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ABSTRACT

Past research into the effects of "exposure" in political advertising indicates that massive "exposure" campaigns alone can show good, and sometimes dramatic, results in elections. This research is partially confirmed by a study of several mass media public relation efforts designed specifically to increase citizen recognition of the name of obscure candidates. Simple "exposure" political messages tested on a group of subjects yielded substantial increases in the recognition of the name used in the test and other positive results. Thus, campaigns in which obscure candidates attempt to win offices via extensive mass media advertisements for "name recognition" can expect a high degree of success. Also, the subjects' encounters with political advertisements stimulate them to seek more information about the candidates, but increasing encounters with the messages result in much less information seeking. Mass media campaigns for "exposure" can be obviated, however, by party loyalty, strongly held prejudices, or poor advertising content. (CH)

THE EFFECTS OF MERE EXPOSURE TO POLITICAL ADVERTISEMENTS

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THE EFFECTS OF MERE EXPOSURE TO POLITICAL ADVERTISING

Introduction

This paper reports the results of an experiment designed to replicate in the area of political advertising the consistent findings in communication and psychological research that increased exposure to a stimulus produces increased affect toward that stimulus. To the extent that this relationship holds for political advertising it has important implications for the democratic process. If a candidate can appreciably increase his or her affect level by increasing his or her exposure through advertisements, those candidates with sufficient financial backing to wage a large-scale media advertising effort would operate at a distinct advantage over opponents who were not as financially well endowed. In addition, it may be argued that by concentrating on maximizing exposure, key issues in the campaign may be ignored. The study investigated the possibility of interfering with the exposure-affect relationship by cuing subjects to the issues involved in campaign advertising. At the same time, the effect of exposure to political ads on information seeking was explored.

Exposure to Political Advertisements

A part of what Bowen, et al., (1971) have termed the "Conventional Wisdom" of political advertising is the belief that simple exposure of the electorate to elementary information about a candidate will produce a political advantage for that candidate. It is obvious that many in the political field hold this belief from the deluge of broadcast, print and outdoor advertising for candidates during campaigns. The proponents of simple exposure can point to an impressive number of supportive cases: Howard Metzenbaum, at the outset a relatively unknown Cleveland millionaire, defeated former astronaut John Glenn in the 1970 Ohio Democratic Senatorial primary after spending about 15 times as much money for electronic media spots as Glenn; multimillionaire Norton Simon, who entered

the California Republican Senatorial primary in 1970 against incumbent Senator George Murphy with a recognition factor close to zero, spent almost $2 million, most of it for advertising, and received 33 percent of the total Republican vote; and that same year in Texas a conservative Democratic insurance man, millionaire Lloyd M. Bentsen, Jr., defeated incumbent Senator Ralph Yarborough in the primary after an intensive Bentsen campaign of political spot advertisements. (See M. Barrett (ed.), Alfred I. duPont-Columbia University Survey of Broadcast Journalism, 1970.) In addition, proponents of mere exposure can point to the apparent success of the technique in the marketing of commercial products, where the number of advertisements is considered of extreme importance.

Electronic media advertising, which seldom is issue oriented, could be expected to help a political candidate in two ways. First, the exposure could increase the affective reactions of the voters to the candidate's name, face and campaign slogans. And second, the exposure could sensitize the voters to the candidate so that they might seek more information from either interpersonal or other media sources. The first effect of exposure might be expected to be most strong in minor elections, where voters have little information on which to make a voting decision. The second effect of exposure, the sensitization to future information, is more indirect in terms of voting outcomes. The results are likely to be mediated by the nature of the voter's interpersonal contacts and the content of the information he or she receives.

Advertising exposure could fail to produce the advantage for a given political candidate because of two complementary sets of factors. First the voters, either through active or unintentional avoidance, could fail to see or hear the advertisements. And second, even after being exposed to the advertisements, the voters could fail to respond to the candidate favorably or be sensitized toward additional information about him. Party identification and prior commitment to a candidate would be expected to have impact on both factors; committed voter might be expected to selectively expose himself or herself

to the advertisements and to use the advertisements to strengthen, rather than weaken, existing positions. Bowen, et al., however, found that the persuasiveness of the advertisements tended to overcome predispositional selectivity, and only a small minority of the voters studied gave closer attention to their favored candidate's ads or selectively avoided the opposition candidate's ads. More than half of the partisan voters, however, did report they "argue against the claims that are made" in the opposition ads when they are exposed to them. The ads, then, did not serve to aid a candidate, but rather to strengthen pre-existing preferences.

A large part of the electoral activity, however, involves intra-party conflict such as primaries or non-partisan contests rather than inter-party battles. In fact, the three cases of political advertisement exposure cited above dealt with primaries, and the survivors of two of those contests, Metzenbaum and Murphy, were defeated in the general election. In the intra-party and non-partisan contests, many of which are local in nature and involve a large number of relatively unknown candidates, mere exposure might be expected to have greater impact, as the barrier created by prior commitment would be expected to be less operative.

Research Findings

A body of literature, existing largely through the efforts of Zajonc in social psychology and Chaffee in communication, has demonstrated a clear, positive relationship between repeated exposure of an individual to a stimulus and that individual's affective evaluation of the stimulus. Zajonc (1968) reports a series of studies which he and his students conducted to determine the attitudinal effects of mere exposure. The questions arise, in part, as a result of repeated findings, reviewed by Zajonc, that words appearing most often in a language are also evaluated most highly. To clarify the direction of this relationship (does exposure produce affect or does affect produce use of a word and, consequently,

exposure?) and correct some methodological shortcomings of a similar, earlier study by Johnson, Thomson and Frincke (1960), Zajonc manipulated the exposure of 12 seven-letter nonsense words in an experimental situation. Subjects were shown these words, heard them pronounced, and then pronounced the words themselves. The words were presented to the subjects at differential frequencies. Subjects were told each word was an adjective which meant either something good or something bad. Subjects were then asked to guess the "goodness" or "badness" of the meanings of these words. While the comparisons between the various words used indicates that differences did exist aside from the effects of mere exposure, exposure had a consistent, positive effect for any given word.

Because of possible confounding in the above experiment resulting from pronounciation (experience leads to ease of pronounciation which leads to high affect), Zajonc substituted Chinese characters for the nonsense words with the same results as reported above. To completely eliminate the verbal component and any resulting confounding of the findings, Zajonc designed a third experiment, identical to those reported above, except that photographs of faces of men were used as stimuli. After differential exposure, subjects were asked "how much they would like to meet the man in the photograph." Again, mere exposure had a strong effect. Zajonc consistently found a positive linear relationship between affect and various levels of exposure.

