DOCUMENT RESUME

ED 206 015 CS 503 528

AUTHOR Payne, David E.; Caron, Andre H.
TITLE Mass Media, Interpersonal, and Social Background Influences in Two Canadian American Settings.
SPONS AGENCY National Association of Broadcasters, Washington, D.C.; Syracuse Univ., N.Y.
PUB DATE May 81
NOTE 51p.; Paper presented at the Annual Meeting of the International Communication Association (31st, Minneapolis, MN, May 21-28, 1981). Also sponsored through the Ministere des Communication, Quebec.

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Adults; *Communication Research; Comparative Analysis; Cultural Differences; Cultural Influences; *Interpersonal Competence; *Mass Media; Predictor Variables; Research Methodology; *Social Background; *Sociolinguistics
IDENTIFIERS *Canada; *United States

ABSTRACT

A study investigated the effects of mass media, interpersonal communication, and sociolinguistic background on adults' political, cultural, and economic attitudes and agendas. Data for the study came from two earlier research efforts: one conducted in Minnesota, involved 414 adults who were interviewed concerning their media use, interpersonal contact with Canada, socioeconomic status and background, and knowledge of and attitudes toward Canadian and American political and cultural events and persons; the other, similar in design, involved interviews with 814 adults in Quebec, Canada. Analysis of data led to the following conclusions: (1) since cultural settings are unique, it is not possible to take findings from one setting and assume they will apply in another; (2) media, interpersonal communication, and sociolinguistic variables do not operate in a uniform manner across different categories of variables; and (3) caution should be exercised when examining media effects studies that do not include interpersonal and sociolinguistic variables. (Extensive tables of data are appended.) (FL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Mass Media, Interpersonal, And Social Background Influences in Two Canadian American Settings

ED206015

U S DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it
Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy

By

David E. Payne

Departments of Sociology and Journalism

University of North Dakota

and

Andre H. Caron

Department of Communication

University of Montreal

This project was partially funded by the Ministere des Communications du Gouvernement du Quebec, the National Association of Broadcasters, and Syracuse University.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

David E. Payne
Andre H. Caron

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Mass Media, Interpersonal, and Social Background Influences In Two Canadian-American Settings

This paper compares the effects of mass media, interpersonal communication and socio-linguistic background on adults' political, cultural and economic attitudes, cognitions and agendas. While there are large literatures relating attitudes, cognitions and agenda to each of these variables separately, these have for the most part not been integrated in a fashion that permits comparison of their relative strengths and the degree to which the mix of their affects varies for different attitudes, cognitions and agendas. The few studies[1] which do compare these three have usually been of one of two types: those conducted around the issue of agenda setting and those conducted in the context of developing nations.

AGENDA SETTING

Agenda setting studies examine the contribution of media, interpersonal contact, and social background in determining the ranking people give to political and cultural issues. These agendas are often limited to political issues or politicans and are frequently conducted during political campaigns. One line of this agenda setting research examines the comparative influence of different media (usually newspapers and television) while ignoring interpersonal effects.

---

[1] We do not include laboratory studies in this review, although they are extensive. (For two recent examples, see Prasad et al, 1978; and Corder-Bolz, et al, 1978.) Because of the limited strength and length of manipulation and artificality, considerations of external validity place them in a different category of concern.

At a more inclusive level media effects are compared with interpersonal effects. Shaw (1977) found evidence from a large study conducted in Charlotte, N.C., that both media and interpersonal contact variables were important in influencing agendas. He suggested that media effects seemed stronger and also found evidence that non media users obtained media agendas from discussion with media users. Palmgren and Clark (1977) noted that the relative impact of media and interpersonal contact on people's agendas may differ depending on the level of the agenda; national agendas being more set by the media and local agendas being more set by interpersonal communication.

Winter (1979) writing two years later attempted to bring order to the growing body of research on the interplay of mass media and interpersonal contact in setting agendas. Unfortunately he found an approximately equal number of studies indicating that interpersonal communication reduced and facilitated the agenda setting role of the media. McCombs and Shaw (1980) specified a number of items which should be considered in clarifying this, but failed to provide a theoretical justification for any mechanism ordering the connections or specifying the process. McLeod et al., (1980) tentatively attempted to provide the theoretical framework. They noted that individuals operate to test their personal agendas and the importance of each agenda item in a process they called social anchoring. Subjects in their research indicated that friends were more powerful anchors and preferred for the most important issues. Media were also used, particularly on less important issues, and when interpersonal contact relevant for the particular agenda item was limited, thus, there are both interpersonal and mass media effects in setting

agendas, and the relative importance of these may depend on the issue of concern.

Research tying effects of socio-linguistic background to effects of media and interpersonal exposure is rare and its conclusions are more tentative. McCombs (1977) and Weaver (1977) make the case that "need for orientation" may influence the relative power of mass media and interpersonal contact in setting agendas. The higher the need for orientation, the more powerful the mass media in setting agendas. Mullens (1977) suggested that amount of education may have a similar effect. His study comparing college students with non students of the same age found a number of differences in agendas between the two groups. McLeod et al., (1974) noted that the background variable of age was also an important influence on media agenda setting. Their older respondents were more likely to be influenced by the media than their younger ones. These studies lead us to suspect that other psychological and social (and in a cross cultural setting, language) variables may be important in determining the degree to which media set people's agendas and by extension form their attitudes and cognitions.

DEVELOPING COUNTRIES

Most of the research examining the relative impact of mass media, interpersonal contact and socio-linguistic factors in developing countries deals with the adoption of a particular innovation.

Everett Rogers (1973) summarized a large number of these studies particularly relating to family planning. He noted that mass media may be useful in providing knowledge about innovations when they are part of a

larger campaign. The decision to adopt and the actual adoption of an innovation was almost exclusively the result of interpersonal contact or the more traditional two way media (ballad singers, etc.), however. Korzenny and his colleagues (1980) found that the most relevant forces relating to family planning in their Mexican setting were radio listening and travel, facilitating communication with more cosmopolitan others. Radio was more powerful than the print media partly because this topic was relatively taboo, thus a person reading about it would not discuss it further out of embarrassment but when people heard it as a group and saw others hear it, they felt more free to discuss the information. This discussion enhanced the effect of the radio programming. Thus radio listening was related to both family planning knowledge and practice. Korzenny's and his colleagues', (1980) research thus provided support for Schramm's (1973) conclusion that mass media exert their greatest influence through their power to focus attention and direct interpersonal discussion. Indeed Hornik (1980:10) says "one central theme resounds in all the most successful experiences of recent years. Communication technology works best as a compliment..."

Korzenny et al., (1980) imply the importance of including the third set of variables (socio-linguistic status) in answering these questions by noting that controls for age, sex and status reduced mass media effects on family planning attitudes and practices, but not cosmopolitan interpersonal communication effects. Inkeles and Smith (1974) working with data from six developing countries find that 90 percent of the variance in "individual modernity" (a composite attitude) can be explained by education, mass media exposure, and occupation and the strongest ef-

fects come from education. Diaz-Bordenaue (1976) reviews a number of studies of development programs in Latin America and also concludes that status variables are of primary importance in the programs' successful adoptions. These studies suggest that in any research of this sort, such social variables must be included in the analysis.

How do these findings from research in developing countries apply to the broad range of cognitions and attitudes on existing political issues and aspects of culture, and do they apply between developed cultures? These questions are not fully answered. There is, however a limited but growing literature assessing them. Joseph Klapper (1960) provided the first good synthesis of this research. Klapper reviewed some of the existing social psychological literature on small group influence and concluded that interpersonal influence (when it is present) is a more powerful shaper of attitudes than mass media but that the mix of the two may change depending on the dependent variable under study. Interpersonal communication may enhance, reduce or operate separately from mass media effects depending on the dependent variable. In addition, he notes that a number of other variables must be included in the total equation. By and large "...mass communication rarely functions as the sole agent in the process of effect, but rather works amid a nexus of other extra-communication mediating forces." (Klapper, 1960:p.92).

Addressing this question, Rogers (1973), says mass media may have a more important effect in the adoption of agendas, cognitions and attitudes in developed than developing countries. In a detailed study of the effects of American mass media on Romanian children Rebeka Jorgensen (1980) also attempted to specify media effects more carefully and ba-

lance them against interpersonal effects. She found that American films, television, and music are Romanian Adolescents' most important source of information about America but that they acted as supports for already developing or existing images from home and school. In addition, these interpersonal sources were more important sources of attitudes and cognitions for non American issues.

It appears that in the developed countries the interplay between media and interpersonal influences relates in a complex and varied way to different attitudes and cognitions just as in developing countries. In neither of these settings nor in the agenda setting paradigm have systematic comparisons of this mix been developed.

