Susceptibility to Agenda Setting: A Cross-Sectional and Longitudinal Analysis of Individual Differences

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Who is most susceptible to media agenda-setting influence? The question has important implications for both scholarly research and the democratic process. From a theoretical point of view, the answer provides insights on the power of the media and the nature of the audience, two central issues of long concern to media scholars. If some members of the audience prove to be less vulnerable to media agenda-setting effects than others, then there is reason to believe that the media have a limited power on the sophisticated segments of the audience. Methodologically, the study of individual differences in the agenda-setting process provides a testing ground for a number of long-debated issues such as individual-level versus aggregate-level analysis, cross-sectional versus longitudinal comparison, and statistical versus substantive significance. Finally, policymakers may use the findings from this line of research to identify the “victims” of agenda setting (Iyengar & Kinder, 1987) and equalize the gap in issue salience among different segments of the public.

Agenda-setting research has attended to individual differences from the outset. In their seminal study, McCombs and Shaw (1972) compared the different agenda-setting effects across voter groups (i.e., Democrats, Republicans, and Independents), and explicitly noted that the purpose of the between-group analysis was to examine the “individual differences” that might be lost in the overall design of “lumping all the voters together in an analysis” (p. 181). Unexpectedly, they found an across-the-board function of agenda setting be-
cause the variations among different voters across various issues and media channels were quite minimal. The search for individual differences has since continued, spanning a variety of individual characteristics such as political partisanship (Iyengar & Kinder, 1987; McCombs & Shaw, 1972; McLeod, Becker, & Byrnes, 1974), campaign interest (McLeod et al., 1974), age (Weaver, Graber, McCombs, & Eyal, 1981), and media preference (Benton & Frazier, 1976). Despite the impressive quantity of studies, the accumulated evidence is conflicting and confusing. Some studies have found no significant differences among individuals, whereas others have reported significant differences in opposite directions from one study to another. Moreover, the selection of these individual characteristics has been criticized as "ad hoc" because they "have no explicit theoretical grounding" (Swanson, 1988, p. 605). However, there do exist theoretical models of audience susceptibility, with the following three concepts most worthy of further exploring in the current chapter.

COGNITIVE SOPHISTICATION

MacKuen (1981) offered two competing theories (attentiveness vs. cognitive framework) of why some members of the audience are more susceptible to agenda setting than others. The attentiveness model holds that the audience's susceptibility to the media agenda is a function of the individual's attentiveness toward incoming information and his or her cognitive ability to process the information. Operationally, attentiveness is measured by interest in politics, and cognitive ability by years of education. Specifically, the theory predicts that the higher the political interest and/or educational level a person has, the more susceptible the person is to media agenda setting. On the other hand, the cognitive framework theory contends that those with higher education and political interest have developed a more effective self-defense mechanism against external influence and thus are less subject to agenda setting.

MacKuen’s empirical test of the two rival models produced evidence in favor of the attentiveness theory. However, a later study by Iyengar and Kinder (1987) found that better education and higher political interest made the audience less susceptible to media agenda setting. Therefore, they concluded that "the power of television news to set the public agenda depends partly on which public we have in mind. Television coverage is particularly effective in shaping the judgment of citizens with limited political resources and skills" (p. 60).

The first objective of this study is to examine whether agenda-setting effects are contingent on the audience's cognitive sophistication; specifically, whether the sophisticated or the naive audience is more easily moved by media coverage of an issue. Following MacKuen (1981) and Iyengar and Kinder (1987), we use education to measure cognitive sophistication. Converse (1972) succinctly justified the use of education alone as a sufficient surrogate for cognitive sophistication:

"The audience's issuesensitivity has been operationalized in several ways depending on the nature of the issue under examination. In Erbring et al.'s study, the presence of a union member or an unemployed person in the family was taken as a measure for sensitivity to unemployment, personal income for sensitivity to inflation, age and gender for sensitivity to crime, and political interest and party membership for sensitivity to trust in the government. Those with a union member or unemployed person in the family were more responsive to media agenda-setting effects about unemployment than those without any of these family connections; women and senior citizens were more affected by media agenda setting about crime than men and the younger generations. However, contrary to their hypothesis, those with a lower level of political interest were more prone to agenda setting about government trust. The impact of income on agenda setting was also unexpected because those at the middle range of income were more subject to media coverage of inflation than those at either end of the income scale. The observed impact of issue sensitivity was further impaired by the lack of control for education (i.e., the differences..."
between the sensitized and insensitized audiences might be due to different levels of cognitive skills) and by the cross-sectional design of the study.

