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Mass Communication and Political Socialization

Newspapers more than other media and media more than other influences produced gains in political knowledge of adolescents during the 1968 campaign, and, the authors report, also influenced opinions.

► Analyses of the agencies of political socialization generally relegate the mass media to a secondary role at best. While the media are often listed as socialization agents alongside parents, schools and peers, there has been little evidence for mass communication as a causal element in a child's development of political cognitions and behaviors.[1] Debate usually centers around the relative effects of the schools *vs.* the family; the media are considered sources of reinforcement of processes initiated by the more primary agents; peer political influences are assumed to be important but have not been studied directly.[2]

Attempts by Jennings and his colleagues to demonstrate the impact of parents and schools on political socialization have yielded little, however.[3] They have found only minor evi-

[1] See, *e.g.* Herbert Hyman, *Political Socialization* (Glencoe, Ill.: Free Press, 1959); Richard E. Dawson and Kenneth Prewitt, *Political Socialization* (Boston: Little, Brown and Co., 1969).

[2] Robert D. Hess and Judith V. Torney, *The Development of Political Attitudes in Children* (Chicago: Aldine Publishing Co., 1967); Hyman, *op. cit.;* Dawson and Prewitt, *op. cit.*

[3] M. Kent Jennings and Richard Niemi, "Patterns of Political Learning," *Harvard Educational Review,* 38:443-67 (Summer 1968); Jennings and Niemi, "The Transmission of Political Values from Parent to Child," *American Political Science Review,* 62:169-84 (March 1968); Kenneth P. Langton and Jennings, "Political Socialization and the High School Civics Curriculum," *American Political Science Review,* 62:852-67 (September 1968); Langton and Jennings, "Acquisition of Political Values in the Schools," *American Political Science Review,* 63:51-65 (March 1969); Langton, *Political Socialization* (New York: Oxford University Press, 1969).

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dence that the child models his political orientations on those of his parents; differences accounted for by variations in school curricula appear negligible. The basis for minimizing the role played by mass media, by contrast, has not been based on this kind of empirical test, but on generalizations from research on processes other than political socialization.

The most complete exposition of the view that the media have little direct effect on social attitudes and behavior has been presented by Klapper.[4] Citing a wide range of evidence and invoking psychological principles of learning and dissonance theory, Klapper proposes that the effects of mass communication are a) mostly simple reinforcement of existing predispositions due to "selective exposure," and b) largely neutralized by interpersonal influences in a "two-step flow" of communication. Klapper offered his generalizations quite tentatively and stressed that there is a small residuum of conditions under which the media have direct effects. But his generalizations are often cited as evidence (rather than hypothesis), primarily by network executives, that the media do not have substantial harmful effects on children.[5] In the political socialization literature, Dawson and Prewitt have cited Klapper's generalizations, which is reasonable enough, in the absence of evidence pro or con; they assert that media content mainly reinforces the child's political predispositions and that its effect is mediated by subsequent influences from interpersonal sources at home and in school.[6]

The "reinforcement" portion of this view seems shortsighted on at least two counts. First, the whole point of research on political socialization is that the child does not have political predispositions at the outset; thus, the question is not whether the media "convert" him to new attitudes, but whether he develops any attitudes at all. It is irrelevant to argue that the media reinforce political predispositions where none yet exist. If the child is politically aware enough to expose himself selectively to reinforcing media messages, he is already socialized. Secondly, Klapper's generalizations are based mainly on studies of opinions on controversial issues, whereas the most likely effects of the media in political socialization are in the acquisition of political knowledge and the building of interest in public affairs. The mass media institutions attempt, in the main, to provide information and stimulate interest, but to avoid taking sides or to present several sides for public examination. Knowledge and interest are important indices of political socialization, and should (hopefully) precede the development of particular opinions. Thus, one might find evidence of "direct" effects of mass communication if he looks for the kinds of influences the media are trying to provide, rather than those the media are supposed to avoid.

The "two-step flow" portion of the argument is perhaps even less persuasive, when applied to political socialization. For reasons similar to those advanced in the preceding paragraph, the media have repeatedly been found to have a direct role in providing information; the "two-step flow" is considered one of attitudinal influence specifically.[7] Further, if mass communication induces youngsters to discuss public affairs among themselves or with their parents, as the "two-step" model says, that in itself would seem to be a major direct effect of the mass media. As the authors of the classic Elmira election campaign study noted, it is heartening for democratic theory to find that

[4] Joseph T. Klapper, *The Effects of Mass Communication* (New York: Free Press, 1960).

[5] Including Klapper, who in 1962 was appointed director of social research for the Columbia Broadcasting System, and has since testified frequently in that capacity before governmental bodies concerned about possible detrimental effects of television on children.

[6] Dawson and Prewitt, *op. cit.*

voters discuss the ideas they acquire via mass media, before translating them into votes.[8] If mass communication has this kind of social effect on the developing child, it is indeed serving as an important agent of political socialization. Significant peer-group discussion of politics is unlikely, of course, until the group reaches a maturational level where most of its members have been politically socialized. But ultimately, the knotty question of the relative contributions of mass vs. interpersonal sources is one for empirical research, not argument and analogy.

