Kids Voting and Political Knowledge: Narrowing Gaps, Informing Votes*

Patrick C. Meirick, *University of Oklahoma*

Daniel B. Wackman, *University of Minnesota*

Objectives. Kids Voting USA is a program designed to educate schoolchildren about the democratic process and foster their political socialization. This article set out to explore the consequences of the Kids Voting program for political knowledge, knowledge gaps, and attitude-behavior consistency. *Methods.* A sample of seventh and eighth graders in an urban school district were surveyed before ($N = 385$) and shortly after ($N = 648$) the 2000 general election. *Results.* Kids Voting exposure was positively related to political knowledge at Time 2 even after controlling for demographics, scholastic achievement, and attention to campaign news. There was no evidence that knowledge gaps widened between Time 1 and 2; in fact, African Americans and those with low initial knowledge gained the most. As political knowledge increased, party ID and issue attitudes became more predictive of candidate preference. Kids Voting exposure, too, was positively related to consistency between party ID and candidate preference, a relationship that was partially mediated by political knowledge. *Conclusions.* Political knowledge among these adolescents appeared to function much the way it does in adults: it equipped them to make political decisions that better reflected their attitudes. Kids Voting seems to contribute to this process, through knowledge and perhaps other avenues, without increasing knowledge gaps.

Anyone who has watched *The Tonight Show with Jay Leno* knows that at least some people in the United States lack even rudimentary political knowledge. Leno accosts passersby on the street and asks them questions like: "Who is the vice president of the United States?" The people blush, squirm, and sometimes take a wild guess, much to the amusement of the studio audience. Of course, only the ignorant appear on the show; those who have the correct answer typically get edited out, left on the cutting-room floor. But dozens of surveys over the last half-century have asked

*Direct correspondence to Patrick C. Meirick, Department of Communication, University of Oklahoma, 610 Elm Ave., Norman, OK 73019-2081 ⟨meirick@ou.edu⟩. He can share all data and coding information with anyone wishing to replicate the study. An earlier version of this article was presented at the Annual Conference of the Midwest Association for Public Opinion Research, Chicago, Nov. 22–23, 2002. This research was made possible by support from the Center for the Study of Political Psychology at the University of Minnesota. The authors also thank Kids Voting Minnesota and the St. Paul Public Schools. Finally, they gratefully acknowledge Christina Fiebich and Fang Wan for their collaboration in the data collection for the Kids Voting evaluation project, of which the current research was a part.

SOCIAL SCIENCE QUARTERLY, Volume 85, Number 5, December 2004
©2004 by the Southwestern Social Science Association

questions similar to those that Leno asks, and these surveys lead us to believe that Leno doesn't have to look very far to find his comedic foils (Converse, 1962; Neuman, 1986). As Delli Carpini and Keeter (1996:17) write: "Compared with what people ought to know as determined by a textbook model of citizenship, the public is ignorant about much of the detail of government and politics—just as conventional wisdom holds." Only about a third of people are able to name both their U.S. senators, 57 percent know which party is more conservative, and 59 percent can name the party to which their governor belonged; a little more than 70 percent are able to name the vice president (Delli Carpini and Keeter, 1996:74).

Research also suggests that the widespread lack of political knowledge in the United States is hardly a laughing matter. Normative theories of democracy assume a well-informed citizenry in which all are (more or less) equal in knowledge. Political knowledge is associated with more stable attitudes that are more predictive of political behavior. Without a certain degree of knowledge, people are unable to make political decisions that reflect their interests and values. Even researchers who tout "low information rationality" concede that more knowledge is better (Popkin, 1991).

Not only is the citizenry at large ill informed, but significant disparities in political knowledge exist between the rich and poor, men and women, and whites and blacks. Knowledge gap theory (Tichenor, Donohue, and Olien, 1970) would suggest that an influx of information (such as accompanies a political campaign) will only widen the disparities. However, some studies have found that information campaigns in general (Garramone and Atkin, 1986; Holbrook, 2002) and civics education in particular (e.g., McDevitt and Chaffee, 2000) can sometimes impart knowledge without widening knowledge gaps.

This article addresses the consequences of the 2000 presidential campaign and the Kids Voting program for the political knowledge and decision making of a sample of urban middle schoolers who were surveyed in late September to early October and again in mid November 2000. It should help shed light on the conflicting findings about knowledge gaps. It will be perhaps the first study to examine the interactional role of political knowledge in the candidate preferences of 12 and 13 year olds who may be thinking about politics in an adult way for the first time (Brainerd, 1978; Eveland, McLeod, and Horowitz, 1999).

Kids Voting and Political Knowledge

Created as a potential remedy for political disaffection and disengagement, Kids Voting began in Phoenix in 1988, became statewide in 1990, became nationwide in 1992, and today has programs in 30 states reaching more than 4.3 million students. Kids Voting consists of a K–12 curriculum with lesson plans designed to teach students about the importance of voting.

In addition, Kids Voting polling places are set up so that kids can go "vote" with their parents on election day. Previous research has demonstrated that Kids Voting increases adult voter turnout (Feldman, 1992; Merrill, 1993; Merrill, Simon, and Adrian, 1994; Simon and Merrill, 1998) and student and adult news media use (Chaffee, Moon, and McDevitt, 1995; McDeevitt and Chafee, 2000) and political discussion (Chaffee, Pan, and McLeod, 1995).

One of the five central lessons of the Kids Voting curriculum is studying the candidates and issues, so it would make sense to expect it to affect political knowledge. In one study, teachers almost unanimously thought Kids Voting increased their students' political knowledge (Simon and Merrill, 1998). McLeod, Eveland, and Horowitz (1995) found that students involved in a Kids Voting program were better informed about civics and about current candidates. Likewise, McDevitt and Chaffee (2000) found a significant positive correlation between Kids Voting curriculum exposure and election knowledge. There are some question marks, however: McDevitt and Chaffee (2000) found that the relationship between Kids Voting exposure and knowledge became nonsignificant when controlling for demographics, and McLeod, Eveland, and Horowitz (1998:197) concluded that Kids Voting's impact on knowledge was "largely indirect, through communication behaviors" such as discussion and attention to news, exposure to which is related to political learning (Valentino and Sears, 1998).

