An earlier phase of a research project proposed a theoretical model linking the key concepts of community commitment, media use, knowledge about community, community evaluation, and community pride as well as a series of social locator variables. The present phase of the study concerned itself with the central part of the model, ignoring the community commitment and community pride variables, guided by the expectation that media use is related to community knowledge, and subsequently, to community evaluation. A telephone survey of 589 household heads in Columbus, Ohio, measured frequency of media use, attention to media content, and attitudes about the community. Results suggest that the data are supportive of major relationships predicted. Persons knowledgeable about their community are likely to evaluate it highly, and that knowledge is, in certain instances, media dependent. Locator variables such as respondents' level of education continue to have impact on knowledge even after media use is controlled, however, indicating that media use is not the sole method by which these variables have their impact on knowledge. There is little consistent evidence that media variables behave differently within different social strata. There is evidence, however, that, at least in the case of local television news, attention to that news is a more important variable than mere use of it. The study of media and media effects with regard to community is one way of investigating basic components and relationships that make up modern society. (Appendixes include analyses measures, four data tables, a figure of the theoretical model, and a list of references.) (NKA)
The Mass Media, Knowledge and Evaluation of Community

By

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ABSTRACT

Following a careful explication of key concepts of community commitment, media use, knowledge about community, community evaluation, and community pride, a theoretical model linking these variables as well as a series of social locator variables is proposed. Data from an omnibus survey of household heads in a midwestern community are analyzed to test aspects of this model. In general, the data are supportive of major relationships predicted. Persons knowledgeable about their community are likely to evaluate it highly. That knowledge is in certain instances media dependent. Locator variables such as level of education of the respondent continue to have impact on knowledge even after media use is controlled, however, arguing that media use is not the sole method by which these locator variables have their impact on knowledge. There is little consistent evidence that media variables behave differently within different social strata. There is evidence, however, that at least in the case of local television news, attention to that news is a more important variable than mere use of it.
The relationship between media institutions and the local community in which those institutions operate has been of central concern in the U.S., with its decentralized media system and geographically separate towns and cities.

Professional journalists debate the proper role of the media, with two distinct models of interaction presented. On the one hand, the media can be called upon to serve as watchdogs, separate from and in many respects superior to other organizations. The media are seen as representatives of the people themselves. The second perspective assigns to the media the role of community leader, booster and supporter. The media, in this perspective, are expected to help the community progress, find a sense of identity, promote its strengths.

The U.S., unlike much of the rest of the world, has a localized rather than nationalized media system. Changes have taken place in the second half of the century, however, leading away from local control of media organizations. Relatively few media organizations are currently owned locally, though decision-making in many areas of activity remain at that level. The general assumption of media critics has been that local ownership and decision-making is important precisely because of the important role media organizations play in their communities.

Despite the prominence of the relationship between media organizations and their communities in professional dialog, relatively little research has attempted to examine the consequences of variants in that relationship. Even the relationship between media coverage and citizen assessment of the
community has been relatively unexamined. The research reported in this paper was undertaken in part to add to an understanding of the impact of the media on evaluations of the communities by the community residents.

Relevant Literature

Stamm (1985) identifies two strands of research in the area of newspaper and community ties. One strand, generally more recent, has looked at antecedents of subscription to metropolitan daily newspapers. A second studied the relationships between reading community or neighborhood weekly newspapers in urban areas and ties to that local community. In general, both strands find that greater ties to the community or metropolitan area are associated with greater media use. Studies tend to look at locator variables such as education and race, and these variables are often taken as standing for different experiences of living in the community or city. Most studies also seek to develop more refined and insightful conceptualizations of the ties to communities or cities, ones that reflect internal experiences of respondents but that also possess definite, external qualities having a social or sociological character. These concepts include community integration, closeness of community, and community identification. There are inconsistencies across studies in labeling concepts and in arguing what concepts various measures are tapping.

Janowitz (1967), in his classic study of the urban community press, argues that "indices of greater community integration should be related to more community newspaper readership." Janowitz said that measures of community integration must be behaviorally oriented in order to avoid "idealized answers" that have little to do with social behavior in the community. His index of community integration consists of three measures:
length of residence, amount of social contact with neighbors, and whether friends live in the neighborhood. He found the index correlated with a readership score tapping both exposure and "involvement" in reading the newspaper. He then used the strength of these results as evidence that any relationship between his readership measure and community identification would have considerable validity. His measures of community identification were affective: whether an individual liked or disliked a community and whether an individual considered the community his or her "real home".

Stamm (1985) defines community identification as a sense of being inside the community structure, and classifies it as a cognitive tie between the individual and the community. Closeness to the community, as indexed by whether the individual would hate to leave, Stamm terms an affective tie. He conceptualizes it as a salience type of variable (Carter, 1965), one that increases slowly and incrementally. As such it should correlate with length of residence, which by implication is also an index of salience.

Pride in one's nation has been a concern of comparative scholars such as Noelle-Neumann (1985), who has identified differences in level of pride among the various nations, Japan and the Federal Republic of Germany. Noelle-Neumann reports, have consistently shown lower levels of national pride than other countries studied.

Noelle-Neumann also has demonstrated that German national pride is correlated with confidence in a whole range of societal institutions, pride in one's work, satisfaction with one's life, and beliefs about family and family values. In addition, those persons highest in national pride have been found to be less interested in emigrating from Germany than those low in pride.
While Noelle-Neumann places much blame for the low levels of pride on the German behaviors in two world wars and the periods surrounding them, she also has linked pride to the mass media. Content analyses have shown a tendency in the German mass media to treat the German character in a negative fashion more often than in a positive one. The media, in Noelle-Neumann's view, in this way have contributed to the low levels of national pride.

Conceptual Distinctions

This brief review illustrates that several concepts exist in the limited literature on the relationship between citizen exposure to the mass media and evaluations of the community. The need for explication of these concepts is rather obvious.

