Effects of Political Advertising

CHARLES ATKIN AND GARY HEALD

POLITICAL candidates have relied increasingly on broadcast advertising to inform and influence the electorate, but few research studies have examined the impact of paid mass media messages on the voter. This investigation explores the relationship of television and radio advertising exposure to a variety of cognitive and affective variables in a typical congressional campaign. The research assesses how exposure variables relate to (1) knowledge about the candiates and issues, (2) issue agenda priorities, (3) interest in the campaign, (4) liking for each candidate, and (5) polarized affect toward the candidates. Conditional relationships between these variables are examined between subgroups of respondents differing in initial familiarity with the candidates, exposure to other sources, and motivation for advertising exposure.

Political knowledge is typically defined in terms of an individual's ability to recall candidates' names, personal characteristics, and qualifications; to identify election issues and current campaign developments; and to recognize connections between candidates and issue positions. The impact of general mass media campaign communications on gains in knowledge has been inferred in numerous voting studies, based on recurrent findings of a moderate association between media exposure and campaign-related knowledge.¹

¹ Bernard Berelson, Paul Lazarsfeld, and William McPhee, Voting, Chicago, University of Chicago Press, 1954; Joseph Trenaman and Denis McQuail, Television and the Political Image, London, Methuen, 1961; Elihu Katz and J. J. Feldman, "The Debates in the Light of Research: A Survey of Surveys," in Sidney Kraus, ed., The Great Debates, Bloomington, Indiana University Press, 1962; Jay Blumler and Denis McQuail, Television in Politics, Chicago, University of Chicago Press, 1969.

Abstract Relationships between broadcast advertising exposure and various cognitive and affective orientations were assessed in a survey of voters during a congressional election campaign. Exposure was moderately correlated with political knowledge and interest. Highly exposed voters were somewhat more likely to attach higher agenda priorities to issues and candidate attributes emphasized in the commercials. Personal affect toward each candidate was mildly associated with advertising exposure frequency.

Charles Atkin is an Associate Professor in the Department of Communication at Michigan State University. Gary Heald is an Assistant Professor of Mass Communication at Florida State University.

POQ 40 (1976) 216-228

Recent research evidence indicates that television advertising contributes to voters' knowledge levels. McClure and Patterson report that about three-fourths of the voters who recalled seeing a political advertisment in the 1972 presidential campaign could correctly identify the ad's message.² Furthermore, voters heavily exposed to television were more likely to show increased accuracy of perception of candidates' positions on 10 issues presented frequently in campaign advertising: on the average, there was a net 32 percent change in the correct direction among heavy viewers and a net 24 percent change among light viewers.³ Atkin, Bowen, Nayman, and Sheinkopf found that voters felt they learned substantive information about candidates' qualifications and issue positions from TV ads in two gubernatorial campaigns.⁴

The message and receiver conditions facilitating political knowledge acquisition have been identified in several advertising studies. Patterson and McClure discovered that political advertising had its strongest impact on issue awareness for voters with low exposure to newspapers and television news.⁵ Atkin et al. showed that perceived knowledge gain was greatest for voters who paid close attention to advertising messages and for those who cited an information-seeking motivation for watching ads.⁶

The role of message repetition in political knowledge gain has been studied by Rothschild and Ray, who experimentally manipulated the frequency of presentation of brief slide advertisments for several candidates. They discovered that unaided recall increased monotonically from treatments showing one to two to four to six repetitions; for instance, there was 20 percent recall of the congressional candidates with a single presentation and 55 percent recall with six presentations.⁷

² Robert McClure and Thomas Patterson, "Television News and Political Advertising: The Impact of Exposure on Voter Beliefs," Communication Research, Vol. 1, 1974, pp. 3-31.

³ Thomas Patterson and Robert McClure, "Television News and Televised Political Advertising: Their Impact on the Voter," Congress and Mass Communications, appendix to hearings before the Joint Committee on Congressional Operations, Ninety-third Congress, Second Session, 1974, pp. 571-618.