HYPOTHESES

This paper reports two research projects in differing developed nation locations which move toward such a systemization. It is not possible to test all the hypotheses that can be derived from the reviewed research in one paper. Rather five general hypotheses will be focused on here. Most of the literature is adopting the general conclusion that interpersonal are stronger than mass media affects on cognitions, attitudes, and agendas. Our first hypothesis simply retests this growing concensus in the unique settings of this research.

Agenda setting research (Palmgren and Clark, 1977) proposes that mass media will have their strongest effects on agendas at national levels, and compared to interpersonal communication have a proportionally smaller effect at local levels. Our second hypothesis extends this by proposing that mass media will have their strongest effects also on attitudes and cognitions at the national or international level with a

proportionally smaller effect on them at the local level. Interpersonal effects, in contrast, will be strongest on local attitudes, cognitions, and agendas.

McLeod et al., (1980) and Ball-Rokeach and DeFleur (1976) proposed, as part of their theoretical framework on agenda setting, that mass media will have their strongest effects on agendas when interpersonal contact is minimal. Our third hypothesis tests and extends it again from agenda setting to attitudes and cognitions by proposing that agendas, attitudes, and cognitions will be more effected by mass media when interpersonal contact is limited than when it is high.

Both the agenda setting and the development research suggest that social variables may be important determinants of agendas, cognitions, and attitudes. Inkeles and Smith (1974), suggest that they may be more important than media or interpersonal contact in developing countries. Corroboration for this is limited, and the degree to which it extends beyond non developed settings is unclear. We propose as a fourth working hypothesis that social and language variables variables (specified in the methods section) will be important in determining attitudes, cognitions, and agendas. We prefer to leave the specification of the strength of these effects compared to media and interpersonal effects an open question since the literature is so incomplete on this topic.

Finally, the relative strength of mass media, interpersonal contact, and socio-linguistic effects on different attitudes, cognitions, and agendas will be explored and a post hoc attempt made to systemize the mix of their effects on theoretically meaningful dimensions.

RESEARCH METHOD

Data for this paper are taken from two studies; the first was conducted in Northern Minnesota in April 1977, the second in Quebec in September 1979. For the Minnesota study an interview schedule was constructed which measured media use, interpersonal contact with Canada, socio-economic status and background, and knowledge of and attitudes about Canadian and American political and cultural events and persons. A number of the knowledge and attitude items used by the Syracuse University team in their study of effects of American media in Kingston, Ontario (Sparks, 1978) were added to items designed for this study and all were pretested on a sample of Northern Minnesota adults (N=100). A discussion of reliability and validity of these items is provided by Payne (1978).

An area was located in Northern Minnesota which because of its geographic location received only Canadian television. This was demographically matched with an area which received both Canadian and American television and an area which received only American television.[2] Interviews were conducted with one adult, selected on quota basis for sex, in each household in the three selected areas. The appropriate respondent in 91% of the selected households completed usable interviews (N=414).

Interviews were conducted by ten graduate and undergraduate students who had been given written and verbal instructions and had conducted mock interviews before going into the field. In addition, the principal

---

[2] Details of the demographic matching of samples and the exact location of research sites are found in Schulke (1977) and are available on request.

researcher held daily meetings with the interviewers during the data collection phase. Each interview took from 25 to 45 minutes to complete.

The interview schedule used in the Quebec study used a French adaptation of a number of items used in the Minnesota study. Some items were deleted and some added because of the difference in the cultural and temporal setting. In addition, a few items were added to expand the scope of the Minnesota study. Interviews were pretested on a sample demographically similar to the selected research population.

Two demographically similar cities were chosen for this research. The first (NOCAB) had a population of 4,500 and received no cable television and had only Francophone television available. The second (CITCAB) had a population of 13,000 and received cable television which made available Anglophone Canadian and American television (ABC) signals.[3] A systematic random sample of residents 18 years of age and older was drawn from each community (CITCAB N=568; NOCAB N=560). The population was defined by a recent federal government election list (census) of every person 18 or older in the location. Of the total sample 212 were temporarily working elsewhere, or had moved or died leaving a working sample of 916 interviewees. From these 814 useable interviews were completed, giving a completion rate of 89%.

Initial contact with each respondent was made by post card informing them of the project and soliciting their cooperation. Interviews were then conducted by two teams of eight inerviewers who were either gradu-

---

[3] Details of the demographic matching and a breakdown of not available and unwilling people in the sample are available in (Caron and Payne, 1980).

ate students of the Department of Communication at the University of Montreal or professional interviewers hired for the research. Interviews took approximately 40 minutes to complete.

We assumed that Francophone Canadian, Anglophone Canadian and American cultures and media, though overlapping to some degree have real differences. Arnold and Tigert (1974), Stewart (1970), Scheer and Eiler (1972) and Peers (1972) all maintain that these differences are are substantial. Caron (1977) maintains that the main differences are between Francophone and Anglophone (Canadian or American) culture and media. In any case the concern with fostering and protecting such cultural uniqueness in the media has been a frequent political concern resulting in considerable legislation about the amount of American content in the various media and by law the American content of Canadian television is limited to 60%.

Comparative measures of Anglophone Canadian and American media, interpersonal and socio-linguistic background contact were obtained by asking Francophones how often they used American and Anglophone Canadian media, how many friends and relatives they had in the United States and Anglophone Canada, and how often they visited those areas, and their socio-linguistic backgrounds. Comparative measures for Americans can be obtained by asking how often they used Canadian media, how often they visited Canada and the number of friends and relatives they had there and their socio-economic backgrounds. It was expected that Canadian effects on Americans should be less than Anglophone effects on Francophones because within language content is more similar than between language content as noted by Caron (1977).

In the Minnesota study, respondents were asked to indicate how frequently they listened to Canadian radio, television and read Canadian magazines and newspapers.[4] The radio, television, and magazine measures were combined to produce an additive composite indicator of Canadian media use (CANMEDA). Interpersonal contact with Canada was measured by the number of immediate and more distant family living in Canada, the number of friends in Canada and the frequency of visiting Canada. These were combined to form an additive composite measure of interpersonal contact with Canada (CANPERS). Socio-economic background was measured by age, income and education. These were combined to form a factor composite indicator (Alpha=.42) of socio-economic status (STATUS).[5]

Nineteen dependent variables from the Minnesota data set are used here. Agenda setting is measured by three single item indicators: most important issue for Canada (CISUIMP), most important issues facing the United States (ISUIMPT), most important issue between the United States and Canada (CANUSIMP). Cognitions are measured by three single variable indicators: number of issues facing Canada respondent could name (CISU), number facing the United States (ISSUS), number between the United States and Canada (CANUSISS). There were four multi-variable constructs: the amount of detail provided about the most important is-

---

[4] Almost no one read a Canadian newspaper. This media use variable was therefore excluded from further analysis. The small number of people who read Canadian magazines compelled us to substitute reading in magazines (of any nationality) about Canada for reading in Canadian magazines.

[5] Factor composites were calculated for CANMEDA and CANPERS but low levels for the alpha coefficients indicated did not have a sufficiently strong underlying dimension to justify using such a unidimensional composite. This was also true for the composites ANGMED and PERSANG from the Quebec data.

sues for Canada (CANISS), the United States (USISS), and between the United States and Canada (CANASSOC); and the number of Canadian words for which the correct American meaning could be provided (GENINFO). Attitudes were measured by two single item indicators: the approval of government supported low cost housing (LOCSTHOS) and government socialized medicare (GOVTMEDS), and six multi-item constructs: attitude toward Canada (CANADA), Francophone Canadians (FRENCH), Anglophone Canadians (ENGLISH), America (USA), American Blacks (USBLACK), and American Whites (USWHITE). Items ranged from open ended to Likert in format. Alpha reliability coefficients for all composites were moderately high. Details of composite construction, style and reliability and validity of dependent variable constructs are found elsewhere (Payne, 1978).

In the Quebec study, respondents indicated the frequency of listening to Anglophone (US and Anglphone Canadian) radio, watching American television (highly correlated with frequency of watching Anglophone Canadian television), and reading American and Anglophone Canadian information magazines. Only one person in the sample reported reading an Anglophone newspaper regularly, so newspaper reading in these data, as in the Minnesota data, was excluded from further analysis. Television, radio and magazine use were combined to form an additive composite of Anglophone media use (ANGMED). When this variable was employed in the analysis respondents who lived in the cabled community but did not have cable and respondents who watched non Francophone television 10% of the time or less were excluded from the analysis to enhance the contrast between users and and non users of Anglophone television. Interpersonal contact with American and Anglophone Canadians was measured by having family

and friends in the United States, frequency and duration of visits to the United States and frequency of visits to Anglophone provinces. These were again combined to form an additive composite of interpersonal contact with Anglophones (PERSANG). Socio-linguistic background was measured by familiarity with English (OTHLANG), and a varimax factor composite (Alpha=.42) of age, education, and income (STATUS).

