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ABSTRACT

This study utilized a cross-lagged correlational technique to determine the causal relationship among media exposure patterns, political and information level, and degree of interest in the 1972 Presidential campaign. It was hypothesized that exposure to campaign content in newspapers, television, radio, and news magazines would lead to higher levels of knowledge and interest. A reciprocal flow of causation from each variable back to exposure was also predicted. Undergraduate students at Michigan State and Colorado State Universities were administered a questionnaire five weeks before the presidential election, and again the day before the election. The analysis showed that October exposure predicted November knowledge above a "no cause" baseline and that the reverse correlation also exceeded the criterion figure. (Author/RB)

RECIPROCAL CAUSALITY AMONG POLITICAL INTEREST, POLITICAL KNOWLEDGE AND MASS MEDIA EXPOSURE

Paper presented to Political Communication Division at 1974 International Communication Association, New Orleans

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Abstract

The main study utilizes a cross-lagged correlational technique to determine the causal relationship between media exposure patterns and both political information level and degree of interest in the campaign. It is hypothesized that exposure to campaign content in newspapers, television, radio and news magazines will lead to higher levels of knowledge and interest. A reciprocal flow of causation from each variable back to exposure is also predicted.

The design applies the Rozelle-Campbell baseline criterion for causal relationships between two variables at two points in time. Undergraduate student voters at Michigan State and Colorado State Universities were administered a questionnaire five weeks before the presidential election, and again the day before the election. Correlations were computed cross-sectionally and cross-lagged between parallel indices of mass media exposure, political knowledge, and campaign interest.

The analysis showed that October exposure predicted November knowledge above a "no cause" baseline, and that the reverse correlation also exceeded the criterion figure. Both cross-lagged correlations between interest and exposure were greater than the baseline. These data indicate that each association is functional, and that both variables make an independent contribution to the relationship in each case. Thus, each variable appears to affect the other in a mutual interaction: interest produces exposure which increases interest in the campaign; exposure leads to information gain which generates more attention to political content.

These findings are supplemented by secondary analysis of 1972 election data from the Survey Research Center of the University of Michigan. Multivariate analyses indicate that moderately strong functional relationships are found between media exposure and both political knowledge and interest in a representative national sample interviewed at one point in time.

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Reciprocal Causality among Political Interest, Political Knowledge and Mass Media Exposure

The lack of dramatic attitudinal change from political exposure has led mass communication researchers to shift their focus to various cognitive effects in recent years.[1] Investigators are also devoting more attention to the social and psychological determinants of campaign exposure patterns rather than searching only for mass media effects.[2] This investigation examines the interrelationships between media exposure and both political knowledge and campaign interest. A secondary analysis of data from the 1972 Michigan Survey Research Center election survey provides descriptive documentation of the extent of these associations. The primary study employs a two-wave panel design to assess the flow of causality among the variables across the final month of the 1972 campaign.

A number of surveys have demonstrated a consistent correlation between exposure to campaign communications and political interest.[3] However, none of this research has applied causal analysis techniques to examine these associations. In reviewing this literature, Weiss points out that "since the evidence linking interest to exposure is correlational, care must be taken in imputing a directional relationship between the two."[4] Unfortunately, the classic panel studies in Erie County and Elmira did not yield findings indicating the nature of the flow of influence between these two variables.

The relationship between exposure and political information level has been shown to be generally positive but less impressive in strength.[5] Again, there are no findings describing the causal linkages between these factors in studies of voters.

Chaffee, Ward and Tipton did assess causal relationships in an investigation of junior and senior high school students during the 1968 presidential campaign.[6] A panel of students completed questionnaires in May and again in November. Using a cross-lagged technique of time-order analysis, they found that mass media use was causally related to political knowledge but less clearly related to political activity among these pre-voters.

The conventional "effects-oriented" approach to the study of mass communication and voting generally seeks to isolate the impact of mass media stimuli on various political responses. This investigation takes a broader perspective, conceptualizing political communication as a process where the voter's knowledge and interest both influence and are influenced by exposure patterns. It is expected that a mutual causative relationship operates, such that exposure produces increases in interest or information, and these variables in turn stimulate increased exposure in a reciprocal fashion.

