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Attitude Change in Discussions of Access to Higher Education

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Introduction

The needs and demands of the public have always played an important role in defining the mission, curriculum, and admissions policies of colleges and universities (Rudolph, 1962/1990; Wechsler, 1977). With the continued devolution of fiscal responsibility from state and federal government to students and their families, higher education institutions find themselves in a situation akin to that faced by corporate actors and their market analysts in the private sector—each struggling just as much to ascertain preferences (attitudes) as to establish them. Effective leadership in this context demands both the capacity to implement visionary agendas as well as to follow the public's lead. This requires an understanding of what the public expects from colleges as well as having some sense of the public's capacity for change along these same perspectives. Therefore, this study examines whether and how deliberative dialogue—an interactive group process in which the public deeply considers a particular issue—yields changes in participants' understanding of and opinions about access to higher education.

Literature Review

Social Psychological Theories on Group Decision-Making

Several theories have addressed how privately held attitudes can change through group discussion. Persuasive arguments theory (e.g., Vinokur & Burnstein, 1974, 1978) posits that group members' opinions will shift in the direction for which there are more persuasive arguments in a given culture. The explanation for this shift is essentially rational and cognitive: After weighing the various arguments that are given for each side, one will change her opinion to the position for which there are the most arguments. In contrast, social comparison theory (e.g., Festinger, 1954; Mussweiler, 2003) proposes

that people shift their opinions to fit in with social norms. This perspective is largely normative and affective: People want to be respected and accepted by the group, so they tend to shift their views in response to others' positions, not their arguments.

Laughlin and Earley (1982) suggest that these two perspectives are complementary (rather than rival) explanations for attitude shift and group decision-making. Specifically, when there is a demonstrably "correct" answer to a problem, persuasive arguments theory tends to predict attitude shifts. In contrast, when there is no single "correct" answer—as is often the case in complex social problems—social comparison theory is more useful (also see Laughlin, 1980).

Deliberative Dialogue: Theory and Practice

The National Issues Forums (NIF) were established in 1981 to provide a venue and format for discussing important, complex social issues. This process uses trained moderators and groups of 15-25 participants who consider three or four possible approaches for addressing a social problem. In these dialogues, participants "deliberate" about the issues and approaches, which means that they share opinions, experiences, and perspectives without necessarily arguing for one side or the other. Moderators ask questions and guide participants to think more deeply about various perspectives. Ideally, participants come to realize that there is no one simple solution to the problem—each approach has its benefits and drawbacks, which must be weighed against one another (Mathews, 1998; Mathews & McAfee, 2003).

Yankelovich (1991) provides a conceptual framework for understanding how deliberative dialogue fosters attitude change. Using extensive public opinion data, he notes that people's opinions about recent events are often unstable: Responses are

drastically altered by minor changes in question phrasing, and responses to the same question can change substantially over a short period of time. He argues that citizens need to have the time and effort to think through complex social issues so as to bring their opinions in line with their deeply held values. This alignment might happen gradually over a long period of time, or this process can be expedited if people participate in carefully constructed discussions (e.g., deliberative dialogues).

Research on Deliberative Dialogue

Research on attitude change within deliberative dialogues differs from social psychology group-decision research in a number of important ways. First, dialogue research often focuses on a sizable number of survey items, whereas social psychology research focuses on change within one or two key dependent variables. Second, deliberative dialogue research often states or implies that people are in a process of self-discovery, whereas social psychology research examines how people influence one another's opinions. Third, the samples in deliberative dialogue studies are never random selections of any given population; often, dialogue participants are those who are directly affected by and/or deeply concerned with the topic of discussion. This sample contrasts with the typical sample of undergraduate psychology students that is often used in social psychology research. Fourth, many studies of group decision-making require the group to reach a single, collective decision. This process of reaching consensus is antithetical to most deliberative dialogue, which is designed to help participants weigh the benefits and drawbacks of several approaches (Mathews, 1998; McAfee, 2004).

Gastil and Dillard (1999) examined whether deliberative dialogue resulted in more sophisticated thinking about complex issues. Analyzing pre- and post-test results

from deliberative dialogues on seven different topics, they found that dialogue participation resulted in a greater likelihood of holding ideologically consistent views and a decreased likelihood of being uncertain about one's attitudes. They also found some evidence that participants who had more formal education—and thus were more likely to have thought about the issue—were more likely to hold ideologically consistent views than were participants with less formal education.