The Quebec data explored a larger range of attitudinal and cognitive dimensions than the Minnesota data. In addition, attempts to develop multi-item dependent variable constructs provided unsatisfactory reliability coefficients. We, therefore, employed a rather large number of single item indicators. Description of these is found in Caron and Payne (1981) from which we quote:

"Dependent variables are divided into two classes - cognitive and affective. There are 18 cognitive variables which measure level of information interviewees had about Canada, Quebec, the United States, and Europe. Knowledge of each of these geographic areas is measured with four questions: first, the number of problems for that area the interviewees could name; second, the amount of detail in their knowledge; third and fourth, the ability to correctly identify two political leaders associated with those areas. The additional two cognitive measures are constructs made by the use of factor analysis (VARIMAX) from the eight political leader identifications items. The strongest factor (FORPOL) loaded heavily on three items measuring knowledge of three foreign politicians: Kennedy, D'Estaing, Carter, and on Claude Ryan. The second (LOCPOL) loaded heavily on knowledge of two national politicians (Clark and Trudeau) and on Levesque. The three item index LOCPOL had an alpha of .64. The four item index FORPOL had an alpha of .82.

Fifty measures or composites of attitudinal dependent variables were used. These measured attitudes about America, Canada, Quebec, and Europe. For each of the four geographic areas, a measure was included (IMPUSPRB, IMPCNPRB, IMPQPRB, IMPEUPRB) indicating which problem the interviewees thought was most important for that geographic political entity. For each area, except Europe, interviewees were also asked to rank five issues for their relative importance (energy, peace, economy, unity, and increasing government involvement).

Six semantic differential items, two measuring activity (active-passive, fast-slow), two measuring evaluation (good-bad, pleasant-unpleasant), and two measuring potency (strong-weak, effective-ineffective), were included for Quebec, Canada and America. Interitem correlation indicated that these six items did not divide themselves into the usual three basic dimensions, possibly because of the small number of measures of each dimension. Each pair retained its separate identity.

Five questions measured relative preference for national or language features: preference for more U.S. TV programming (MOREUS); preference for American rather than Quebec vocalists, restaurants and accomodations (SING, EAT, HOTEL); and preference for an additional French or American television channel (NATTV). Four questions measured attitude toward increasing government involvement in agriculture (MRGVTAG), business (MRGVTBUS), national resources (MRGVTRCS), and life generally (LESGVT). A final question asked whether interviewees felt there should be less violence on television (VLNCE)."

FINDINGS

The data for hypotheses one, two, four, and five are all contained in Tables A (for Minnesota data) and B (for Quebec data). The data relating to hypothesis three are contained in Tables C (for Minnesota data) and D (Quebec data). All these tables are given in the Appendix. Summary tables, showing the number of statistically significant relationships but not specifiying them individually nor indicting the strength of associations are included in the text.

The first hypothesis addresses the comparative levels of association of mass media and interpersonal contact with information, attitudes and agendas in both settings. Data relating to this hypothesis are contained in the first four columns of Tables A and B (Appendix) and are summarized in Table 1.

Table I About Here

For the Minnesota data, the 0 order correlations between measures of information acquisition and media and interpersonal contact indicate media contact was significantly related more frequently to acquisition of information than interpersonal contact was. In addition, the levels of association were higher for media contacts. In the Quebec data, interpersonal contact was significaty related to information measures more frequently than was media contact. In addition, the strength of the relationship was stronger for the interpersonal association in twelve of the sixteen associations. The two data sets, then, provide conflicting results about the relative importance of media and interpersonal contact in transmitting information. These conflicting findings could be the

result of the small number of measures included in the Minnesota data or could reflect real differences resulting from the different cultural settings. Such possible cultural differences can not be clearly specified from the data available here.

In the Minnesota data, two of the four agenda measures are significantly related to foreign media contact while none of them are related to foreign interpersonal contact. In the Quebec data, one of four is related to interpersonal contact and one to media contact. Thus, what little evidence there is from agendas relating to the first hypothesis tends to disconfirm it. Interpersonal contact variables do not have stronger relationships with agendas than media use variables.

The Minnesota data contain little evidence that media or interpersonal contact is strongly related to attitudes. In constrast to this, the Quebec data indicate a number of significant relationships between media use and attitudes (18/42) and an even larger number between interpersonal contact and attitudes (26/42). The relationships between interpersonal contact and attitudes are also stronger in the majority of cases than those between media use and attitudes, but on the whole, these two variables are related to attitudes similarly.

In summary, the data provide different answers about the relationships between interpersonal and media exposure and information, attitudes, and agendas but the differences are most strongly tied to the different settings. In the Quebec data, clear support was found for the first hypothesis from the attitudinal dimensions and slight support from the information dimensions. Interpersonal contact was more strongly related to each of these than mass media contact. Agendas in both data

sets and information and attitude dimensions in Minnesota showed no such pattern, and disconfirmed the first hypothesis.

The introduction of status (and in the Quebec data, language) as a control reduces the number of variables signficantly related to interpersonal contact and the size of most of the measures of association. The inclusion of these and interpersonal contact as controls also reduces the size and number of significant relationships between media use and the same measures. The relative importance of media and interpersonal contact as causes is not changed by the inclusion of controls, however. Thus, the partial support and partial disconfirmation originally found for the first hypothesis remains.

The second hypothesis examines the relative levels of association of media and interpersonal contact with information, attitudes and agendas at local, national and international levels. Specifically, it proposes that mass media effects will be strongest at the national and international levels while interpersonal contact will have its strongest effects at the local level. Findings relating to this hypothesis are summarized in Table 2. We examine first findings relating to information transfer. In the Minnesota data, neither media nor interpersonal contact were related to transfer

Table 2 About Here

of local information but both were significantly related to transfer of international information with about the same frequency and the same intensity. In the Quebec data, a different pattern was found. Media use and interpersonal contact were related to transfer of local, national

and international information. Interpersonal contact was the most consistently and strongly related at all levels but the differences were not great.

The number of items measuring agenda setting in both the Minnesota and Quebec studies is limited enough that it is difficult to draw conclusions. Both data sets show interpersonal contact having minimal agenda setting effects at the national and international level. The Quebec data, give some support for interpersonal contact effects at the local level. The Minnesota data indicate significant relationships of about the same degree between media use and agendas at both the local and international level. In the Quebec data, the media are more strongly related to agendas at the international than the local or national levels. The relationships are all so small that the differences are probably not meaningful. In short, where differences are found, they are in the direction predicted (media at national and international, and interpersonal at local levels) but media and interpersonal differences are not significant more often than they are.

Minnesota data relating media and interpersonal contact to attitudes provide no support for the second hypothesis. They are both about equally related to attitudes on local and international issues. In contrast data from Quebec indicate that both media and interpersonal contact are more likely to affect attitudes about international rather than local issues.

Contrary to hypothesis 2, the most frequent and strongest relationships were between interpersonal contact and attitudes about the international issues. One reason for this may be that the interactions spe-

cifically asked for were interactions with foreigners as opposed to the normal interaction pattern with friends. If interaction with neighbors and close friends had been used instead, the expected result of interpersonal interaction operating at the local level may have been more apparent.

In summary, data from information and agenda sectors gave only partial suppport to the second hypothesis and data from the attitude sector gave disconfirming evidence. Thus the second hypothesis is rejected in its present general form.

The third hypothesis proposes that mass media will have their strongest effects when interpersonal contact is low. A summary showing number of statistically significant relationships relating to this hypothesis can be found in Table 3. The data from Minnesota and Quebec provide conflicting information about this hypothesis also. The Minnesota data indicate overall stronger and more frequent relationships for mass media where interpersonal contact is high, contradicting the third hypothesis. The Quebec data show larger and more than twice as many significant relationships between media and dependent variables when interpersonal contact is low, thus supporting the hypothesis. This pattern becomes more pronounced when controls for status (and in the case of Quebec language) are introduced.

Insert Table 3 About Here

These apparent contradictory findings from the two data sets can be reconciled when the dependent variables are again broken down into categories of information agendas and attitudes. In both data sets, information is more readily transfered by mass media in high interpersonal

contact settings than low ones. In Minnesota, attitudes are equally frequently associated in the two while in Quebec they are much more frequently and strongly associated in low interpersonal contact situations. The apparent contradiction in the summary figures is a result of differing proportions of items devoted to attitudes and information transfer in the two samples. In both data sets, intepersonal contact facilitiates transfer of information but inhibits transfer of attitudes from media to media users. Thus, the third hypothesis receives support for attitude transfer but is disconfirmed for information transfer.