⁴ Charles Atkin, Lawrence Bowen, Oguz Nayman, and Kenneth Sheinkopf, "Quality Versus Quantity in Televised Political Ads," *The Public Opinion Quarterly*, Vol. 37, 1973, pp. 209-224. In contrast, an unpublished survey of voters in nonpresidential campaigns shows that those seeing the largest number of broadcast ads were the least capable of correctly identifying the political candidates. This finding may be attributed to viewer selectivity or a "clutter effect" that leaves the voter confused by excessive exposure to similar campaign messages promoting minimally distinguishable candidates; see Timothy Meyer and Thomas Donohue, "The New Student Voter and the 'Selling' of Politicians," *Phi Kappa Phi Journal*, Vol. 54, 1974, pp. 8-13.

⁵ Patterson and McClure, op. cit.

⁶ Atkin et al., op. cit. To the extent that the political candidate's name and positions are well known, exposure to campaign messages should not result in marked information gain. In the 1960 presidential campaign, for example, there were increases in knowledge concerning the relatively unknown Senator Kennedy but little changes in knowledge about the more familiar Vice-President Nixon. See Ben-Zeev and I. S. White, "Effects and Implications," in Kraus, ed., op. cit.

⁷ Michael Rothschild and Michael Ray, "Involvement and Political Advertising Effect: An Exploratory Experiment," Communication Research, Vol. 1, 1974, pp. 264-284.

The effect of political messages on the voters' agenda of priorities among campaign issues and candidate attributes has periodically attracted scholarly interest. Lazarsfeld, Berelson, and Gaudet observed that the mass media had a marked effect in the 1940 presidential election by redefining the issues such that "issues about which people had previously thought very little, or had been little concerned, took on a new importance as they were accented by campaign propaganda."8 Most of the recent agenda-setting research has examined the relationship between the rank-ordering of issues and attributes emphasized by the news media and the perceived relative importance of these factors among the public.9 While the high correspondence between media and personal agendas may be open to alternative explanations, most observers agree that to some extent the media shape what people think about in arriving at a decision. If a candidate can elevate the importance of those qualities and issues on which he is positively perceived by most voters, the campaign may favorably influence voters without actually persuading them to change issue positions. The crucial goal may be to focus voter attention on which factors to think about, rather than to convince them about what to think.

Considering agenda-setting and political advertising, Bowers compared a content analysis of newspaper ads in a number of senatorial and gubernatorial campaigns with Harris poll rankings of the importance of campaign issues; an extremely high correlation was found between advertising emphasis and voter emphasis. In a study of political TV advertising and voter agenda in the 1972 presidential campaign, Shaw and Bowers concluded that the appearance of an issue in commercials raised the salience of that issue, especially for those persons exposed to the ads. These associations are undoubtedly due in part to candiates' reliance on public opinion polling as a guide in deciding which issues to emphasize.

The role of the mass media in stimulating political interest in the electorate is important because interested persons are more likely to vote in an election.¹² Interest is defined as the degree of concern or psychological involvement in a particular election campaign. This variable has been shown to correlate moderately with exposure to campaign content in many studies.¹³ Lane proposes that increases in the availability of politi-

⁶ Paul Lazarsfeld, Bernard Berelson, and Hazel Gaudet, The People's Choice, New York, Columbia University Press, 1948, p. 98.

⁹ Maxwell McCombs and Donald Shaw, "The Agenda-Setting Function of the Media," The Public Opinion Quarterly, Vol. 36, 1972, pp. 176-187; Jack McLeod, Lee Becker, and James Byrnes, "Another Look at the Agenda-Setting Function of the Press," Communication Research, Vol. 1, 1974, pp. 131-167.

¹⁰ Thomas Bowers, "Newspaper Political Advertising and the Agenda-Setting Function," *Journalism Quarterly*, Vol. 50, 1973, pp. 552-556.

¹¹ Donald Shaw and Thomas Bowers, "Learning from Commercials: The Influence of TV Advertising on the Voter Political 'Agenda,' " paper presented to the Association for Education in Journalism, 1973.

¹² Lester Milbrath, Political Participation, Chicago, Rand McNally, 1965.

