsdale, NJ: Lawrence Erlbaum, 1993).

<sup>12</sup> C.M. Smith, R.S. Tindale, and D.L. Dugoni, "Minority and Majority Influence in Freely Interacting Groups," *British Journal of Social Psychology*, in press.

<sup>13</sup> C. Nemeth, "Differential Contributions of Majority and Minority Influence," *Psychological Review*, Vol. 93, 1986, pp. 23-45.



R. Scott Tindale is professor,  
Department of Psychology,  
Loyola University of Chicago