In an attempt to control for self-selection bias in his sample, Gastil (2004) used a quasi-experimental design to assess the impact of participation in deliberative dialogue. Students from across the United States enrolled in sections of adult literacy courses that either used deliberative dialogues or used traditional classroom activities (students were not aware of the instructional method at the time of enrollment). When given a survey at the end of the course, those who enrolled in sections with deliberative dialogue were more likely have conversations about politics with people from different ideological and social backgrounds and were less likely to dominate those conversations. In addition, he found that participants who engaged in greater levels of reading, listening, and observation within the dialogues were more likely to exhibit subsequent civic dispositions and behaviors.

It is unclear whether participants change their aggregate opinions over the course of the dialogue, with some studies finding significant changes in a single direction (Pelletier, Kraak, McCullum, Uusitalo, & Rich, 1999) and some finding little or no change (e.g., Doble Research Associates, 2001; Gastil, 1994). In one study that found significant mean shifts in attitudes, Pelletier et al. (1999) noted that participants tended to

move away from social justice and environmentally conscious perspectives and toward an ideologically conservative conventional agriculture perspective.

Deliberative Dialogue on “Who is College For?”

The present study focuses on deliberative dialogues about access to higher education. Since changes in opinions and subsequent behavioral changes vary substantially across dialogue topics and experiences (Gastil, 2004; Gastil & Dillard, 1999), this study seeks to re-visit some previous questions as well as to explore new areas. Specifically, this study will explore (a) whether (and possibly in what direction) aggregate opinions will shift after the dialogue, (b) whether and how participants’ understandings of related issues will change, and (c) what factors predict how much participants will change their perspectives. It was hypothesized that (a) there would be few (if any) changes in aggregate opinions, (b) factor loadings on some items would increase and more items would load onto factors, and (c) women and people who do not have bachelor’s degrees would be more likely to change their opinions after group deliberation (see Baxter Magolda, 1992; Belenky, Clinchy, Goldberger, & Tarule, 1986).

Method

Participants

Participants were 468 community members (60% female) in 10 counties and two states who took part in a deliberative dialogue around the issue of “Who is College For?” Only those who completed both the pre- and post-discussion questionnaires were included in the sample. The sample was reasonably diverse in terms of race/ethnicity (16% African American, 4% Hispanic/Latino/Chicano, 3% multiracial/multiethnic, 71% White/Caucasian, 3% other, and 2% unknown) and age (27% were 18-24 years of age,

17% were 25-34, 25% were 35-49, 28% were 50-64, 1% were 65 or older, and 1% were unknown). Dialogues were hosted in a variety of locations, including universities, libraries, community organizations, high schools, adult learning centers, bookstores, hotels, offices, homes, and halfway houses. Many participants belonged to organizations that were hosting these events, but some participants heard about the dialogues (either through formal publicity or word-of-mouth) and decided to attend. Participants received no monetary compensation for their involvement.

Although this sample is certainly not random, it does represent a cross-section of Michigan residents. It seems reasonable to assume that these participants, who chose to engage in dialogues about college access, might be more informed about and more interested in this topic than the average Michigan resident. Thus, we would expect smaller changes in this sample's opinions than in the opinions of a random sample (Vinokur & Burnstein, 1978).

Measures

The pre-discussion questionnaire (i.e., "pre-test") asked participants to rate their agreement with seven statements (e.g., "Scholarships should generally be given to students with the highest grades and test scores") on a five-point Likert scale (1 = "strongly disagree," 2 = "disagree," 3 = "neutral," 4 = "agree," 5 = "strongly agree"). The questionnaire also contained demographic information (gender, age, educational attainment, and race/ethnicity) and other questions. Age was indicated by checking one of six categories (17 or younger, 18-24, 25-34, 35-49, 50-64, 65 or older) and educational attainment was indicated with nine categories (from "less than 6th grade" to "graduate degree"). For this study, age was coded from 1-6 (1 = "17 or younger" to 6 = "65 or

older”), and educational attainment (0 = less than bachelor’s degree, 1 = bachelor’s degree or higher) and race/ethnicity (0 = White/Caucasian, 1 = Person of color) were dummy-coded. The post-discussion questionnaire (i.e., “post-test”) contained the same seven Likert-scale questions as the pre-test, along with various other items. The post-test instructions informed participants that some of the items would be identical to those on the pre-discussion questionnaire, but they should not refer to their previous responses.