Related Studies

Although there has been a great deal of research on adolescent media use, and on political socialization, these areas rarely overlap. Media-use studies usually only peripherally examine consumption of public affairs and political content, often because the research involves younger children. Studies of political socialization usually compare age groupings on such measures as political knowledge and trust in government; media use is treated as either an added dependent variable or as a secondary agent of socialization, as discussed above.[9] One study that has attempted to relate adolescent media use to political socialization is that of Jennings and Niemi; they treat media use for political news as a form of political activity, rather than as an agent of political socialization.[10] In a national sample of high school seniors and their parents, they found that 83% of the high school seniors and 87% of their parents report following public affairs at least "some" of the time. However, the parents paid more attention to the four major media (television, radio, newspapers, magazines) for public affairs and political information than did the seniors. They conclude:

> . . . increased media usage (for public affairs and politics) in adulthood means shifting from irregular to regular use . . . regular usage (for public affairs and politics) becomes more widespread during the high school years, because of class assignments if for no other reason. The process continues on after high school, so that regular media usage continues to climb well into the adult years. It seems likely that political discussions and other kinds of political activity follow the same line of development.

Antecedent socialization variables that might account for differential adolescent political media use have been examined by several communication researchers. Clarke's work indicates that parent-child "identification," "independence training" and reading skills are all related to public affairs reading among 10th grade boys.[11]

McLeod, Chaffee and Wackman have inferred that the structure of parent-child communication is a major determinant of both media use patterns

[7] Paul J. Deutschmann and Wayne A. Danielson, "Diffusion of Knowledge of the Major News Story," JOURNALISM QUARTERLY, 37:345-55 (Summer 1960); Wilbur Schramm, "Communication and Change," in Daniel Lerner and Wilbur Schramm, eds., *Communication and Change in the Developing Countries* (Honolulu: East-West Center Press, 1967), pp. 5-32; Bradley S. Greenberg, "Person-to-Person Communication in the Diffusion of News Events," JOURNALISM QUARTERLY, 41:489-94 (Autumn 1964); Verling C. Troldahl, "A Field Test of a Modified 'Two-Step Flow of Communication' Model," *Public Opinion Quarterly*, 30:609-23 (Winter 1966-67). The direct power of the media to inform without converting opinions is discussed in Klapper, *op. cit.*, pp. 84-90.

[8] Bernard R. Berelson, Paul F. Lazarsfeld and William N. McPhee, *Voting: A Study of Opinion Formation in a Presidential Campaign* (Chicago: University of Chicago Press, 1954), pp. 305-23.

[9] For a thorough analysis of the various components of political socialization from a systems-theory viewpoint, see David Easton and Jack Dennis, *Children in the Political System* (New York: McGraw-Hill, 1969).

[10] Jennings and Niemi, "Patterns of Political Learning," *loc. cit.*

[11] Peter Clarke, "A Study of Children's Reading Behavior," report to U.S. Department of Health, Education and Welfare, Office of Education Bureau of Research, March 1969 (Project No. 7-1069).

[12] Jack M. McLeod, Steven H. Chaffee and Daniel B. Wackman, "Family Communication: An Updated Report," paper presented to Communication Theory and Methodology Division of AEJ at Boulder, Colo., 1967; Chaffee, McLeod and Wackman, "Family Communication Patterns and Adolescent Political Participation," in Jack Dennis, ed., *Explorations of Political Socialization: A Reader of Contemporary Research* (New York: Wiley, forthcoming 1970).

and other indicators of political socialization.[12] They find the greatest attention to media public affairs reports by adolescents whose parents have stressed "concept orientations" but not "social harmony."

Schramm, Lyle and Parker found considerable public affairs viewing among adolescents but not among younger children.[13] Schramm also found significant relationships between reactions to 1958 election coverage, based on a scale in the form "not seen; saw but didn't particularly like; saw and particularly liked," and mental ability and grade. Predictably, intelligent 12th graders were more likely to have seen the election coverage and to have liked it, than 10th or 8th graders of any intelligence level.

Byrne examined media use and socio-economic status, race and residence.[14] He concluded that children with primarily television news exposure (over newspapers) tend to think favorably about government and feel it is effective. These children tend to be black, low SES and rural.

Hess and Torney show evidence that by the time they reach adolescence youths have attained considerable political knowledge, have discussed conditions and issues and have worn campaign buttons and passed out literature.[15] However, the mass communication research literature suggests that purposive use of media for public affairs and/or political information is virtually non-existent until late in the high school years.

In summary, there are major gaps in the empirical picture. Specific use of the media for public affairs content has not been examined in relation to cognitive or behavioral indicators of political socialization. The "developmental" studies consist of comparisons of age groups at a single point in time, rather than making repeated measurements on the same children longitudinally so that time order could be assessed and "processes" traced. Research has rarely been timed to coincide with major political events, such as election campaigns, when public affairs media use is likely to be greatest and political socialization probably proceeds most rapidly. To the extent that the question of mass *vs.* interpersonal sources has been considered an empirical one at all, it has been approached only indirectly as a matter of "which measures explain more variance," instead of explicit comparisons among the various sources. And there is no real evidence on the most basic question: can it be shown that the mass media have *any* direct effect on political socialization?