Chaffee (1967a), building on the work of Carter (1965), designed two experiments to determine the role of salience, or psychological closeness of an object, in overall evaluation of the object. Carter distinguishes between the salience relation, or the evaluative link between a person and a single object, presumably a function of past experience, and a pertinence relation, or the evaluative discrimination between two objects each possessing the same attribute. The pertinence discrimination is situation bound, arising in a given time setting or for a particular task. The salience relation, however, is independent of other elements of the situation, having been built up over time. Salience is

what the person brings with him or her to any given situation. The summary evaluation an individual makes of an object in a given situation may result from a pertinence discrimination, the prior salience of the object, or both. In both of Chaffee's experiments, the objects of evaluation were Greek words, thought to be relatively unfamiliar to the subjects, 8th and 9th graders in a California school. Salience was manipulated in both experiments via an unstated requirement that certain words be used more often than others to solve a simple word puzzle. Evaluation of the objects, in both experiments, was measured by bipolar adjectival scales. In both cases, as salience increased, so did evaluation. In a subsequent experiment, Chaffee (1967b) reports consistent relationships between salience (measured as familiarity) and evaluation of person objects.

While mere exposure might be expected to result in higher salience and therefore greater affective evaluation, salience could also be expected to result from other factors. In the Chaffee experiments, discussed above, for instance, familiarity is combined with usefulness in a purposeful confound to produce salience. Finn (1973), in an experiment designed to identify antecedents of salience, has demonstrated that salience can be successfully manipulated through utility alone. Finn manipulated the discriminatory power of a set of objects previously unfamiliar to the subjects and found that the objects involved in the more exclusive discriminations were chosen as more salient.

Bowen (1970) extended the work on salience to the field of advertising in an experiment testing the differential effects of product ads relying primarily on exposure (salience) and those relying on sound purchasing arguments, including pertinence comparisons. Bowen found that for products which required high involvement, ads relying primarily on exposure were evaluated lower than ads relying on pertinence comparisons. Respondents also reported they would be more willing to buy the high involvement products advertised in the information appeal (pertinence ads) than those in the exposure (salience) appeals. While the experiment does not deal with the effects of exposure alone, it is important in

indicating the relative value of salience appeals. In the high involvement situation, subjects clearly preferred the pertinence ads over the salience ads and seemed to extend that evaluation to purchasing decision.

Research on mere exposure was extended to the area of advertising by Becknell, Wilson and Baird (1963), who showed subjects slides of nonsense syllables with differing frequencies interspaced with unrelated visual materials. After this exposure, the subjects, all females, were given pairs of boxes containing nylon stockings and asked to choose the "brand" they preferred. The "brand" names, which were marked on the boxes, corresponded to the nonsense syllables presented earlier. The data showed a tendency for subjects to prefer the stockings in the boxes bearing the nonsense "brand" name given higher exposure.

Hypotheses

Zajonc (1968) attempts to explain the mere exposure findings in terms of psychological arousal. A novel stimulus produces uncertainty or discomfort for the individual, resulting in a negative evaluation of that stimulus. As exposure to the stimulus continues with no negative consequences resulting, the evaluation of the object stimulus should become more positive. To test this conceptualization Zajonc designed an experiment using GSR as the measure of arousal and nonsense words as the stimuli. The result was a decrease in arousal as measured by the GSR with increasing exposure. Zajonc's conceptualization seems to stand in conflict with theorists such as Fiske and Maddi (1961) who contend that individuals seek out novel stimuli. While Fiske and Maddi argue that this seeking of variety is done to maintain the individual's customary level of activation, Zajonc argues that this seeking of novel stimuli is to assure the individual the stimulus is not discomforting or harmful. Zajonc argues that as the stimulus becomes more familiar, and the organism more assured of its harmlessness, exploration will taper off, and affect toward the stimulus will increase.

Both the Zajonc position and that of Fiske and Maddi run counter to what would seem to be the intuitive expectation regarding the relationship between mere exposure, resulting object salience, and seeking of additional information about that stimulus object. As we noted earlier, the increased exposure might be expected to sensitize the individuals to the stimulus and result in increased information seeking to learn more about the stimulus. This expectation would be expected particularly in the situation where the exposure was very incomplete in terms of providing information, as was the case in the Zajonc experiment dealing with "mug shots" of unknown persons. If the exposure served to arouse the interest of the individual, more information seeking might be expected with greater exposure since the relative knowledge level regarding that stimulus would not increase much after the first couple of exposures. In the political framework, the viewers of political advertisements that contain very little information might be expected to increase their interest in the candidates given high exposure and later make attempts to find out about those candidates.

It is this latter interpretation, that increased exposure will increase interest and information seeking, that political candidates may be relying on. If the Zajonc position is correct, however, exposure may increase their affect yet decrease the information sought about the candidates, resulting in off-setting effects. If however by increasing the saliency of the candidate affect increases and at the same time so does interest and information seeking, exposure is an extremely valuable asset in the campaign. One possible drawback to such exposure, however, might result if the increased advertising of a candidate increased the awareness of the supporters of the opposition candidate of the challenge and resulted in their high voter turnout. A common problem in elections in which an incumbent is seeking reelection is motivation of the incumbent's supporters to vote despite confidence their candidate will win by a wide margin.

Several factors in political situations also might be expected to counter the effects of mere exposure on affective evaluations of the candidates. This would seem to be the case since differential exposure of candidates does provide the voter some information which can be used for pertinence evaluations of those same candidates. First, unequal exposure provides some information about the financial ability of the candidates, since advertising costs money and the candidates with the most money can purchase the most ad time and gain the most exposure. This leaves the candidate open to charges he or she is "purchasing" elective office and runs counter to the notion in this country that any person can be elected if qualified. Second, ad exposure is often thought to be a substitute for the old fashioned kind of campaign during which the candidate makes an effort to meet personally as many voters as possible to allow the voter to evaluate the candidate more fully. And finally, political ads are seldom issue oriented and have been credited with turning the political decision making process in this country into one based on slick appeals rather than concrete issue statements. These issues concerning political advertising could be made more salient for a voter by the other candidate or nonpartisan sources such as the media. Charges of misuse of advertising, of course, are quite common in most elections. One candidate accuses the other of attempting to "buy" an election by using "slick appeals" and "sidestepping the issues." The airing of these charges in the election would be expected to make these issues more salient, and increased exposure of the candidate in such ads would be expected to produce a negative effect on the candidate's evaluation. This, of course, is what the less exposed candidate intends; candidates with large advertising budgets seldom do much complaining about the evils of campaign advertising.

This increased salience of the issues of political advertising would be expected to have an adverse effect on the information seeking behavior of the voters. This would be the case since the voter can infer that the candidate that advertises more may be wealthier, may be waging a somewhat impersonal campaign

and may be avoiding the issues of the campaign, while the reverse may be true of the less exposed candidates. The voter, therefore, would need to know less about all the candidates.

These expectations can be formally stated as the following four hypotheses, which are illustrated in Figures Ia and Ib.

H 1. When the issues of political advertising are low in salience, the affective evaluation of a candidate will be positively related to the amount of political advertising for that candidate.

H 2. When the issues of political advertising are highly salient, the affective evaluation of a candidate will be negatively related to the amount of political advertising for that candidate.

H 3. Individuals will indicate they are likely to seek information about the candidates less as the advertising for that candidate increases.

H 4. Individuals will indicate they are likely to seek information about the candidates less when issues of political advertising are highly salient than when they are low in salience.