¹³ Lazarsfeld, Berelson, and Gaudet, op. cit., Berelson, Lazarsfeld, McPhee, op. cit.

cal information will lead to increased politicization in a society. Atkin, Galloway, and Nayman used cross-lagged correlational teachniques to demonstrate that campaign interest and media exposure influence each other—that interest produces exposure and exposure increases interest. Atkin et al. provide the only political advertising evidence on this question; they discovered a mild positive relationship between attention to TV commercials and campaign interest. Any association between these two variables might be interpreted primarily as advertising effects, since one of the basic goals of aggressive political advertising is to overcome the barriers of voter apathy, and the unpredictable schedule of advertising presentation reduces the opportunity for active information seeking by those with prior interest. 17

Liking for candidates is defined as a positive affective orientation toward the candidate as a person, independent of party affiliation or issue positions. Thus, liking is viewed as a personal attraction toward an individual rather than an ideologically based evaluation. "Mere exposure" theory suggests that repeated symbolic experience with a novel and simple stimulus will lead to greater positive affect for the object portrayed. As applied to broadcast political advertising for little-known candidates such as nonincumbents, there should be a positive logarithmic correlation between the number of message exposures and degree of liking for the candidate. This impact should be particularly strong for voters with low involvement and low awareness of the candidate.

Beyond this "mere exposure" effect may lie a more general polarization of affective orientations toward candidates. Since even brief spot ads provide substantive information along with projection of a name and face, it is possible that exposure may produce counterproductive effects on voters who are unimpressed or antipathetic to the candidate's attributes. Perhaps a more likely outcome of repeated exposure is affective activation—the formulation of a positive or negative personal evaluation of a candidate and an increase in certainty of that orientation. Thus, con-

¹⁴ Robert Lane. Political Life, New York, Free Press, 1965.

¹⁵ Charles Atkin, John Galloway, and Oguz Nayman, "Reciprocal Causality Among Political Interest, Political Knowledge and Mass Media Exposure," paper presented to the International Communication Association, 1974.

¹⁶ Atkin, Bowen, Nayman, and Sheinkopf, op. cit.

¹⁷ Robert Agranoff, *The New Style in Election Campaigns*, Boston, Holbrook Press, 1972; Harold Mendelsohn and Irving Crespi, *Polls, Television and the New Politicians*, Scranton, Pa., Chandler, 1970.

¹⁸ Robert Zajonc, "Attitudinal Effects of Mere Exposure," Journal of Personality and Social Psychology Monograph Supplement, Vol. 9, 1968, pp. 1-27. This is rooted in the common finding that attitudes people have toward one another are favorably enhanced by social interaction; see Leon Festinger, "Group Attraction and Membership," Journal of Social Issues, Vol. 7, 1951, pp. 152-163; George Homans, Social Behavior: Its Elementary Forms, New York, Harcourt, Brace, 1961; Theodore Newcomb, "Stabilities Underlying Changes in Interpersonal Attraction," Journal of Abnormal and Social Psychology, Vol. 66, 1963, pp. 376-386.

¹⁹ Rothschild and Ray, op. cit.

sequences of intrusive advertising could include either liking or disliking, depending on the predispositions of the voter. In a related finding, Atkin et al. report that three-fifths of late-deciding voters were positively influenced by the chosen candidate's ads, and fully half were unfavorably affected by the unchosen candidate's ads.²⁰

This investigation examines the associations between political advertising exposure and the criterion variables of knowledge, agenda, interest, liking, and polarized affect. Three advertising variables are studied: frequency of exposure to TV ads, degree of attention to TV ads, and degree of attention to radio ads. In addition, the research design includes a number of third variables for purposes of comparison, control, and specification: exposure to newspaper and television news, formal and informal interpersonal communication, initial familiarity with the candidates, and reasons for exposure to broadcast advertising.

Method

Interviews were conducted with a random telephone sample of 323 mid-Michigan voters during the last weeks of the 1974 congressional campaign, focusing on a race between two candidates for the U.S. House of Representatives. The candidates were nonincumbents competing in a swing district, so each relied heavily on broadcast advertising to reach the voters. The Democratic candidate was fairly well known from previous campaigns, while the Republican candidate was almost a total unknown before the campaign.

Prior to formulating the survey instrument, the campaign media directors for each candidate were interviewed to determine which issues would be emphasized in radio and television commercials. Based on their plans and actual scripts, questions about issue knowledge and agenda emphases were framed. The fifteen-minute survey asked questions on a number of variables; following are brief descriptions of the variables of central importance.²¹

PREDICTOR VARIABLES

Radio Attention: Attention paid to each candidate's ads while listening to radio.