This study is an attempt to fill those research gaps. In contrast to the approach of most mass communication researchers, we treat media use as an independent variable and look at changes over time in consumption of media public affairs content during the 1968 national election campaign, and their relationship to changes in political cognitions and behaviors. In contrast to the developmental approach of most political socialization researchers, we are looking at a relatively short time period—albeit one in which we expect a great deal of political socialization to occur—on the assumption that socialization is a cumulative process (*i.e.* that a significant portion of the changes we trace will endure).

The general hypothesis is that public affairs media consumption accounts for some change in political cognitions and behavior by comparison with three other agencies of political socialization: parents, teachers and peers.

Study Design

The study was conducted in five Wisconsin cities, selected to provide socio-economic and political diversity in

[13] Wilbur Schramm, Jack Lyle and Edwin B. Parker, *Television in the Lives of Our Children* (Stanford, Calif.: Stanford University Press, 1961).

[14] Gary C. Byrne, "Mass Media and Political Socialization of Children and Pre-Adults," JOURNALISM QUARTERLY, 46:140-2 (Spring 1969).

[15] Hess and Torney, *Supra*, 2.

the total sample. The cities, located in Milwaukee and Fox River Valley regions, ranged in population from 18,000 to 68,000 (1960 census). In the 1968 general election, two of these cities gave large majorities to Hubert Humphrey, two to Richard Nixon, and the fifth gave Nixon a slight edge. In the April 1968 Wisconsin primary, Senator Eugene McCarthy easily defeated President Lyndon Johnson in three of the cities; the McCarthy-Johnson vote was close in the other two.

Data were collected by self-administered questionnaires filled out at school, in May (about one month after the primary election), and again in November (within two weeks after the general election). The eventual sample consisted of a panel of 1,291 students, about equally divided between two grade levels. The junior high sample consists of 639 who were 7th grade students in May and 8th graders in November; in some cities this involved a move from grammar school to a middle school. The senior high group (N=652) was in the 10th grade in May, 11th in November.

In our analyses, data from these two age groups are presented separately. Comparisons between them should be made guardedly, however, since they do not represent identical universes. We sampled only in public schools, and parochial school enrollment is much heavier at the junior high level; thus our senior high sample includes substantially more Roman Catholics. Also, junior high school district boundaries are not always coterminous with senior high boundaries, and in some districts our junior high students moved from a grammar school in May to a "middle school" in November.

This lack of comparability was not serious for our purposes. While we expect differences between grade levels in the *absolute level* on many measures, we hypothesize that the political socialization process, as indicated by the *relationships among* these measures, will be about the same at either grade level. Therefore we treat the two grade-level samples as separate replications of the same study. In each of our tables, the junior high and senior high data are juxtaposed so that the similarity of process can be assessed.

Although we have "Time 1-Time 2" measures taken six months apart, this should not be interpreted as a "before-after" study. The election campaign had begun in Wisconsin in January, aiming at the April primary. Many of our young respondents participated actively in the McCarthy campaign (sometimes called a "children's crusade") in early spring. Our May questionnaires reached the students during a lull in the year's campaigning, and the design can probably be best described as a "during-after" one.

Variables and Changes

Three kinds of measures were made in both May and November: mass media use, political knowledge and campaigning activity. Thus we focus on behavior rather than inferred cognitive states such as attitudes, although our estimates of behavior are necessarily based on self-report for media use and campaigning activity. Only political knowledge was tested directly—and this was the only measure for which we could not use identical questionnaire items in the two time periods. Because of elections, assassinations and other "real world" events, most of the knowledge questions we asked in May were not relevant in November—or the answers to them had changed. Therefore, no direct May-November comparison of knowledge could be made. Table 1 shows changes in the other variables, which are discussed below.

Political Knowledge. A 22-item factual knowledge test was administered in May, and a 29-item test in November. The May test asked for identification of the countries of four leaders; the parties and present jobs of

TABLE 1

May-November Changes in Campaigning and Media Use Indices

Index	*Grade*	*May mean*	*November mean*	*Net change*	*Correlation May vs. November*
Campaign Activity	Jr.Hi	.74	1.16	+.42	.31
	Sr.Hi	1.02	1.02	none	.47
TV Entertainment Viewing	Jr.Hi	2.21	1.77	−.44	.33
	Sr.Hi	1.92	1.29	−.63	.40
Newspaper Entertainment Reading	Jr.Hi	1.97	1.82	−.15	.31
	Sr.Hi	2.04	1.97	−.07	.46
TV Public Affairs Viewing	Jr.Hi	.51	.55	+.04	.37
	Sr.Hi	.51	.52	+.01	.51
Newspaper Public Affairs Reading	Jr.Hi	1.42	1.52	+.10	.50
	Sr.Hi	1.63	1.70	+.07	.53
Total Public Affairs Media Use	Jr.Hi	1.93	2.07	+.14	.53
	Sr.Hi	2.14	2.23	+.09	.63

five presidential candidates and three Wisconsin politicians; the local congressman; and the number of U.S. Senators from Wisconsin. The November test asked for the names and parties of the winning and losing candidates in the presidential, gubernatorial and senatorial elections; names of the winner and loser in the congressional election; the parties, states and jobs of Nelson Rockefeller and Eugene McCarthy; names of at least six cabinet-level departments of the U.S. government, and whether U.S. Supreme Court justices are elected or appointed.