Methodology

To test the four hypotheses offered above a 2 x 3 factorial design experiment employing repeated and independent measures was used. The experiment was integrated into the structure of two undergraduate mass media courses.

Subjects. College sophomores and juniors enrolled in the two courses were asked to volunteer during class time to participate in the experiment. A total of 66 students were given the experimental manipulations; three of those were eliminated prior to analysis due to their incomplete responses to the post-test questionnaire, and three other subjects were eliminated randomly to equalize cell size.

Exposure Manipulation. Six names were chosen from a list of 10 possible after a pre-test using students enrolled in a sophomore level journalism class to determine prior affect for the names. The original list contained only male first names coupled with common, Anglo-Saxon surnames. The four eliminated names

differed most in terms of mean affect scores. The remaining names were all rated relatively neutral on an eight point scale. The selected names are listed in Table I.

The six names were then randomly assigned to one of three exposure levels: high (freq.=10), moderate (freq.=5), and low (freq.=2). Two names were assigned to each of the exposure levels. The exposure levels were chosen from the six used by Zajonc (0, 1, 2, 5, 10, 25) in the "mug shot" experiment on pragmatic grounds--the amount of time devoted to the experiment had to be held low to assure cooperation of the subjects. A tape recording of 34 advertisements for the six names was made by a professional broadcaster; efforts were made to keep the advertisements consistent in tone and inflection. Each of the advertisements was about 7 seconds long and was followed by a three second pause. Order of presentation of the advertisements was randomly determined within each half of the 34 advertisement tape. A second tape was made identical to the first except that the names in the high and low exposure levels were alternated. See Table I for description of the tapes.

Each advertisement consisted of the following three sentences:

"This Tuesday, vote for _____. Make your vote count. Vote for _____."

Each name was mentioned twice in a given advertisement, increasing the real frequency of name exposure for all names by two. To fill the pauses between these rather repetitious advertisements, soft, classical music was used as background for the taping.

In both the "mug shot" experiment and the experiment using Chinese characters, Zajonc used exposures of only 2 seconds duration. In other words, the stimulus exposed 25 times was shown the subjects for a total of only 50 seconds. In our experiment, however, each ad consists of a 7-second verbal message plus 1.5 seconds of free space on each side of that message, for a total of 10 seconds. This makes our 5-exposure situation identical to the Zajonc 25-exposure situation

in terms of total advertising exposure. Exposure to the candidate's name, however, was much less--close to 2 seconds per ad.

To test the exposure effects two types of comparisons were built into the experiment. The simplest comparison is between the summed evaluations of Ronald Jones and Richard Brown (freq.=2) in Tape 1 and the summed evaluations of those same two names (freq.=10) in Tape 2. Since no respondents heard both tapes, both these means are independent. The experiment is replicated within itself, of course, as the comparisons of Joseph Roberts and James Allen between Tape 1 and Tape 2 test the same hypothesis and are likewise independent. A more powerful comparison, however, is across individuals, as indicated by the 2, 5 and 10 frequency comparisons within each tape. This comparison holds constant individual differences in use of the scales, found by McLeod, Becker and Elliott (1972) to be fairly consistent across tasks and time. Zajonc employed a similar design in his series of experiments.

While the short advertisements might seem unusual, Bowen, et al., report that television ads of less than 30 seconds in length occurred quite frequently in both Colorado and Wisconsin gubernatorial campaigns in 1970. In Colorado, ads of 10 seconds duration were employed. The short ads were necessary in this experiment to hold down the total length of the experiment and to keep the information for each candidate constant.

Salience of Issues of Political Advertising. Prior to the experimenter's appearance and request for volunteers, the subjects were asked by their instructor to read one of two short essays on current mass media issues. After reading these essays, the subjects were to comment on the material's relevance to the course and return them to the instructor. One of those essays dealt with the evils of the media dominance of the political process, stressing that those candidates with the most money can "purchase" political office. The essay included several real examples of electoral success of a wealthy candidate who was able to buy great amounts of advertising time and win office. The other essay dealt with an

unrelated issue in broadcast and print journalism. The reading of these articles served as the issue salience manipulation--the political process essay producing high issue salience and the other essay low issue salience. Every effort was made to incorporate the reading of the articles into the class activities in order to separate them from the experiment. This was done so as to reduce any demand characteristics which, if present, would be highly influential in this type of experiment.

Setting. Upon arrival at the class the subjects were asked by their instructor to read the essays described above. When the students were nearly finished reading the materials the primary experimenter appeared and, after waiting for completion of the reading task, was introduced. The experimenter asked for volunteers for a "memory recall" experiment being conducted in a separate department, and then briefly described the tapes and procedure. Zajonc used the "memory" cover for his experiment using photographs as stimuli. The readings had been systematically distributed to the class, and the experimenter, aware of this pattern, systematically assigned subjects to the cells. The experiment was run in eight classes; all conditions of the experiment were represented in each of these groups. The subjects then either went to a separate room and heard Tape 1 or another room and heard Tape 2. An experimenter accompanied the subjects, gave them more specific instructions about the memory recall experiment and asked them to pay close attention to the tapes. After hearing the tapes, the subjects were given a post-test questionnaire, which they completed before returning to their class. Experimenters were balanced across the tapes according to sex. Subjects were debriefed in their class about a month after the experiment.

Instructions and Post-Test. Subjects were informed before hearing the tapes that all advertisements contained in them were designed specifically for the experiment, that all the candidates were fictitious, and that they should pay

attention since the experiment dealt with recall of information from ads. In addition, the subjects were told they "should try to put yourself into a voting framework. In other words, please try to listen to the advertisements as you would listen to advertisements for candidates for a local office such as mayor or alderman." There was no mention of the political party of any of the candidates. The post-test also stressed the fact that the candidates were fictitious and that the questions "require you to form images or pictures of the candidates."

The Dependent Measures. In the Zajonc experiments using nonsense or foreign words, affect was operationalized by questions requiring the respondents to guess the real meanings of the words, i.e., whether they had bad or good meanings. While Zajonc argued that subjects were probably responding according to the affect they assigned the words since they had nothing else to judge on, a more direct measure seemed preferable. In the "mug shot" experiment, affect was measured by asking the respondents to indicate on a seven-point scale how much they might like the man in each photograph. Chaffee (1967a and 1967b) similarly operationalized the summary evaluation resulting both from salience and pertinence relationships by a bipolar rating scale with like and dislike as the anchors. The first three items in Table II were used in this experiment to measure the affective evaluations of the fictitious political candidates. The first two items are adaptations of the items used by Zajonc and Chaffee. The third item was designed to tap a summary evaluation of the candidate for voting purposes. In a situation such as the one created for this experiment, voter preference would be expected to be a proper measure of affect as no other basis for an evaluation is available. Table II shows high inter-item correlations (average = .65) for the measures used to form the affect index.

The final two items in Table II were considered measures of likelihood of seeking information. In experimental research, information seeking is often measured by asking subjects to indicate topics they would like to receive information about.

Our experimental situation prohibited such a measure, however, as the subjects knew the candidates were fictitious and thus no real information existed. The measures used here allow the respondents to indicate what they would be likely to do in such a situation. Item four in Table II measures general information seeking while item five measures the seeking of a specific type of interpersonal information--that which tells an individual what his friends are thinking. The two items are highly correlated (.71).