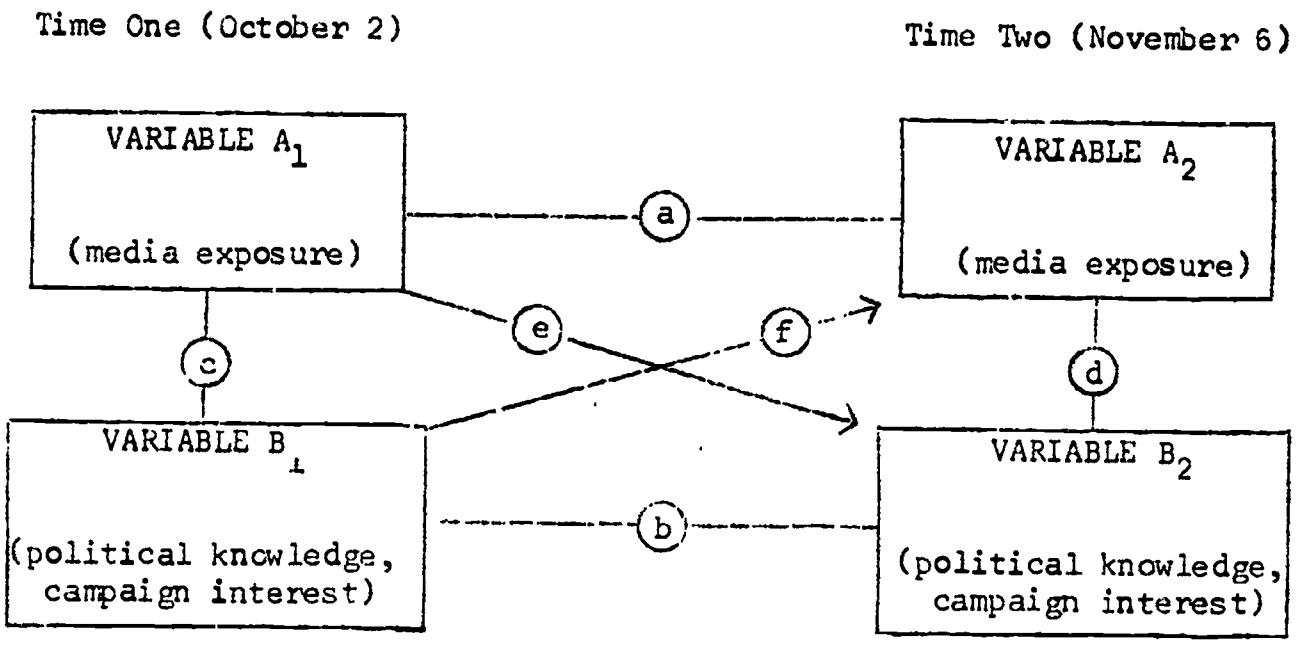
Thus, the basic hypothesis predicts that amount of exposure to campaign content in newspapers, television, radio and news magazines is functionally related to level of political knowledge and degree of campaign interest. Two causal components of this hypothesis are proposed: media exposure produces higher levels of knowledge and interest; knowledge and interest make an independent contribution to media exposure patterns.

The effects-oriented sub-hypothesis represents a rather straightforward learning theory prediction implied in most investigations of cognitive effects of the mass media. This is supplemented by a prediction derived from the re-emerging "uses and gratifications" paradigm.[7] Individuals who develop an intrinsic interest in political matters will tend to select mass media messages that satisfy this inclination. Furthermore, those who are most informed about the political

environment will tend to seek additional messages, because they are cognitively prepared to identify more content as relevant and to assimilate new developments into a context of existing understanding. Previously knowledgeable individuals' wider range of awareness of political personalities and processes allows the generation of greater cognitive uncertainty that must be reduced by information-seeking.[8]

The basic hypothesis can be assessed with cross-sectional data, using conventional partial correlation statistics. The two causal predictions can be tested with a recent cross-lagged correlation technique pioneered by Rozelle and Campbell.[9] Figure 1 presents the general design for a two-variable and two-time panel study. The two correlations between variable A and B across time are of key importance. To determine causality, the cross-lagged correlations (e and f) must be compared to a "no cause" baseline statistic that takes into account both the cross-sectional (c and d) and test-retest (a and b) associations that may spuriously produce sizable

Figure 1



diagonal relationships. Conceptually, the bivariate correlations across time are compared to an average static correlation that is adjusted for unreliability due to temporal instability. This is the computational for the baseline statistic:

$$\text{Baseline} = \frac{c + d}{2} \times \sqrt{\frac{a}{r_A} \times \frac{b}{r_B}}$$

r_A, r_B = geometric means (T_1--T_2) of internal consistency component of reliability coefficient

Causal influence from variable A to variable B can be tested by examining the extent to which the diagonal statistic f exceeds the baseline. Similarly, the reverse diagonal statistic e may be assessed against this base figure. When the diagonal correlation is greater than the baseline, the relationship meets the basic criteria for causality: association, functionality, and time-order. The relative contribution of each variable to the relationship can be inferred from the relative strength of the two diagonal correlations.