H1: *Kids Voting exposure will be positively related to political knowledge.*

Knowledge Gaps

Regardless of whether they were highly exposed to the Kids Voting curriculum, the five or six weeks before election day 2000 likely presented students with a great deal of political information. Given that existing knowledge facilitates not only the processing of information but also the acquisition of further knowledge (Price and Zaller, 1993; Bennett, 1994), it might make sense to assume that those with greater existing knowledge would gain more information from an intervention like Kids Voting or the final push of a presidential campaign, thereby widening existing knowledge gaps. This interpretation is a micro-level twist on the original macro-level conception of the knowledge gap hypothesis (Tichenor, Donahue, and Olien, 1970), which posits causes in the social structure (rather than the cognitive structure) for knowledge gaps and their tendency to widen. There is evidence for both interpretations, both of which would generally predict widening knowledge gaps with an infusion of information.

However, McDevitt and Chaffee (2000) found that exposure to a Kids Voting curriculum had greater effects on news viewing and attention to news for students who were low in socioeconomic status. The interaction of SES and curriculum exposure was not significant for election knowledge,

but the sign of the interaction term suggested that it was more likely that the knowledge gap was closing rather than widening. In another analysis of that data, McDevitt and Chaffee (1998) showed that the relationship between political knowledge and Kids Voting exposure was stronger for students of low socioeconomic status. McLeod, Eveland, and Horowitz (1998) reported that Kids Voting succeeded in narrowing knowledge gaps associated with socioeconomic status and gender, although above-average students benefited more than other students. Dealing with media use rather than Kids Voting, Garramone and Atkin (1986) found no evidence that the relationship between media exposure and political knowledge was any stronger for students who were interested in politics or school than for those who weren't. Moreover, they found hints that media exposure was more strongly related to intended political participation for those students who were not interested in politics or school.

McDevitt and Chaffee (2000:265) based their hypothesis about narrowing knowledge gaps on the ability of campaigns to "more strongly stimulate the political orientations of exposed students who are less scholarly or uninterested in politics." The stimulation was presumed to be based on the novelty of the information for low-SES groups, who tend to pay less attention to political news (Drew and Reeves, 1980). The final stage of presidential campaigns tends to make campaign information so ubiquitous that even those who are not seeking information learn (Trent and Friedenberg, 2000). For instance, those low in political knowledge report greater learning from late-night comedy than those high in political knowledge (Pew Research Center for People and the Press, 2000).

H2: *Minorities, females, low academic achievers, and those with lower initial levels of political knowledge will show greater political knowledge gains between Time 1 and Time 2 than will whites, males, higher academic achievers, and those with higher levels of initial knowledge.*

Does Political Knowledge Matter?

Normative theorists typically argue that a well-informed electorate is essential to the functioning of a democracy. Yet it has become clear that the electorate is not well informed (Campbell et al., 1960; Converse, 1962, 1964; Delli Carpini and Keeter, 1996). Some marvel at the "paradox" that the U.S. political system functions as well as it does given the low levels of political knowledge they see (Neuman, 1986).

Some scholars contend that widely dispersed political knowledge isn't necessary for the democratic system to function. One such argument is made on the aggregate level, and the other on the individual level. Regarding the former, Converse (1990) and Page and Shapiro (1992) follow Condorcet's jury theorem in arguing that, in the great scheme of things, those with little

knowledge do little harm to the overall coherence of the public's verdict because of the magic of aggregation. That is, voting errors would cancel each other out, amounting to random noise, so that those who have more political knowledge make the real decision. Yet two problems remain. One is that, as Bartels (1996) argues, it is unlikely that voting errors will be random. Systematic errors would compound instead of canceling each other out. Another problem is normative. However harmless political illiteracy may be on a macro level, it would seem to be tantamount to disenfranchisement for unknowledgeable individuals on a micro level. The aggregation argument suggests that people with low knowledge have no voice (or an inarticulate one, capable only of "noise") in the democratic process. If so, the situation is antithetical to normative notions of democracy.

On the individual level, Page and Shapiro (1992), Popkin (1991), and Sniderman, Brody, and Tetlock (1991) argue that even people low in political knowledge can pick up on crucial cues and make rational voting choices that conform to their interests. Popkin (1991), for one, contends that a high level of textbook civics knowledge (e.g., ability to name political leaders) is not required to meaningfully consider relevant issues. "Whereas the 'incompetent citizen' literature is good for telling us the many things voters do not know, it is not so good at providing clues about what they *do* know" (Popkin, 1991:43, emphasis in original). People may have a general idea of which political party gibes better with their interests and values, for instance, and this can serve as a useful heuristic.

Still, Popkin concedes that although people can get by with less information, more is better. Popkin (1991) points to classic studies (Berelson, Lazarsfeld, and McPhee, 1954; Lazarsfeld, Berelson, and Gaudet, 1944) that showed voters' misperceptions of their preferred candidates' issue stands decreased when campaigns focused on those issues. Clearly, knowledge of candidates' issue positions is an important kind of information for people to have in making "good" voting decisions. Likewise, Bartels (1996) demonstrates that a hypothetical model of a "fully informed voter" behaves quite differently than less knowledgeable counterparts. For instance, fully informed voters are less likely to vote for an incumbent, presumably because they have enough information about an opponent to feel comfortable voting for him or her.

Perhaps the most thorough account of the functioning of political knowledge comes from Delli Carpini and Keeter (1996). They provide convincing evidence that knowledge enables people to make political decisions that are more consistent with and more reflective of their attitudes. For instance, political conservatism was a much better predictor of voting for Bush in 1988 among those high in knowledge than in those low in knowledge (Delli Carpini and Keeter, 1996:258). Kallgren and Wood (1986) found that people who had greater environmental knowledge had more accessible beliefs in a thought-listing procedure. As a consequence, their petition-signing behavior two weeks later was much more consistent with their attitudes than was the behavior of those low in knowledge.