The affect and likelihood of information seeking indices were formed by a simple summing of the respective items. Each item required response on an eight-point scale. The correlations shown in Table II indicate the items included in both dependent variable indices discriminate between the two variables: each item shows raw correlations with items in their index roughly twice as large as the correlations with the items in the other index.

Results

Affect. The analysis shown in Tables III a and b indicates the relatively large effect of individual differences on the overall evaluations of the affect of the six candidates. Individual means for those six evaluations ranged from a high of 19.50 to a low of 10.50, indicating tremendous differences in the ways the individuals in the experiment were using the eight-point scales. As Tables IV a and b clearly demonstrate, such individual differences severely limit the ability of the less powerful, uncorrelated tests to distinguish differences in cell means. In both internal replications of the experiment (shown in IV a and b), the residual variance, due at least in part to the individual differences in use of the scales, overwhelms the variance explained by either exposure or the issue salience manipulation.

The dependent means presented in Tables III a and b show an unexpected curvilinear relationship between exposure and affect. In both the high and low

issue salience conditions the moderate exposure produces higher affective evaluation of the candidates than does either low exposure or high exposure. Since the F test for the variance explained by the three means is not sensitive to such a curvilinear relationship, individual t tests based on the differences between the correlated means were performed. (See Blalock, 1972).

The individual means tests, presented in Tables V a and b, show a clear curvilinear relationship, at least in the high issue salience condition. In the high issue salience condition affect increases with increased exposure until freq.=5, contrary to prediction, and decreases again as exposure increases to freq.=10. Mean differences between affect for the freq.=10 and freq.=5 and for the freq.=5 and freq.=2 comparisons are significant at traditional levels. While the differences for the low issue salience conditions are in the same direction as those for high issue salience, they are less pronounced and only the freq.=10 vs. freq.=5 comparison approaches traditional significance levels.

To adequately test the differences between the two issue salience conditions (for which repeated measures were not used) individual evaluations of the six candidates were converted to deviation scores by subtracting out individual means. This produces essentially the same control as that provided by the deviation score tests employed above, though the results are not necessarily identical. The tests of the differences of the means of these individual deviation scores for the two issue salience conditions are shown in Table VI. Issue salience had impact only in the freq.=2 exposure situation; subjects in the high issue salience situation rated the candidates with only 2 advertisements significantly lower than did the subjects in the Low issue salience condition. The means for the six cells shown in Table VI are plotted in Figure II, which illustrates clearly the curvilinearity of the relationship between exposure and affect and the weak effect of the issue salience manipulation.

The back up affect measure, which asked respondents to rank order the candidates, also produced a curvilinear relationship between exposure and affect, though the differences appear most pronounced in the low issue salience rather than the high issue salience condition, the reverse of what was the case with the other measure. The mean ranks for this measure are presented in Table VII.

Likelihood of Information Seeking. As was the case with affect, individual variance clouds the differences between means due to differential advertising exposure. Individual means for the variable ranged from 2.00 to 15.33, necessitating control for the different ways subjects use the scales. In both the low and high issue salience conditions, individual differences produce large F ratios. The uncorrelated means analysis of variance, not shown here, also illustrates the futility of proceeding without pulling out the individual variation.

Tables VIII a and b also illustrate the underlying curvilinear relationship that surfaces between exposure and likelihood of seeking information, contrary, again, to prediction. The mean differences for the exposure manipulations are significant at traditional levels in both the low and high issue salience conditions. The curvilinear relationship for likelihood of information seeking does not appear to be as strong as it was for affect.

Tables IX a and b show the results of t tests for differences between the correlated means. In the low issue salience condition, likelihood of seeking information increases with exposure so that in the freq.=5 condition subjects report they would be more likely to seek information about the candidate than in the freq.=2 situation. But the respondents report they would be less likely to seek information about the candidates with 10 ads than about those with only 5. In the high issue salience condition, the difference between the reported likelihood of seeking information for those candidates with 5 ads and those with 10 does not surface. In both those conditions, respondents report they are more likely to seek information about the candidates than in the low exposure condition.

Table X reports the results of the independent mean deviation scores tests for the likelihood of seeking information variable. None of the differences is statistically significant. The means shown in Table X are plotted in Figure III.

Discussion

A comparison between Figures I a and b and Figures II and III indicates the general lack of fit of the findings with the expectations. The most noticeable differences, of course, result from the unexpected curvilinear relationships between exposure and affect and likelihood of information seeking. The comparisons further indicate the generally null findings for the issue salience variable.

If we ignore the weak effect of the salience variable, Figure II shows that the relationship between exposure and affect is compatible with that found in the literature up to the five ad condition. In other words, exposure leads to affect up to a point. But after the five ad condition, exposure shows a negative relationship to affect. In the most comparable piece of earlier research, Zajonc found in his "mug shot" experiment that affect increased up to a 50 second exposure condition. What appears to have happened in our experiment is that the subjects considered the 10-second ad itself as the entire stimulus and a saturation point was reached after the 50 second exposure point. Increased exposure at some point after 50 seconds had the reverse effect. Since we only used three points on the exposure continuum, it is impossible to determine the precise point of inflection of the curve.

The curvilinear relationships between exposure and affect could be explained by two intervening variables differentially effected by exposure but similarly related to affect or two intervening variables similarly related to exposure but having differential effects on overall affective evaluation. While it may not be necessary to resort to intervening variables to explain the curvilinear findings, it is important to note that both the research by Chaffee and that by Zajonc has

relied on such variables. Chaffee has called the intervening variable salience or psychological closeness while Zajonc says the intervening variables is relaxation of discomfort.

The hypothesis that information seeking would be inversely related to exposure was derived from Zajonc's use of exploration and curiosity to explain the exposure--affect relationship. While the Zajonc position results in the negative expectation, our findings for the low and moderate exposure conditions are just the opposite. Again, ignoring the very slight differences between the issue salience conditions, the data show a mild positive relationship between exposure and reported likelihood of information seeking which holds only until 5 exposures and then shows a slight negative trend. These findings suggest that information seeking here is most likely the result of the same intervening variables as affect. The intuitive position that the first exposures will stimulate the individual to seek additional information seems more in line with the data. The increased exposure apparently leads to disinterest and a decrease in information seeking.

The apparent failure of the issue salience manipulation may have resulted from use of college students as subjects for the experiment. It may be that the issues of political advertising were already highly salient for these students and the short essay they read before the experiment had no additional effect on the issue salience. Further indication that this is the case comes for an additional analysis of the ability of the subjects after the experiment to list the number of ads for each candidate. Students who were most interested in who was misusing the advertising process would be expected to identify those overexposed and underexposed candidates better than the other students, yet this did not seem to be the case. The analysis showed no differences between the low and high issue salience groups.