The fourth hypothesis proposes that social-linguistic background variables will be important causes of attitudes, agendas and information levels. Data relating to the fourth hypothesis are summarized in Table 4. These summaries clearly indicate the importance of social linguistic variables in determining our interviewees information levels, agendas and attitudes. Both the Minnesota and the Quebec data indicate that subjects status is frequently related to the amount of information they report. This is true at the local, national and international level. In the Quebec data, where language differences exist, knowledge of English is also frequently associated with these variables.

Insert Table 4 About Here

The associations between socio-linguistic measures and information are both the most regular and strongest found in the data sets, and exist at the local national and international levels. The relationships between our indicators of attitudes and socio-linguistic background are also frequently significant in both data sets. As with the information variables, these relationships do not appear to differ in strength or

frequency as the analysis moves from the local to national and international levels. The same pattern that was found in the Quebec sample between language and information was also found between language and attitudes. Language and status appeared to be approximately equally frequent predictors of attitudes. Further, when controlling for language, the effects of status are only slightly reduced in most cases indicating the separateness of the predictive power of these two variables.

In summary, these data give broad support for the fourth hypothesis. The data clearly indicate that the background variables in these geographic settings are important predictors of attitudes, agendas and information levels about local national and international issues.

The fifth analytic focus of the paper was more a series of concerns than a hypothesis. It was intended to draw attention to comparing the relative strength and regularity of the various possible associates of information, agendas and attitudes. A summary of the most general of these comparisons is contained in Table 5 which combines parts of Table 1 and Table 4 to show the number of times that media use, interpersonal contact, status, and English familiarity was related to each of the types of dependent variables and Table 6 which shows which relationships are strongest most frequently.

In the Minnesota data, status is the most frequently related variable to information

Insert Tables 5 and 6 About Here

and attitudes, but this is somewhat misleading. Media use was most often more strongly related to information than either status or interper-

sonal relationships. Thus, status was more frequently related to information and attitudes but when media use was related, it was related more strongly than status to those attitudes and areas of information.

In the Quebec data, interpersonal contact and language were the strongest correlates of information acquisition. In Quebec, media use and status were frequently related to information levels as in the Minnesota data, but more of the strongest relationships were with language and interpersonal contact.

The data dealing with the correlates of agenda setting are not clear about which variables predominate. This is partly a result of the small number of agenda setting items in the data set. All of the independent variables effect agendas, some in one of the samples and some in the other, and some at one level of generality and some at others. No clear pattern was apparent.

Non-media variables were generally more frequently and strongly related to attitudinal variables than media variables. Status was most strongly and most frequently related in both data sets followed by language and interpersonal contact. Media use was also related to these variables in many cases but to a lesser degree generally. This provides a very general answer to the fifth focus of the paper, but it is clear that many variations exist for different types of attitudes, information objects and agendas and in different settings which are too complicated to deal with in a single paper.

DISCUSSION

It is not possible to examine all possible relations between as many variables as are used here in one short article. Our purpose here is to summarize and point to general patterns.

The first hypothesis, that information, attitudes and agendas would be more frequently and strongly associated with interpersonal than media contact, was generally supported in the Quebec data and not supported in the Minnesota data. These differences were enhanced, rather than reduced, by the inclusion of controls. Thus, we conclude that to establish the relative importance of the two influence (media and interpersonal) require a geographic referent as well as specification of the dependent variable studied and may be even more complex than Klapper (1960) proposed. In any case the media imperialism proposed by the neo-marxists is less powerful than they generally assume and appears only for some variables in some settings. It should be noted in connection with this hypothesis that non-cable users in the cabled community in Quebec were excluded so the contrast between Anglophone television users and non-users was enhanced. Thus the low level of support for this hypothesis further undermines the culutural imperialism position.

The second hypothesis, that information, attitudes and agendas would be most strongly related to media use at the national and international level and interpersonal contact at the local level, received support in some cases in some settings but findings were generally not significant and sometimes were significant in the opposite direction.

The third hypothesis, that media impact would be strongest where interpersonal contact was minimal, was supported in both data sets for attitudes but opposite results were found in both data sets for information transfer. Thus McLeod's (1980) and Ball-Rokeach and DeFleur's (1976) conclusions are substantiated for attitudes but also limited in their generalizability by the finding that the opposite effect appeared for information and neither pattern was clear for agendas. These findings also help explain Winter's (1979) observation that interpersonal contact was reported as both enhancing and suppressing media affects.

The fourth hypothesis, and its exploratory extension, examined the role of social-linguistic variables as determinants of information, attitudes and agendas. In both data sets these variables were important. The relative importance of status and language compared to interpersonal contact and media exposure varied between the two samples and the variety of indicators. They were generally as important or more important than media and interpersonal contact, however. Thus, the conclusions of Inkeles and Smith (1974), Diaz-Bordéneau (1976), Mullens (1977), and McLeod et al. (1974) were also supported and extended from agendas to attitudes and cognitions, and from developing nation settings to developed nations.

Several conclusions of general importance can be drawn from these data. First, as Beltran (1976) said, each cultural setting is unique. It is not possible to simply take findings from one setting and assume they will apply in another. In two settings as similar as Canada-U.S. and U.S.-Canada differences in findings were more common than similarities. This implies the need both for a vastly expanded pool of inter-

cultural communication studies and a systemization based on this much extended pool. Until that begins to develop, researchers and practitioners should exercise caution in attempting to generalize their conclusions beyond the setting in which they were reached.

Second, media, interpersonal and socio-linguistic variables do not operate in a uniform way across different categories of variables. Language may be a strong predictor of attitudes and a weak forecaster of agendas. Further, the variation patterns become more complex the finer the dependent variable categories. More divergence of findings occurred when categories like attitudes and agendas were broken down into local, national and international than when they were not. The variation in power of the various predictors was even less regular relating to specific indicators of dependent variables. This suggests the appropriateness of an inductively based scheme of dependent variable categories using concepts generated from similarly related propositions rather than our current (relatively unsuccessful) deductively developed categories.

Third, some caution should be exercised when examining media effects studies which do not include interpersonal and socio-linguistic variables. When media contact is used in the context of these other variables, and its relative importance is compared to theirs, a much more cautious interpretation than broadly based media imperialism seems appropriate. When media effects are examined out of this context their apparent strength is artificially enhanced.

The general analysis of the data reported here and these reservations about current attempts to generalize media research lead us to conclude that a solid foundation for understanding media effects is still being

built and much more detailed and extensive research is imperative. Studies such as this one are early attempts to form such a foundation.

Table 1

Number of Statistically Significant Relationships ($p < .05$)
First Hypothesis Data

	Minnesota Data				Quebec Data			
	Mass Media		Interpersonal Contact		Mass Media		Interpersonal Contact	
	0 Order	With Controls	0 Order	With Controls	0 Order	With Controls	0 Order	With Controls
Information	4/6	3/6	3/6	3/6	11/16	6/16	15/16	14/16
Agendas	2/4	---	0/4	---	6/19	---	12/19	---
Attitudes	1/8	0/8	2/8	2/8	13/28	5/28	15/28	9/28
Totals	7/18		5/18		30/62		42/62	

Table 2

Number of Statistically Significant Relationships ($p < .05$) From
Second Hypothesis Data

	Media					Interpersonal				
	Minnesota Data			Quebec Data		Minnesota Data			Quebec Data	
	Local	International	Inter-national	Local	National	Inter-national	Local	International	Inter-national	Local	National	Inter-national
Information	0/2	4/4		2/4	3/4	6/8	0/2	3/4		4/4	4/4	7/8
Agendas	1/1	1/2		2/6	2/6	1/7	0/1	0/2		4/6	2/6	5/7
Attitudes	0/3	1/3		2/6	2/11	7/11	1/3	1/3		1/6	7/11	8/11

Table 3

Number of Statistically Significant Relationships ($p < .05$) From Third Hypothesis Data

	Minnesota Data				Quebec Data			
	Low Interpersonal		High Interpersonal		Low Interpersonal		High Interpersonal	
	contact	controls	contact	controls	contact	controls	contact	controls
Information	1/6	1/6	4/6	4/6	9/16	6/16	10/16	4/16
Agendas	1/3	---	1/3	---	4/19	---	4/19	---
Attitudes	1/8	1/8	1/8	1/8	14/28	9/28	6/28	1/28
Totals	3/17	2/14	6/17	5/14	27/63	19/59	20/63	9/59