Overall the senior high group scored better than the junior high sample on both tests. The junior high distributions of scores were approximately symmetrical, but the senior high distributions were skewed to the left. Since the primary purpose of the knowledge tests was to provide indices that could be compared in correlational analyses, these raw scores were converted into standardized rectangular distributions. This was done by breaking each of the four arrays (May vs. November, Jr. High vs. Sr. High) into deciles. These four indices have equivalent means and variances, and thus can be compared with one another in analysis, without serious distortion of the correlation coefficients due to differential reliabilities and distributions.[16]

The test-retest correlation (between the May and November knowledge indices) was .73 for the junior high sample and .72 for the senior high sample. These figures can be taken as the lower limit of reliability for the knowledge measures, since the correlations are depressed not only by unreliability but also by real change in comparative knowledge during the campaign.

It would be unreasonable to assume that knowledge increased uniformly for all items and all persons from May to November. An example is provided by the only questions that were asked in both May and November. These consisted of identification of the states and parties of Nelson Rockefeller and Eugene McCarthy. Senior high students were always more likely than junior

[16] A rectangular distribution was used so that we could check for linearity of relationships by cross-tabulation. Since the correlation coefficient assumes normal distributions, rectangularity tends to distort correlations somewhat, as do the non-interval properties of our scales. But correlations calculated with these four measures are comparable for partialing purposes, since they are equivalent in standard deviations, skewness and kurtosis. The sensitivity of correlation coefficients to non-normality is discussed in William J. Paisley, "Correlational Analysis and the 'Nature of the Data'," paper presented to the Pacific Chapter, American Association for Public Opinion Research, at San Francisco, May, 1965.

high to answer correctly. And the ability to identify Rockefeller correctly was slightly higher in November than in May. But the proportion correctly identifying McCarthy declined markedly from May to November. Some three-fourths of the sample could identify the senator as a Democrat in May; but only about one-third could do so in November, on a similarly worded question.[17] This doubtless reflects McCarthy's shift from a central figure in the Wisconsin primary in April, to his very minimal role in the fall election campaign. And it demonstrates that increases in political knowledge are not all cumulative; politics is episodic for youths, as well as for adults.

Campaigning Activity. Although adolescents are not permitted to participate formally in the political process by voting, they are not barred from attempting to influence those who do vote. We asked about a number of possible types of campaigning activity in the spring; three items were reported frequently enough to be repeated in the fall. These items (all forms of communicative output) provide a four-level index of campaign activism: wearing a campaign button, distributing campaign leaflets and trying to talk someone into liking a candidate.

Changes in the total score on this index are shown at the top of Table 1. There was a marked increase in campaigning among the junior high students, but no overall change for the senior high sample.

Table 1 also shows that the May-November correlations between the two activity indices were rather low. This is probably due both to unreliability (a measure that correlates only .31 with itself over time is unlikely to correlate significantly with another variable) and real change in terms of who is active.

Mass Media Use. Ten questions were asked about the content the student regularly consumes via the mass media. Five dealt with specific types of television programing and five with specific types of newspaper content. From these items, we constructed four indices of mass media use, representing consumption of Entertainment *vs.* Public Affairs content, via newspapers *vs.* television. The Public Affairs content indices were later combined into a single total use index to provide our best measure of mass media public affairs consumption. The following items were used in these measures:

a) TV Entertainment Viewing: regularly watching comedies, westerns and spy-adventure shows.

b) TV Public Affairs Viewing: regularly watching news specials and national news shows.

c) Newspaper Entertainment Reading: regular reading of comics and sports.

d) Newspaper Public Affairs Reading: regular reading of the front page, news about politics and news about the Vietnam war.

e) Total Public Affairs Media Use: sum of scores from (*b*) and (*d*).

The Entertainment content indices were intended as "control" categories; that is, we expected that they would not be related to changes in political socialization, whereas the Public Affairs categories would. It is conceivable, however, that Entertainment content could serve to attract the youngster to the media, after which he would be exposed to Public Affairs content. Therefore, we have retained the Entertainment categories throughout our analysis, even though we did not expect that they would account for political socialization directly.