Would we find these same relationships for 12 and 13 year olds just starting to think about politics? It is hard to say; most studies of adolescents and politics have treated political knowledge exclusively as an outcome variable, a proxy for political socialization. Piaget held that children start to develop "formal operations," the cognitive ability to handle abstract thought, at about age 12 (Brainerd, 1978). If so, children's capacity "to think about political matters as 'adults' should begin at about this time" (Eveland, McLeod, and Horowitz, 1999:701). In examining the role of age in acquisition of political knowledge, Eveland, McLeod, and Horowitz (1999) did not find a quantum leap coinciding with this age range. But the relationship between knowledge and attitude-behavior consistency among adolescents has received little or no attention. Based on the findings for adults, we predict:

H3: *Political knowledge will be positively related to attitude-behavior consistency.*

In large part because we expect exposure to the Kids Voting curriculum to increase political knowledge, as stated in H1, we predict:

H4: *Exposure to Kids Voting will be positively related to attitude-behavior consistency.*

Finally, because we expect that the effect of the Kids Voting (KV) curriculum on attitude-behavior correspondence is due in large part to its effects on political knowledge, we predict:

H5: *Political knowledge will at least partially mediate the relationship between Kids Voting exposure and attitude-behavior consistency.*

Method

Sample

The data for this study were collected with paper-and-pencil questionnaires about five weeks before, and again two weeks after, the 2000 general election. The data here were collected in conjunction with a study aimed at evaluating the Kids Voting program for an urban public school district in St. Paul, Minnesota. Although we surveyed students in the third through twelfth grades, we focus here on students in the seventh and eighth grades. The study was run in four middle schools selected to be roughly representative of the district's demographics. For the purposes of this study, the *N* for Time 1 is 385 and the Time 2 *N* is 648 (the smaller *N* at Time 1 is due to a split sample). The *N* for the panel is 297. Of those in the Time 2 sample, about 52 percent of the students were female, 68 percent were members of racial or ethnic minorities, and 31 percent indicated that their parents were not born in the United States.

Measurement

Kids Voting Exposure. Chaffee's (e.g., McDevitt and Chaffee, 2000) scale of student-reported KV exposure was used. We asked students in yes-or-no questions whether they recalled being taught four specific topics from the KV curriculum and if they recalled being taught anything from Kids Voting. An additional item in Chaffee's index, a one to five scale rating how much the election was discussed in class, had to be dropped for low reliability. The remaining scale had somewhat subpar reliability ($\alpha = 0.49$). Teachers also were asked to report the amount of class time and the topics they had covered, but no reports for secondary teachers were returned.

Political Knowledge. Several types of political knowledge were measured, but based on reliability and our desire for straightforward tests, we decided to use an overall measure incorporating all of them. The final scale consisted of 14 items including three background civics questions (e.g., voting age), five candidate knowledge questions (e.g., which candidate was governor of Texas), and six questions about the candidates' issue positions (e.g., "Which one wants to cut taxes by the biggest amount?"). Questions were posed in a multiple-choice format with four possible answers, including "Neither" for candidate and issue knowledge and "I don't know" for all three types. Correct answers were scored as 1, while incorrect, don't know, and nonanswers were scored as 0, and were summed to create the overall knowledge scale. Alpha was 0.66 at Time 1 and 0.67 at Time 2.

Issue Attitudes. The students were asked to indicate their attitudes on the six partisan issues addressed in the issue knowledge section. These items took the form of statements (e.g., "The government should make it harder to buy guns") to which students showed their agreement or disagreement on a five-point scale. Responses to the conservative issues (tax cuts, military spending, private school vouchers) lacked coherence with each other and (reverse coded) with the liberal issues. Indeed, attitude measure stability is often a concern in research on children (Vaillancourt, 1973). However, the three liberal issues (Medicare drug benefits or "helping older people buy medicine," gun control, and the environment) did form a relatively reliable scale, with alphas of 0.57 at Time 1 and 0.55 at Time 2.

Party Identification. Students were asked whether they considered themselves Democrats, Republicans, other, or as having no party affiliation. For use as a continuous variable, party ID was made a bipolar scale with Democrats (1) and Republicans (–1) at the poles and "other party" and "no party" at the midpoint (0). The higher value was assigned to Democrats to correspond with the directionality of the liberal issue attitude scale.

Presidential Candidate Preference. Students were asked who they were for in the presidential race: Bush, Gore, someone else, or undecided. For use as a continuous variable, Gore (1) and Bush (–1) were assigned to opposite ends of a polar scale, with the rest at 0. As measured at Time 2, who respondents preferred is our measure of political behavior.

Campaign Interest and Attention. The present research uses three measures of campaign interest and attention. The first was a scale of interest in the presidential and senatorial campaigns that summed those two items; alpha was 0.79 at Time 1 and 0.71 at Time 2. The other two were asked at Time 2 only. One concerned how much attention the respondent paid to news about the presidential and senatorial campaigns ($\alpha = 0.69$). Finally, there was a two-item scale that addressed the frequency of campaign discussions with friends and with parents ($\alpha = 0.63$).

Other Variables. Other variables included demographics such as students' gender, race, self-reported grades in school, and whether their parents were born in the United States.