There is some suggestion that the use of political stimuli for our experiment may have led to the curvilinear relationship between exposure and affect--a

relationship which may have been consistent with earlier findings had other stimuli been used. In a series of field experiments, Zajonc and his students (Zajonc and Rajecki, 1969; Crandall, 1972, and Rajecki and Wolfson, 1973) have replicated the laboratory findings using nonsense words as the stimuli. While evaluations of such stimuli are without much consequence to the subjects, our experiment, by requiring the subjects to evaluate the candidates in a voting framework, may have given more consequence to the decisions. Subjects, particularly those drawn from a college population, may have fairly fixed ways of approaching a voting situation and may react negatively to high exposure not accompanied by additional information. Nonsense stimuli would not be expected to contain this additional requirement.

The data are clear on the role of individual differences in evaluations under circumstances of low specification, such as the experiment provided. While the manipulations were at least partially successful in producing small changes in the subjects' affective evaluations of and reported likelihood of seeking information about the candidates, those changes remain masked by preexisting influences on the way individuals use scales. In other words, the manipulations apparently produced deviations around the individual's mean, but not in the mean itself. Though Zajonc has taken this into account in his experiments, he has given it less attention than it seems to deserve. The experimenter who does not build individual difference controls other than randomization into the design may be left without an adequate test of the hypotheses. An analogy here might be in the need to find an individual's baseline when using the GSR device. Each individual seems to have a baseline for use of scales like those in this experiment. In situations where the manipulation is very strong and the experiment requires very specific reactions, isolation of such baselines would not be very important. But in an experiment which lacks such strong manipulations, the baseline is very important.

This experiment raises questions about the generalizability of the prior findings, particularly those of Zajonc who has relied on mere exposure to produce affect, to real-world situations. The realm of political advertising is one such real-world area where the earlier findings would be expected to be of great importance. Few candidates rely solely on spot ads; fewer still rely on ads like those used in this experiment that emphasize only the name. And no radio station runs a full 10 minutes of advertisements as was done in the experiment. Yet advertisements do appear on the air in great quantity, and many are spots with little more than mention of name and office. While it would be risky to generalize the findings of this experiment to all political campaigns, they would seem to be relevant to at least those campaigns where obscure candidates attempt to win their way to minor office via name recognition. In such cases, exposure seems to have limited blessings.

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TABLE I

Description of Tapes and Names Used for Exposure Manipulation*

NAMES	Frequency of Ad	
	Tape 1	Tape 2
Ronald Jones	2	10
David Smith	5	5
Joseph Roberts	10	2
Richard Brown	2	10
Thomas Meyer	5	5
James Allen	10	2

*NOTE: Each advertisement consisted of the following three sentences: This Tuesday, vote for_____. Make your vote count. Vote for_____."

TABLE II

Correlation Matrix*

Five Items Included in Post-Test

	1	2	3	4	5
1. How much would you like to meet a person like the fictitious_____?	1.00				
2. If you were to meet a person like the fictitious_____, how much do you think you would like him?	.667	1.00			
3. How likely do you think it is that you would vote for a person like the fictitious_____if he were running for public office? Would you say you would be more likely to vote for him or against him?	.596	.689	1.00		
4. How likely do you think it would be that you would try to find out more information about a person like the fictitious_____?	.332	.335	.469	1.00	
5. How likely do you think it would be that you would try to find out what your friends think about a person like the fictitious_____?	.325	.319	.370	.711	1.00

*NOTE: Entries are average correlations for the five items across all six of the candidates. In the analyses that follow, the first three items were summed to form an index of Affect. Items 4 and 5 were summed to form an index of Likelihood of Seeking Information.

TABLE IIIa

Dependent (Correlated) Means and Analysis of Variance Table for Affect: Low Salience of Issues of Political Advertising*

	Low Exposure (Freq.=2)	Moderate Exposure (Freq.=5)	High Exposure (Freq.=10)
Mean	26.07	26.93	25.13
sd	8.12	6.63	6.82

N=30 (each subject served in each exposure condition)

	Degrees of Freedom	Sums of Squares	Mean Square	F	Significance Level
Explained by three levels of exposure	2	48.21	24.11	.57	NS
Explained by individual differences	29	2259.15	77.90	1.86	$p \leq .001$
Residual	58	2434.46	41.97		
TOTAL	89	4741.82			

*NOTE: Scores are summed across both candidates in the same exposure condition. Both Tape 1 and Tape 2 respondents are included. A low score indicates low affect.

TABLE IIIb

Dependent (Correlated) Means and Analysis Variance Table for Affect: High Salience of Issues of Political Advertising*

	Low Exposure (Freq.=2)	Moderate Exposure (Freq.=5)	High Exposure (Freq.=10)
Mean	26.13	28.77	27.33
sd	4.89	4.25	6.45

H=30 (each subject served in each exposure condition)

	Degrees of Freedom	Sums of Squares	Mean Square	F	Significance Level
Explained by three levels of exposure	2	106.96	53.48	2.21	NS
Explained by individual differences	29	1103.49	38.05	1.58	$p \leq .05$
Residual	58	1400.71	24.15		
TOTAL	89	2611.16			

*NOTE: Scores are summed across both candidates in the same exposure condition. Both Tape 1 and Tape 2 respondents are included. A low score indicates low affect.

TABLE IVa

Independent (Uncorrelated) Means and Analysis of Variance Table for Affect: Low Exposure in Tape 1*

	Low Exposure (Freq.=2)	High Exposure (Freq.=10)	Total
Low Salience of Issues of Political Advertising	$\bar{X}$=24.20 sd= 7.21	$\bar{X}$=24.80 sd= 7.19	$\bar{X}$=24.50 sd= 7.08
High Salience of Issues of Political Advertising	$\bar{X}$=25.93 sd= 6.30	$\bar{X}$=25.40 sd= 6.77	$\bar{X}$=25.67 sd= 6.43
TOTAL	$\bar{X}$=25.07 sd= 6.71	$\bar{X}$=25.10 sd= 6.87	$\bar{X}$=25.08 sd= 6.73 N=60

	Degrees of Freedom	Sums of Squares	Mean Square	F	Significance Level
Explained by exposure	1	.02	.02	.00	NS
Explained by issue salience	1	20.42	20.42	.02	NS
Interaction	1	4.82	4.82	.01	NS
Residual	56	52,819.74	943.21		
TOTAL	59	52,845.00			

*NOTE: Entries are means and standard deviations for individual evaluations summed across both candidates in the same exposure condition. Freq.=5 condition is not presented because no independent test across the same candidate is possible. A low score indicates low affect.

TABLE IVb

Independent (Uncorrelated) Means and Analysis of

Variance Table for Affect: Low Exposure in Tape 2*

	Low Exposure (Freq.=2)	High Exposure (Freq.=10)	Total
Low Salience of Issues of Political Advertising	$\bar{X}$=27.93 sd= 6.25	$\bar{X}$=25.47 sd= 6.90	$\bar{X}$=26.70 sd= 6.59
High Salience of Issues of Political Advertising	$\bar{X}$=26.33 sd= 3.40	$\bar{X}$=29.07 sd= 6.01	$\bar{X}$=27.70 sd= 4.99
TOTAL	$\bar{X}$=27.13 sd= 5.01	$\bar{X}$=27.27 sd= 6.61	$\bar{X}$=27.20 sd= 5.82
			N=60

	Degrees of Freedom	Sums of Squares	Mean Square	F	Significance Level
Explained by exposure	1	.27	.27	.00	NS
Explained by issue salience	1	15.00	15.00	.02	NS
Interaction	1	101.40	101.40	.13	NS
Residual	56	44,973.33	803.10		
TOTAL	59	45,090.00			

*NOTE: Entries are means and standard deviations for individual evaluations summed across both candidates in the same exposure condition. Freq.=5 condition is not presented because no independent test across the same candidate is possible. A low score indicates low affect.