Table 4

Number of Statistically Significant ($p < .05$) Relationships Between Sociolinguistic Background and Dependent Variables

	Minnesota Status			Quebec Status				Quebec Language			
	Local	International	Total	Local	National	International	Total	Local	National	International	Total
Information	2/2	4/4	6/6	2/4	3/4	6/8	11/16	4/4	4/4	7/8	15/16
Agendas	0/1	1/2	1/3	4/6	4/6	5/7	13/19	4/6	2/6	3/7	9/19
Attitudes	3/5	1/3	4/8	5/6	3/11	9/11	17/28	5/6	6/11	8/11	19/43

Table 5

Number of Statistically Significant Relationships ($p < .05$)

	Minnesota			Quebec			
	Media	Inter-personal	Status	Media	Inter-Personal	Status	Language
Information	4/6	3/6	6/6	11/16	15/16	11/16	15/16
Agendas	2/3	0/3	1/3	9/19	12/19	13/19	9/15
Attitudes	1/8	2/8	4/8	13/28	15/28	17/28	19/28

Table 6

Strongest Relationship With Dependent Variables

	Minnesota			Quebec			
	Media	Inter-personal	Status	Media	Inter-personal	Status	Language
Information	3½	½	2		4½	3½	8
Agendas	2		1	3	4⅔	7⅔	3⅔
Attitudes	1	1	6	0	5⅓	17⅓	5⅓

REFERENCES

Arnold, Stephen and Douglas Tigert
1974 "Canadians and Americans A Comparative Analyiss." International Journal of Comparative Sociology, 15: pp. 68-83.

Ball-RoKeach, S. and M. DeFleur
1976 "A Dependency Model of Mass Media Effects." Communication Research, 3: pp. 3-21.

Beltran Luis Ramiro
1976 "Alien Premises, Objects, and Methods in Latin American Communication Research." Communication Research 3:107-134.

Benton, Marc and P. Jean Frazier
1976 "The Agenda Setting Function of the Mass Media at Three Levels of Information Holding." Communication Research 3: pp.261-274.

Caron, A. and D.E. Payne
1980 Les Mass Media et L' Imagerie Politico-Culturelle Des Quebecois. A Report to the Department of Communication of the Government of Quebec.

Corder-Bolz, Charles and Shirley O. Bryant
1978 "Teacher Vs Program." Journal of Communication, 28:97-104.

Diaz-Bordeneau, Juan
1976 "Communication of Agricultural Innovations in Latin America: The Need for New Models." Communication Research 3: pp. 136-155.

Dube, S.C.
1967 "Communication, innovation, and planned change in India." Pp. 129-167 in Daniel Lerner and Wilbur Schram (eds.), Communication and Change in Developing Countries. Honolulu: East West Center Press.

Eyal, Chaim
1979 "The roles of newspapers and television in agenda-setting." Pp. 21-33 in Maxwell McCombs (ed.), Setting the Agenda for Agenda Setting Research: An Assessment of the Priority Ideas and Problems. Buck Hill Falls, Pennslyvania: The American Association for Public Opinion Research.

Inkeles, Alex and David Smith
1974 Becoming Modern: Individual Changes in Six Developing Countries. Cambridge: Harvard University Press.

Jorgensen, Rebekah
1980 "The influence of American films and television programs on Romanian adolescents." Paper read at the International Communication Association Meetings. Acapulco, Mexico.

Klapper, Joseph
1960 The Effects of Mass Communication. New York: The Free Press

Korzenny, Felipe and R.V. Farace
1977 "Communication networks and social change in developing countries." Pp. in N.C. Jain (ed.), Interpersonal and Intercultural Communication Annual. Falls Church, VA: Speech Communication Association.

Korzenny, Felipe, Blake Armstrong and Tatiana Galvan
1980 "Mass communication, cosmopolite channels, and family planning knowledge, attitudes and practices among rural villagers in Mexico." Paper read at the International Communication Association Meetings. Acapulco, Mexico.

McCombs, Maxwell
1976 "Elaborating the agenda setting influence of mass communication." Paper read at the Institute for Communication Research. Keio University Tokyo, Japan.

McCombs, Maxwell
1977 "Expanding the domain of agenda setting research: strategies for theoretical development." Paper read at the Speech Communication Association Meetings. Washington.

McCombs, Maxwell
1977b"Newspapers versus television: Mass communication effects across time." Pp. 89-106 in Donald Shaw and Maxwell McCombs (eds.), Emergence of American Political Issues: The Agenda Setting Function of the Press. St. Paul, MN: West Publishing Company.

McCombs, Maxwell and Donald Shaw
1980 "An up-to-date report on the agenda setting function." Paper read at the International Communication Association Meetings. Acapulco, Mexico.

McLeod, Harriet, James Protzman and Donald Shaw
1980 "Agenda setting as social anchoring: A pre-test and speculations." University of North Carolina School of Journalism.

McLeod, J.M., Lee Becker and J. Byrnes
1974 "Another look at the Agenda setting function of the press." Communication Research 1: pp. 131-166.

Mullens, Edward L.
1977 "Agenda setting and the young voter." Pp. 133-149 in Donald Shaw and Maxwell McCombs Emergence of Political Issues: The Agenda Setting Function of the Press St. Paul, MN: West Publishing Company.

Nordenstreng, Karle and Tapio Varis
1973 "The non homogeneity of the national state and the international flow of communication." Pp. 393-412 in George Gerbner, Larry Gross and William Melody (eds.), Communication Technology and Social Policy. New York: Wiley.

Palmgren, Philip and Peter Clark
1977 "Agenda Setting with local and national issues." Communication Research 4:435-452.

Patterson, Thomas and Robert McClure
1976 The Unseeing Eye: The Myth of Television Power in National Politics. New York: G.P. Putnam's Sons.

Payne, David E.
1978 "Cross national diffusion: The effects of Canadian TV on rural Minnesota viewers." American Sociological Review 43:740-756.

Payne David E.
1979 "Between friends: Canadian media and American users." Paper read at the Association for Education in Journalism Meetings. Dallas.

Payne, David E. and Andre Caron
1981 "Use and Effects of Anglophone Canadian and American Mass Media on Semi-Rural Quebecois, Communication Research, Forthcoming.

Peers, Frank W.
1972 "Broadcasting and National Unity." Pg. 202-215 in B. Singer (ed.), Communication in Canadian Society. Toronto: Copp Clark.

Prasad, K., T.R. Rao and Anees Sheikh
1978 "Mothers Vers Commercial." Journal of Communication 28:1 pp. 91-96.

Rogers, Everett
1973 Communication Strategies for Family Planning. New York: The Free Press.

Salomon, G.
1974 "What is learned and how it is taught: The interaction between media, message, task, and learner. "Seventy-third Yearbook of the National Society for the Study of Education. Chicago: National Society for the Study of Education.

Scheer, Chris and Sam W. Eiler
1972 A Comparison of Canadian and American Network Television News." Journal of Broadcasting 16(2): 159-164.

Schiller, Herbert
1973 "Authentic national development versus the free flow of information and the new communication technology." 483-503 in George Gerbner, Larry Gross and William Melody (eds.), Communication Technology and Social Policy. New York: Wiley.

Schram, Wilbur
1973 "Channels and Audiences." Pp. in I. De Sola Pool, W. Schram, N. Maccoby, and E.B. Parker (eds.), Handbook of Communication. Chicago: Rand McNally.

Schulke, B.
1977 "The effects of Television on Rural Minnesota Viewers Attitudes toward Capital Punishment. MA thesis. Department of Sociology, University of North Dakota.

Shaw, Eugene
1977 "The interpersonal agenda." Pp. 69-87 in Donald Shaw and Maxwell McCombs (eds.), The Emergence of American Political Issues: The Agenda Setting Function of the Press. St. Paul, MN. West Publishing Company.

Sparks, Vernon
1978 "The flow of news between Canada and the United States." Journalism Quarterly 52: Pp. 260-268.

Starck, K.
1973 "Value and Information source preference." Journal of Communication 23: pp. 74-85.

Stewart, W.B.
1972 Canadian Social System and Canadian Broadcasting Audience in B. Singer (ed.) Communication in Canadian Society. Toronto: Copp Clark Publishing Company.

Weaver, David
1977 "Political Issues and voter need for orientation." Pp. 107-121 in Donald Shaw and Maxwell McCombs (eds.), The Emergence of American Political Issues: The Agenda Setting Function of the Press. St. Paul, MN: West Publishing Co.

Weaver, David and Maxwell McCombs
1978 "Voters' need for orientation and the choice of candidates: Mass media and electoral decision making." Paper presented at the Annual meetings of the American Association for Public Opinion Research.