Our second objective in this study is to investigate the role of issue sensitivity in agenda setting while holding the audience's cognitive sophistication constant. Family income is used as the only measure of sensitivity to all issues under study: inflation, unemployment, international problems, and government spending (there is detailed discussion of the issues later). It is hypothesized that those with higher levels of income are less sensitive to inflation and unemployment because they are proportionally less affected by these issues than those with lower levels of income. On the other hand, the wealthier are expected to be more sensitive to international problems (which may affect their domestic and overseas investments) and government spending (which has direct relevance to their taxes).

**OBTRUSIVENESS ISSUE**

Although our interest centers on the contingent effects of individual characteristics, it is necessary to control for issue characteristics because there may be some interaction between the two. For example, the sophisticated audience may be more susceptible to agenda setting for unobtrusive issues whereas the naive audience may be more vulnerable for obtrusive issues. According to Zucker (1978), an issue is obtrusive if the public has direct experience with it, or unobtrusive if the public has no direct contact with it. Domestic economic issues such as inflation and unemployment are often cited as examples of obtrusive issues, whereas foreign affairs is considered a typical unobtrusive issue. The distinction between obtrusive and unobtrusive issues has been empirically tested. For example, based on a factor analysis of 11 issues, Eyal (1979) identified two distinctive sets of issues: an obtrusive set including inflation, unemployment, and the economy and an unobtrusive set involving welfare, the environment, and foreign affairs. Blood (1981) reported that the respondents in his survey rated inflation as the most obtrusive and the Iran hostage issue the least obtrusive, with economic recession falling in between.

Zucker argued that the media agenda-setting effects are stronger for obtrusive issues because the audience has to rely on the media for information about these issues. On the other hand, the audience is less susceptible to agenda setting about obtrusive issues because these issues can be learned from one's own experience or personal networks. A number of studies have found strong media agenda-setting effects for obtrusive issues (Eyal, 1979; Zucker, 1978), and weak or even null agenda-setting effects for obtrusive issues (Iyengar, 1979; Palmgreen & Clarke, 1977; Winter, 1980). However, a more recent study by Yagade and Dozier (1990) has raised doubts about the obtrusiveness hypothesis. Using a different terminology, “concreteness versus abstractness,” the authors observed that the media agenda-setting power was enhanced for concrete issues, but diminished for abstract issues. Although Yagade and Dozier drew a distinction between concreteness and obtrusiveness, the examples they used clearly indicate that concretiveness and concreteness are equitable. For example, they defined the nuclear arms race as an abstract issue and found no agenda-setting effects for it; when the issue was treated as an unobtrusive issue in earlier studies by Zucker and others, stronger agenda-setting effects were observed.

To control for the interaction between audience characteristics and issue obtrusiveness, we have included four issues in the current study: inflation, unemployment, federal government spending, and international problems. There are both conceptual and pragmatic reasons to choose these issues. Conceptually, based on previous studies (Blood, 1981; Eyal, 1979), we have an objective measure of obtrusiveness for these issues, with inflation and unemployment being the most obtrusive, international problems the most unobtrusive, and government spending in between. Practically, these four issues have been prominent in the public’s issue agenda (e.g., accounting for up to 80% of the answers to the question of what the most important problem facing the nation is in Gallup polls), whereas other issues such as the environment, drug abuse, crime, or abortion tend to be present sporadically and sparsely.