The perspective being taken in this paper and the program of research associated with it is that community commitment is felt by individuals in recognition of structural constraints placed upon them. A person who has moved to a community because of a job and expects to stay in that job for several years would be expected to express a commitment to the community. The commitment might be strengthened by marriage, home ownership, the presence of children (particularly if in schools), and other factors making it unlikely that the person will quickly and easily move from the community. The person doesn't have to know much about the community, evaluate it highly, or have pride in it to feel a sense of commitment to it.

The work of Stama (1985) particularly suggests that there are two components to commitment. The first is rather cognitive, the second affective. The cognitive component involves a recognition that one is placed in the community. The affective component is an instance of what
Simmel (1950) called faithfulness. Simmel argues that faithfulness appears in all relationships, including ties to organizations and political entities. It is a second-order phenomenon because "its practical effect always consists in replacing some other feeling, which hardly ever disappears completely." Faithfulness insures the continuance of a relationship beyond the forces that first brought it about. Simmel describes the dynamic of faithfulness as an induction made by feeling itself. If at one moment a relation exists, the individual concludes that the relation will exist at a later moment. Mere habitual togetherness, or the mere existence of a relationship over time, produces this affective response.

Persons committed to a community (in either the cognitive or affective sense) would be expected to adopt media habits leading them to learn more about the community in which they live. The assumption is that these persons would recognize that the media provide services helpful to them in their everyday lives within the community. Since they are cognizant of the constraints on them and the likelihood they will remain, they should seek out media to help them cope. The consistent finding from Stamm and others that commitment leads to media use is in keeping with this perspective.

Pride is viewed here as quite distinct conceptually from commitment. It is viewed here as a sense of shared satisfaction in community accomplishments. As such, pride is probably dependent on commitment and a subsequent sense of identification with the community. An analogy comes from the area of sports. Persons who identify with a sports team for some reason would be expected to feel a sense of pride in that team's accomplishments. The identification might result from a shared point of reference (the team and the person attend the same university), knowledge
of the team and its individuals, or perhaps the sense that by cheering the
team on at games the spectator has in fact contributed to the team's
success. Similarly pride in community would be expected to result from some
sense that the accomplishments of the community were in part the
accomplishments of the citizen.

Commitment, in this view, would occur temporally rather early; pride
would occur rather late. Of course, while commitment would seem to serve as
a necessary condition for pride, it would not be sufficient. Between
commitment and pride might lie (temporally speaking) several important
activities and evaluations involving the community.

As noted, commitment would be expected to lead to media use. Media
use, in turn, would be expected to lead to knowledge of the community.
Knowledge of the community would be expected to lead to evaluations of the
community distinct from a sense of pride.

For media use to produce knowledge about the community, the use must
be of media containing information about the community. At the same time,
the media use would be most likely to produce knowledge when the user was
particularly attentive to content about the community.

The knowledge gained from media use ought to be more than civics-book
knowledge. Users should gain an understanding of the problems facing the
community as well as of community resources and strengths in solving
problems. Users should be able to make specific proposals for action in
areas facing the community.

Information can be stored in several ways. From the point of view of
community assessment, it probably matters most how community members sum up
the positive and negatives about a community. A net positive in information
should lead to a high evaluation of the community. A net negative should
lead to a low assessment.

This assessment, then, is seen as a summary evaluation of the community, much in the way a teacher evaluates a student (from A to E) or a skating judge evaluates a performer: does the community score well as a community. Clearly a person should be able to evaluate a community to which he or she has no commitment. The evaluation also need not lead to pride, since the individual may feel no connection to the community's accomplishments or failures. The evaluation, however, ought to be tied closely to information stored about the community.

Left out of the discussion to this point is a consideration of what structural factors ought to be associated with community commitment, media use, knowledge, community evaluations and community pride. To be sure, structural or locator variables have played a prominent role in media effects research to date and are employed quite routinely as control variables in examining relationships between media use and potential effects. Perhaps education is the classic such locator variable in this type of analysis. The relationship between media use and some consequence, such as knowledge, is examined with knowledge held constant via control. The result is that the effect of media use on knowledge is considered of interest only if that effect is beyond what one would predict based on knowledge of the educational level of the respondent.

Locator variables in the perspective being presented in this paper play one of two roles, each distinct from that discussed immediately above. In the first instance, locator variables are viewed as antecedent to media use, and variance between the locator variables and media use is thought to result from a casual relationship between the two. For example, media use is viewed as one of the means by which a variable such as education might
have impact on knowledge, particularly knowledge about current events. In other words, persons learn in their formal schooling about the importance of keeping informed and that the mass media are a way of doing this.

From this perspective, controlling for locator variables such as education in examining the media use to effect relationship is mistaken conceptually, since it does not recognize the temporal placement of the variables. In the education example, it is clear that knowledge about events in the public arena occurring years after the individual has left school obviously cannot be learned in school, but the means of acquiring that knowledge can. So rather than treating education as an unwanted covariate of media use in an analysis testing for spuriousness of relationships, media use should be treated as the intervening variable between education and the knowledge effect. Media use becomes the control variable. (See Rosenberg, 1968, for an elaboration of the distinction between these two types of control variables.)

Figure 1 provides a summary of the model discussed thus far and illustrates the placement of four locator variables thought to be of interest for the issue of community evaluation and community pride. The first is years of formal education. The second is race of the respondent. The third is location of residence (city versus suburb). The final is amount of exposure the respondent has had to the community (or amount of community experience). Each of these variables is expected to be directly related to media use.

Each of these variables might have a residual relationship to knowledge, as the model indicates. This would result from the impact of these variables on other information acquisition skills, such as the ability to develop nonmedia information sources and to retain, organize,
and articulate information received. In recognition of the expectation that simple exposure seems to increase affective responses to phenomenon (Zajonc, 1968), amount of exposure to or experience with the community also is expected to have a direct effect on community evaluation.

Figure 1 has separated out conceptually the four locator variables identified from community commitment. Commitment is viewed as a recognition of structural constraints on movement from the community, consequently it is psychological rather than contextual, as are the four locator variables. Yet it isn’t clear that commitment would be related to any of the identified locator variables excepting community exposure or experience. Commitment might simply be a psychological accounting of the reality of the experience variable.