TV Exposure Frequency: Total number of ads for each candidate seen during campaign.

²⁰ Similarly, voters who had decided on a candidate before the campaign began were just as likely to say that opposition as well as their own candidate's advertising served to reinforce their predispositions; see Atkin, Bowen, Nayman, and Sheinkopf, op. cit.

The actual wording of the questionnaire items can be obtained by writing to the senior author. Individual elements combined into the criterion variable indices are described at the foot of Table 1. Components of all indices are weighted equally; the advertising exposure index is the sum of "radio attention" plus the product of "TV attention" times "TV exposure frequency."

TV Attention: Closeness of attention to each candidate's ads on television.

CRITERION VARIABLES

Knowledge: Correct recall of candidates' names and identification of issue positions.

Agenda: Ratings of importance of certain issues and candidate attributes.

Interest: Degree of concern about congressional campaign.

Liking: Personal affect for each candidate, aside from issues and party preferences.

Polarized affect: Formation of positive or negative evaluation, and degree of confidence in evaluation.

THIRD VARIABLES

News Exposure: Amount of newspaper article reading and TV news story viewing relating to congressional campaign.

Interpersonal Communication: Frequency of talking about campaign with family or friends, and contact with candidates or campaign workers.

Previous Familiarity: How well informed about each candidate before campaign began.

Viewing Information-Seeking: Reason for viewing ads, either motivated seeking of information or unmotivated exposure due to advertising intrusiveness and entertainment seeking.

The data were analyzed to determine bivariate associations, partial correlations controlling third variables, and conditional relationships at two levels of several control variables. Since many of the "predictor" and "criterion" variables are not clearly antecedent in a given relationship, caution must be observed in inferring causality from advertising exposure. In particular, the exposure-knowledge, exposure-interest, and exposure-affect relationships may be due to reverse causation as the more knowledgeable, interested, or favorable voters pay greater attention to advertisements.

Results

The findings are presented separately for each of the five criterion variables.

KNOWLEDGE

The voters' knowledge of the candidates and their issue positions is moderately correlated with radio and television advertising exposure; Table 1 shows a correlation of +.42 for the overall index of broadcast exposure. Learning of candidate names vs. issue stands occurs to an

Table 1. Communication Correlates of Knowledge, Agenda, Interest, and Polarization*

Exposure Variable	r between Exposure and				
	Knowledge	Agenda	Interest	Polarization	
Advertising exposure index	+.42	+.18	+.40	+.28	
TV ads frequency	+.34	+.16	+.28	+.19	
Attention on TV ads	+.34	+.15	+.38	+.28	
Attention of radio ads	+.27	+.13	+.30	+.19	
News exposure index	+.39	+.18	+.42	+.31	
Newspaper article frequency	+.43	+.18	+.36	+.32	
TV news story frequency	+.20	+.12	+.31	+.19	
Interpersonal exposure index	+.36	+.07	+.41	+.29	
Conversation frequency	+.29	+.08	+.38	+.25	
Candidate/worker contact	+.29	+.03	+.25	+.21	
	Beta weights				
Advertising exposure index	+.26	+.13	+.20	+.13	
News exposure index	+.20	+.14	+.22	+.18	
Interpersonal exposure index	+.18	03	+.24	+.16	
	Multiple correlations				
(Advertising, news, interpersonal)	.51	.22	.52	.38	

^{*} Knowledge Index = (recalls Democratic candidate's name + recalls Republican candidate's name + knows Democrat's position on military spending + knows Republican's position on balancing budget + knows Republican's position on being own man).

Agenda Index = (nominates military spending as important issue + nominates balancing budget as important issue + degree of importance of candidate's position on military spending + degree of importance of candidate's position on balancing budget + degree of importance for candidate to be own man + degree of importance for candidate to be sensitive to people's needs).

Interest Measure = degree of interest in congressional election.

Polarization Index = (degree of liking or disliking for Democrat + degree of liking or disliking for Republican).

Exposure indices are composed of individual items listed under each index.

equivalent degree (not shown). For comparative purposes, political knowledge correlates +.39 with the index of newspaper and TV news campaign exposure, and +.36 with the interpersonal exposure index. These factors combine to produce a multiple correlation of .51.