Winter, James P.
1979 "Contingent conditions and the agenda setting function of the media." Pp. 33-42 in Maxwell McCombs (ed.), Setting the Agenda for Agenda Setting Research: An Assessment of the Priority Ideas and Problems. Buck Hill Falls, Pennsylvania: The American Association for Public Opinion Research.

Yum, Ock Jun
1980 "Communication diversity and information acquisition among Korean immigrants in Hawaii." Paper read at the International Communication Association Meetings, Acapulco, Mexico

APPENDIX

TABLE A

EFFECTS OF STATUS CANADIAN MASS MEDIA AND

INTERPERSONAL EXPOSURE OF RURAL MINNESOTANS (Pearson r)

DEPENDENT VARIABLES	MEDIA COMPOSITE		INTERPERSONAL COMPOSITE		STATUS COMPOSITE
	0 order	with controls	0 order	with controls	0 order
INFORMATION					
Number of issues facing Canada (CISU)	*** .26 (412)	*** .22 (408)	*** -.17 (412)	*** -.16 (409)	*** .20 (412)
Number of issues between US and Canada (CANUSISS)	* .11 (413)	.08 (409)	** -.12 (413)	* .07 (410)	** .12 (413)
Amount known about Canadian issues composite (SCALECN)	*** .31 (413)	*** .28 (409)	-.07 (413)	-.05 (410)	*** .19 (413)
Language familiarity composite (GENINFO)	*** .47 (414)	*** .44 (410)	*** .25 (414)	*** -.24 (411)	*** .22 (414)
Number of issues facing US (ISSUS)	.01 (414)	-.02 (410)	.01 (414)	.02 (411)	*** .20 (414)
Amount known about US issues composite (SCALEUS)	-.03 (413)	-.06 (409)	.01 (413)	.02 (410)	*** .19 (413)
AGENDAS					
Most important issue facing Canada (CISUIMP)	.11† (232)	———	-.08† (232)	———	* .15† (232)
Most important issue between US and Canada (CANUSIMP)	** -.14† (236)	———	.10† (236)	———	.09† (236)
Most important issue facing US (ISUIMPT)	* -.14† (322)	———	.06† (322)	———	.06† (322)
ATTITUDES					
Attitude toward Canada (CANADA)	.01 (414)	.01 (410)	-.01 (414)	-.02 (411)	-.05 (414)
Attitude toward English Canadians (ENGLISH)	* -.09 (414)	-.07 (410)	* .11 (414)	* .11 (411)	-.02 (414)
Attitude toward French Canadians (FRENCH)	.06 (414)	.05 (410)	-.03 (414)	-.03 (411)	.05 (414)
Attitude toward US (USA)	-.03 (414)	.01 (410)	** .12 (414)	* .11 (411)	*** .16 (413)
Attitude toward American Whites (US WHITES)	.00 (414)	-.01 (410)	-.03 (414)	-.03 (411)	.05 (414)
Attitude toward American Blacks (US BLACKS)	-.03 (414)	-.01 (410)	-.04 (414)	-.05 (411)	*** -.19 (414)
Attitude toward Gvt. supported medicine (GOVTMEDS)	-.01 (357)	-.01 (410)	.01 (413)	.03 (410)	*** .16 (413)
Attitude toward Gvt. supported low cost housing (LOCSTHOS)	-.02 (413)	-.05 (409)	-.02 (413)	-.01 (410)	*** .19 (413)

* $p < .05$
** $p < .01$
*** $p < .001$
† eta coefficient calculated because of curvilinear data

TABLE B

EFFECTS OF STATUS, LANGUAGE, AND ANGLOPHONE MASS MEDIA

AND INTERPERSONAL EXPOSURE ON RURAL QUEBECOIS (Pearson r)

DEPENDENT VARIABLES	MEDIA COMPOSITE		INTERPERSONAL COMPOSITE		STATUS COMPOSITE		LANGUAGE COMPOSITE	
	0 order	with controls	0 order	with controls	0 order	with controls	0 order	Mult R
INFORMATION								
Knowledge of US problems (KNUSPRB)	-.04 (368)	-.06 (356)	-.03 (574)	-.01 (562)	.06 (574)	.04 (563)	.07 (566)	.08
Number of problems for the US named (NUMUSPRB)	*** .26 (519)	*** .17 (503)	***-.20 (814)	***-.14 (798)	*** .23 (814)	*** .19 (799)	*** .23 (802)	.35
Jimmy Carter recognition (CARTER)	***-.18 (519)	.05 (503)	***-.21 (813)	***-.15 (797)	***-.23 (813)	*** .18 (798)	*** .26 (801)	.39
Ted Kennedy recognition (KENNEDY)	*** .17 (519)	* .09 (503)	***-.20 (813)	***-.14 (797)	*** .14 (813)	** .10 (798)	*** .20 (801)	.30
Number of problems for Europe named (NUMEUPRB)	*** .21 (519)	*** .14 (503)	***-.19 (814)	***-.13 (814)	** .13 (814)	* .07 (799)	***-.23 (802)	.28
Knowledge of European problems (KNEUPRB)	-.01 (264)	-.10 (253)	** -.14 (411)	* -.09 (400)	.06 (411)	.02 (401)	*** .16 (404)	.24
Simone Weil recognition (WEIL)	*** .17 (518)	** .12 (503)	** -.08 (812)	* -.03 (797)	** .08 (812)	.05 (798)	*** .18 (801)	.22
Valery Giscard d'Estaing recognition (D'ESTAING)	*** .17 (516)	.02 (501)	***-.25 (810)	***-.16 (795)	*** .25 (810)	*** .19 (796)	*** .33 (799)	.42
Knowledge of Canadian problems (KNCNPRB)	.06 (481)	-.00 (467)	***-.11 (743)	* -.08 (729)	*** .13 (743)	*** .11 (730)	** .10 (733)	.18
Number of problems for Canada named (NUMCNPRB)	*** .21 (519)	** .12 (503)	***-.11 (814)	* -.06 (798)	*** .19 (814)	*** .15 (799)	*** .18 (802)	.28
Joe Clark recognition (CLARK)	* .08 (518)	.02 (502)	***-.14 (812)	** -.10 (796)	** .09 (812)	* .06 (797)	*** .13 (800)	.22
Elliot Trudeau recognition (TRUDEAU)	* .06 (519)	.03 (503)	** -.10 (813)	* -.08 (797)	.03 (813)	.02 (798)	* .06 (801)	.13
Knowledge of Quebec problems (KNQPRB)	.04 (493)	-.01 478	* -.07 (764)	-.03 (749)	.06 (764)	.03 (750)	*** .12 (753)	.15
Number of problems for Quebec named (NUMQPRB)	** .11 (519)	.03 (503)	** -.13 (814)	** -.08 (798)	*** .19 (814)	** .15 (799)	*** .18 (802)	.25
Claude Ryan recognition (RYAN)	*** .13 (517)	.03 (502)	***-.13 (811)	***-.17 (796)	*** .13 (811)	* .08 (797)	*** .22 (800)	.33
Rene Levesque recognition (LEVESQUE)	.02 (519)	-.01 (503)	***-.11 (813)	** -.09 (797)	.04 (813)	.03 (798)	* .07 (801)	.15
AGENDAS								
Most important problem for Europe (IMPEUPRB)	.07†(273)	-----	.05†(425)	-----	.15†(422)	-----	.05†(418)	
Most important problem for the US (IMPUSPRB)	.07†(373)	-----	.06†(580)	-----	**.15†(580)	-----	.05†(571)	
Most important problem for Canada (IMPCNPRB)	.11†(518)	-----	.08†(808)	-----	.07†(813)	-----	.02†(704)	
Most important problem for Quebec (IMPQPRB)	.09†(497)	-----	*** .14†(769)	-----	* .11†(769)	-----	** .08†(758)	

* p<.05 † eta coefficient calculated because of curvilinear data

** p<.01 †† data for media composite were calculated excluding respondents who lived in a cabled community but did not have cable

*** p<.001

TABLE B

EFFECTS OF STATUS, LANGUAGE, AND ANGLOPHONE MASS MEDIA AND INTERPERSONAL EXPOSURE ON RURAL QUEBECOIS (Pearson r)