Table 1 shows changes in these indices during the campaign. There was a self-reported decrease in Enter-

[17] It is tempting to interpret this as a subtle judgment by our respondents that McCarthy was not "really" a Democrat in the fall because he did not campaign actively for Hubert Humphrey. However, we found a similar (if less dramatic) May-November decline in the ability to identify Minnesota as McCarthy's home state, indicating a general decline in knowledge about the senator.

tainment consumption via both newspapers and television, and a reported increase in Public Affairs consumption. Whether these represent real changes or a tendency to give more socially desirable responses in the re-test is debatable. Comparison of the junior high vs. senior high means would suggest that there are no lasting trends away from Newspaper Entertainment Reading or toward TV Public Affairs Viewing. There may have been temporary changes of these types during the campaign, simply because the media are saturated with political material just before an election. The question of shifts in media habits during adolescent development awaits more thorough study; we are more interested here in the ways in which these indices relate to other variables.

The chance of our finding strong correlations is not great, however, to judge from the May-November correlations. All are rather low, and their depression cannot be plausibly attributed solely to massive real changes. It is not surprising that reliability is low, since most of our measures consist of only two or three items each. Fortunately, our Ns are large enough so that rather small correlations will be statistically significant; this factor helps to balance the unreliability of many of our measures.

It should also be noted in Table 1 that the May-November correlations are higher for the senior high than the junior high group, on every index. Most of these differences are statistically significant. Although it is conceivable that older youths are more consistent in these behaviors over time, the most likely explanation of these differences is again measurement reliability. The senior high students are more experienced at test-taking, and thus there is probably less error in their responses to our questions.

Time Order

As is so often the case in studies of this sort, we found that "almost everything correlated with everything else." But we are interested here in more than simple statistical associations among variables. We hope to develop some picture of the *process* of politicization during the campaign. This implies that we should arrive at statements about the *time order* of events. If use of mass media public affairs content "causes" political socialization, then it should a) be correlated with the criterion measures, b) precede them in time and c) be functionally, not fortuitously, related to them.

To test this kind of hypothesis, we used a variant of "cross-lagged" correlation, partialing for initial scores on the dependent variable. Figure 1 shows schematically the six correlations that are possible in a two-variable study when measures are taken at two different times. A simple cross-lagged test consists of the difference between the hypothesized time-order correlation (f) and the reverse time-order correlation (e). If there is no difference between these two correlations, then one has no evidence of a process in which the hypothesized independent variable precedes the dependent variable. However, the reverse does not necessarily hold; the simple cross-lagged test (f-e >0) is not in itself sufficient evidence to infer the hypothesized time order. One should also show that the hypothesized correlation (f) exceeds the static correlations within time periods (c and d).[18]

Finally, it is preferable to have a test of the explained change in the dependent variable that is independent of the initial level on that measure; this, in effect, controls for other possible independent variables, which might account for initial differences. One method would be to use gain scores, but these

[18] Failure to pass this test is inconclusive, especially if the hypothesized correlation is close to the static correlations. The latter will tend to be greater simply because of homogeneity of testing conditions, which enhances the associations between measures taken in a single reactive measurement administration—such as our self-administered questionnaires.

tend to be unreliable and poorly distributed and leave open the threat of a regression effect. A more satisfactory procedure is partial correlation, controlling for initial (Time 1) scores on the dependent variable. In terms of Figure 1, the standard partial formula would be $r_p = \frac{f\text{-}cb}{\sqrt{1\text{-}c^2}\sqrt{1\text{-}b^2}}$. However, it provides a better test of the time-order hypothesis if we build the cross-lagged test (*f*-*e*) into this formula. Accordingly, we have combined the standard partial correlation formula and the cross-lagged factor into the single computation $r_p = \frac{f\text{-}eb}{\sqrt{1\text{-}c^2}\sqrt{1\text{-}b^2}}$ by substituting the cross-lagged test for the more usual *f*-*c* portion of the numerator.[19]

The main results of our study are shown in Table 2, where political knowledge is the dependent variable, and in Table 3, where campaigning activity is the dependent variable. The independent variables include the five media use indices, plus (in Table 2 only) campaigning activity. Wherever asterisks appear in these tables, they indicate evidence contrary to the general hypothesis.

The only relationships in these tables that are totally free of counter-hypothetical evidence are those between Public Affairs media use (either TV or newspapers, or the two combined) and increased political knowledge (Table 2). Remarkably similar data at the two grade levels show the hypothesized correlation considerably higher than the reverse correlation, higher than the mean of the two static correlations, and highly significant when partialed on initial scores. Both media predict knowledge fairly well, and the combination of the two into a composite index yields even better prediction.

Two other relationships in Table 2 hold for the junior high group only. There are significant partial correlations between Entertainment use via both media, and political knowledge. In the case of TV Entertainment Viewing, the partialing technique seems to have uncovered a relationship that was not apparent from the raw hypothesized correlation alone. These findings suggest that, for the young junior high students, *any* use of the mass media tends to expose them to sources of increased political knowledge. By senior high age, however, these side-effects of non-selective media use disappear. In the case of TV Entertainment Viewing, there is a highly significant senior high negative relationship with political knowledge, as well as a mild negative relationship with campaigning activity (Table 3). (It is noteworthy that these two negative effects of TV Entertainment Viewing at the senior high level pass all our tests for time-order inference, *in the wrong direction*. Therefore, we should accept a negative causal inference and have not otherwise asterisked those rows in Tables 2 and 3.)