The advertising-knowledge relationship is reduced to a partial correlation of +.25 with exposure to these other sources controlled. Additional partialling on precampaign familiarity with the candidates and campaign interest further reduces the association to +.21. Thus, with likely contaminating factors controlled, a substantial relationship remains between broadcast advertising exposure and campaign knowledge, indicating a functional relationship. The finding that *frequency* of viewing commercials is correlated +.34 with knowledge provides evidence that advertising exerts a causal influence in the relationship, since sheer exposure

frequency is unlikely to be due to selective attention by the knowledgeable.

Table 3 shows that the relationship is stronger among respondents who reported an informational motivation for viewing advertising. Those who said they watched because "the ads came on" or solely because ads were entertaining appear to learn less information than the explicit information-seekers. On the other hand, there is no differential association at high vs. low levels of previous familiarity or exposure to nonadvertising messages.

AGENDA

Voters were asked an open-ended question about the issues that they personally considered most important in making their congressional voting decision, and this was followed by several items asking for rating of the importance of the candidates' positions on several issues and the importance of several candidate qualities. Some issues and attributes were emphasized by both candidates, some by one candidate, and some by neither candidate. Table 1 shows that the overall agenda index is associated +.18 with the three advertising exposure items, along with the news media exposure index. Interpersonal exposure is only slightly related.

Since the agenda-setting findings are the unique feature of this study, these data are presented in more explicit detail in Table 2. The sample was divided at the median on the advertising exposure index, and responses were cross-tabulated on each agenda item. Those who were highly exposed are somewhat more likely to name as important the two issues most heavily emphasized in the advertising campaign, although the differences are not significant. On the four emphasized issues specifically cited in close-ended questioning, there is a consistent but modest tendency for the highly exposed respondents to feel that these factors are more important than do the less exposed respondents. The only significant finding is the 94 percent vs. 82 percent difference between these two groups in rating that it is "very important" for the candidate to be sensitive to people's needs. There is also a consistent tendency for less exposed voters to reply that they "don't know" the importance of the four issues.

Two approaches are used to test the validity of the relationship. Partialling on news and interpersonal exposure, previous familiarity, and campaign interest reduces the correlation somewhat from +.18 to +.12. Furthermore, a second index was constructed of issues not emphasized in

²² A four-item agenda index was constructed for each candidate based on the extent to which they gave priority to each factor in their TV and radio advertising. The correlation between exposure to the Republican's advertising and the voters' own agenda was +.18; and identical +.18 correlation was obtained for Democrat ad exposure and the voters' agenda. Since the two exposure indices and two agenda indices are strongly correlated and the relationships are quite similar, an overall agenda index was pooled for further analyses.

Table 2. Cross-Tabulations between Exposure to Broadcast Advertising Exposure and Importance of Campaign Issues

	Amount of	f Exposure	
Importance Item	Low N = 165	High N = 158	
There are a number of issues and problems facing the voters in this campaign for Congress. In making your voting decision, which of the issues do you personally consider most im- portant?			
Mentioned balancing the federal budget	15%	$23\% X^2 = 2.0$	6 (p = .10)
Mentioned cutting military spending	7%	$11\% X^2 = 1.7$	7 (p = .19)
How important is the candidate's position on balancing the federal budget?			
Very important	60%	$67\% X^2 = 4.0$	(p = .26)
Somewhat important	21	21	• ,
Not so important	13	10	
Don't know	6	2	
How important is the candidate's position on cutting military spending?			
Very important	52%	$51\% X^2 = 3.6$	6 (p = .30)
Somewhat important	27	35	•
Not so important	15	10	
Don't know	6	4	
How important do you feel it is for the candidate to be his own man?			
Very important	62%	$67\% X^2 = 6.0$	(p = .11)
Somewhat important	16	16	_
Not so important	11	13	
Don't know	11	4	
How important do you feel it is for the candidate to be sensitive to the needs of the people?			
Very important	82%	$94\% X^2 = 11$.5(p = .01)
Somewhat important	11	5	- '
Not so important	3	1	
Don't know	4	0	

the advertising (importance of Nixon pardon, forced busing, energy crisis, cost of living, unemployment). This nonagenda index was correlated -.02 with broadcast advertising exposure. Thus, the issues given priority in the commercials were perceived by exposed voters as important, while no difference by exposure was found for the "control" issues. This suggests that the relationship between the candidate and voter agendas is functional (although not strong); the direction of causality is likely to be from advertising to agenda.