Method

SECONDARY ANALYSIS -- Evidence regarding the existence and extent of interrelationship among these political variables is best assessed with data from a representative nationwide sample of voters. This is most efficiently achieved through secondary analysis of the 1972 election survey conducted by the University of Michigan Survey Research Center (SRC). The major strength of that data base is the size and quality of the sample; analyses will be applied to a subset of 846 respondents who were personally interviewed on all three sets of questions soon after election day.[10] Despite the excellent sample, the SRC survey has measurement shortcomings: there is only a single exposure item for each of the media, and the six knowledge items are rather formal and superficial. Another weakness is the nature of the survey design; although interviews were conducted both before

and after the election, the media use and political knowledge questions were asked only at the second point in time. This renders the panel feature of the SRC investigation irrelevant for communication analyses; the design is essentially single-wave, severely limiting inference of causal flow. Nevertheless, SRC studies have set the standard for election research over the past few decades, and the sample is far more generalizable than any group of college students.

These are the specific questions asked in the SRC survey, with scoring in parentheses:

Political Interest: Some people seem to follow what's going on in government and public affairs most of the time, whether there's an election going on or not. Others aren't that interested. Would you say you follow what's going on in government and public affairs most of the time (4), some of the time (3), only now and then (2), or hardly at all (1)?

Political Knowledge: Do you happen to know how many times an individual can be elected president? (two terms = 1, other or don't know = 0); Do you know how long the term of office is for a United States senator? (six years = 2, four or eight years = 1, other or don't know = 0); How long is the term of office for a member of the House of Representatives in Washington? (two years = 2, four years = 1, other or don't know = 0); Do you happen to remember the name of the candidates for Congress--that is, for the House of Representatives in Washington--that ran in this district in November? (both correct = 2, one correct = 1, neither correct or don't know = 0); Do you happen to know which party had the most members in the House of Representatives in Washington before the elections this month? (Democrats = 1, other or don't know = 0); Do you happen to know which party elected the most members to the House of Representatives in the elections this month? (Democrats = 1, other or don't know = 0).

Newspaper Reading: We're interested in this interview in finding out whether people paid much attention to the election campaign this year. Take newspapers for instance--did you read much about the campaign this year in any newpaper? (no = 0) IF YES: How much did you read newspaper articles about the election campaign --regularly (4), often (3), from time to time (2), or just once in a great while (1)?

Magazine Reading: How about magazines--did you read about the campaign in any magazines? (no = 0) IF YES: How many magazine articles about the campaign would you say you read--a good many (3), several (2), or just one or two (1)?

Television Viewing: How about television--did you watch any programs about the campaign on television? (no = 0) IF YES: How many television programs about the campaign would you say you watched--a good many (3), several (2), or just one or two (1)?

Radio Listening: How about radio--did you listen to any speeches or discussions about the campaign on the radio? (no = 0) IF YES: How many programs about the campaign did you listen to on the radio--a good many (3), several (2), or just one or two (1)?

In addition, there were standard demographic questions, including extent of formal education and social class level.

PANEL STUDY -- The primary investigation was carried out in two locales at two points in time. Non-probability samples of 148 underclassmen at Michigan State University and 171 underclassmen at Colorado State University completed parallel questionnaires five weeks before the 1972 Presidential election and again the day before the election. The students were preponderantly freshmen and sophomores enrolled in introductory communication courses. All respondents were eligible voters for the first time in a major election. They were selected both for convenience and because they were likely to be undergoing an advanced political socialization process as new voters in this election.

To minimize panel sensitization, no indication was given of a follow-up at the first administration. Anonimity was stressed to reduce socially desirable answers and allow for freer expression of political opinions and preferences. Time 1 and 2 questionnaires were matched by comparing birth dates obtained in the demographic section of the instrument, and by inspecting handwriting in doubtful cases.