Campaigning Activity does not appear to enter into time-order relationships as either an independent variable (Table 2) or a dependent variable (Table 3). Rather consistently, the static within-time correlations of this variable with knowledge and media use are greater than the hypothesized time-lagged correlation. There is one exception, in Table 3, where Newspaper Public Affairs Reading predicts Campaigning Activity, at least for the junior high group. Since we consider the static-*vs*.-hypothesized correlation com-

[19] For this partialing technique, we have relied heavily on the reasoning of George W. Bohrnstedt, "Observations on the Measurement of Change," in Edgar F. Borgatta, ed., *Sociological Methodology 1969* (San Francisco: Jossey-Bass, 1969) pp. 113-33. The formula we have used differs from that given by Bohrnstedt, but is consistent with his line of argument. By partialing out the initial scores on the dependent variable, our analysis explains only *change* in that variable, which is our main interest. This method controls for the influence of external variables that might account for initial differences in the dependent variable. Substitution of the reverse (*e*) correlation for the static (*c*) correlation is based on the assumption of null conditions, and therefore does not prejudice the data against the null hypothesis.

TABLE 2

Correlations of Communication Indices with Political Knowledge

Independent Variable	*Grade level*	*Hypothesized r (f)*	*Reverse r (e)*	*Mean static r (c & d)*	*Partial r*	*Partial r sig. level*
Campaign Activity	Jr.Hi	.20	.18	.23**	.10	.01
	Sr.Hi	.27	.25	.28**	.13	.001
TV Entertainment Viewing	Jr.Hi	.00	−.12	−.05	.12	.01
	Sr.Hi	−.24	−.09	−.15	−.25	.001****
Newspaper Entertainment Reading	Jr.Hi	.18	.11	.17	.15	.001
	Sr.Hi	.07	.08*	.09**	.01	***
TV Public Affairs Viewing	Jr.Hi	.26	.18	.23	.20	.001
	Sr.Hi	.29	.21	.25	.21	.001
Newspaper Public Affairs Reading	Jr.Hi	.29	.18	.25	.23	.001
	Sr.Hi	.27	.17	.24	.23	.001
Total Public Affairs Media Use	Jr.Hi	.33	.22	.29	.26	.001
	Sr.Hi	.33	.23	.30	.26	.001

* Reject hypothesis, since reverse correlation exceeds hypothesized correlation.

** Hypothesis is dubious, since hypothesized correlation does not exceed mean static correlation.

*** Reject hypothesis, since partial correlation is non-significant.

**** Data indicate a negative inference, that media use lowers knowledge.

TABLE 3

Correlations of Communication Indices with Campaign Activity

Independent Variable	*Grade level*	*Hypothesized r (f)*	*Reverse r (e)*	*Mean static r (c & d)*	*Partial r*	*Partial r sig. level*
TV Entertainment Viewing	Jr.Hi	.02	.07*	.05**	−.01	***
	Sr.Hi	−.09	−.03	−.07	−.08	.05 ****
Newspaper Entertainment Reading	Jr.Hi	.11	.11*	.08	.08	.05
	Sr.Hi	.04	−.02	.04**	.04	***
TV Public Affairs Viewing	Jr.Hi	.13	.17*	.16**	.08	.05
	Sr.Hi	.19	.20*	.20**	.11	.01
Newspaper Public Affairs Reading	Jr.Hi	.22	.11	.20	.20	.001
	Sr.Hi	.25	.20	.27**	.18	.001
Total Public Affairs Media Use	Jr.Hi	.21	.17	.22**	.17	.001
	Sr.Hi	.27	.25	.29**	.18	.001

* Reject hypothesis, since reverse correlation exceeds hypothesized correlation.

** Hypothesis is dubious, since hypothesized correlation does not exceed mean static correlation.

*** Reject hypothesis, since partial correlation is non-significant.

**** Data indicate a negative inference, that media use lowers campaigning.

parison our weakest test against a causal inference (see Footnote 18), we could tentatively infer that Newspaper Public Affairs Reading leads to greater Campaigning Activity regardless of grade level. It should be stressed that this inference does not extend to TV Public Affairs Viewing, which appears to retard Campaigning Activity, if anything. In this connection, note that the Composite Public Affairs Use index predicts Campaigning Activity less well than Newspaper Public Affairs Reading alone (Table 3), despite presumed greater reliability.

In sum, the use of newspapers for public affairs news inputs emerges as an important functional variable in

TABLE 4

Mean Ratings of Sources of Information and Opinions about Current Affairs

	Grade level	Source Rated: Parents	Friends	Teachers	Mass Media
Rating as Source of Information	Jr.Hi	3.7	2.4	3.9	5.4
	Sr.Hi	2.8	2.7	3.8	5.7
Rating as Source of Opinions	Jr.Hi	3.7	2.5	3.3	4.5
	Sr.Hi	2.8	2.6	3.1	4.5

the process of political socialization. This behavior increases in incidence during the campaign, it is more frequent among the older adolescents and it appears to precede increased knowledge and activity. Television has a more mixed effect and may even deter active campaigning behavior. But specific viewing of public affairs programing does lead to knowledge gain.