TABLE Va

Tests for Correlated Means For Affect: Low Salience of Issues of Political Advertising*

TEST			INTERPRETATION
$\bar{X}_D$ (Freq.=10) - (Freq.=5)	=	-1.83	A negative $\bar{X}_D$ means affect for the candidates with 10 advertisements was less than for the candidates with 5 ads.
sd	=	7.99	
t	=	1.24	
p.	=	.11	
$\bar{X}_D$ (Freq.=2) - (Freq.=5)	=	-0.87	A negative $\bar{X}_D$ means affect for the candidates with 2 advertisements was less than for the candidates with 5 ads.
sd	=	7.37	
t	=	0.64	
p.	=	NS	
$\bar{X}_D$ (Freq.=10) - (Freq.=2)	=	-0.93	A negative $\bar{X}_D$ means affect for the candidates with 10 advertisements was less than for the candidates with 2 ads.
sd	=	7.85	
t	=	0.64	
p.	=	NS	

*NOTE: The null hypothesis for each of these tests is: μ_D=0.0. Scores are summed across both candidates in the same exposure condition. Both Tape 1 and Tape 2 respondents are included.

TABLE Vb

Tests for Correlated Means For Affect: High Salience of Issues of Political Advertising*

TEST			INTERPRETATION
$\bar{X}_D$(Freq.=10) - (Freq.=5)	=	-1.53	A negative $\bar{X}_D$ means affect for the candidates with 10 advertisements was less than for the candidates with 5 ads.
sd	=	4.72	
t	=	1.74	
p.	<	.05	
$\bar{X}_D$(Freq.=2) - (Freq.=5)	=	-2.30	A negative $\bar{X}_D$ means affect for the candidates with 2 advertisements was less than for the candidates with 5 ads.
sd	=	6.15	
t	=	2.02	
p.	<	.05	
$\bar{X}_D$(Freq.=10) - (Freq.=2)	=	+1.10	A positive $\bar{X}_D$ means affect for the candidates with 10 advertisements was greater than for the candidates with 2 ads.
sd	=	8.87	
t	=	0.67	
p.	=	NS	

*NOTE: The null hypothesis for each of these tests is: μ_D=0.0. Scores are summed across both candidates in the same exposure condition. Both Tape 1 and Tape 2 respondents are included.

TABLE VI

Tests for Differences Between Uncorrelated Means of Individual Affect Deviation Scores for Low and High Political Issue Salience Across Three Exposure Levels*

	Low Issue Salience	High Issue Salience	
Exposure (Freq.=2)	$\bar{X}$ = +0.023 sd = 4.27	$\bar{X}$ = -3.46 sd = 5.33	t = 2.75 df = 58 p. < .005
Exposure (Freq.=5)	$\bar{X}$ = +0.60 sd = 4.69	$\bar{X}$ = +1.12 sd = 2.37	t = 0.53 df = 58 p. = NS
Exposure (Freq.=10)	$\bar{X}$ = -0.91 sd = 4.78	$\bar{X}$ = -0.19 sd = 4.26	t = 0.61 df = 58 p. = NS

N for each row = 60

*NOTE: To obtain the entries a mean for each individual's evaluation of the six candidates was computed as were deviation scores from that mean for each of those evaluations. Entries in the cells above are means of those deviation scores for all subjects in the cell. Entries are for both candidates in the same exposure condition, and both Tape 1 and Tape 2 subjects are included in each cell. A low score indicates low affect.

TABLE VII

Mean Ranks for Back-Up Affect Measure for Three Levels of Exposure and Low and High Salience of Issues of Political Advertising*

	Low Exposure (Freq.=2)	Moderate Exposure (Freq.=5)	High Exposure (Freq.=10)
Low Issue Salience	5.68 N = 28	7.57 N = 28	4.64 N = 28
High Issue Salience	7.27 N = 29	7.45 N = 29	6.25 N = 29

*NOTE: Entries are summed affect rankings for two candidates in the same exposure condition. Each respondent in each row served in all three column conditions. A low score indicates low affect.

TABLE VIIIa

Dependent (Correlated) Means and Analysis of Variance Table for Likelihood of Information Seeking: Low Salience of Issues of Political Advertising*

	Low Exposure (Freq.=2)	Moderate Exposure (Freq.=5)	High Exposure (Freq.=10)
Mean	17.70	19.40	18.00
sd	5.61	5.78	6.51

N = 30 (each subject served in each exposure condition)

	Degrees of Freedom	Sums of Squares	Mean Square	F	Significance Level
Explained by three levels of exposure	2	84.66	42.33	3.57	$p \leq .05$
Explained by individual differencts	29	2528.49	87.18	7.35	$p \leq .001$
Residual	58	688.01	11.86		
TOTAL	89	3301.16			

*NOTE: Scores are summed across both candidates in the same exposure condition. Both Tape 1 and Tape 2 respondents are included. A low score indicates low likelihood.

TABLE VIIIb

Dependent (Correlated) Means and Analysis of Variance Table for Likelihood of Information Seeking: High Salience of Issues of Political Advertising*

	Low Exposure (Freq.=2)	Moderate Exposure (Freq.=5)	High Exposure (Freq.=10)
Mean	19.03	20.90	20.47
sd	6.42	6.02	6.38

N = 30 (each subject served in each exposure condition)

	Degrees of Freedom	Sums of Squares	Mean Square	F	Significance Level
Explained by three levels of exposure	2	57.27	28.64	3.44	p. $<$ .05
Explained by Individual differences	29	3058.73	105.47	12.68	p. $<$ .001
Residual	58	482.40	8.32		
TOTAL	89	3598.40			

NOTE: Scores are summed across both candidates in the same exposure condition. Both Tape 1 and Tape 2 respondents are included. A low score indicates low likelihood.

TABLE IXa

Tests for Correlated Likelihood of Information Seeking Means: Low Salience of Issues of Political Advertising*

TEST		INTERPRETATION
$\bar{X}_D$(Freq.=10) - (Freq.=5)	= -2.80	A negative $\bar{X}_D$ means the likelihood of seeking information about the candidates with 10 advertisements was less than for the candidates with 5 ads.
sd	= 7.58	
t	= 1.99	
p.	< .05	
$\bar{X}_D$(Freq.=2) - (Freq.=5)	= -3.33	A negative $\bar{X}_D$ means the likelihood of seeking information about the candidates with 2 advertisements was less than for the candidates with 5 ads.
sd	= 7.43	
t	= 2.41	
p.	< .025	
$\bar{X}_D$(Freq.=10) - (Freq.=2)	= +0.53	A positive $\bar{X}_D$ means the likelihood of seeking information about the candidates with 10 advertisements was greater than for the candidates with 2 ads.
sd	= 6.20	
t	= 0.46	
p.	= NS	

*NOTE: The null hypothesis for each of these tests is: $\mu_D = 0.0$. Scores are summed across both candidates in the same exposure condition. Both Tape 1 and Tape 2 respondents are included.