DEPENDENT VARIABLES	MEDIA COMPOSITE		INTERPERSONAL COMPOSITE		STATUS COMPOSITE		LANGUAGE COMPOSITE	
	0 order	with controls	0 order	with controls	0 order	with controls	0 order	Mult R
ATTITUDES								
Semantic differentials US good-bad (USGOOD)	** -.07 (472)	-.04 (458)	* .08 (739)	* .07 (726)	-.01 (739)	.00 (727)	-.05 (730)	.15
Semantic differentials US active-passive (USACTIVE)	** -.11 (472)	-.01 (458)	*** .12 (739)	** .10 (726)	***-.15 (739)	***-.13 (727)	***-.11 (730)	.28
Semantic differentials US strong-weak (USSTRONG)	** -.07 (472)	-.02 (458)	** .09 (739)	.05 (726)	***-.18 (739)	***-.15 (727)	***-.15 (730)	.24
Semantic differentials US friendly-unfriendly (USFRIEND)	** -.12 (471)	-.10 (457)	* .07 (738)	.05 (725)	.04 (738)	.06 (726)	* -.07 (729)	.18
Semantic differentials US fast-slow (USFAST)	** -.13 (470)	-.04 (456)	.06 (737)	.02 (724)	***-.16 (737)	***-.11 (762)	***-.15 (728)	.25
Semantic differentials US effective-ineffective (USEFFECT)	* -.08 (472)	-.00 (458)	* .06 (739)	.02 (726)	***-.13 (739)	** -.11 (727)	***-.13 (730)	.21
Preference for US or Quebec chain restaurants (EAT)	-.05 (493)	-.02 (478)	* -.08 (776)	* -.08 (761)	* -.07 (776)	* -.08 (762)	-.01 (765)	.15
Preference for US or Quebec vocalists (SING)	***-.21 (440)	* -.08 (427)	.01 (709)	-.04 (697)	***-.36 (709)	***-.33 (698)	***-.18 (701)	.39
Preference for US or Quebec chain motels (HOTEL)	***-.18 (483)	* -.09 (469)	* .08 (767)	.05 (754)	***-.25 (767)	***-.23 (755)	***-.13 (758)	.28
Rank of Economy as a problem for the US (USECNRNK)	-.04 (431)	.01 (417)	* .07 (685)	.05 (672)	* -.07 (685)	-.05 (673)	* -.07 (676)	.16
Rank of International Peace as a problem for the US (USPCERNK)	* +.09 (434)	.06 (420)	* .06 (689)	* .06 (676)	** .09 (689)	** .09 (677)	-.00 (680)	.10
Rank of Energy as a problem for the US (USENGRNK)	-.01 (434)	.06 (420)	* .06 (690)	.04 (677)	***-.17 (690)	***-.16 (678)	** -.10 (681)	.21
Rank of National Unity as a problem for the US (USUNTRNK)	+.02 (414)	-.07 (400)	***-.13(666)	* -.08 (653)	*** .13 (666)	** .10 (654)	*** .16 (657)	.23
Rank of Growing Government as a problem for the US (USSCLRNK)	-.03 (416)	-.05 (402)	** -.09 (668)	** -.10 (655)	.04 (668)	.04 (656)	-.00 (659)	.11
There should be more US programming on Canadian-TV (MOREUS)	* -.07 (515)	* -.09 (499)	* -.06 (808)	* .06 (792)	*** .11 (808)	*** .11 (793)	.03 (796)	.12

* p<.05
** p<.01
*** p<.001

+ eta value reported because of curvilinear data

TABLE B

EFFECTS OF STATUS, LANGUAGE, AND ANGLOPHONE MASS MEDIA AND INTERPERSONAL EXPOSURE ON RURAL QUEBECOIS (Pearson r)

DEPENDENT VARIABLES	MEDIA COMPOSITE		INTERPERSONAL COMPOSITE		STATUS COMPOSITE		LANGUAGE COMPOSITE	
	0 order	with controls	0 order	with controls	0 order	with controls	0 order	Mult R
Semantic differential Quebec good-bad (QGOOD)	-.03 (514)	.01 (499)	.00 (805)	-.02 (790)	***-.13 (805)	***-.12 (791)	* -.06 (794)	.13
Semantic differential Quebec active-passive (QACTIVE)	* -.09 (514)	-.02 (499)	* .07 (805)	.03 (790)	***-.12 (805)	** -.10 (791)	***-.13 (794)	.20
Semantic differential Quebec strong-weak (QSTRONG)	-.06 (514)	-.05 (499)	.00 (804)	-.01 (789)	-.03 (804)	-.02 (790)	-.05 (793)	.08
Semantic differential Quebec friendly-unfriendly (QFRIEND)	-.05 (514)	.05 (499)	.05 (805)	-.00 (790)	***-.17 (805)	***-.14 (791)	***-.16 (794)	.26
Semantic differential Quebec fast-slow (QFAST)	-.01 (513)	.05 (498)	.04 (804)	.02 (789)	***-.12 (804)	***-.11 (790)	* -.07 (793)	.19
Semantic differential Quebec effective-ineffective (QEFFECT)	-.04 (513)	.00 (498)	.04 (804)	.02 (789)	* -.08 (804)	* -.07 (790)	* -.06 (793)	.12
Rank of Economy as a problem for Quebec (QECONRNK)	.04 (511)	.04 (496)	-.04 (799)	-.04 (784)	-.03 (799)	-.03 (785)	-.00 (788)	.08
Rank of International Peace as a problem for Quebec (QPCERNK)	.07 (506)	-.04 (491)	* -.08 (794)	-.05 (779)	*** .26 (794)	*** .24 (780)	*** .13 (783)	.31
Rank of Energy as a problem for Quebec (QENGRNK)	* .09 (507)	.02 (492)	** -.10 (795)	* -.06 (780)	** .09 (795)	* .06 (781)	*** .13 (784)	.17
Rank of National Unity as a problem for Quebec (QUNITRNK)	** -.11 (508)	.02 (493)	*** .16 (796)	*** .13 (781)	***-.24 (796)	***-.21 (782)	***-.17 (785)	.34
Rank of Growing Government as a problem for Quebec (QSCLRNK)	.04 (505)	-.03 (490)	.00 (793)	-.01 (778)	-.03 (793)	-.02 (779)	-.05 (782)	.06

* p<.05
** p<.01
*** p<.001

† eta coefficient calculated because of curvilinear data

TABLE B

EFFECTS OF STATUS, LANGUAGE, AND ANGLOPHONE MASS MEDIA

AND INTERPERSONAL EXPOSURE ON RURAL QUEBECOIS (Pearson r)

DEPENDENT VARIABLES	MEDIA COMPOSITE		INTERPERSONAL COMPOSITE		STATUS COMPOSITE	LANGUAGE COMPOSITE	
	0 order	with controls	0 order	with controls	0 order	with controls	0 order	Mult R
Choice of a new French or US TV channel (CHATV)	***-.20 (504)	** -.11 (489)	.02 (795)	-.04 (780)	***-.15 (795)	***-.12 (781)	***-.19 (784)	.30
Semantic differential Canada good-bad (CGOOD)	-.05 (514)	-.02 (499)	** .10 (806)	* .07 (791)	.01 (806)	.04 (792)	** -.10 (795)	.20
Semantic differential Canada active-passive (CACTIVE)	-.05 (513)	-.02 (498)	.04 (805)	.02 (790)	-.04 (805)	-.03 (791)	* -.07 (794)	.11
Semantic differential Canada strong-weak (CSTRONG)	.01 (513)	.01 (499)	.03 (804)	.02 (790)	.04 (804)	.05 (791)	-.03 (794)	.12
Semantic differential Canada friendly-unfriendly (CFRIEND)	-.09 (512)	-.01 (497)	** .09 (803)	.05 (788)	** -.10 (803)	* -.07 (789)	***-.14 (792)	.23
Semantic differential Canada fast-slow (CFAST)	-.00 (513)	.02 (498)	.03 (804)	.02 (789)	-.05 (804)	-.05 (790)	-.02 (793)	.06
Semantic differential Canada effective-ineffective (CEFFECT)	-.06 (514)	-.02 (499)	* .08 (805)	** .06 (790)	-.04 (805)	-.02 (791)	* -.06 (794)	.15
Rank of National Unity as a problem for Canada (CECONRNK)	-.09 (502)	* .09 (487)	-.05 (785)	-.05 (770)	-.03 (785)	-.03 (771)	-.01 (774)	.10
Rank of International Peace as a problem for Canada (CPCERNK)	* -.09 (499)	.02 (484)	* -.07 (783)	.03 (768)	*** .17 (783)	*** .15 (769)	*** .13 (772)	.19
Rank of Energy as a problem for Canada (CENGRNK)	.07 (500)	* .09 (485)	.02 (784)	.04 (769)	* -.06 (784)	* -.07 (770)	.04 (773)	.15
Rank of Internal Unity as a problem for Canada (CUNITRNK)	***-.18 (497)	* -.1 (482)	*** .12 (779)	** .09 (764)	***-.16 (779)	***-.14 (765)	***-.14 (768)	.25
Rank of Growing Government as a problem for Canada (CGOVRNK)	-.04 (495)	-.06 (480)	-.05 (778)	-.06 (763)	* .07 (778)	* .08 (764)	-.01 (767)	.13
We should have more laws regulating labor and agriculture (MRGVTAG)	-.02 (516)	-.07 (500)	***-.12 (811)	** -.09 (795)	.04 (811)	.02 (796)	** .10 (799)	.18
We should have more laws regulating small business (MRGVTBUS)	-.04 (517)	-.06 (501)	** -.10 (812)	-.04 (796)	-.04 (812)	** -.07 (797)	*** .15 (800)	.15
We should have more laws controlling natural resources (MRGVTRCS)	** -.11 (516)	* -.08 (500)	* -.07 (811)	* -.07 (795)	***-.14 (811)	***-.15 (796)	.00 (799)	.19
Society would be better with less government (LESGVT)	.02 (517)	-.05 (501)	-.00 (812)	.00 (796)	*** .18 (812)	*** .18 (797)	.05 (800)	.21
There should be less violence (VLNCE)	-.07 (517)	-.06 (502)	* .08 (810)	** .08 (795)	.03 (810)	.03 (796)	.00 (799)	.15