A measure was created to indicate the magnitude of change from the pre-test to the post-test responses. The absolute value of the difference between pre-test and post-test scores for each item was computed, and the absolute values were added together. This sum served to indicate the total magnitude—but not the direction—of change that resulted from the dialogue.

Analysis

Three types of analyses were performed on the data. First, paired t-tests were performed on the seven items that were identical on the pre-test and post-test to determine whether participants’ opinions shifted in a particular direction. Second, to determine whether participants’ thoughts were structured differently before and after the dialogue, factor analyses with principal axis factoring and Oblimin rotation were conducted first on the seven pre-test items and then on the seven post-test items. Factors with Eigenvalues greater than one were extracted, yielding three factors for both the pre-test and post-test. These results were compared to determine similarities or differences in the pre-test and post-test factor structures. Items with factor loadings above .35 were considered adequate. Third, multiple regression analyses were performed to predict the magnitude of change for participants. The dependent variable was the magnitude of

change on the seven items (described above), and the independent variables were all seven pre-test items, gender, age, dummy-coded race/ethnicity, and dummy-coded educational attainment.

Results and Discussion

Group Shifts in Attitudes

Paired t-tests on five of the seven items yielded significant differences ($p \leq .05$) between responses to the pre-test and post-test items. At first glance, these changes do not seem to follow any logical pattern. Participants' responses on three of the items moved toward the "neutral" response ("3" on the 1-5 scale), and two moved toward the extremes. Similarly, three of the items moved toward favoring increased access to college, whereas two of the items moved toward a more exclusive perspective (see Table 1).

However, these findings are consistent with what occurred within the dialogues. Many participants learn new factual information about college access, including many of the barriers that prevent students from entering and graduating from college. As a result, on three of these items, participants become more likely to provide responses that indicate an increased understanding of these dynamics (i.e., they were more likely to note the existence of barriers and to promote policies to overcome them). However, dialogue participants also frequently noted that some important jobs do not require college degrees (Bowman & Pasque, 2005; Daun-Barnett & Bowman, 2005). Therefore, participants simultaneously become less likely to think that everyone should attend college, but more likely to support equal opportunity for those who wish to do so.

Structural Changes in Attitudes and Conceptions

The factor analysis of the pre-test items suggests that participants do not initially think about access to higher education in structured ways (see Table 2). For each of the first two factors, only one item had a factor loading greater than .35. For the third factor, two items have loadings above .35; these two items (“It is important for people to go to college” and “Colleges and universities play an important role in shaping responsible citizens,” respectively) represent a “Value of College” factor that emphasizes the general importance of attending college.

The factor structure for the post-test items was much more clear (see Table 3). The first factor had two items with loadings above .55 (“Only the best and the brightest high school students should go to college” and “Scholarships should generally be given to students with the highest grades and test scores”). This factor represents a “Meritocracy” perspective on who should have access to and benefit from college. Specifically, academic achievement and/or intelligence should be of utmost importance in college admissions and financial aid. The pairing of these two items suggests that many participants draw connections between who should attend college and how monetary assistance should be allotted to those who do attend.

The second factor had two items with loadings above .45 (“Those who work hard enough can graduate from college” and “Race, ethnicity, and gender should be considered in college admissions”). This factor captured a “Recognition of Barriers” to college access and persistence. The pairing of these two items implies that participants conceptually link difficulties with persisting in college with admissions policies that are designed to help students overcome societal obstacles. The third factor was the same

“Value of College” factor that was identified in the pre-test; it had factor loadings of .54 and .49 (versus pre-test loadings of .42 and .51, respectively). Interestingly, one of these items (“Colleges and universities play an important role in shaping responsible citizens”) clearly emphasizes a social or civic role of colleges, whereas the other item (“It is important for people to go to college”) may connote individual and/or societal reasons. The three factors from the post-test had low intercorrelations, $-.25 < r < .10$, suggesting that participants saw these as fairly distinct issues.

It should be noted that the three factors yielded in the post-test were similar to the assumptions, perspectives, and rationales that underlie the three approaches in the dialogue guide. Approach 1 of the discussion guide states that college should be for those who work hard (related to the “Recognition of Barriers” factor), approach 2 says that college should be for the most academically qualified (related to the “Meritocracy” factor), and approach 3 says that college should be for everyone who wants it (related to the “Value of College” factor) (see National Forum on Higher Education for the Public Good, 2004). Given that these approaches were created by compiling and aggregating the opinions of experts (Belcher, Kingston, Knighton, McKenzie, Thomas, Wilder, et al., 2002; Bowman, Daun-Barnett, Burkhardt, & Brill, 2005), it seems that dialogue participants move toward a more structured conceptual framework that mirrors that of experts. However, it is an open question to what degree this coherence results from participants’ having an in-depth understanding of the issues or from participants’ adopting the existing framework of the discussion booklet.