**GROUP-LEVEL ANALYSIS**

**Data**

The data on the public’s issue salience are extracted from 35 Gallup surveys that contain a question on “what is the most important problem facing the nation” (MIP hereafter) between 1977 and 1986, archived at the Roper Center for Public Opinion Research at the University of Connecticut. The unavailability of many Gallup MIP surveys after that period prevents us from extending the series up to the present. Nevertheless, the current data pool, with a total of 39,914 individuals interviewed at 35 points in time, provides a sufficient basis to test the hypothesized differential effects of media agenda setting. As did many earlier studies of agenda setting, we use the open-ended question on MIP as a measure of perceived issue salience. As discussed earlier, we chose two individual characteristics, education and income, to divide the surveys for cross-sectional comparison. To keep a balance between enough groups for comparison and enough individuals in each group, we classify both education and income into three levels.¹ The procedure results in nine audience groups (three levels of education x three levels of income).

¹For education, those with 8 years of schooling or less are labeled low, those with 9 to 12 years of schooling are middle, and those with any college education or more are high. For income, no fixed threshold value is used because family income in dollar amount increases all the time. Thus, all 35 samples are divided as evenly as possible into three income levels.
The data on media issue coverage are based on a content analysis specifically carried out for this chapter. The content analysis involves counting the number of news stories on inflation, unemployment, international problems, and government spending aired by ABC World News during the same 10-year period. The definitions of inflation, unemployment, and government spending are self-explanatory, and international problems refers to all kinds of "bad news" abroad such as wars, riots, coups, scandals, economic crises, and natural disasters. ABC was selected to represent national television newscasts because previous studies have shown a high degree of homogeneity in news content among the three networks (e.g., Zhu, 1992). Using The Vanderbilt Television News Index and Abstract as our source, we examined every news item on the ABC World News for the 10 years. If ABC World News was off the air for a given day (e.g., a Saturday or Sunday) we substituted first with CBS Evening News for that day, followed by NBC Nightly News if CBS Evening News was also off the air on that day.

**VISUAL INSPECTION**

Before performing any formal test, we plot the public's issue salience of the four issues, along with media coverage of these issues, in Figs. 6.1 to 6.4, to help identify visible patterns for (a) media agenda-setting effects over time, and (b) differentials in agenda-setting effects across groups. For an easy reading of the figures, only five out of the nine audience groups are shown, with four intermediate groups omitted. Before the omission, however, we checked all nine series to ensure that all the excluded series fell into the middle of the displayed areas.

Figures 6.1 to 6.4 reveal a certain degree of correspondence between the public's issue salience and the media's coverage of the issues. For example, both the public and the media had a fairly high level of concern about inflation at the beginning of the 10-year period (Fig. 6.1). After a dip, both rose to a new height in January 1978 and stayed there for about 2 years. The 1980s, however, witnessed a gradual decline in the prominence of inflation in both the public's mind and the media's spotlight, although the latter lost interest in the issue much quicker. Unemployment went through a different course, but the parallel trends between the public and the media are quite visible (Fig. 6.2). For example, after paying little attention to the issue, both the public's concern and the media's coverage of unemployment rose suddenly in January 1982 and peaked in 1983, then both displayed a downward trend. The parallel between the public's salience and the media's coverage of international problems is more complex because there were several ups and downs throughout the entire period (Fig. 6.3). However, a careful check of these cycles reveals a close match between the two agendas. For example, January 1980 saw an abrupt rise of international problems in both the public and the media agenda (mostly regarding U.S. hostages in Iran). Parallel trends can
also be found in several other peaks and valleys of international problems between 1983 and 1986. Government spending seems to be a weak case for media agenda setting because the public did not become concerned about the issue until January 1984, whereas the most intensive coverage of the issue occurred between 1981 and 1983 (Fig. 6.4).

Figures 6.1 to 6.4 also show some differences among the five audience groups. However, both the magnitude and the direction of between-group differences vary over time and across issues. For example, the differences were much larger in the first 5 years (1977-1981) than in the last 5 years (1982-1986) for inflation (Fig. 6.1), but smaller in the first half of the period than the second half for unemployment (Fig. 6.2). A larger between-group discrepancy was also observed during the second half of the period for both international problems (Fig. 6.3) and government spending (Fig. 6.4). In general, the high-education/high-income group had the highest level of issue salience and the low-education/low-income group had the lowest level of concerns. This pattern shows up even for inflation, which seems to be contradictory to the issue sensitivity hypothesis. However, the reverse holds for unemployment, in which the high-education/high-income group was the least concerned whereas the low-education/low-income group was the most concerned (Fig. 6.2), which is consistent with the sensitivity hypothesis. When the level of media coverage is taken into account, it becomes clear that the high-education/high-income group shows the closest match with the media.