It would be unremarkable if we were to infer simply that those who follow media public affairs reports know more about current events than do those who ignore these reports. But our findings indicate a more global process in our young respondents during the campaign. The hypothesized time-lagged correlations in Table 2 that exceed the corresponding mean static correlations can be interpreted operationally in this way: attention to media public affairs reports in May predicts the youth's November knowledge ranking better than it predicts his May knowledge ranking. This occurs despite the fact that the May knowledge measure tested information about matters that were in May's news, whereas the November knowledge measure tested information that was in the November media reports. As an "information gain" inference we can say that high media use during the campaign predicted a large relative *future* gain in knowledge better than it explained current knowledge.

This interpretation encourages the general inference that mass communication plays a causal role in the political socialization process.

Ratings of Sources

For our last set of analyses, we turn to a variable that was measured only in the November questionnaire; therefore it is open only to static analysis. We do, however, relate it to the process variables that have already been analyzed.

Rather than attempt to assess indirectly the relative impact of different agents of political socialization, we asked our respondents to make this comparison themselves. We listed the four sources that are commonly thought to be important: parents, friends, teachers and mass media. We asked each respondent to rate each of these on two bases: how much information he gets from the source and how much his personal opinions issue from it. Separate sets of questions requested this assessment for two current news topics: student conduct and student demonstrations at the University of Wisconsin, and the bombing halt in Vietnam and the peace talks. Ratings for these two topics were summed to provide index scores.

The results for this set of questions are presented in Table 4. The junior high and senior high data are quite similar with two exceptions. Parents are rated as a more important source of information and opinions for the junior high group. And there is a tendency for senior high students to rate the mass media higher as a source of information.

Comparing the sources, the mass media are clearly rated as the most important source of information and

(albeit to a lesser extent) personal opinions. Friends are the least important source. Teachers appear to be more a source of information than of opinion.

These self-report ratings contravene the prevailing view that inter-personal sources are more important than formal channels. The credence given to such data depends, of course, on the degree to which one is willing to trust a person's introspective inference about the influences on his thinking. Some researchers would prefer their own assumptions. Others consider it an open question, pending "more research." The latter is presented in Table 5, which consists of the correlations between the indices of media use, information and campaigning, *vs.* a composite source-rating index combining the "information" and "opinion" ratings shown in Table 4.[20]

There is, first, a validity check on the ratings of mass media as a source, where they are correlated against indices of mass media use. As expected, the media ratings tend to be correlated with Public Affairs consumption, but not with Entertainment Use; and the ratings of parents, friends and teachers are uncorrelated with Public Affairs use. Interestingly, TV Entertainment Viewing is associated with reliance on teachers, parents and friends for information.

The most impressive set of relationships in Table 5 concerns the central criterion measure of political knowledge. This variable is strongly correlated with the ratings given the mass media as a source of information and opinion. It is also rather strongly, but *negatively*, correlated with the ratings of the three more personal sources.

This provides corroboration for our main inference, that the use of mass media for public affairs information is an important factor in political socialization. The media are not simply a supplement to interpersonal communication, but constitute a major independent agency of personal political growth. Earlier, our correlational analyses pointed in that direction. Here, introspective ratings by the respondents themselves invite the same conclusion. And we have throughout relied primarily on criterion tests of knowledge, a variable on which the respondent cannot "fake" or distort his responses.

The data on campaigning activity in Table 5 are weak; there is at best a mild correlation with mass media ratings. From this and our earlier evidence, we conclude that active campaigning behavior is not closely associated with mass communication variables, with the possible exception of newsreading.

Conclusions

In all, our data point to the inference that mass communication plays a role in political socialization insofar as political knowledge is concerned, but its influence does not extend to overt behavior such as campaigning activity. Not surprisingly, this effect is a specific function of attention to public affairs content in the media, although entertainment content may "attract" younger children to the media so that they learn something about politics without necessarily intending to.

The association between media public affairs use and political knowledge is not one of mere coincidence in time; high media use during the campaign predicts high knowledge (relative to the student's age-peers) after the campaign —even when those factors that account for Time-1 knowledge are partialed out. This time-order evidence indicates that media use should be considered as an independent (or intervening) variable in the political socialization process, not merely as one of many dependent

[20] This summary measure was used for simplicity. The results shown in Table 5 are very similar to those that were found for both information and opinion ratings when these were analyzed separately.