Predicting the Magnitude of Opinion Change

When controlling for all other variables in the model, women are more likely to change their opinions than men, older people are more likely to change their opinions than younger people, and people who do not have a bachelor's degree are more likely to change their opinions than those who do, all p 's $< .05$ (see Table 4). People of color were somewhat more likely to change their views than Whites, $p < .10$. In addition, people with more egalitarian viewpoints on three of the seven pre-test items were less likely to change their opinions than were those with more exclusive opinions, p 's $< .05$. The multiple regression model predicted 9.4% of the variance in the magnitude of opinion change from the pre-test to the post-test, $F(11, 409) = 3.850, p < .001$.

By definition, a multiple regression analysis examines the unique variances in the dependent variable accounted for by each of the independent variables. However, these relationships can be more difficult to interpret when two or more of the independent variables are highly correlated (Pedhazur, 1997). In this sample, there is a substantial correlation between participants' age and educational attainment, $r(457) = .69, p < .001$. A simple linear correlation between age or education and the total magnitude of attitude change on the seven items would suggest that there is no relationship between these two predictors and the dependent variable, p 's $> .10$. However, when partialing out the effects of age, there is a significant negative correlation between educational attainment and magnitude of attitude change, $r(457) = -.16, p = .001$. Likewise, when partialing out the effects of educational attainment, there is a significant relationship between age and magnitude of attitude change, $r(457) = .15, p = .001$. Since no other independent variables in the regression equation have intercorrelations greater than .3 or less than -.3,

it seems that this model provides a fair representation of the unique relationships between these independent variables and the dependent variable.

In some ways, it is difficult to discuss the implications of these results, since changing one's views in this context can be construed in either a positive or a negative light. On one hand, people who alter their views after the dialogue might be more open-minded, more willing to listen, and/or more able to take others' perspectives. On the other hand, changing one's opinions might be construed as yielding one's own independent beliefs and/or not having thought about the issue previously. For example, the finding that participants with egalitarian viewpoints were less likely to change their views can either be perceived as "stubbornness" or as having a more informed opinion at the outset (from the first set of analyses, participants on average tended to move toward an egalitarian perspective on these three items, which provides some support for the latter interpretation).

Interestingly, the participants who were least likely to change their beliefs were young White men with bachelor's degrees. This is consistent with previous findings that suggest that White Americans from middle-class backgrounds are likely to be raised in a manner that encourages the "flowering" and "blossoming" of their own individual opinions (Kusserow, 1999; Wiley, Rose, Burger, & Miller, 1998) and that male college students are less likely to use conversations as a means of shaping their opinions than are female college students (Baxter Magolda, 1992). It is also possible that these more privileged group members have (or perceive that they have) a greater knowledge of the current educational system and are therefore less likely to change their opinions after receiving factual and normative information on this topic.

Implications and Conclusions

On average, dialogue participants shift their opinions in a way that reflects an increased understanding of access to college and the specific content broached in the discussions. After the dialogue, participants had a more coherent and integrated understanding of the underlying issues within this topic. In general, women, people without bachelor's degrees, people of color, older people, and people with more conservative viewpoints were most likely to change their opinions.

The fact that individuals are able to change their opinions and form more sophisticated perspectives after a single dialogue is quite encouraging. Often, public opinion polls can reflect “off-the-cuff” answers to questions that people have not previously considered (Yankelovich, 1991). This study has provided support for the efficacy of deliberative dialogue in promoting greater understanding of access to higher education. This process can be useful not only as a means of civic education and engagement for its own sake, but also for those who are directly involved in these issues. High school students and their parents might benefit greatly from discussing these issues, especially if they have not had the time, opportunity, or information required to think deeply about going to college. In some cases, such an intervention might be what is needed to encourage a careful consideration of one's own plans for postsecondary education.