In addition to viewing these locator variables as determinants of media use and, indirectly and directly, community knowledge, the perspective of this paper is that these locator variables can serve as contingencies or facilitators for the relationships between media use and knowledge and between knowledge and community evaluation. The relationship between media use and knowledge may be contingent upon a locator for one of two reasons: members of one subgroup may, on average, consider information in the mass media more relevant than members of another subgroup, or members of one subgroup may be more efficient in acquiring available information.

Greenberg and Dervin (1970), among others, have shown that media habits of whites and nonwhites differ markedly in this country. It seems quite reasonable to expect that the dominant white media would have less impact on nonwhites than whites. Blacks would be expected to have developed alternative information sources and ways of interpreting information.
provided by the dominant media. In addition, race of respondent would be of importance because of relevance. One subgroup could, on average, perceive the information as less relevant than the other, hence acquire less for a particular amount of exposure or attention.

The knowledge-gap hypothesis is an instance of a particular locator variable (education) being important because it helps identify differences in the efficiency with which members of the group acquire information from the media. In an early report of this work, Tichenor, Rodenkirchen, Olien and Donohue (1973) demonstrated that as information is infused into a social system, those with more education often acquire information at a higher rate than those with less education.

The existence of an us/them orientation of city versus suburban residence will result in stronger media effects for the suburbanites, who will have less direct experience with metropolitan issues than the urban residents. Relevance may in fact be higher for the city residents, but they have direct experience with community issues and do not depend as heavily on the media.

Finally, those who are new to the community are expected to be more influenced by media exposure than those with more experience in the community. This may be offset by the fact that those in the community longer may, on average, have a greater store of knowledge which can be used to anticipate, interpret, and evaluate new information.

Expectations of this Study

The relationship between commitment, media use and pride has been dealt with in a report on an earlier phase of this research project (Fredin and Becker, 1987). The present paper concerns itself with the central part of the model, essentially ignoring for the present the two variables,
community commitment and community pride. In part this decision to limit
the scope of the paper reflects a newly formulated perspective on the
distinctiveness of commitment, community evaluation and pride. It also
allows for an examination of the role of locator variables without
entangling the analysis unnecessarily.

In addition, the limited scope reflects a new sensitization to the
importance of conceptual development and measurement of media variables as
well as the indicants of knowledge of community. Details of this effort are
included in the methodological discussion to follow.

In sum, the present study is guided by the expectation that media use
is related to community knowledge, which is related to community
evaluation. Four locator variables (educational level, race of the
respondent, location of the respondent's residence in the community, and
amount of exposure of the respondent to that community) also are expected
to be related to use and knowledge. Exposure to the community is expected
to be related to community evaluation directly as well. And these four
locator variables are expected to serve as contingencies for the media use
to knowledge relationship, with persons high in education, persons who are
white, persons living in the suburbs, and persons new to the community
expected to gain more from media exposure than their counterparts.

Methodology

An omnibus survey of household heads in Columbus, Ohio, a midwestern
community of one million people, provided an opportunity to examine
components of the model specified above. Telephone interviews of
approximately 15 minutes in length were completed with a sample of 589
persons in January of 1987. Telephone numbers were generated randomly;
selection of the sex of the household head to be interviewed was determined
by the last digit of the phone number. Interviewers were trained and supervised by the authors. Completion rate was 73%.

The survey instrument contained measures of the number of days of viewing local television news (at three different times of the evening), number of days of readership of the local daily newspaper, readership of neighborhood weekly newspapers, and use of radio for news (1). In addition, respondents were asked to indicate how much attention they paid to "news about problems and issues" facing the local community when they viewed television news or read the daily newspaper. The importance of such attention measures has been suggested by Chaffee and Schleuder (1986). Attention measures for weekly newspapers and radio were not included. Interactions between exposure and attention were created for the daily newspaper and local television news. A number of researchers, including Janowitz (1967) and Edelstein and Larsen (1960), used measures which combined frequency of use of weekly newspapers with amount of the newspaper read.

While the survey instrument contained several items which could be used to index knowledge about community affairs, two items were included to reflect the measurement strategy suggested by Becker and Blood (1984). Respondents were asked: In general, what are the best things about metropolitan Columbus? Interviewers were asked to probe for as many responses as the interviewee could offer. This question was followed by: What are the worst things about metropolitan Columbus? Again, interviewers were instructed to probe for multiple responses. Up to three responses were coded for each question.

All information was treated as equal, and an index of positive knowledge was created by summing responses to the first question, with the
range of possible scores being from 0 to 3. A similar index of negative
information was created. Finally, an index of net positive information was
created by subtracting the negative information score from the positive
information score [2].

Two additional open-ended questions were employed in a similar way.
Persons were asked to name "a few publicly or privately funded projects
that you think should be built in Columbus in the next few years." This was
followed by: "Is there anything you would like to see torn down?" Persons
were scored in terms of their ability to provide answers.

Similarly, indices were created for a series of measures of attitudes
toward local issues and job approval ratings for local officials. The
officials were the mayor and two council candidates. The local issues
ranged from a bus strike to distribution of birth control devices in the
schools to a decision by the city to try to host the 1996 Olympics. In both
cases, the index merely reflected the ability of the respondent to take a
stand. "Don't know" responses were treated as indicating a lack of
information about the city.

Several measures of community evaluation have been used in a series of
surveys undertaken as part of the program of research discussed above. Some
of these have been reported in Fredin and Becker (1987). The general
strategy in writing questions has been to try to develop measures which
differentiate between community commitment, community evaluation in
general, and community pride. Figure 1 and the discussion above have
obviated the need for such independent measures.

In the analyses which follow, community evaluation has been tapped by
the following question: "How do you evaluate metropolitan Columbus as a
place to live? Would you say it is an excellent place to live, a good
place, a fair place, or a poor place to live?" The measure of pride was: "In general, would you say you are extremely proud, very proud, somewhat proud, or not at all proud of the fact that you live in metropolitan Columbus?" Commitment was measured by: "If you were able to choose between living in metropolitan Columbus and living in any other place in the United States, would you choose to live in Columbus or somewhere else?"