The most striking observation in Figs. 6.1 to 6.4 is, however, that the cross-sectional variations appear to be much less dominant than the longitudinal variations within each group. That means, despite the different levels of concerns, various groups of the public behave quite consistently with each other over time. Even when there was a large difference in the magnitude of issue salience across the groups (e.g., 1981-1982 in Fig. 6.1, 1983-1986 in Fig. 6.2, 1980 in Fig. 6.3, and 1983-1986 in Fig. 6.4), it is important to note that all the groups followed a similar trajectory along with the changes in the number of television news stories. The displayed series represent the maximum contrast among the nine groups. The between-group differences across the entire sample would appear even less visible had the four intermediate groups been included.

TIME SERIES ANALYSIS

However informative they might be, visual impressions are not always reliable, especially because we are dealing with such complex scenarios that involve multidimensional comparisons. To formally test the differential effects of media agenda setting, we have applied generalized least squares (GLS) regression to the data. The GLS estimation controls for the autocorrelation present in the time series data (Hibbs, 1974). The dependent variable for the regressions is issue salience (i.e., the percentage naming an issue as the MIP by an audience group), whereas news salience (the number of ABC news stories on the issue) serves as the independent variable. A quarterly interval is used for the series, which amounts to 40 time points for the 10-year period. There were five quarters in which Gallup did not conduct an MIP survey. The missing points have been linearly interpolated. Because there are 36 series of issue salience (nine audience groups x four issues), we performed the same GLS regression 36 times. The results are summarized in Fig. 6.5.

The vertical axis displays the estimated standardized GLS regression coefficients, which represent the agenda-setting effects of television news coverage about the four issues on each of the audience groups. Not shown

2 More precisely, a cumulated number of stories is used (= News0 + .5News t+1 + .25News t+2 + .125News t+3, where t is the current month, t-1 is the previous month, etc.). See Zhu, Watt, Snyder, Yan, & Jiang (1993) for details.

3 Strictly speaking, a comparison across regressions should be based on the unstandardized coefficients. However, plotting the unstandardized coefficients may make the interpretation unnecessarily complicated. Thus, the standardized coefficients are used here.
in the figure, however, is the significance test for each of the coefficients. Given the degrees of freedom for the regressions, (± .28 is the minimal value for a coefficient to be marginally significant at the .10 level (which may be acceptable given the small N, 40, for all the regressions), and (± .32) is minimally required for significance at the .05 level. Judged by these two yardsticks, media coverage of the first three issues seems to have a significant impact on the audience (on seven groups for inflation, six for unemployment, and all nine for international problems). On the other hand, television news about government spending appears to have no effect on any of the nine groups. It should be noted that, although eight of the nine coefficients for government spending are negative, all of them are far from being significant. Thus, the data do not lend support to the so-called reverse agenda-setting hypothesis (i.e., the audience sets the agenda for the media).

Because we are more interested in whether the agenda-setting effects are differentiated across various segments of the audience, it is necessary to take a closer look at the between-group differences in Fig. 6.5. Three patterns seem to emerge: First, all of the nine groups are responsive to media agenda setting for international problems (i.e., all coefficients are significant beyond the .05 level). Second, none of the groups is affected by agenda setting for government spending. Finally, the groups show a varying degree of susceptibility to agenda setting for inflation and unemployment, with the agenda-setting effects being significant on some groups (three for inflation and five for unemployment), marginally significant on other groups (four and one, respectively), and not significant on still other groups (two and three, respectively).