Furthermore, an increased understanding of college access can be useful to citizens making judgments about educational policies. In contrast to social marketing techniques, which seek to convince people to take a particular view or engage in a particular behavior (Andreasen, 1995; Kotler & Zaltman, 1971), deliberative dialogue

allows participants to gain a greater understanding of access to college writ large. Therefore, citizens will be better prepared to consider not only a single current issue (e.g., affirmative action), but also other relevant issues of importance (e.g., the reciprocal relationship between the local economy and educational attainment).

Future Research

This study provides some useful information about the impact of these dialogues on people's perceptions. However, there are additional questions that should be explored. First, in this project, the questionnaires were administered immediately before and after the dialogue, illustrating the changes that occurred over a 90-minute period. However, it is unclear how long these attitude shifts last. Do they eventually disappear over time? Or might they become even more pronounced, as people continue to think about these topics after the dialogue?

Second, the impact of attending a single dialogue is probably quite small when compared to sustained thinking and discussion about an issue. It would certainly be possible for a group of people to continue conversations about college access over a period of time. How might this extended deliberation process affect the opinions of individuals or the group as a whole? Finally, it would be useful to consider what drives these changes in attitudes. What specifically leads people to reconsider their perspectives (e.g., factual information, personal stories from other participants, etc.)? The answers to these questions will enable educators and community members alike to increase awareness around the important issue of access to college.

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Table 1

Paired T-tests for Pre-test and Post-test Questionnaire Responses

	Mean		<i>t</i>	<i>df</i>	<i>p</i>
	Pre-test	Post-test			
1. It is important for people to go to college.	4.41	4.23	6.050	456	<.001
2. Those who work hard enough can graduate from college.	3.94	3.88	1.602	458	>.10
3. Only the best and the brightest high school students should go to college.	1.86	1.94	-1.968	453	.05
4. Colleges and universities play an important role in shaping responsible citizens.	4.05	4.01	0.921	455	>.10
5. Race, ethnicity, and gender should be considered in college admissions.	2.82	2.94	-2.808	457	.005
6. Scholarships should generally be given to students with the highest grades and test scores.	2.72	2.52	4.636	457	<.001
7. High tuition prevents many people from going to college.	4.15	4.23	-1.946	463	.05

Table 2

Principal Axis Factor Analyses of Pre-test Questionnaire Responses

	Factor		Value of college
	1	2	
1. It is important for people to go to college.	.162	.258	.508
2. Those who work hard enough can graduate from college.	-.055	.635	.134
3. Only the best and the brightest high school students should go to college.	-.664	.033	-.110
4. Colleges and universities play an important role in shaping responsible citizens.	-.022	-.031	.418
5. Race, ethnicity, and gender should be considered in college admissions.	.138	-.238	.140
6. Scholarships should generally be given to students with the highest grades and test scores.	-.308	.085	.011
7. High tuition prevents many people from going to college.	.340	-.163	.273

Table 3

Principal Axis Factor Analyses of Post-test Questionnaire Responses

	Factor		
	Meritocracy	Recognition of barriers	Value of college
1. It is important for people to go to college.	-.281	.183	.485
2. Those who work hard enough can graduate from college.	.025	.485	.141
3. Only the best and the brightest high school students should go to college.	.585	.042	-.241
4. Colleges and universities play an important role in shaping responsible citizens.	-.076	-.065	.542
5. Race, ethnicity, and gender should be considered in college admissions.	-.123	-.544	.173
6. Scholarships should generally be given to students with the highest grades and test scores.	.662	.016	.034
7. High tuition prevents many people from going to college.	-.314	-.110	.138

Table 4

Multiple Regression Analysis Predicting Magnitude of Attitude Change

Variables	<i>B</i>	<i>SE</i>	<i>\$</i>
Pre-test: It is important for people to go to college.	.007	.023	.015
Pre-test: Those who work hard enough can graduate from college.	.010	.016	.031
Pre-test: Only the best and the brightest high school students should go to college.	-.024	.020	-.059
Pre-test: Colleges and universities play an important role in shaping responsible citizens.	-.025	.019	-.064
Pre-test: Race, ethnicity, and gender should be considered in college admissions.	-.032	.012	-.139**
Pre-test: Scholarships should generally be given to students with the highest grades and test scores.	.035	.014	.121*
Pre-test: High tuition prevents many people from going to college.	-.036	.017	-.106*
Female	.070	.030	.111*
Age	.070	.017	.271***
Person of color (dummy-coded)	.064	.036	.089+
Bachelor's degree or higher (dummy-coded)	-.106	.043	-.163*
Intercept	.361	.165*	
R ²	.094		
N	422		

+ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$