The four locator variables were measured in rather traditional ways. Persons were asked how many years they had lived in the metropolitan area, the last grade of school they had completed, their race, and whether they lived in the city or outside the city [3]. Race was coded as white or nonwhite.

Specific questions and other details of the measures are reported in the Appendix.

Results

Although this paper is not concerned directly with community commitment and community pride, it does assume the distinctiveness of the concept community evaluation from commitment and pride. For this reason, the analyses begin, in Table 1, with an examination of the relationships between these three concepts. The top section of the table (Table 1a) shows that there is some relationship between commitment to community and the evaluation given to the community. Those persons who say they would stay in the community if given a choice are more likely to give it an evaluation of "excellent" than are those who say they would move. But the relationship is far from perfect (nearly identical percentages rate the community as "good", for example), and there is little reason to believe the same concept is tapped by these two measures.

Similarly, Table 1b shows that community pride and community
commitment are not identical. Significantly more of those persons who said they would stay in the community if given a chance say they are "very proud" of the fact they live in the community than do those who say they would move if given the chance. Of those who would stay, however, just under a third say they are only "somewhat proud" of living in the community, and a quarter of those who say they would move if given the chance say they are "very proud" of living in the community.

The relationship between community pride and community evaluation is shown in Table 1c. Here the relationship is somewhat stronger (with a tau b of .55). But the overlap is far from perfect. More than 11% of the persons rating it as an "excellent" place to live say they are "somewhat proud" of the community or less. Only a quarter of those rating it as "excellent" say they are "extremely proud" to be living there. Similarly, 15% of those saying it is a fair place to live say they are not at all proud of the community.

Overall, these sets of interrelationships are consistent with the model posed. Community evaluation and pride are more strongly related than are community commitment and either community evaluation or community pride. None of the interrelationships is so strong as to suggest that the conceptual distinctions presented above do not also have an empirical base.

Table 2 summarizes the regression analysis for community evaluation. This variable is regressed first on community knowledge, producing an adjusted multiple R Square of .17. As expected, community knowledge is predictive of level of community evaluation. Next, community evaluation is regressed on exposure to community. As Table 2 shows, there is no evidence of the predicted direct relationship of exposure on evaluation. When community exposure is added to the equation as a second step (after entry
of knowledge), there is no evidence of an emerging direct relationship between exposure and evaluation.

The entries in the bottom part of Table 2 show the standardized beta coefficients for the final equation, that is, the equation containing both the knowledge measures and community exposure. Six of the seven possible knowledge measures were used for the equation. The net positive measure (knowledge about what is best about the community minus knowledge about what is worst) was not used in favor of the simpler measures of knowledge about what is best and knowledge about what is worst.

Those persons high in knowledge about the best things in the community do evaluate the community more highly than those low in knowledge. Conversely, those high in knowledge about the negative aspects of the community evaluate it more lowly than those without this knowledge. Similarly, knowledge about what should be torn down in the community is negatively related to community evaluation, while knowledge about what should be constructed is unrelated to evaluation. Surprisingly, knowledge about local issues is not related to evaluation, while knowledge about local politicians is (positively). The standardized beta for community exposure is slightly positively related to evaluation, providing only slight evidence for the continuation of the direct effects of this variable in the model.

In a separate analysis not shown here knowledge about what is worst about the metropolitan area was subtracted from knowledge about what is best to create an index of net positive information about the community. This was used in a regression analysis identical to that shown in Table 2 excepting that the net positive index replaced the two items used to create it. The net positive variable showed a standardized beta of .31 in the
final equation, lower than the beta reported in Table 2 for the positive knowledge item but considerable greater than the beta for the negative information item. In these analyses, then, the separate indices seem to be better predictors of community evaluation than the index. It seems to matter more what people know than how they assemble that information in a simple, subtractive model of information storage.

Table 3 provides a summary of the regression analysis with community knowledge as the dependent variable and media use and the four locator variables as the independent variables. Each of the seven knowledge variables was first regressed on the six media variables (four of use and two of attention). As the top line in the table shows, evidence of strong media effects is clearly lacking. Only for the two somewhat traditional measures of knowledge (about issues and candidates) is the adjusted R Square of any size. The four locator variables (as a block and without the media variables in the equation) show only slightly stronger relationships with the knowledge measures. There is evidence, however, that these locator variables do explain variance in knowledge directly, controlling for variance explained indirectly (through media use). In other words, in each of the seven cases of knowledge examined, the direct path between the locator variables and knowledge shown in Figure 1 should be retained, though the gain in R Square (simple, rather than adjusted) is not great.

The lower part of Table 3 shows the individual standardized beta coefficients for both types of media variables (exposure and attention) and the four locator variables. These are the betas for the final equation with all variables entered. By reading down the first column it is possible to see that knowledge about what is best in the community is predicted best by attention to television news, race and education. White persons, those
high in attention to television news and, those high in education are
higher in knowledge of the community than others. Knowledge about what is
worst in the community also is positively related to attention to
television news and to education. Those who have lived in the city versus
those in the suburbs also are more knowledgeable than their counterparts.
Use of newspapers is associated with having a net balance of positive
information about the best and worst things in the community, as is
education and being white.

Knowledge about what should be built and what should be torn down in
the community is unrelated to the media variables even when viewed
individually. Blacks are more likely to have suggestions on things to tear
down than whites. The better educated are more likely to have ideas on
things to construct than the less well educated.

Knowledge about the issues is related positively to readership of the
weekly newspaper and (contrary to expectation) negatively to use of radio
for news. Knowledge of the issues also is positively related to attention
paid to local television news and the local news in the daily newspaper.
Whites also have more knowledge about the issues than nonwhites, and those
who have lived in the metropolitan area longer have more knowledge than
those with less exposure to the community. Knowledge about people is
positively related to use of the daily newspaper and attention to local
television news as well as to years of formal education and number of years
in the metropolitan area.