Results

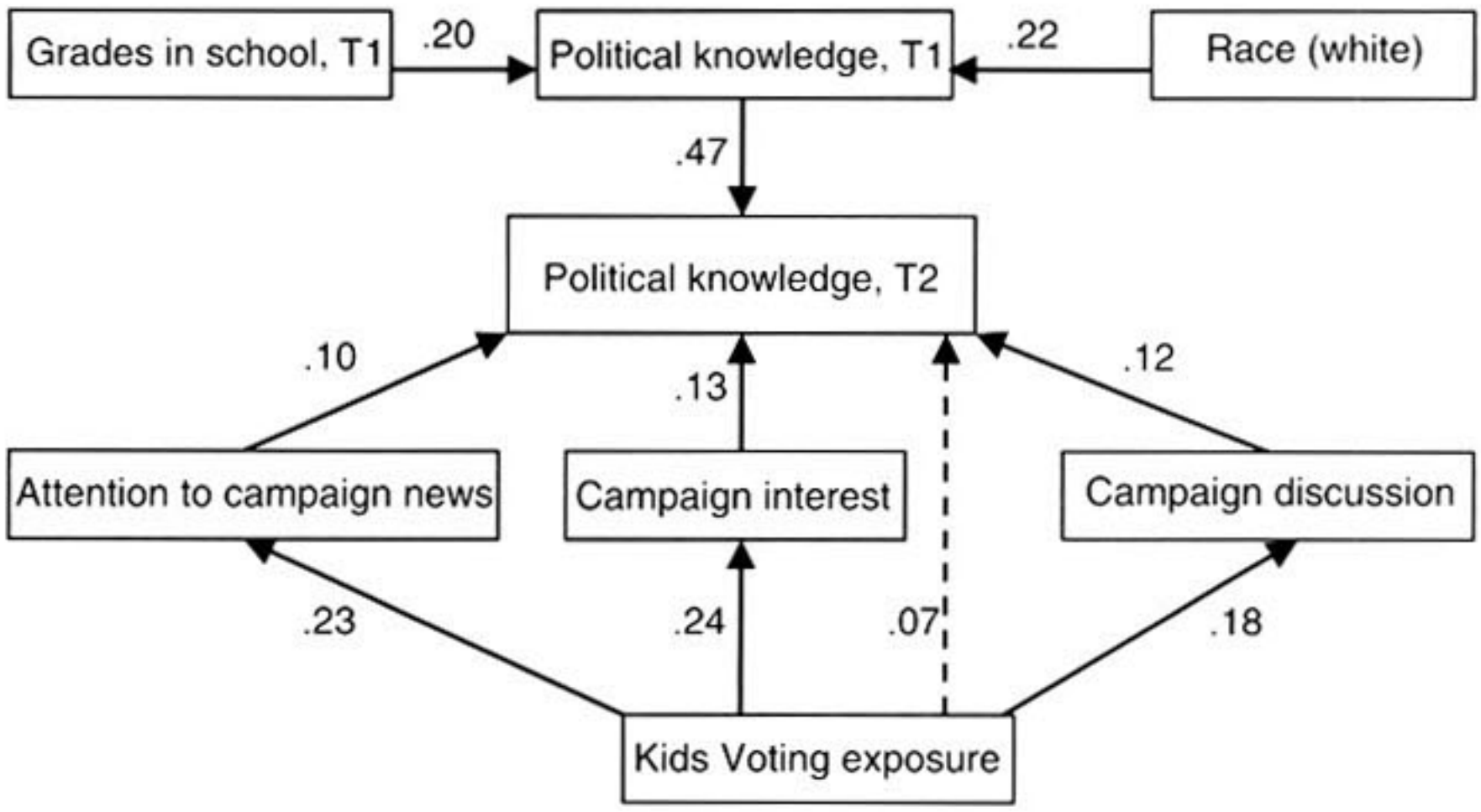
H1: Kids Voting and Knowledge

It was expected that exposure to the Kids Voting curriculum would be positively related to higher levels of knowledge at Time 2, after the curriculum had run its course. We found that the zero-order correlation between KV exposure and Time 2 knowledge was positive and significant ($r = 0.18$, $p < 0.001$), but McDevitt and Chaffee (2000) had seen a similar relationship disappear when demographics were controlled. So next, we ran a regression model that added three demographic variables (academic performance, gender, and minority status) and three communication variables (campaign discussion, attention to campaign news, and interest in the campaign) as competing predictors. Even though all predictors were significant except gender (and that was approaching significance), KV exposure remained a significant predictor of Time 2 political knowledge ($\beta = 0.09$, $p < 0.05$).

Still, this leaves out the strongest predictor of Time 2 knowledge: Time 1 knowledge. And it doesn't address the question of whether KV exposure has direct or indirect effects on political knowledge. So we specified a structural equation model in *Amos* in which race and grades predicted Time 1 knowledge, which in turn predicted Time 2 knowledge, and KV exposure would have both direct effects and indirect effects (through campaign discussion, interest, and attention to news) on Time 2 knowledge. Fit was satisfactory (CFI = 0.94; NFI = 0.94, IFI = 0.94).

FIGURE 1

Predictors of Time 2 Political Knowledge



NOTE: All paths represented by solid lines are significant at $p<0.05$. Coefficients are standardized regression weights. $N=297$.

As Figure 1 shows, all specified paths in the model were significant at $p<0.05$ except for the direct path from KV exposure to Time 2 knowledge ($\beta = 0.07$, ns). KV exposure had a comparable indirect effect on knowledge through campaign discussion, news attention, and interest, assessed by *Amos* at $\beta = 0.08$. Its total effect on Time 2 political knowledge, then, was $\beta = 0.15$, greater than that of any predictor in the model other than Time 1 knowledge. H1 is largely supported.

H2: Closing Knowledge Gaps

It was hypothesized that the influx of new information through Kids Voting and the end stages of the campaign would help to narrow gaps in knowledge, such as the one along racial lines shown in Figure 1. Our approach is to examine repeated-measures analyses of variance with overall political knowledge at Time 1 and Time 2 as the within-subject factor. In each case, the key term was the interaction between the independent variable (gender, race, academic achievement, prior knowledge level) and the repeated knowledge measure. We also planned a limited number of contrasts to address specific groups mentioned in the hypothesis.