TABLE IXb

Tests for Correlated Likelihood of Information Seeking

Means: High Salience of Issues of Political Advertising*

TEST			INTERPRETATION
$\bar{X}_D$(Freq.=10) - (Freq.=5)	=	-0.87	A negative $\bar{X}_D$ means the likelihood of
sd	=	5.11	seeking information about the candidates
t	=	0.92	with 10 advertisements was less than
p.	=	NS	for the candidates with 5 ads.
$\bar{X}_D$(Freq.=2) - (Freq.=5)	=	-3.80	A negative $\bar{X}_D$ means the likelihood of
sd	=	6.57	seeking information about the candidates
t	=	3.12	with 2 advertisements was less than for
p.	<	.005	the candidates with 5 ads.
$\bar{X}_D$(Freq.=10) - (Freq.=2)	=	+2.86	A positive $\bar{X}_D$ means the likelihood of
sd	=	6.23	seeking information about the candidates
t	=	2.47	with 10 advertisements was greater than
p.	<	.01	for the candidates with 2 ads.

*NOTE: The null hypothesis for each of these tests is: $\mu_D = 0.0$. Scores are summed across both candidates in the same exposure condition. Both Tape 1 and Tape 2 respondents are included.

TABLE X

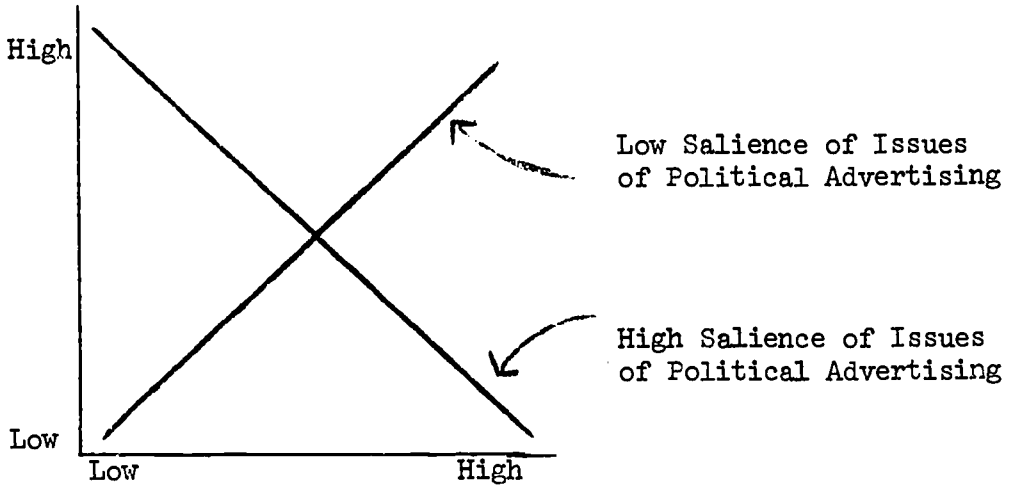
Tests for Differences Between Uncorrelated Means of Individual Likelihood of Information Seeking Means for Low and High Political Issue Salience Across Three Exposure Levels*

	Low Issue Salience	High Issue Salience	
Exposure (Freq.=2)	$\bar{X}$ = -0.64 sd = 3.95	$\bar{X}$ = -1.10 sd = 2.53	t = 0.24 df = 58 p. = NS
Exposure (Freq.=5)	$\bar{X}$ = +0.30 sd = 3.18	$\bar{X}$ = +0.76 sd = 2.22	t = 0.28 df = 58 p. = NS
Exposure (Freq.=10)	$\bar{X}$ = -0.38 sd = 2.80	$\bar{X}$ = +0.33 sd = 2.17	t = 0.48 df = 58 p. = NS

N for each row = 60

*NOTE: To obtain the entries a mean for each individual's evaluation of the six candidates was computed as were deviation scores from that mean for each of those evaluations. Entries in the cells above are means of those deviation scores for all subjects in the cell. Entries are for both candidates in the same exposure condition, and both Tape 1 and Tape 2 subjects are included in each cell. A low score indicates low likelihood.