However, it is premature to accept the differential effects of media agenda setting for the last two issues simply based on the significance level of the GLS coefficients. The significance level generated from the regressions does not directly test the null hypothesis that there is no difference among the regression coefficients; instead, it tests the null hypothesis that each of the regression coefficients is zero in the population. Thus, if we ran two GLS regressions and found one yielded a significant coefficient (say, \( p = .049 \)) but the other yielded a nonsignificant coefficient (\( p = .051 \)), the significance test does not imply that the two estimated coefficients are significantly different (as one can expect from this hypothesized case, the two coefficients are most likely to be equal in the population). A formal test of the heterogeneity across the estimated coefficients is therefore called for.

**Heterogeneity Test**

We have chosen Rosenthal's (1991) heterogeneity test to assess whether there are indeed differential effects of agenda setting across the nine groups.\(^4\) To control for the issue characteristics, the test is performed separately for each issue. The procedure results in four scores for the heterogeneity statistic: 1.365 for inflation, 6.159 for unemployment, .30 for international problems, and 1.159 for government spending. The statistic has a \( \chi^2 \) distribution with \( k - 1 \) degrees of freedom (\( k \) is the number of coefficients tested). If the statistic is 15.51 (the critical value of \( \chi^2 \) with \( df = 8 \) for \( p = .05 \)) or greater, then we can conclude that the nine coefficients under examination are significantly different at the level of .05 or beyond. Obviously, none of the four heterogeneity statistics survives this test. In fact, the significance level is above the .50 level for the most heterogeneous issue (unemployment). In addition to the test of the overall difference among the nine groups as a whole, we have also checked the pairwise difference between any two groups for each issue. Among the 144 possible pairwise comparisons, there is no single pair of coefficients different from each other at the .05 level.\(^5\)

Because the heterogeneity test shows no significant difference among the nine groups for each issue, we can legitimately combine the GLS coefficients into a weighted mean to summarize the agenda-setting effects on the entire sample. Following Rosenthal's (1991) procedure, we have obtained four weighted mean GLS coefficients and their corresponding significance levels (\( \beta = .300 \) and \( p < .01 \) for inflation; \( \beta = .345 \) and \( p < .01 \) for unemployment; \( \beta = .375 \) and \( p < .01 \) for international problems; and \( \beta = .305 \) and \( p > .50 \) for government spending). As the results show, the agenda-setting effects on the entire sample are significant for the first three issues, but not significant for government spending.

**Individual-Level Analysis**

Unlike most other time series studies of agenda setting in which the aggregated issue salience is regressed on media content, our study disaggregates the public into nine groups in terms of cognitive sophistication and issue sensitivity. This group-level approach reduces, if not completely eliminates, the ecological fallacy that is often associated with aggregate-level analysis. However, our approach still suffers from a loss of power of analysis when we transform the original individual-level data, which include nearly 40,000 respondents, to 36 group-issue series. In other words, there might be a high degree of Type II error in our findings of no differential effects of agenda setting based on a comparison of 36 cases. Thus, before drawing any firm conclusion, we need to cross-validate the findings with individual-level data.

\(^4\) The test is based on \( \chi^2 = \frac{\sum_{i=1}^{9} (z_i - \bar{z})^2}{s^2} \), where \( z_i \) is Fisher's transformation of the standardized regression coefficient for Group \( i \) (\( i = 1 \) to 9), \( \bar{z} \) is the weighted mean for the nine \( z \)s for an issue, and \( n_i \) is the number of cases for Group \( i \) (\( n_i = 40 \) for each of the nine groups). The resulting statistic is distributed as \( \chi^2 \) with \( k - 1 \) degrees of freedom (\( k \) is the number of coefficients in the test).

\(^5\) Only two pairwise comparisons are marginally significant at the .10 level (the low-education/high-income group vs. the low-education/low-income group, and the former group vs. the middle-education/low-income group, both for unemployment).
The validation is carried out by fitting a series of log-linear models to the 35 original individual-level Gallup MIP data sets. To assess the between-group difference over time, the 35 surveys are stacked into one data set, which contains 39,914 cases and five variables: issue, education, income, year, and news. All of the variables except news are treated as categorical variables. Issue has four categories, representing the four issues under study. Both education and income are coded into three levels, ranging from low through middle to high, the same as in the group-level analysis. Year has 10 categories, ranging from 1977 to 1986, each for a particular year in which the surveys were conducted. This variable is used to account for the changes in the distribution of issue over time. We treat year as a categorical variable rather than a continuous variable in order to examine (a) the unique contribution of year, and (b) its interaction with education and income, both of which are possible only when year is included as a categorical variable in the log-linear models. On the other hand, news (the number of stories aired by ABC World News on each of the four issues in a given year) remains as a continuous variable because it does not have cross-sectional variation (i.e., news is a constant for all nine groups at a given time).