Results were mixed. See Table 1. The knowledge gap between male and female students did not narrow significantly ($F_{1,290} = 1.952$, ns), nor did gaps between students with different levels of academic achievement ($F_{2,278} = 0.779$, ns). Taken as a whole, race was not quite a significant factor in differential learning ($F_{3,278} = 2.030$, $p = 0.11$). However, a planned

TABLE 1

Change in Political Knowledge by Gender, Grades, Race, and Initial Knowledge

	N	T1 Knowledge Mean (*SD*)	T2 Knowledge Mean (*SD*)	Gain	*F* Ratio
Gender					
Male	149	5.40 (2.79)	6.72 (3.02)	1.32	1.952
Female	143	4.82 (2.66)	6.59 (2.54)	1.77	
Grades in school					
As	66	6.39 (3.33)	7.94 (2.91)	1.55	0.774
Bs	133	4.99 (2.46)	6.75 (2.55)	1.76	
Cs or Ds	82	4.49 (2.44)	5.78 (2.58)	1.29	
Race					
White	97	6.13 (2.99)	7.54 (2.66)	1.40_a	2.030
Asian	71	4.70 (2.47)	6.00 (2.62)	1.30_a	
Black	52	4.31 (2.41)	6.65 (2.92)	2.35_b	
Other	62	4.65 (2.52)	5.97 (2.70)	1.32_a	
Time 1 knowledge					
High (6–14)	109	7.96 (2.00)	8.32 (2.65)	0.36_a	33.856***
Moderate (4–5)	107	4.50 (.50)	5.95 (2.31)	1.46_b	
Low (0–3)	82	2.02 (.86)	5.29 (2.39)	3.27_c	

***$p<0.001$; **$p<0.01$; *$p<0.05$; ^$p<0.10$.

NOTE: Within each column, different letters indicate the coefficients are significantly different at $p<0.05$.

contrast showed that African-American students, who had the lowest level of initial knowledge, gained significantly more knowledge than did white students ($t = -2.072$, df = 278, $p<0.05$). In the other two contrasts, Asians and other ethnic groups had knowledge gains essentially equal to those of white students.

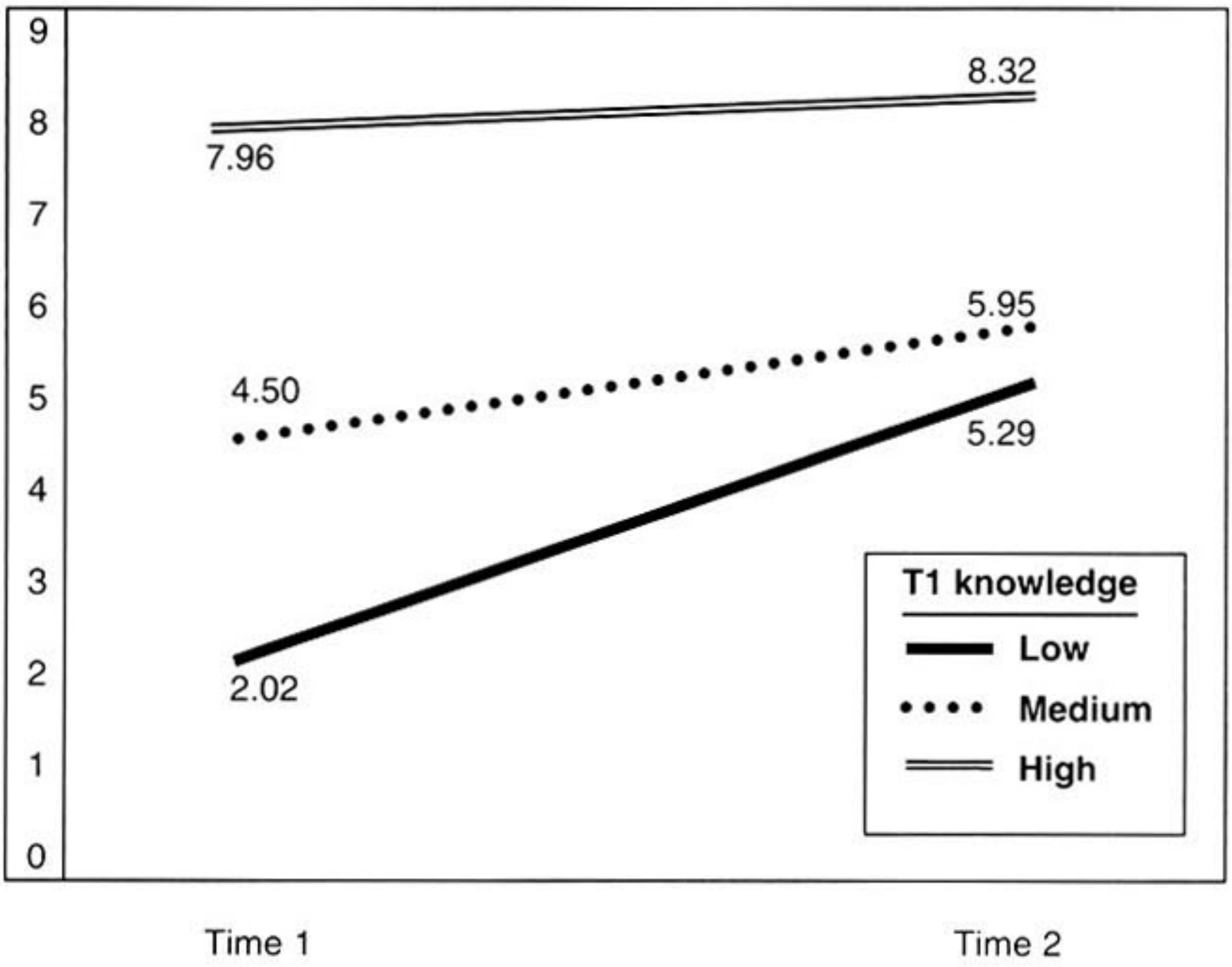
The clearest evidence for narrowed knowledge gaps was found for levels of initial knowledge. Time 1 knowledge was trichotomized for this analysis into low (0–3 points), medium (4–5 points), and high (6–14). The repeated-measures ANOVA showed a significant interaction between initial knowledge and knowledge change ($F_{2,295} = 33.856$, $p<0.001$). The interaction is shown in Figure 2. The gap between the high-knowledge group and the low-knowledge group narrowed from almost six points to just over three. The low-knowledge group gained significantly more than the medium- ($t = 8.21$, df = 295, $p<0.001$) and high-knowledge groups ($t = 5.088$, df = 295, $p<0.001$), while the medium-knowledge group outgained the high-knowledge group ($t = 3.335$, df = 295, $p<0.001$). Overall, H2 finds partial support.