The conditional associations in Table 3 show that the relationship is substantially greater among respondents not previously familiar with the candidates and among those not highly exposed to other information sources. No difference occurs according to the level of motivation for exposure. Thus, the minimally informed voters appear to be most strongly

Table 3. Conditional Correlations between Political Advertising Exposure and Knowledge,
Agenda, Interest, Polarization, and Liking

Conditional Variable	r between Advertising Exposure Index and				
	Knowldge	Agenda	Interest	Polari- zation	Likinga
Pre-campaign familiarity with candidates					
Not informed $(N = 137)$	+.36	+.25	+.41	+.24	+.18
Informed $(N = 186)$	+.37	+.15	+.29	+.23	+.05
News and interpersonal exposure					
Below median ($N = 149$)	+.28	+.24	+.18	+.27	+.21
Above median $(N = 174)$	+.33	+.09	+.33	+.16	+.08
Motivation for advertising viewing					
Information $(N = 96)^b$	+.43	+.10	+.42	+.12	+.11
Other/none $(N = 84)$	+.30	+.10	+.38	+.04	+.05

^a Figures in the Liking column are the average of the correlation between exposure and liking for the Democratic candidate and the exposure-liking correlation for the Republican.

^b N's in the Motivation conditions are reduced because only those voters who had seen both candidates' commercials were analyzed.

influenced by the agenda set in the candidates' advertising. Those more cognitively involved in the campaign are less susceptible to agenda-setting effects.

INTEREST

Advertising exposure is correlated +.40 with the campaign interest measure; news and interpersonal exposure are related to a similar degree. The multiple correlation of these three factors and interest is .52.

Since the raw association is likely to be highly spurious, previous familiarity, knowledge, and exposure to news and interpersonal messages were controlled. The partial correlation is a modest +.15, with the news and interpersonal exposure index accounting for most of the reduction.

The conditional relationship between advertising exposure and interest is stronger for voters with above average exposure to other communications than among those less exposed to nonadvertising sources (Table 3). There is a higher correlation among voters who were not informed prior to the campaign than among those who knew something about the candidates. No difference occurs by motivation for viewing.

LIKING

Advertising exposure measures are consistently related to positive affect toward each candidate, as shown in Table 4. An index of exposure to the Democrat's broadcast ads is correlated +.16 with liking for this candidate, and the Republican's exposure index is correlated +.20 with lik-

Table 4. Political Advertising Correlations of Liking for Congressional Candidates

	r between Exposure and			
Exposure Variable	Liking for Democrat	Liking for Republican		
Democrat advertising exposure index	+.16	+.07		
Number of Democrat's TV ads viewed	+.11	+.01		
Degree of attention to Democrat's TV ads	+.16	+.10		
Degree of attention to Democrat's radio ads	+.11	+.01		
Republican advertising exposure index	+.08	+.20		
Number of Republican's TV ads viewed	+.09	+.13		
Degree of attention to Republican's TV ads	+.08	+.20		
Degree of attention to Republican's radio ads	+.03	+.11		
Partial correlations				
Democrat Advertising Exposure Index				
controlling news and interpersonal exposure	+.09			
controlling campaign interest	+.12			
controlling previous familiarity with Democrat	+.11			
controlling for all three variables	+.07			
Republican Advertising Exposure Index	. •= .			
controlling news and interpersonal exposure		+.13		
controlling campaign interest		+.10		
controlling previous familiarity with Republican		+.19		
controlling for all three variables		+.08		

ing him; the correlations with specific types of advertising exposure range from +.11 to +.20.²³

Two approaches are used to determine the substance of these correlations. First, correlations of exposure to a candidate's ads with personal affect toward that candidate are compared to correlations with affect toward the opposing candidate; in all cases, advertising for a candidate is more closely related to affect toward him rather than his opponent. Second, partialling on interest, precampaign familiarity, and other communication exposure yields diminished yet positive associations. Thus, there is consistent evidence that exposure is related to liking, although the magnitude of the relationship is marginal.