Issue is the dependent variable in all of the log-linear models we have tested and news is always entered as a covariate. The models differ only in the specification of three independent variables: education, income, and year. First, we fitted a null model that assumes the distribution of issue is not affected by any of the independent variables. As one can expect, this null model fits the data poorly, as reflected by a large and significant $L^2$ relative to its degrees of freedom ($L^2 = 15,075.28, df = 264, p = .000$). Although this null model does not offer any theoretically interesting information, the resulting $L^2$ represents the total variance in issue, a baseline from which improvements made by subsequent models can be calculated.

Next, we searched for a best fitted model that explains the most variance in issue with the fewest predictors. The resulting model, including all three independent variables and their two-way interactions, provides a very good fit to the data, given the huge size of the sample ($L^2 = 110.80, df = 108, p = .41$). Absent from the model is the three-way interaction among education, income, and year. Had the three-way interaction been included, we would have had a saturated model, which by definition fits the observed data perfectly (i.e., $L^2 = 0, df = 0, p = 1$). However, the difference between the best-fitted model and the saturated model is not statistically significant ($\Delta L^2 = 110.80, df = 108, p = .41$), suggesting that the more parsimonious model (i.e., the best-fitted model) is superior. On the other hand, a comparison between the best-fitted model and the null model shows a significant difference ($\Delta L^2 = 14,984.57, df = 159, p = .000$), which justifies the inclusion of these predictors. Furthermore, the best-fitted model explains 99.3% ($=\Delta L^2 / L^2_{null}$ model) of the variance in the null model. The remaining 0.7% of unexplained variance is due to the three-way interaction omitted from the best fitted model.

Our primary interest is not in the best fitted model per se, but in the relative contribution made by each of the independent variables. Thus, we have examined three partial models that contain all the predictors of the best fitted model except one: education, income, and year, alternatively. Because these partial models use one fewer predictor than the best fitted model, they necessarily fit the data less well. As it turns out, all three partial models do not fit the data adequately ($L^2 = 282.05, df = 114, p = .000$ for the education-excluded model; $L^2 = 246.40, df = 114, p = .000$ for the income-excluded model; and $L^2 = 5,690.89, df = 131, p = .000$ for the year-excluded model). Thus, each of the three independent variables has an indispensable influence on issue salience. In other words, unlike the time series analysis at the group level, log-linear analysis of individual-level data shows significant differences both cross-sectionally and longitudinally.

As in any other causal study, we should be concerned with both the significance and the size of the effects. The best indicator of the size of effect for a variable is the unique contribution made by the variable over and above all other variables present in a model. Thus, we have calculated the difference between a partial model and the best fitted model divided by the null model, which gives the proportion of variance solely attributable to the variable excluded from the partial model. For example, the unique contribution of education is given by $(L^2_{Education}- L^2_{best-fitted}) / L^2_{null} = (282.05 - 110.80) / 15,094.37 = 1.1%$. By the same token, the estimated unique contribution is 9% for income and 37.0% for year. As explained before, year captures the changes in the distribution of issue for a given group over time. Therefore, to borrow the analysis of variance language, education and income together represent the between-subjects variance, whereas year indicates the within-subjects variance. In other words, the log-linear modeling shows that the within-subjects factor (i.e., comparison of the individuals within the same group over time) accounts for almost 20 times more variance in issue than do the between-subjects factors (i.e., comparison of individuals across groups at a given time). This finding is consistent with the time series analysis of group-level data that shows significant agenda-setting effects over time but few differences across groups.