TABLE 5

Correlations of Source Ratings with Other Variables (November only)[a]

Correlated Index	*Grade level*	*Parents*	*Friends*	*Teachers*	*Mass Media*
Political Knowledge	Jr.Hi	–.07	–.17	–.15	.23
	Sr.Hi	–.08	–.12	–.12	.25
Campaign Activity	Jr.Hi	.02	.02	.01	.05
	Sr.Hi	–.01	.03	–.02	.09
TV Entertainment Viewing	Jr.Hi	.07	.11	.11	.02
	Sr.Hi	.15	.09	.14	.08
Newspaper Entertainment Reading	Jr.Hi	–.01	.01	–.03	.05
	Sr.Hi	.06	.03	.03	.06
TV Public Affairs Viewing	Jr.Hi	.06	.01	.01	.05
	Sr.Hi	–.02	.04	.01	.14
Newspaper Public Affairs Reading	Jr.Hi	.05	.00	–.04	.11
	Sr.Hi	.06	.13	.07	.10
Total Public Affairs Media Use	Jr.Hi	.06	.00	–.02	.10
	Sr.Hi	.03	.11	.05	.15

[a] Correlations greater than .08 are significant at the .05 level; correlations of .11 and greater are significant at the .01 level.

variables. Since we have not used a strictly "experimental" design, there may be other factors (aside from media use) that contribute to changes in knowledge levels; but these factors cannot provide alternative explanations to our main inference, because their effect can only have occurred *after* our Time 1 (May) measures on the independent variable (media use). A reasonable model of political socialization would be as a *series* of changes in the child's orientation to "the outside world"; close attention to media public affairs reports seems to be one of the earlier events in that series, although by no means the earliest.

The development of political knowledge and political opinions appears to be a later event in the series; at least, our young respondents clearly attribute both informative and opinion-making powers to the media. The more knowledgable are more likely to say they rely on the media, whereas the less knowledgable turn to more personal sources for their information and opinions. Perhaps our most surprising finding is the extent to which the youngsters feel their opinions (as distinct from information) are based on mass media reports. They rate the media as more influential than parents, teachers or peers. Unfortunately we have no external test here of opinion-formation, so we can only report this as their introspective self-description, *i.e.* as a hypothesis. Since it is so clearly contrary to the prevailing "reinforcement" and "two-step" generalizations about mass media effects,[21] it is certainly worthy of more controlled investigation. Part of the confusion probably stems from an inclination by most researchers to look for media influences in *one* attitudinal direction, rather than ask the more fundamental question of whether the person forms *any* opinion. It is quite possible that many (even most) individuals form their opinions largely on the basis of mass media reports. Since these reports are "two-sided" on most issues, however, one person may form an opinion in one direction while a second person forms a directly contrary opinion based on the same information; when aggregate data on opinion *direction* are summed across many persons, these important

[21] Klapper, *op. cit.*; Dawson and Prewitt, *op. cit.*

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somewhat overstated the situation in his lead, but it is not really misleading and I wouldn't make an issue of it because the wires—especially UPI—do tend to overstate the lead in a grab for the headline. Much better, though, than they used to be in this respect."

The irony here is that he not only voiced the "newsroom hunch" about UPI, but he wrote the remarks on the AP story!

The most amusing comment—amusing because it perhaps somewhat pathetically points out some of the difficulties a reporter encounters in his quest for accuracy—came from another Washington source, also in public relations, who wrote: "We have checked the two stories you sent us and the source material . . . apparently used by the writers. Frankly, we found that our source material was not as clear as it should have been. In fact we later found it necessary to make some changes in our annual report, on which these stories were based."

Finally, a number of the returns were complimentary to the writers. Several, for example, noted such things as "a good journalistic rewrite with only minor errors" (UPI, 2 wording and 1 typo); or "This story contains some errors of fact but, given the complexity of the subject, is a reasonable survey" (AP, 3 wording, 1 mechanical, 2 typo, 1 number, 1 other factual).

Conclusion

On the basis of the sample drawn, the newsroom adage that AP is more accurate than UPI does not appear to be true. Discounting the mechanical problems with the AP machine, the difference between number of errors overall between the two services is not significant. Similarly, neither is the difference between the number of stories indicated by the sources as totally accurate significant. About the best that can be said—at least until a more probing study is made drawing on a much larger sample—is that one wire service is not more accurate than the other nor, parenthetically, that one is more inaccurate. In short, they can be viewed as both equally accurate or equally inaccurate.

The data suggest that when sources do perceive error in wire stories, the errors are somewhat more likely to be mistakes in reporting than in interpretation, even though sources are sometimes highly critical of interpretations.

The sample of AP stories contained 91 reporting errors, compared to 62 interpretation errors. Comparable numbers for UPI are 69 and 45, respectively. If "mechanical" errors are removed from the tabulations, the finding still holds—although the difference is smaller. In that case, AP stories contained 69 reporting errors, compared to 62 interpretation errors. UPI's comparable figures are 65 and 45, respectively.

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individual changes tend to neutralize one another so that it appears that "nothing" has happened. Analysis of opinion *formation* irrespective of direction would be likely to uncover more effects of mass communication.

We should consider the attitudinal effects of the mass media on political socialization as an open question. There is solid evidence of informational effects; beyond attitudes, there is little evidence of effects on overt political behavior. And of course there is much yet to be learned about other factors that account for differences in media public affairs use and consequent knowledge. Meanwhile, while media influences may be to an extent modified by intervening personal interactions, there can be little doubt that mass communication has some direct effects on the developing adolescent.