Despite the restricted representativeness of the respondents studied, this investigation has several methodological strengths. First, the panel design allows analysis of time-order relationships among the variables. In addition, administration of the questionnaire on two disparate campuses with questions about both national and local elections gives an opportunity to examine replication of findings under differing circumstances. Most importantly, the focus of the

instrument on just three basic variables provides more complete and precise measurement of each. Identical measures at both points in time were used to compile indices of mass media use, political knowledge, and campaign interest. These are the specific items used to ascertain each variable:

Mass Media Exposure: Four separate indices were constructed, measuring both national and local exposure in both October and November. The exposure section of each questionnaire was introduced with the question: "Where do you get your information about the presidential campaign--how much news about Nixon and McGovern have you seen or heard in these mass media during the last week? The media list included the campus newspaper, other newspapers, news magazines, TV newscasts, and radio newscasts. Beneath the words "how many news stories," the frequency categories were "none," "a few," "five to ten," and "more than ten." These were scored 0-1-2-3.

Students were also asked, "how much news have you received about state and local campaigns? (i.e., county offices or U.S. Senator)." The same newspaper, TV and radio sources were listed below this. Identical items were repeated in the follow-up questionnaire.

Political Knowledge: Both national and local information indices were constructed from a number of items that were asked at each point in time.

At the national level, students were asked to indicate whether Nixon and McGovern were "similar" or "far apart" on four issues: reform of the tax system, security of Israel, amount of defense spending, and support for the Thieu regime. They could also respond in the "I'm not sure" column (correct answers = 2, not sure = 1, incorrect = 0).

Next, a series of open-ended questions asked them to identify the campaign role of George Meany, Frank Mankiewicz, Maurice Stans, and Jean Westwood, and to

name the Democratic Vice-Presidential candidate and identify one of his former jobs (in each case, fully correct answer = 2, partially correct = 1, incorrect or blank = 0). Finally, they were asked "what traditionally Democratic region of the country seems to be switching over to the Republican party?" (South = 1, incorrect or blank = 0).

Local knowledge items included an identification of the name, party, and current job of the two U.S. Senatorial candidates; an identification of two referenda questions on the state ballot; a multiple choice concerning how state Supreme Court Justices gain their seats; and identification of the names and offices sought by student candidates at the county level. Of course, different candidates and issues were involved in each state, but the basic situations were remarkably similar. Scoring followed the pattern for national knowledge questions.

Political Interest: To gauge interest in the campaign, an all-inclusive question was posed in each questionnaire: "generally speaking, how interested are you in this year's election campaign?" The foils included "very interested," "fairly interested," "slightly interested," and "not interested" (scored 3-2-1-0).

Findings

SECONDARY ANALYSIS -- Correlational analysis of the SRC data shows that the knowledge, interest, and media use indices are interrelated above the .4 level, which are quite strong correlations by social science standards. Table 1 breaks down mass media usage into the four component scales and presents bivariate and multivariate analyses.

Amount of political reading in newspapers is the strongest correlate of both political interest (+.41) and political knowledge (+.36), while extent of listening to political content on the radio is the weakest correlate. Television viewing and magazine reading correlations fall in between.

As expected, education and social class are moderately associated with print media use (r's in the +.20's and +.30's), but are unrelated to electronic media exposure (no other demographic factors relate to both mass media exposure and political knowledge or interest). When these key socio-economic status variables are controlled, the newspaper and magazine correlations with political knowledge and interest drop somewhat. Table 1 shows that the partial correlations are largest for newspaper reading and television viewing. All partials except radio-knowledge remain above the .2 level, indicating a substantial functional relationship between media exposure and both political variables.

Since education is closely associated with political knowledge (+.40), it is useful to examine the conditional correlations of knowledge with media use at each basic level of educational achievement. There is a consistent tendency for the strength of association to diminish from low education (less than high school) to high education (at least some college). The lower correlations for the college educated stratum should be kept in mind when interpreting the relationships in the college student samples in the panel study. The pattern of correlations at different levels of interest tends to be inconsistent.

These findings indicate that positive associations exist among the set of variables under examination. The bivariate relationships are only modestly reduced wher control variables are considered. Since the magnitude of association remains moderately strong, these results suggest that exposure is functionally related to both knowledge and interest to fairly important degree.

PANEL STUDY -- The presentation of findings will focus on the bivariate relationships across the one-month time lag. This will be supplemented with description of cross-sectional associations and univariate changes for the three key variables.

Table 2 reports the correlational data from Michigan and Colorado samples concerning mass media exposure and political knowledge. The average of the October and November static correlations between these indices is +.30 in Michigan and +.27 in Colorado. The magnitude of association is quite similar to that found among the college educated respondents in the SRC national sample.

The cross-lagged correlations between October knowledge and November exposure are almost identical in Michigan (+.27) and Colorado (+.28). However, the association between early exposure and later knowledge differs between the two samples: the relationship is a strong +.33 in Michigan, but a mild +.13 in Colorado.