CONCLUDING REMARKS

Who is most susceptible to media agenda-setting effects? The answer seems to be everyone, or no one, depending on the issue context. In this study, we have found that various audience groups are equally subject to media agenda-setting

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6$L^2$ stands for log-likelihood function, a measure of the discrepancy between the observed frequencies (e.g., the mentions of various issues as the most important problem) and the expected frequencies (e.g., given the joint distribution of education, income, and year). Thus, a large, significant $L^2$ indicates a poor fit of the theoretical model to the data, whereas a small, nonsignificant $L^2$ suggests a good fit between the model and the data.

7The remaining explained variance in the best fitted model is attributable to the joint force of the three independent variables.
influence for inflation, unemployment, and international problems, but the same groups are equally unresponsive to agenda setting for government spending. In other words, the audience is homogeneously susceptible to the media agenda for some issues and invariantly insensitive to the media agenda for other issues. This uniform process of agenda setting seems to be quite robust given the fact that our evidence is derived from 35 nationwide samples spanning 10 years and analyzed at both group and individual levels.

One may argue that the homogeneous agenda-setting effects are not warranted because the individual-level analysis did show significant differences across levels of education and income. This brings up the traditional debate between statistical significance and substantive significance. Yes, the between-group differences detected in the individual-level analysis reach a high significance level ($p < .001$). However, in terms of the size of the effects, the between-group factors (i.e., education and income) together account for only 2% of the variance in issue salience, which pales compared with the 37% of the variance explained by the within-group factor (year). In other words, the media agenda-setting effects are not manifested in creating different levels of salience among individuals, but are evident at driving the salience of all individuals up and down over time.

One may challenge our findings of homogeneous agenda-setting effects based on the particular way the public is classified. There are certainly a variety of alternatives for grouping the public, such as by exposure to media (which seems to be more appropriate to testing media agenda-setting effects), interest in public affairs (e.g., Iyengar & Kinder, 1987; MacKuen, 1981), personality (e.g., measured by the Strength of Personality; Weimann & Brosius, 1994), and occupation or union membership (Erbring et al., 1980). However, we suspect that the results would not be any different if any of these classifications was employed, because these variables are highly correlated with education or income, the variables used in this study. For example, in Weimann and Brosius (1994), the rank-order correlations between opinion leaders (i.e., the highest 10% on the Strength of Personality scale) and opinion followers in Germany are mostly above .80 and .90 across issues and over time, which suggests a highly homogeneous agenda-setting process in that country.

The multilevel approach used in this study appears to be both crucial and fruitful to testing the differential effects of agenda setting. The most important outcome from this exercise is, of course, that uniform effects of agenda setting consistently emerged at both the group and individual levels. Each level of analysis offers additional insights. For example, the time series analysis of the group-level data provides a justification for the conventional time series analysis of the correspondence between the aggregate public issue salience and the media agenda. On the other hand, the log-linear modeling of individual-level data helps consolidate the mixed results from previous studies regarding individual differences in agenda setting. Other factors aside, the size of sample employed seems to be closely related to whether a study finds significant differences across individuals. As clearly demonstrated in this study, a large sample makes the significance test very sensitive to any small difference across individuals. Although this is certainly a desirable strength of a large sample, we should also be concerned with the substantive meaning of the significance by examining the size of the difference.

Do the characteristics of an issue make a difference in agenda-setting? This study does not offer any conclusive evidence. Agenda-setting effects are observed in an unobtrusive issue (international problems), as well as two obtrusive issues (inflation and unemployment). On the other hand, agenda setting is absent from government spending (which presumably is an unobtrusive issue). However, a strong case of agenda setting for government spending was found elsewhere (Zhu, 1992) based on a subsequent time span (1990–1991). Conversely, an earlier study (Behr & Iyengar, 1985) reported no agenda-setting effects for unemployment during an earlier period (1974–1980). Thus, it appears that media agenda setting can take place for both obtrusive and unobtrusive issues, depending on the specific time period under study. This is, of course, not a satisfactory answer. A particular difficulty in testing the contingent impact of issue characteristics is the limited number of issues that are salient to the public at any given time. A fruitful approach in future research will be meta-analysis that provides a quantitative and systematic means to integrate a diverse body of studies on issue characteristics.

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