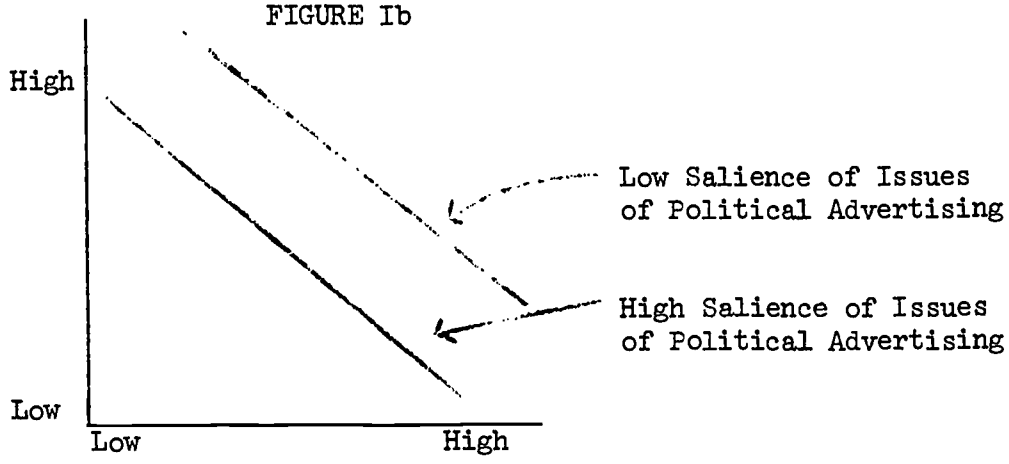
FIGURE Ia



Affect

Frequency of Exposure to Stimulus

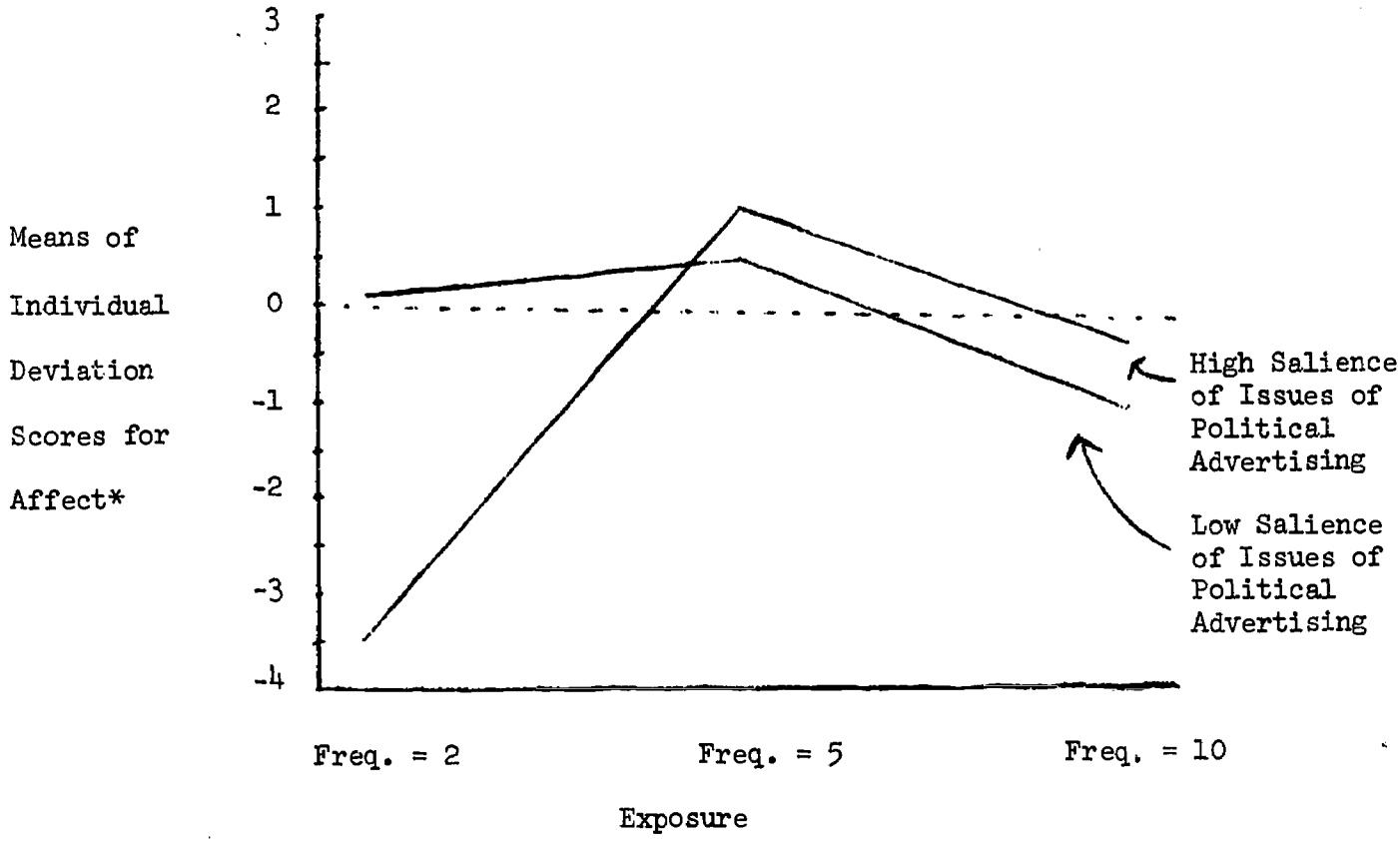
FIGURE Ib



Likelihood of Seeking Information

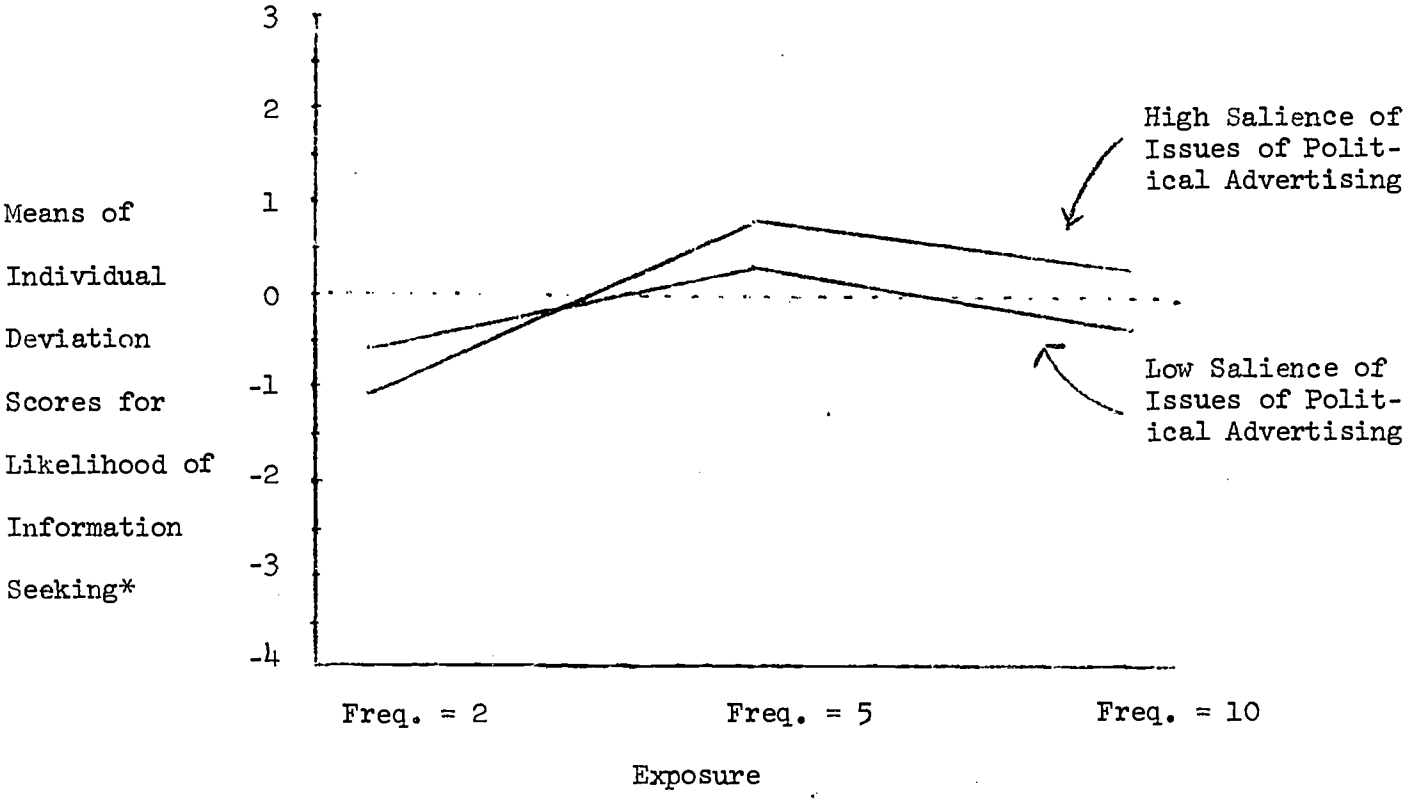
Frequency of Exposure to Stimulus

FIGURE II



*NOTE: A positive score indicates high affect and a negative score indicates low affect. A score near zero indicates the affect score is near the mean for the evaluations of the six candidates.

FIGURE III



*NOTE: A positive score indicates high likelihood and a negative score indicates low likelihood. A score near zero indicates the likelihood score is near the mean for the evaluations of the six candidates.