The standardized betas present a complicated picture of the role of
the two types of media variables used here. Overall, attention to local
television news is a better predictor than exposure to local television
news. It is difficult, however, to give a nod to either exposure to the
daily newspaper or attention. The entry of interaction terms for the exposure and attention measures (not shown here) did not clarify the picture. Overall, this analysis suggested the additive approach taken here (versus the multiplicative approach of the interactions) was preferable.

Multiple regression techniques were used to test the sets of expectations about contingencies resulting from the influence of the locator variables. For predicting knowledge, separate regressions were run for each of the seven knowledge measures. In each equation, all the media variables and all the locators were first entered. Then all the two-way interactions between each locator and each media variable were entered. Backward stepwise regression was used to eliminate nonsignificant interactions, but the original media and locator variables were forced to remain in the equation. The stepwise method was used because each two-way interaction represents a hypothesis of one of the types outlined above, and there is no compelling reason for asserting that any one hypothesis is more likely than any other. The level of the probability of F to remove was .1. After the final equation was arrived at, the incremental F test was used to determine whether the added variance for the remaining interactive variables was significant. Interaction terms were kept if both the individual coefficients and the increment in variance were significant.

The same procedure was employed for the same reasons in looking at the relationship between evaluation and knowledge, but in this case zero-order locator variables were not entered because the model assumes that the locators work only through knowledge.

Table 4 shows that the relationship between knowledge and evaluation is affected by race, education and city versus suburban residence. Greater knowledge of local political figures leads to higher evaluations among
non-white respondents, but knowledge of political figures has almost no
effect on evaluations for whites. Greater knowledge of local issues leads
to lower evaluations for non-whites, but again has almost no effect for
whites. The number of best aspects of the metro area is positively related
to evaluation, but education increasingly dampens the relationship;
evaluation increases at a decreasing rate as both the number of best
aspects and level of education increase simultaneously. Put another way,
the number of best aspects has less weight in the overall evaluation as
education increases. A mirror image of this pattern occurs with knowledge
of issues and education. The greater the knowledge of issues, the lower the
evaluation, but as education increases the negative effect of issue
knowledge is lessened. Because multiple regression was used, the effect of
education on the relation between knowledge of issues and evaluation, and
the effect of race on the same relation are each controlled.
Table 5 shows this same analysis for two of the seven knowledge measures.
These were chosen for presentation because none of the other knowledge
measures showed a significant pattern of interactions. As Table 5 shows,
there is no strong pattern of interactions even for the two knowledge
measures shown. For the measure of knowledge of issues, the efficiency
hypothesis generally (and the knowledge-gap hypothesis specifically) gets
some support.

Table 5 shows that attention to television is not significant. The
interaction between attention to television and education, however, is
significant. As education increases, knowledge is acquired at a greater
rate. Length of residence, the other locator hypothesized as altering the
efficiency of information acquisition, has the same pattern of effect, but
with attention to newspapers instead of attention to local television news.
For the interaction of education and attention to newspapers, the pattern is the reverse. Attention alone is not related to knowledge. When the interaction of attention and education is taken into account, the increase in knowledge occurs at a decreasing rate.

The relevance hypothesis holds for both race and for city versus suburban residence with regard to exposure to weekly newspapers. Increased reading of weeklies leads to increased knowledge of issues, but the rate of increase is significantly lower for blacks and for suburbanites.

The efficiency hypothesis is supported in one instance with regard to knowledge of political figures. Exposure to television leads to added knowledge, but this relationship is weakened as the length of residence increases.

To complete the intended examination of Figure 1, the relationships between social indicators and media use were examined. These analyses, not tabled here, show that two social locators are significant predictors of exposure. As other studies have found, length of residence is a predictor of exposure to local television news, use of the daily newspaper and readership of weekly newspapers. Education is negatively related to exposure to television news and positively related to exposure to the daily newspaper. None of the locators is related to attention to local news on television or in the daily newspaper, or to use of the radio for news.

Summary and Conclusions

The analyses in this paper were organized around a model of media effects. The particular effects of interest are how members of urban centers think about and evaluate their communities. Of concern as well was the impact of community variables on use of the media.

The data presented here show that there is considerable empirical
merit in the conceptual distinctions made. The key concepts of community commitment, community evaluation and community pride do not seem to be identical. Conceptually, they vary in the amount and type of affect, and the notion of faithfulness as an affective process that is different from liking may play a role in the make-up of pride and commitment. Commitment is more cognitive and may in part represent personal decisions. The measures also differ in that commitment is seen as antecedent to the others. The concepts do have an important common ground, however. All can be seen as social measures that are outward manifestations of ways in which respondents construct their own understanding of their community context.

The approach taken here is somewhat different from earlier research in this area in that it places stronger emphasis upon cognition and the role it plays in media use and constructing and understanding of community. Seven different knowledge measures were devised using three strategies for assessing cognitions. In the cases of best and worst aspects, respondents were free to list what they saw as most important. In the other questions the topics related to the community were selected by the researchers. In the instance of constructing and tearing down of buildings, respondents were free to list their ideas. In knowledge of people and issues measures, the number of don't know responses was tallied on the assumption that opinion must be based in part upon knowledge. In general, the knowledge measures tap the shape of the content of cognitions, and, as with the social measures of pride, commitment and evaluation, the knowledge measures contain different levels of affect.

The data show that the knowledge measures are related to overall evaluation of the community, but the relationship is not particularly strong. Four of six knowledge measures are significant predictors:
knowledge of what should be built and knowledge of issues are not significant predictors. No predictions were made concerning which knowledge scores should be strongest.

Media use and attention to media represent another area in which some departure from previous work occurred. Unlike many studies in this area, measures of exposure to nearly all mass media were included. Attention was found to be distinct from exposure. Attention to television appears to be a stronger predictor than exposure. For the daily newspapers, neither is consistent nor particularly strong in predicting knowledge. By using multiple regression, interactions between exposure and attention could be checked. None added significant increments of explained variance. Earlier researchers had combined measures of media use. Evidence here is that they should be kept separate. However, both attention and exposure measures appear to be important. This lends some support to Janowitz's argument that exposure measures only are too limited in that they would assume that all who are exposed to media "are emotionally and socially equipped to perceive in the same fashion and to the same degree." Exposure and attention can be seen as mechanisms which can facilitate or hinder acquisition of knowledge or the satisfaction of various needs. As predictors of knowledge, the media measures were not particularly strong nor were they consistent.