H3: Knowledge and Attitude-Behavior Consistency

It was expected that political knowledge would be positively related with greater consistency between attitudes (operationalized here as party iden-

FIGURE 2

Overall Knowledge by Time 1 Knowledge Groups



tification and issue attitudes) and behavior, in this case candidate preference. "Behavior" is not a misnomer here: almost 60 percent of the students went to official polling places and "voted." The preferences of those who did were almost identical to the ones of those who did not, so we opted not to exclude nonvoters. To examine the attitude-behavior consistency hypothesis, we first examined correlations at Time 2 of vote choice with party ID and the issue attitude scale for groups with high, medium, and low levels of Time 2 overall knowledge. In a second analysis, we used regression to predict Time 2 vote choice, with knowledge interaction terms as key tests.

In the first analysis, we see that vote choice is significantly related to party ID for those medium and high in knowledge. See Table 2. Compared to those low in knowledge, the relationship between vote choice and party ID was significantly stronger for those high in knowledge ($z = 6.05$, $p < 0.001$) and for those with a medium level of knowledge ($z = 3.89$, $p < 0.001$). The difference between the coefficients for those high and those medium in knowledge approached significance ($z = 1.72$, $p < 0.10$). This is consistent with the hypothesis. We also see that vote choice was significantly related to issue attitudes for those high in knowledge. The relationship was significantly stronger for those high in knowledge than for those low in knowledge ($z = 3.72$, $p < 0.001$) and for those of moderate knowledge ($z = 2.78$,

TABLE 2

Time 2 Attitude-Consistency Correlations by Time 2 Overall Knowledge

	Candidate and Party ID		Candidate and Issue Attitudes	
T2 Knowledge	*r*	*N*	*r*	*N*
Low	0.07_a	217	-0.07_a	215
Medium	0.44_b***	168	0.00_a	165
High	0.57_b***	227	0.28_b***	222

***$p<0.001$; **$p<0.01$; *$p<0.05$.

NOTE: Within each column, different letters indicate the coefficients are significantly different at $p<0.01$.

$p<0.01$). The difference between the coefficients for those moderate and those low in knowledge was not significant ($z = 0.67$, ns). The results of this analysis also lend support to the hypothesis.

In the second analysis, we used linear regression to predict Time 2 candidate preference. (Similar results were obtained with logistic regression in which the dependent variable was reduced to preferring Gore or not, but we chose linear regression because it allows richer data for the dependent variable as well as easier interpretation of the coefficients.) Table 3 shows four such models. The first model has none of the interaction terms that serve as tests of the hypotheses. As a baseline, it includes party ID, the issue attitude

TABLE 3

Predictors of Time 2 Voting for Gore in Linear Regression

	Model 1	Model 2	Model 3	Model 4
Predictor	β	β	β	β
Gender (female)	0.12**	0.11**	0.11**	0.11**
African American	0.09*	0.10*	0.09*	0.09*
Party ID (Democrat)	0.33***	0.31***	0.32***	0.31***
Issue attitudes (liberal)	0.06	0.06	0.05	0.06
Time 2 knowledge	0.06	0.06	0.07^	0.07
KV exposure	−0.05	−0.05	−0.06	0.06
Knowledge × party ID		0.16***		0.13***
Knowledge × issue attitudes		0.10**		0.10**
KV exposure × party ID			0.16***	0.11**
KV exposure × issue attitudes			−0.01	−0.04
R^2 (adjusted)	0.152	0.191	0.174	0.201

$N = 548$.

***$p<0.001$; **$p<0.01$; *$p<0.05$; ^$p<0.10$.

NOTE: Coefficients are standardized regression weights. Higher values for IVs indicated in parentheses. DV had three levels: Gore = 1, others/undecided = 0, Bush = −1.

scale, the KV exposure scale, and Time 2 overall political knowledge—these variables are centered to avoid collinearity problems when the interaction terms are added (Yu, 2000)—as well as dummy variables for gender and for being African American. Of these, three show a significant relationship such that being female, African American, or Democratic is positively related to voting for Gore.

The second model adds the knowledge interaction terms. The knowledge-by-party ID and knowledge-by-issue attitudes interactions are both significant, indicating that with increasing knowledge, Democratic party ID and liberal issue attitudes become more predictive of voting for Gore, in support of the hypothesis.

H4: Kids Voting and Attitude-Behavior Consistency

It was expected that Kids Voting exposure would promote greater consistency between attitudes and voting behavior, much as political knowledge does. This hypothesis is tested with a variation of the above regression model. See Table 3 once again. Model 3 in that table shows the baseline model of vote choice plus two interaction terms, those of KV exposure with party ID and issue attitudes. Again, the interaction terms are the key tests. One of the interactions, KV exposure-by-party ID, is significant, indicating that as KV exposure increases, those identifying as Democrats become more likely to vote for Gore. The KV exposure-by-issue attitudes interaction is not significant, however, so support for the hypothesis is mixed.

H5: Knowledge as a Mediator Between KV Exposure and Attitude-Behaviour Consistency

Baron and Kenny (1986) have set out four specific tests to establish mediation. The results under H4 fulfill the first step, showing a relationship between the initial variable, KV exposure, and the outcome, attitude-behavior consistency (at least in one case: greater consistency between party ID and vote choice). The second step, showing a relationship between KV exposure and the presumed mediator, political knowledge, was fulfilled by the results of H1. As for the third step, the results under H3 showed a relationship between the mediator, political knowledge, and attitude-behavior consistency, but that equation did not control for the initial variable, KV exposure (or rather, it controlled for the effect of KV exposure on candidate preference, but not for its effect on attitude-behavior consistency tested through interactions with attitude variables). As part of the fourth and final step, we will specify a regression model that includes key interaction terms for KV exposure as well as political knowledge. This will allow us to test attitude-behavior consistency's relationship with the mediator (political knowledge) controlling for the initial variable (KV exposure) and the initial

variable controlling for the mediator. If the KV-exposure-by-party ID interaction disappears, it would indicate that political knowledge completely mediated the effect of KV exposure on attitude-behavior consistency.