In Michigan, both correlations are above the baseline correlation of +.24. Since the baseline controls for the influence of all other contaminating factors, there is evidence for inferring that exposure causes knowledge, and that knowledge causes exposure.

While it is apparent that the Colorado data replicate the knowledge-to-exposure causal flow, reverse linkage does not exceed the chance baseline. Thus, there is some doubt about the existance of a direct causal link from exposure to knowledge.

This relationship can be examined at both the national and local level. In Michigan, the exposure-to-knowledge diagonal exceeds the reverse diagonal +.29 to +.26 for national exposure and knowledge, and +.26 to +.20 for local correlations. In each case, both figures are well above the Rozelle-Campbell baseline. Again, the Colorado results diverge from this pattern, indicating the knowledge-to-exposure diagonal is more influential.

Which of the mass media contribute most to political information among students? Table 3 displays the correlations between early exposure to the individual media outlets and subsequent political knowledge. It shows that reading

newspapers and magazines is slightly more closely correlated than viewing television or listening to radio, on the average. The static correlations within each point in time are considerably stronger, with the basic pre-eminence of the print media again reflected. The pattern of associations is similar to that found in the college educated segment of the SRC sample, although the relative strength of the television vs. radio is reversed.

Table 4 presents the data for the relationship between media exposure and political interest. A moderately strong association is found between these two variables at both Time 1 and Time 2, with an average correlation of +.34 overall in each state. This is almost identical to the parallel correlation in the SRC study.

In Michigan, overall exposure to campaign messages in October correlates +.29 with November interest, and the reverse linkage is +.26. Both figures exceed the Rozelle-Campbell baseline. The impact of the mass media on interest is doubtful in Colorado, as the modest correlation across time falls short of the baseline. The interest-to-exposure correlation is clearly higher than the base criterion.

Comparing the various October media sources as they correlate with November campaign interest, it appears that the broadcast media make a more important contribution. Table 5 shows that early television and radio exposure is more closely tied to later interest than newspaper reading, with magazine use in the middle. These findings diverge from the correlations obtained in the SRC secondary analysis wtih respect to basic strength of association and the relative role of television and newspapers. This may be due to the different nature of the interest questions in each study: the SRC item referred to general political interest, while the panel survey asked about specific campaign interest. Since the SRC question implies interest as an independent variable, the closer relationship found with exposure in that study may be interpreted as evidence for a predominant interest-to-exposure causal flow.

One of the valuable features of a two-wave study is the opportunity to trace changes in each individual variable across time. Since the political communication literature contains little recent data on intra-campaign change, the findings from the college samples will be briefly reviewed. Between early October and Election Eve, there was a substantial increase in exposure to campaign communications in the mass media. The mean score on the overall media exposure index increased by 43% during this five-week period. The gain is particularly strong for exposure to local news coverage, with an increase of 63%. On the national exposure index, the gain is 27%. The students attended national messages considerably more often than local news items at both points in time.

Table 6 shows the relative amount of increase in exposure for each mass media source. The proportion of students attending five or more news stories about local politics doubled for each local source, with the campus newspaper registering the sharpest jump from October to November. Even with the last minute increases, students still exposed themselves to more national political material in newspapers, radio, and television.

The increase in political knowledge is moderate, with a slight gain on the national index and a 54% jump at the local level. Table 7 illustrates how knowledge gain becomes greater for more localized referents.

Political interest rose 15% between October and November, with most students "fairly interested" at each point in the campaign.

Discussion

This investigation represents an attempt to trace the causal influences among several key variables in the political learning process. Two correlates of mass media exposure have been identified and subjected to time-order analyses to ascertain the nature of these relationships.

The secondary analysis of national sample data shows that mass media exposure is functionally related to political knowledge and to political interest. The panel survey of two limited samples of college voters sought to detect the time-order causality in these relationships, while providing more sophisticated measurement of exposure and knowledge. In the case of the flow of influence from political interest and knowledge to exposure, the panel findings yield evidence that each factor makes an important contribution to mass media usage patterns. The cross-lagged relationships for both pairs of variables meet the criteria of causality.

It also appears that media exposure makes an independent contribution to political knowledge and interest, although the data from the Colorado sample are marginal. With the exception of two local politics correlations in Colorado, all cross-lagged correlations exceed the Rozelle-Campbell baseline. Thus, a tentative inference of causality can be drawn from the overall set of panel findings.