The social locators were also fairly weak as knowledge predictors, but evidence was found that education works both through media as intervening variables and directly even though the knowledge assessed could not have been learned in school. Length of residence also showed indirect and direct effects in the case of mentions of what is worst about the metro area.

There is some evidence, also not consistent, that relationships between media use, knowledge and evaluation are different for different
subgroups as defined by the social locators. A number of interactions were found. All the interactions supported in Tables 4 and 5 are plausible despite the lack of a straightforward overall pattern. In this regard, the findings echo the kind of pattern Blumler (1984) discussed in looking at uses and gratifications among subgroups identified by locators. Whatever the focus of media satisfaction, the most powerful background discriminant rarely was the same in any two subgroups. The media use measures were conceptualized as independent of particular gratifications sought.

Interactions found here indicate that the skills and habits related to use could facilitate or hinder gratifications sought. In this regard the measures are one source of the non-linear relationships Blumler reports between social locators and gratifications, and are at least indirect evidence that individual skills and knowledge may affect the relationship of uses, gratifications and social factors.

Interactions between use and other variables may have an important temporal or episodic aspect as well. A clue comes from the interaction between race and knowledge of political figures. For non-whites, the increased knowledge leads to increased evaluation; for whites the relationship was significantly weaker. Two of the political figures were black city councilmen. The third was the mayor, who is white and has strong support across all groups. At the time of the survey one of the black councilmen was the focus of alleged wrongdoing for the second time in a year, and the incident involved the mayor. (The councilman was cleared both times. Both incidents had strong political overtones.) In some instances, gratifications may occur sporadically because pertinent material is episodic in nature. Media skills can amplify or depress the effects of such episodes. Such an argument indicates that research is needed to assess the
ease or difficulty of setting off interactions between social factors, media use and gratifications and not only to isolate stable ones.

The model has a reflexive quality. A wide range of concepts are drawn upon in order to study the integration of individuals into their community. The model starts with social locators, some such as location of residence, that are externally rooted, others, such as commitment, that are internally rooted. It then moves through behaviors, particularly with regard to media, and then to psychological constructs -- the measures of knowledge -- and finally to measures such as evaluation and pride, which themselves are manifestations of what respondents have constructed in order to create their own understanding of their community that forms the context for their daily life. The study of media and media effects with regard to community seems important because it is one way of investigating basic components and relationships that make up modern society.
Notes

[1] For the measure of weekly newspaper readership, the responses "every week" and "a couple per month" constituted a positive response, while "one or fewer per month" and "don't know" were scored as 0. For radio, people who said they mostly listened to radio for news and information were scored positively, while those saying they mostly listened for sports or music or who didn't know or didn't listen were scored as 0.

[2] Some respondents gave very general responses such as "I just like it" or "I don't like it." While these represent minimal information, they were coded as such. People who answered this way rarely gave additional responses, so they would be scored as low in knowledge. Their net positive scores, however, would rarely be zero. Only three responses were coded since past experience with such measures has shown that it is very rare for an individual to be able to articulate more than three responses. Three positive responses were given by 23% of the sample; three negative responses were given by 5%.

[3] The city studied has taken a rather aggressive policy toward annexation and has surrounded many of the "suburbs", thereby halting their growth. For this reason, living outside the city does not necessarily mean living distant from the city center. Suburban government is definitely smaller and distinct from government of the dominant city. Just under 60% of the sample lived in the dominant city.
Appendix

Measures Used in Analyses

Community Commitment

If you were able to choose between living in metropolitan Columbus and living in any other place in the United States, would you choose to live in Columbus or somewhere else?

Education

What is the last grade of school you completed?

Race

What is your race? Are you white, black, or a member of another racial group?

Location of Residence

Do you live in the city of Columbus or outside the city limits?

Exposure to Community

How long have you lived in metropolitan Columbus?

Media Use

Exposure measures:

to local TV news

About how many days a week do you watch the 5:30 to 6 o'clock segment of one of the local early evening television news broadcasts?

About how many days a week do you watch the 6 o'clock to 6:30 segment of one of the local television news broadcasts?

About how many days a week do you watch a local television news program at 11 p.m.?

An index was created by summing these three measures. The Cronbach alpha for the index was: .56.

to metro newspaper

About how many days a week do you read the Columbus Dispatch?

to weekly newspaper

Most neighborhoods in Franklin County are served by one or more weekly newspapers. How often would you say you read such a weekly? Do you read at least one every week, at least a couple of times a week, or less frequently?
per month, or more issue a month or less?

In the analyses, the first two responses were coded as 1. The final response and "don't know" were scored as 0.

to news on radio

When you listen to radio, would you say you listen mostly for music, mostly for news and information, mostly for sports, or perhaps you never listen to radio?

In the analyses, the "mostly for news and information" response was coded as 1, and the other responses were coded as 0.

Attention measures:

to TV news

When you watch the local evening news, how much attention do you pay to news about problems and issues facing metropolitan Columbus? Would you say you pay a lot of attention, quite a bit of attention, some attention, or very little attention to news about problems and issues in metropolitan Columbus?

to daily newspaper

When you read the Columbus Dispatch, how much attention do you pay to news about problems and issues facing metropolitan Columbus? Would you say you pay a lot of attention, quite a bit of attention, some attention, or very little attention to news about problems and issues in metropolitan Columbus?

Community Knowledge

Best

In general, what are the best things about metropolitan Columbus?

Respondents were coded from 0 to 3 for the number of responses given.

Worst

What are the worst things about metropolitan Columbus?

Respondents were coded from 0 to 3 for the number of responses given.

Positive

This index was created by subtracting the value of Worst from the value of Best.

Build
In general, if you could pick a few publicly or privately funded projects that you think should be built in metropolitan Columbus in the next few years, what would they be?

Respondents were coded from 0 to 3 for the number of responses given.