Conditional analyses in Table 3 show that the exposure-affect relationship exists primarily among those who had no prior familiarity; those

The specific role of mere exposure was examined with correlations based on the frequency of TV commercial viewing; the median number of ads viewed for each candidate was four, while the mean was about seven. The number of times that the respondent reported seeing ads for the Republican candidate was correlated +.13 with liking him; the corresponding Democrat's correlation was +.11. Zajone suggests that message repetition should be defined as a logarithmic rather than a direct linear function; when the log of the exposure frequency variable was used in analysis, the correlation increases minimally to +.14 for the Republican while the Democrat's correlation remains at +.11. Both drop to +.04 when the control variables are applied. It appears that the development of positive affect through repeated exposure occurs only to a slight degree; indeed, this minimal relationship might be due to favorable voters watching (or remembering watching) more ads.

who were aware of a candidate before the campaign were not influenced by repeated exposure, while the uninformed group has a correlation of +.26 in the case of the Republican candidate and +.10 in the case of the Democrat. Furthermore, the relationship is considerably stronger for respondents with lower exposure to other information sources. These conditional relationships are consistent with "mere exposure" theory. Finally, the motivated viewer group has a somewhat higher association than the group not seeking information from ads.

POLARIZATION

Ratings along the personal affect scale were transformed so that "like very much" or "dislike very much" received the highest score while "neutral" or "don't know" was scored lowest; the degree of affect was then summed across the two candidates. This index of polarization is correlated to the same moderate extent with advertising, news, and interpersonal exposure (Table 1). Partialling on the control variables, the relationship between advertising exposure and polarization drops sharply from +.28 to +.12. Apparently a functional association remains, but the magnitude is modest when these factors are considered. Table 3 shows that the voters less exposed to nonadvertising messages and more motivated to obtain information have the larger correlations between advertising exposure and polarization.

Discussion

The pattern of findings shows that exposure to radio and television advertising is positively related to all criterion variables, although the generally moderate zero-order correlations decline substantially when other predictor variables are controlled. The evidence indicates that advertising exposure is functionally related to knowledge, agenda, interest, affect, and polarization. Whether exposure is a cause or consequence of these variables is difficult to determine in a single-shot survey; however, it appears unlikely that selective seeking of advertising messages could fully account for the relationships, since reception of broadcast commercials is often due to chance opportunity or to entertainment seeking. Thus, it seems that advertising does contribute to the voters' cognitive and affective orientations to some extent.

Considering the various communication predictor variables, the results indicate that advertising exposure, news exposure, and interpersonal exposure are related to almost equal extents with the political orientations of the voters. The main exception is the weak relationship between interpersonal communication and agenda priorities. Exposure to newspaper articles about the congressional campaign is the strongest single predictor of the criterion variables. Among the advertising predictors, attention to

TV ads is the strongest correlate in almost every case; radio attention and number of TV ads viewed are much less closely related to the political orientation variables. The exposure variables requiring the most active participation (TV attention and newspaper reading) are those most strongly associated with the criterion measures.

Examination of the antecedent and intervening conditions for advertising learning yields some interesting results. Somewhat stronger correlations are found for those voters who were least well informed about the candidates before the campaign began; for several criterion variables, those less attentive to other campaign communication show stronger relationships. Thus, it appears that voters who have few prior or concurrent informational inputs may learn the most from advertising. Voters who are manifestly using broadcast advertising for informational purposes consistently show stronger correlations between exposure and orientation, indicating that the motivation for attending to advertising is an important factor.

In conclusion, the evidence suggests that a well-designed and well-financed political advertising campaign in the broadcast media can serve to (1) increase the electorate's level of knowledge about the candidate and his featured issue positions, (2) elevate emphasized issues and attributes higher on the voters' agenda of decisional criteria, (3) stimulate the electorate's interest in the campaign, (4) produce more positive affect toward the candidate as a person, and (5) intensify polarization of evaluations of the candidate. It must be recognized that these consequences of advertising occur within the context of other mass media and interpersonal message inputs, and that the political orientations held or learned by the voter probably exert a reciprocal influence in producing exposure to broadcast advertising.