The pattern of results indicates that each pair of variables is in a mutually reciprocal relationship, each stimulating increases in the other. Examining each process narrowly, a person's basic interest in politics probably leads him to read and watch news about a particular campaign; in turn, this exposure arouses his interest which then produces more exposure behavior. Similarly, there may be an exposure-knowledge spiral, such that attention to political content generates a better informed person, who then seeks to keep up with the events of the campaign. Since interest in a topic area is clearly an important antecedent of attention to messages about it, the interest-to-exposure relationship is hardly surprising. The role of previous information level in stimulating exposure is less obvious. Perhaps those who are already well informed have a greater opportunity for curiosity arousal because of their familiarity with the various personalities and

issues. Whenever news stories about such topics are subsequently encountered, the person with a previous awareness and knowledge about it will be a more active information processor than the person who originally knows little. The less informed person has little basis for developing uncertainty about the topic, since his target level of knowledge is likely to be lower.

While this exploratory investigation has isolated two subprocesses for analytic purposes, the findings can be integrated into a more holistic model of communication and political cognition (Figure 2). Of course, many elements of this paradigm are tentative and unsupported by empirical evidence. Nevertheless, it may provide a useful framework for future research.

Beginning with antecedents early in life, it is proposed that basic intelligence and the nature of social contact contribute to amount of formal education and socialization to political roles. Intelligence and educational experience largely determine communication skills, which are of critical importance in defining the effort required for exposure to the highly politicized print media.

Formal and informal socialization affect the development of intrinsic interest in public affairs, which has been shown to be an important correlate of political exposure patterns. These socialization experiences also provide an orientation toward the political environment as being relevant or irrelevant to the individual's needs; the extent to which he perceives political events and issues as impinging on his welfare is a crucial determinant of extrinsic uncertainty generation and consequent information processing about public affairs. Those most involved in the political system will maintain daily surveillence of new developments, and will require information for forming and defending political cognitions (and attitudes and behaviors).

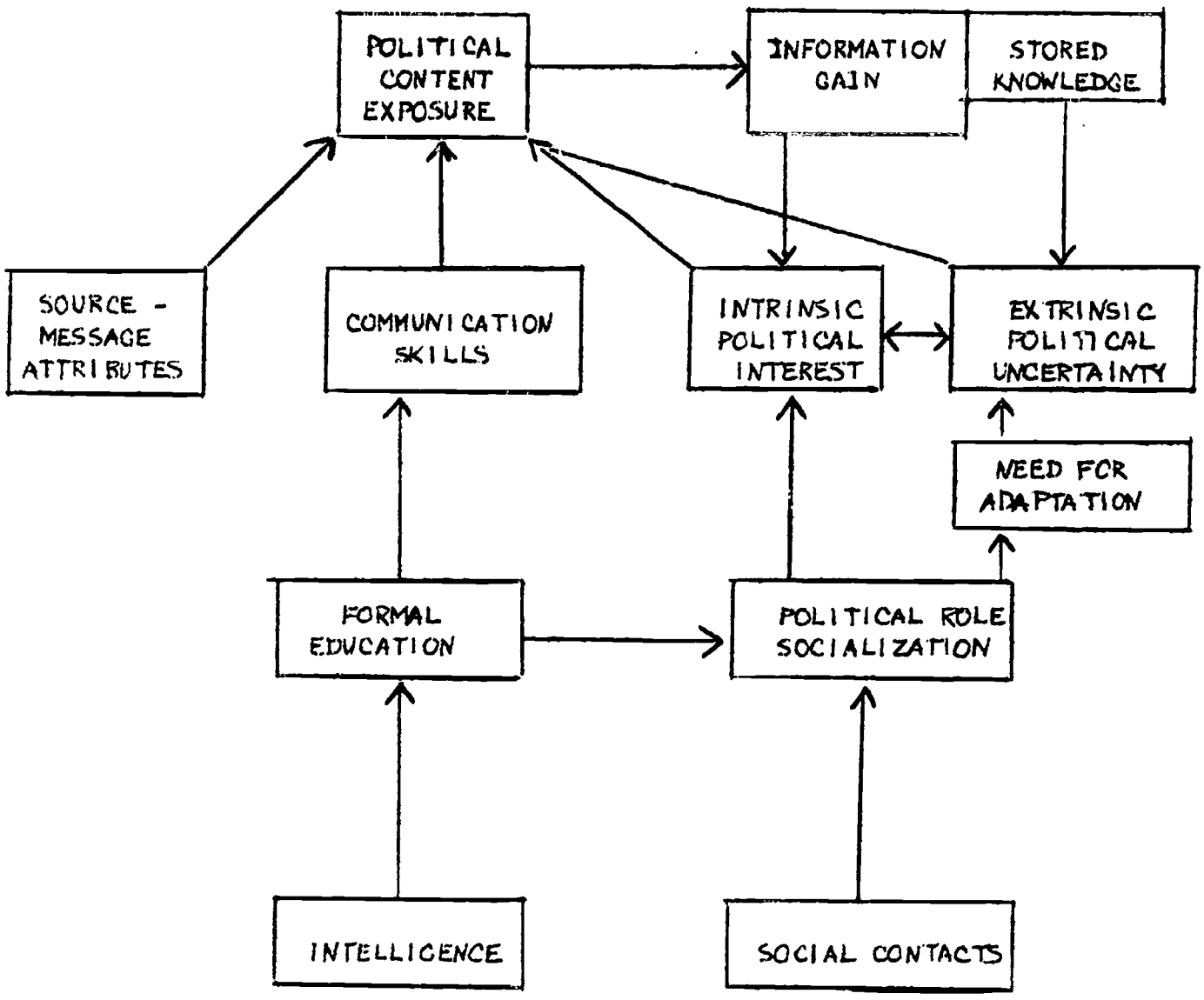
These personal factors serve to define the reward value of political messages, in combination with source and content attributes of the message. To the extent