Is there anything you would like to see torn down?

Respondents were coded from 0 to 3 for the number of responses given.

Now I would like to ask you a few questions about some issues in the news. Some people say that government leaders here in Columbus and Franklin County should do more to control and plan the development of the northern part of the county. Others think there is no need for more government control and planning of development in northern Franklin County. What do you think?

Columbus has been invited to make a bid or proposal to host the 1996 Olympics. Do you think local leaders should or should not make a bid to host these international Olympic games?

Some people place most of the blame for the Columbus bus strike on the management of COTA, the Central Ohio Transit Authority. Others have placed most of the blame on the union drivers. Others say both groups are equally to blame. Whom do you think deserves the blame?

Do you think that relationships between racial groups in metropolitan Columbus are better now than they were five years ago, worse than they were five years ago, or about the same as they were five years ago?

The mayor of Columbus currently has a salary of $75,000 per year. By 1991, that salary will be $85,000 per year. Do you think $85,000 per year will be too much to pay the mayor of Columbus, too little to pay the mayor, or the right amount?

There has been a lot of talk recently about sex and health education in our society. First, do you think the schools are doing a good job, an adequate job, or a poor job of educating children about sex and health issues?

Some people have proposed that the schools should make birth control pills and contraceptive devices available to the students, while others don’t think the schools should do this. What do you think?

The number of “don’t know” responses to these questions was summed
to form the Issues index. Cronbach's alpha is .45.

People

Do you approve or disapprove of the way Dana Rinehart is handling his job as mayor of Columbus?

Do you approve or disapprove of the way Jerry Hammond is handling his job as Columbus city councilman?

Do you approve or disapprove of the way Ben Espy is handling his job as Columbus city councilman?

The number of "don't know" responses to these questions was summed to form the People index. Cronbach's alpha is .64.

Community Evaluation

How do you evaluate metropolitan Columbus as a place to live? Would you say it is an excellent place to live, a good place, a fair place, or a poor place to live?

Community Pride

In general, would you say you are extremely proud, very proud, somewhat proud, or not at all proud of the fact that you live in metropolitan Columbus?
References

"What voters know about election issues and candidates and what the
media tell them," presented to the International Society of
Political Psychology, Toronto, Canada.

"The social character of media gratifications," paper presented
at the annual conference of the International Communication
Association, San Francisco.

Carter, Richard F. (1965)
"Communication and effective relations," Journalism Quarterly,
42:203-12.

Chaffee, Steven H., and Joan Schleuder (1986)
"Measurement and effects of attention to media news," Human

Edelstein, Alex S., and Otto N. Larsen (1960)
"The weekly press' contribution to a sense of urban community,"

"Media use and community pride," presented to the Political
Communication Division of the International Communication
Association, Montreal, Canada.

Greenberg, Bradley S., and Brenda Dervin (1970)
Use of the Mass Media by the Urban Poor, Praeger Publishers, New
York.

Janowitz, Morris (1967)
The Community Press in an Urban Setting. The University of Chicago
Press, Chicago.

Noelle-Neumann, Elisabeth (1985)
"National identity and self-esteem: On the relationship between
public and private virtues, taking Germany as an example,"
presented to the World Association for Public Opinion Research,
Wiesbaden, Federal Republic of Germany.

Rosenberg, Morris (1968)

Simmel, Georg, (1950)
The Sociology of Georg Simmel, translated and edited by Kurt H.

Stamm, Keith R. (1985)
Newspaper Use and Community Ties. ABLEX, Norwood, N.J.
Tichenor, Phillip J., Jane M. Rodenkirchen, Clarice N. Olien and George A. Donohue (1973) 

Zajonc, Robert B. (1968) 

Figure 1. Model of Variable Interrelationships
Table 1. Interrelationships of Community Evaluation, Community Pride, and Community Commitment.

a. Community Evaluation by Community Commitment

<table>
<thead>
<tr>
<th>Community Evaluation</th>
<th>Commitment:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>0.7%</td>
<td>1.1%</td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>8.6</td>
<td>27.9</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>49.7</td>
<td>53.4</td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>41.2</td>
<td>17.6</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.1</td>
<td>100.0</td>
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</tr>
<tr>
<td>(N)</td>
<td>(292)</td>
<td>(262)</td>
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$\tau_b = -0.30$

b. Community Pride by Community Commitment

<table>
<thead>
<tr>
<th>Community Pride</th>
<th>Commitment:</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Not at all proud</td>
<td>0.4%</td>
<td>8.3%</td>
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</tr>
<tr>
<td>Somewhat proud</td>
<td>30.9</td>
<td>61.5</td>
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</tr>
<tr>
<td>Very proud</td>
<td>55.1</td>
<td>25.8</td>
<td></td>
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<tr>
<td>Extremely proud</td>
<td>13.7</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.1</td>
<td>100.0</td>
<td></td>
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<tr>
<td>(N)</td>
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<td>(252)</td>
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$\tau_b = -0.38$

c. Community Pride by Community Evaluation

<table>
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<th>Community Evaluation:</th>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Not at all proud</td>
<td>40.0%</td>
<td>14.6%</td>
<td>1.7%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Somewhat proud</td>
<td>40.0</td>
<td>76.0</td>
<td>54.4</td>
<td>10.1</td>
</tr>
<tr>
<td>Very proud</td>
<td>20.0</td>
<td>9.4</td>
<td>41.5</td>
<td>52.7</td>
</tr>
<tr>
<td>Extremely proud</td>
<td>0.0</td>
<td>0.0</td>
<td>2.4</td>
<td>26.0</td>
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<tr>
<td>TOTAL</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
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<tr>
<td>(N)</td>
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<td>(96)</td>
<td>(294)</td>
<td>(159)</td>
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$\tau_b = +0.55$
Table 2. Regression of Community Evaluation on Knowledge of Community and Community Exposure

<table>
<thead>
<tr>
<th></th>
<th>Adjusted R Square for Knowledge</th>
<th>Adjusted R Square for Community Exposure</th>
<th>Change in R Square for Addition of Community Exposure (a)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>.17**</td>
<td>.00</td>
<td>.01</td>
</tr>
</tbody>
</table>

**Standardized Betas for Final Equation**

- Knowledge about what is best about metro area: .37**
- Knowledge about what is worst about metro area: -.10*
- Knowledge about what should be built in the metro area: .04
- Knowledge about what should be torn down in the metro area: -.14**
- Knowledge about local issues: .03
- Knowledge about local politicians: .13**
- Community exposure: .07*

(a) The R square terms used for this test were not adjusted.