Model 4 shows this regression equation. See Table 3. Two results are especially worth noting. First, the interaction terms of political knowledge with party ID (and issue attitudes) remain significant. Second, the interaction of KV exposure and party ID remains significant as well, but it is attenuated compared to its coefficient in Model 3. A Sobel test (Sobel, 1982) indicates that the reduction in the coefficient is significant ($z = 3.08$, $p < 0.01$). This result indicates that political knowledge only *partially* mediates the relationship between KV exposure and attitude-behavior consistency.

Discussion

Kids Voting did indeed make a difference in political knowledge in this study. Notably, this result remained significant even when demographics and communication measures were included in the model, which was not the case for McDevitt and Chaffee (2000); one notable difference is that our study lacked a measure of SES. Past studies have found Kids Voting to have effects on media use and campaign discussion, which in turn facilitated political learning. We saw this here, as Kids Voting exposure was related to campaign interest, discussion, and attention to campaign news, all of which were related to political knowledge. But while others have concluded that the effects of Kids Voting on knowledge were "largely indirect" (McLeod, Eveland, and Horowitz, 1998:197), we found direct and indirect effects to be of comparable size.

We found evidence that the information influx the students received did not contribute to knowledge gaps. On the contrary, it narrowed those gaps in some instances, which is consistent with the findings of McLeod, Eveland, and Horowitz (1998). It may well be that political information campaigns (whether schoolwide or nationwide) can present novel stimulation that overcomes the learning advantages that accompany social status and/or sophisticated knowledge structures.

We found that those with greater political knowledge had attitudes that were more consistent with their voting behavior. As with the findings for attitude stability, correlations between vote choice and (1) party identification and (2) issue attitudes were both significant for those high in knowledge, and the high-knowledge groups had correlations that were greater than those of low- or medium-knowledge groups for one or both comparisons. The regression analysis showed that knowledge interacted with party identification and issue attitudes to improve prediction of candidate preference.

KV exposure also interacted with party ID such that the more students were exposed to the curriculum, the more likely it was that Democrats would vote for Gore. This effect was partly mediated by political knowledge, as we expected, but the fact that the effect remained significant in predicting

candidate preference suggests that Kids Voting encourages attitude-behavior consistency through other avenues. It may be that in stressing the importance of voting, the Kids Voting curriculum encourages students to expend more cognitive effort on their decision making. If so, Kids Voting would facilitate deeper processing not only by increasing students' ability to do so through increased political knowledge, but also by increasing their motivation.

However, Kids Voting did not interact with issue attitudes to improve prediction of vote choices, and some would argue party-line voting represents a heuristic shortcut that shortchanges the deliberative process. Perhaps. But remember the subjects here are barely teenagers. Political sophistication does vary with age (Eveland, McLeod, and Horowitz, 1999; Jennings and Niemi, 1974), and it was only among those in the highest tier of knowledge that we found *any* relationship between issue attitudes and candidate preference. It may be that at this age, the ability—regardless of motivation—to relate issue preferences, candidate positions, and candidate preferences is relatively rare. Meanwhile, the ability to use party ID as a heuristic to inform candidate preferences can lead to relatively rational choices.

This study has several limitations. Our study lacked a control group that was not exposed at all to Kids Voting, so ironclad inferences of causality can't be made. Perhaps because our subjects were not adults, the reliability of some of our scales suffered. In that our subjects were middle schoolers, our findings can't be generalized to an adult population; in that we drew them from one school district (and from just a few schools within that), we have no basis in statistical logic to generalize our findings to middle schoolers broadly defined. But in that the findings here echo previous work on political knowledge and political socialization, we have some confidence in their validity. Moreover, we see no clear reason that the relationships found in this study would not generalize to other American adolescents.

We can say with some confidence that exposure to Kids Voting contributed to political knowledge. Moreover, the influx of political information students received did not widen existing knowledge gaps; in some cases, it narrowed them. This is good news for educators and for those who want to overcome societal inequities. But the inconsistent findings regarding the effect of new information on knowledge gaps suggest that there is much yet to be learned.

Our findings regarding attitude-behavior consistency suggest that political knowledge works in much the same way for adolescents as it does for adults: it equips them to make political decisions that better reflect their attitudes, and therefore decisions that are normatively better. Kids Voting may contribute to this process, through knowledge and perhaps other avenues. Admittedly, it is yet to be demonstrated longitudinally that those involved with Kids Voting as adolescents become more engaged as adults; that is an important direction for future research. But if Kids Voting's gains prove lasting, we have hope that it can reduce the "noise" of voting error and give low-knowledge citizens a more articulate voice in the democratic process.

REFERENCES

Baron, R. M., and D. A. Kenny. 1986. "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations." *Journal of Personality and Social Psychology* 51:1173–82.

Bartels, Larry M. 1996. "Uninformed Votes: Information Effects in Presidential Elections." *American Journal of Political Science* 40:194–230.

Bennett, Stephen Earl. 1994. "The Persian Gulf War's Impact on Americans' Political Information." *Political Behavior* 16:179–201.

Berelson, Bernard R., Paul F. Lazarsfeld, and William N. McPhee. 1954. *Voting: A Study of Opinion Formation in a Presidential Campaign.* Chicago, IL: University of Chicago Press.

Brainerd, Charles J. 1978. *Piaget's Theory of Intelligence.* Englewood Cliffs, NJ: Prentice Hall.

Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter.* New York: John Wiley and Sons.