that reward value exceeds expenditures for obtaining and processing the message, exposure to political content will occur. Exposure produces transitory information gain and long-term stored knowledge (along with development and change of attitudes and behavior). This learning then feeds back to maintain or increase intrinsic interest and extrinsic uncertainty in an ongoing cycle.

These are the barebones components and linkages in a rather complex and primitive model. The present study does provide support for some of the connections among variables. In particular, the data presented here suggest that exposure, knowledge, and interest are causally related. The results give limited support for two important cognitive outcomes of exposure that effects-oriented perspectives have not adequately examined. The investigation also demonstrates the potential utility of one methodological technique for detecting causality in analyses of political data.

Figure 2

Some Key Variables and Linkages in Political Communication and Learning Model



Footnotes

1. Major reviews of this literature include Walter Weiss, "Effects of the Mass Media of Communication," in Gardner Lindzey and Elliot Aronson (eds.), The Handbook of Social Psychology (Reading, Mass.: Addison Wesley, 1969); Dan Nimmo, The Political Persuaders (Englewood Cliffs, N.J.: Prentice-Hall, 1970); Harold Mendelsohn and Irving Crespi, Polls, Television and the New Politics (Scranton, Pa.: Chandler, 1970); Maxwell McCombs, "Mass Communication in Political Campaigns: Information, Gratification, and Persuasion," in F. G. Kline and P. J. Tichenor (eds.), Current Perspectives in Mass Communication Research (Beverly Hills: Sage Publications, 1973).

2. Blumler, Jay and Denis McQuail, Television in Politics (Chicago: University of Chicago Press, 1969).

3. Bernard Berelson, Paul Lazarsfeld, and William McPhee, Voting (Chicago: University of Chicago Press, 1954); Paul Lazarsfeld, Bernard Berelson, and Hazel Gaudet, The People's Choice (New York: Duell, Sloan and Pearce, 1948).

4. Weiss, ibid, p. 155.

5. Berelson, et al., op. cit.; Lazarsfeld, et al., op. cit.; Charles Atkin, Wayne Crouch, and Verling Troldahl, "The Role of the Campus Newspaper in the New Youth Vote," a paper delivered at the International Communication Association convention (Montreal: April, 1973); Joseph Trenaman and Denis McQuail, Television and the Political Image (London: Methuen, 1961); Robert McClure and Thomas Patterson, "Television News and Political Advertising: Impact on Voter Beliefs," Communication Research, 1:3-31 (1974).

6. Steven Chaffee, Scott Ward, and Leonard Tipton, "Mass Communication and Political Socialization," Journalism Quarterly, 47:647-659 (1970).

7. Charles K. Atkin, "Instrumental Utilities and Information-Seeking," in Peter Clarke (ed.), New Models for Communication Research (Beverly Hills: Sage Publications, 1973); Maxwell McCombs and L. E. Mullins, "Consequences of Education: Media Exposure, Political Interest and Information-Seeking Orientations," Mass Comm Review, 1:27-31 (1973); Norris Johnson, "Television and Politicization: A Test of Competing Models," Journalism Quarterly, 50:447-55 (1973).