(N=561) * p (.05 (one-tailed) ** p (.01 (one-tailed)
Table 3. Regression of Knowledge of Community on Media Use and Locator Variables

<table>
<thead>
<tr>
<th></th>
<th>Knowledge of Community...</th>
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<tr>
<td></td>
<td>Best</td>
</tr>
<tr>
<td>Adjusted R Square for Media Variables</td>
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</tr>
<tr>
<td>Adjusted R Square for Locators</td>
<td></td>
</tr>
<tr>
<td>Change R Square for Addition of Locators (a)</td>
<td></td>
</tr>
</tbody>
</table>

Standardized Betas for Final Equation

Exposure measures:

- to local TV news: 0.06, -0.02, 0.07, -0.05, -0.03, -0.00, 0.04
- to metro newspaper: 0.05, -0.08, 0.11*, 0.03, -0.04, 0.01, 0.10*
- to weekly newspaper: 0.06, 0.04, 0.03, 0.03, -0.08, 0.07*, 0.03
- to daily newspaper on radio: -0.02, -0.01, -0.01, 0.01, -0.00, -0.10, -0.06

Attention measures:

- to TV news: 0.16**, 0.10*, 0.07, 0.05, 0.06, 0.26**, 0.18**
- to daily newspaper: -0.01, 0.07, -0.06, 0.04, 0.07, 0.09*, 0.08
Table 3. (Continued)

Locators:

<table>
<thead>
<tr>
<th>Live in city</th>
<th>.22</th>
<th>.03*</th>
<th>-.05</th>
<th>.26</th>
<th>-.42</th>
<th>-.60</th>
<th>.02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race (white)</td>
<td>.11**</td>
<td>.31</td>
<td>.03*</td>
<td>-.01</td>
<td>-.12**</td>
<td>.12**</td>
<td>-.03</td>
</tr>
<tr>
<td>Education</td>
<td>.29**</td>
<td>.19**</td>
<td>.12**</td>
<td>.16**</td>
<td>-.05</td>
<td>.03</td>
<td>.09*</td>
</tr>
<tr>
<td>Yrs. in metro area</td>
<td>-.01</td>
<td>.01</td>
<td>-.02</td>
<td>-.00</td>
<td>.04</td>
<td>.07*</td>
<td>.15**</td>
</tr>
</tbody>
</table>

(a) The $R$ square terms used for this test were not adjusted.

(N=564) * $p < .05$ (one-tailed) ** $p < .01$ (one-tailed)
Table 4. Regression of Community Evaluation and Exposure for Subgroups of Social Locators

<table>
<thead>
<tr>
<th>Adjusted R Square for</th>
<th>Zero-order Variables</th>
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<tbody>
<tr>
<td>Adjusted R Square for</td>
<td>Zero-order plus</td>
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</tr>
<tr>
<td>Interactive Variables</td>
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</tr>
<tr>
<td>Change in R Square for</td>
<td>Addition of Interactive Variables (a)</td>
<td>.03**</td>
</tr>
</tbody>
</table>

**Standardized Betas for Final Equation**

**Main Effects:**

<table>
<thead>
<tr>
<th>Knowledge of Community</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Best</td>
<td>.64**</td>
</tr>
<tr>
<td>Worst</td>
<td>-.11**</td>
</tr>
<tr>
<td>Build</td>
<td>.04</td>
</tr>
<tr>
<td>Down</td>
<td>-.12**</td>
</tr>
<tr>
<td>Issues</td>
<td>-.24**</td>
</tr>
<tr>
<td>People</td>
<td>.37**</td>
</tr>
<tr>
<td>Community Exposure</td>
<td>.10**</td>
</tr>
</tbody>
</table>

**Selected Interactions:**

| Race by Issues         | .33**         |
| Race by People         | -.33*         |
| Education by Issues    | .30**         |
| Education by Best      | -.37**        |
| City/suburb by Best    | -.09          |

(a) The R square terms used for this test were not adjusted.
(N=561) * p (.05  ** o (.01 }
Table 5. Regression of Knowledge of Community on Media Use for Subgroups of Social Locators

<table>
<thead>
<tr>
<th></th>
<th>Knowledge of Issues</th>
<th>Knowledge of Political Figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R Square</td>
<td>.11**</td>
<td>.11**</td>
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<tr>
<td>for Zero-order Variables</td>
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<td>.11**</td>
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<td>Zero-order plus</td>
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<tr>
<td>Interactive Variables</td>
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</tr>
<tr>
<td>Change in R Square</td>
<td>.05*</td>
<td>.01*</td>
</tr>
<tr>
<td>for Addition of Interactive Variables (a)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Standardized Betas for Final Equation**

**Main Effects:**

**Exposure measures:**

- to local TV news: .01  .15*
- to metro newspaper: -.01  .10*
- to weekly newspaper: .43**  .03
- to news on radio: -.10**  -.06

**Attention measures:**

- to TV news: .02  .17**
- to daily newspapers: .20  .06

**Locators:**

- live in city: .19  .03
- race (white): .34**  -.03
- education: .02  .10*
- yrs. in metro area: -.10  .29**
Table 5. (Continued)

**Selected Interactions:**

| Education by attention to tv news | .34** |
| Education by attention to daily newspaper | -.34** |
| Yrs in metro area by attention to daily newspaper | .26** |
| Live in city by exposure to weekly newspaper | -.24* |
| Race by exposure to weekly newspaper | -.36* |
| Yrs. in metro area by exposure to local TV news | -.23* |

a) The R Square terms used for this test were not adjusted.

n=564)  *  p (.05  **  p (.01