Chaffee, Steven H., Youngme Moon, and Michael McDevitt. 1995. "The Newspaper Industry and Kids Voting USA: A Win-Win Partnership." Presented to the 1995 AEJMC Convention, Communication Theory and Methodology Division. Washington, DC.

Chaffee, Steven H., Zhongdang Pan, and Jack M. McLeod. 1995. *Effects of Kids Voting San Jose: A Quasi-Experimental Evaluation.* Report to the Policy Study Center, Annenberg School for Communication, University of Pennsylvania.

Converse, Philip E. 1962. "Information Flow and the Stability of Partisan Attitudes." *Public Opinion Quarterly* 26:578–99.

———. 1964. "The Nature of Belief Systems in Mass Publics." In David E. Apter, ed., *Ideology and Discontent.* New York: Free Press.

———. 1990. "Popular Representation and the Distribution of Information." In John A. Ferejohn and James H. Kuklinski, eds., *Information and Democratic Processes.* Urbana, IL: University of Illinois Press.

Delli Carpini, Michael X., and Scott Keeter. 1996. *What Americans Know about Politics and Why it Matters.* New Haven, CT: Yale University Press.

Drew, Dan G., and Byron B. Reeves. 1980. "Children and Television News." *Journalism Quarterly* 57:45–54, 115.

Eveland, William P., Jack M. McLeod, and Edward M. Horowitz. 1999. "Communication and Age in Childhood Political Socialization: An Interactive Model of Political Development." *Journalism and Mass Communication Quarterly* 75:699–718.

Feldman, Stuart. 1992. "Young Enough to Vote: Kids Voting USA Voter Education Project." *Management Review* 18:7–8.

Garramone, Gina M., and Charles K. Atkin. 1986. "Mass Communication and Political Socialization: Specifying the Effects." *Public Opinion Quarterly* 50:76–86.

Holbrook, Thomas M. 2002. "Presidential Campaigns and the Knowledge Gap." *Political Communication* 19:437–54.

Jennings, M. Kent, and Richard G. Niemi. 1974. *The Political Character of Adolescence: The Influence of Families and Schools.* Princeton, NJ: Princeton University Press.

Kallgren, Carl A., and Wendy Wood. 1986. "Access to Attitude-Relevant Memory as a Determinant of Attitude-Behavior Consistency." *Journal of Experimental Social Psychology* 22:328–38.

Lazarsfeld, Paul F., Bernard Berelson, and Hazel Gaudet. 1944. *The People's Choice: How the Voter Makes Up His Mind in a Presidential Campaign.* New York: Duell, Sloan and Pearce.

McDevitt, Michael, and Steven Chaffee. 1998. "Second Chance Political Socialization: 'Trickle-up' Effects of Children on Parents." Pp. 57–66 in Thomas J. Johnson, Carol E. Hays, and Scott P. Hays, eds., *Engaging the Public: How Government and the Media Can Reinvigorate American Democracy.* Lanhan, MD: Rowan and Littlefield.

———. 2000. "Closing Gaps in Political Communication and Knowledge: Effects of a School Intervention." *Communication Research* 27:259–92.

McLeod, Jack M., William P. Eveland, and Edward M. Horowitz. 1995. "Learning to Live in a Democracy: The Interdependence of Family, Schools, and Media." Presented at the Annual Meeting of the Association for Education in Journalism and Mass Communication. Washington, DC.

———. 1998. "Going Beyond Adults and Voter Turnout: Evaluating a Socialization Program Involving Schools, Family and Media." Pp. 195–205 in Thomas J. Johnson, Carol E. Hays, and Scott P. Hays, eds., *Engaging the Public: How Government and the Media Can Reinvigorate American Democracy.* Lanhan, MD: Rowan and Littlefield.

Merrill, Bruce D. 1993. *Evaluating the Effectiveness of Kids Voting USA in the 1992 Presidential Election.* Unpublished manuscript.

Merrill, Bruce D., James Simon, and E. Adrian. 1994. "Boosting Voter Turnout: The Kids Voting Program." *Journal of Social Studies Research* 18:2–7.

Neuman, W. Russell. 1986. *The Paradox of Mass Politics: Knowledge and Opinion in the American Electorate.* Cambridge: Harvard University Press.

Page, Benjamin I., and Robert Y. Shapiro. 1992. *The Rational Public.* Chicago, IL: University of Chicago Press.

Pew Research Center for the People and the Press. 2000. *The Tough Job of Communicating with Voters.* Available at ⟨http://people-press.org/reports/display.php3?PageID=243⟩.

Popkin, Samuel L. 1991. *The Reasoning Voter: Communication and Persuasion in Presidential Campaigns.* Chicago, IL: University of Chicago Press.

Price, Vincent, and John Zaller. 1993. "Who Gets the News? Alternative Measures of News Reception and Their Implications for Research." *Public Opinion Quarterly* 57:133–64.

Simon, James, and Bruce D. Merrill. 1998. "Political Socialization in the Classroom Revisited: The Kids Voting Program." *Social Science Journal* 35:29–42.

Sniderman, Paul M., Richard A. Brody, and Philip E. Tetlock. 1991. *Reasoning and Choice: Explorations in Political Psychology.* New York: Cambridge University Press.

Tichenor, P. J., G. A. Donohue, and C. N. Olien. 1970. "Mass Media Flow and Differential Growth in Knowledge." *Public Opinion Quarterly* 34:159–70.

Trent, Judith S., and Robert V. Friedenberg. 2000. *Political Campaign Communication: Principles and Practices,* 4th ed. Westport, CT: Praeger Publishers.

Vaillancourt, Pauline Marie 1973. "Stability of Children's Survey Responses." *Public Opinion Quarterly* 37:373–87.

Valentino, Nicholas A., and David O. Sears. 1998. "Event-Driven Political Communication and the Preadult Socialization of Partisanship." *Political Behavior* 20:127–54.

Yu, C H. 2000. "An Overview of Remedial Tools for Collinearity in SAS." Pp. 196–201 in *Proceedings of 2000 Western Users of SAS Software Conference.* Scottsdale, AZ: WUSS.