8. Atkin, ibid.

9. Richard Rozelle and Donald Campbell, "More Plausible Rival Hypotheses in the Cross-Lagged Panel Correlation Technique," Psychological Bulletin, 71:74-80 (1969).

10. Only the 846 Form I Post Election respondents who were personally interviewed on all three sets of data are analyzed; the remaining 1905 voters did not answer all media use and political knowledge items.

Table 1

Relationships of Political Content Exposure with Political Interest and Knowledge[a]

Political correlates:	Newspaper Reading	Magazine Reading	Television Viewing	Radio Listening
Political Interest				
zero-order r	+.41	+.33	+.36	+.21
partial r . . . . . (education & class)	+.35	+.25	+.35	+.22
Political Knowledge				
zero-order r	+.36	+.34	+.25	+.11
partial r . . . . . (education & class)	+.29	+.23	+.25	+.11
conditional r				
high education	+.25	+.28	+.16	+.03
moderate education . . .	+.28	+.20	+.19	+.12
low education	+.35	+.26	+.35	+.17

[a] Data base: Survey Research Center national sample interviewed after 1972 presidential election. N = 846 respondents interviewed on all variables.

Table 2

Correlations between Mass Media Exposure and Political Knowledge

Mass Media Exposure	Diagonal r (f)	Reverse r (e)	Static r (mean c&d)	Baseline
Michigan sample (N=148)				
Overall exposure	+.33	+.27	+.30	+.24
National content	+.29	+.26	+.25	+.20
Local content	+.26	+.20	+.25	+.18
Colorado sample (N=171)				
Overall exposure	+.18	- +.28	+.27	+.19
National content	+.16	+.27	+.21	+.15
Local content	+.14	+.23	+.26	+.15

Table 3

Media Source Correlates of Political Knowledge

October Exposure Source	November National Interest	November Local Interest
Campus newspaper	+.17	+.16
Other newspapers	+.16	+.13
News magazines	+.15	----
Radio newscasts	+.12	+.10
TV newscasts	+.07	+.15

Table 4

Correlations between Mass Media Exposure and Political Interest

Mass Media Exposure	Diagonal r (f)	Reverse r (e)	Static r (mean c&d)	Baseline
Michigan sample (N=148)				
Overall exposure	+.29	+.26	+.34	+.23
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Local content	+.28	+.24	+.29	+.20
Colorado sample (N=171)				
Overall exposure	+.21	+.31	+.34	+.23
National content	+.22	+.31	+.32	+.21
Local content	+.14	+.27	+.28	+.18

Table 5

Media Source Correlates of Political Interest

October Exposure Source	November National Interest	November Local Interest
Campus Newspaper	+.11[a]	+.11
Other newspapers	+.08	+.14
News magazines	+.15	----
Radio newscasts	+.18	+.14
TV newscasts	+.15	+.17

[a] Cell entries are average correlations between Michigan and Colorado samples.

Table 6

Change in Exposure Levels from October to November, by Medium

Mass Media Source	Percent Exposed to Five or More News Stories October 2nd	November 6th
National Campaign News		
Campus newspaper	45 %[a]	68 %
Other newspapers	25 %	40 %
News Magazines	27 %	34 %
Radio newscasts	46 %	62 %
TV newscasts	48 %	61 %
Local Campaign News		
Campus newspaper	22 %	60 %
Other newspapers	12 %	26 %
Radio newscasts	22 %	46 %
TV newscasts	19 %	39 %

[a] Percentages are averaged across the two samples. Total N = 319.

Table 7

Change in Political Knowledge Levels from October to November

Topic	Percent Responding Correct Answer October 2nd	November 6th
Identification of Nixon vs. McGovern positions on:		
Reform of tax system	68 %[a]	70 %
Security of Israel	40 %	38 %
Amount of defense spending	88 %	89 %
Support for Thieu regime	65 %	72 %
Identification of political campaign role of:		
George Meany	17 %	19 %
Frank Mankiewicz	20 %	24 %
Maurice Stans	7 %	6 %
Jean Westwood	5 %	11 %
Naming and describing Sargent Shriver	46 %	55 %
Naming South as new Republican area	49 %	52 %
Naming and describing incumbant candidate for U.S. Senator	33 %	56 %
Naming and describing challenger	20 %	30 %
Naming two referrenda issues	31 %	76 %
Identification of State Supreme Court Justices as being elected	29 %	53%
Naming a student candidate	25 %	44 %

[a] Percentages are averaged across the two samples. Total N = 319.