* p<.05
** p<.01
*** p<.001

† eta coefficient calculated because of curvilinear data

TABLE C

EFFECTS OF ANGLOPHONE MASS MEDIA

ON RURAL MINNESOTA RESIDENTS WITH DIFFERENT

AMOUNTS OF INTERPERSONAL CONTACT WITH CANADIANS

MEDIA COMPOSITE	LOW INTERPERSONAL CONTACT SUBSAMPLE		HIGH INTERPERSONAL CONTACT SUBSAMPLE	
	0 order	with controls	0 order	with controls
INFORMATION				
Number of issues facing Canada (CISU)	.08 (146)	.08 (143)	*** .32 (266)	*** .28 (263)
Number of issues between US and Canada (CANUSISS)	.00 (146)	-.01 (143)	* .13 (267)	* .11 (264)
Amount known about Canadian issues composite (SCALECN)	.05 (145)	.05 (142)	*** .42 (268)	*** .39 (265)
Language familiarity composite (GENINFO)	*** .40 (146)	*** .40 (143)	*** .48 (268)	*** .44 (265)
Number of issues facing US (ISSUS)	.02 (146)	.01 (143)	-.00 (268)	-.04 (143)
Amount known about US issues composite (SCALEUS)	-.11 (145)	-.12 (142)	-.01 (268)	-.03 (265)
AGENDAS				
Most important issue facing Canada (CISUIMP)	.05 (63)†	———	.14 (169)†	———
Most important issue between US and Canada (CANUSIMP)	.07 (74)†	———	* .14 (162)†	———
Most important issue facing US (ISUIMPT)	** .24 (110)†	———	.11 (212)†	———
ATTITUDES				
Attitude toward Canada (CANADA)	.05 (146)	.05 (143)	-.03 (268)	-.01 (265)
Attitude toward English Canadians (ENGLISH)	-.02 (146)	-.02 (143)	*-.10 (268)	-.10 (265)
Attitude toward French Canadians (FRENCH)	.01 (146)	.01 (143)	.08 (268)	.06 (265)
Attitude toward US (USA)	.04 (146)	.05 (143)	-.06 (268)	-.03 (265)
Attitude toward American Whites (US WHITES)	.03 (146)	.09 (143)	-.07 (268)	-.08 (265)
Attitude toward American Blacks (US BLACKS)	-.01 (146)	.00 (143)	-.05 (268)	-.01 (265)
Attitude toward Gvt. supported medicine (GOVTMEDS)	* .15 (146)	* .15 (143)	-.10 (267)	**-.14 (264)
Attitude toward Gvt. supported low cost housing (LOCSTHOS)	-.05 (146)	-.06 (143)	-.02 (267)	-.06 (264)

* $p < .05$
** $p < .01$
*** $p < .001$
† eta coefficient calculated because of curvilinear data

TABLE 1

EFFECTS OF ANGLOPHONE MASS MEDIA ON RURAL QUEBECOIS OF DIFFERENT INTERPERSONAL CONTACT LEVELS WITH AND WITHOUT CONTROLS FOR STATUS AND LANGUAGE

MEDIA COMPOSITE	LOW INTERPERSONAL CONTACT SUBSAMPLE		HIGH INTERPERSONAL CONTACT SUBSAMPLE	
	0 order	with controls	0 order	with controls
INFORMATION				
Knowledge of US problems (KNUSPRB)	-.04 (131)	-.06 (125)	-.03 (237)	-.06 (226)
Number of problems for US named (NUMUSPRB)	*** .26 (222)	*** .22 (215)	*** .25 (279)	** .15 (283)
Jimmy Carter recognition (CARTER)	.11 (222)	.03 (215)	*** .21 (297)	.08 (283)
Ted Kennedy recognition (KENNEDY)	* .14 (222)	* .12 (215)	.17 (297)	.07 (283)
Number of problems for Europe named (NUMEUPRB)	*** .21 (222)	** .20 (215)	*** .19 (297)	* .12 (283)
Knowledge of European problems (KNEUPRB)	-.06 (82)	-.11 (77)	.00 (182)	-.08 (283)
Simmone Weil recognition (WEIL)	*** .20 (222)	** .19 (215)	** .16 (296)	.08 (283)
Valery Giscard d'Estaing recognition (D'ESTAING)	* .13 (221)	.05 (214)	*** .17 (295)	-.00 (282)
Knowledge of Canadian problems (KNCNPRB)	.04 (201)	-.01 (195)	.05 (280)	.01 (267)
Number of problems for Canada named (NUMCNPRB)	* .15 (222)	* .11 (215)	.02 (297)	** .14 (283)
Joe Clark recognition (CLARK)	.06 (222)	.01 (215)	.08 (296)	.04 (282)
Elliot Trudeau recognition (TRUDEAU)	.07 (222)	.06 (215)	.05 (297)	.01 (283)
Knowledge of Quebec problems (KNQPRB)	.05 (209)	.03 (203)	.01 (284)	-.05 (270)
Number of problems for Quebec named (NUMQPRB)	.08 (272)	.03 (215)	* .11 (297)	.04 (283)
Claude Ryan recognition (RYAN)	.04 (222)	.00 (215)	*** .17 (295)	.05 (282)
Rene Levesque recognition (LEVESQUE)	-.01 (222)	-.03 (215)	.03 (297)	.04 (283)
AGENDAS				
Most important problem for Europe (IMPEUPRB)	* .12 (87)†	----------	.08 (186)†	.18 (186)†
Most important problem for the US (IMPUSPRB)	* .12 (133)†	----------	-.07 (240)†	.09 (240)†
Most important problem for Canada (IMPCNPRB)	.06 (222)†	----------	.12 (296)†	.11 (296)†
Most important problem for Quebec (IMPQPRB)	.14 (211)†	----------	.08 (286)†	.06 (286)†

* p <.05
** p <.01
*** p <.001
†eta coefficient calculated because of curvilinear data

TABLE D

EFFECTS OF ANGLOPHONE MASS MEDIA

ON RURAL QUEBECOIS OF DIFFERENT

INTERPERSONAL CONTACT LEVELS WITH AND WITHOUT CONTROLS FOR STATUS AND LANGUAGE

MEDIA COMPOSITE	LOW INTERPERSONAL CONTACT SUBSAMPLE		HIGH INTERPERSONAL CONTACT SUBSAMPLE	
	0 order	with controls	0 order	with controls
ATTITUDES				
Semantic differential US good-bad (USGOOD)	-.10 (196)	-.12 (190)	.04 (276)	.02 (263)
Semantic differential US active-passive (USACTIVE)	* -.13 (196)	-.07 (190)	-.08 (276)	.02 (263)
Semantic differential US strong-weak (USSTRONG)	-.12 (197)	-.06 (191)	-.03 (275)	.08 (262)
Semantic differential US friendly-unfriendly (USFRIEND)	-.00 (196)	-.05 (191)	*** -.18 (275)	* -.14 (262)
Semantic differential US fast-slow (USFAST)	* -.14 (195)	-.09 (189)	* -.11 (278)	-.02 (262)
Semantic differential US effective-ineffective (USEFFECT)	* -.13 (191)	-.09 (190)	-.04 (276)	.06 (263)
Preference for US or Quebec chain restaurants (EAT)	* -.14 (209)	-.11 (202)	.01 (284)	.05 (270)
Preference for US or Quebec vocalists (SING)	** -.18 (205)	-.10 (199)	*** -.23 (235)	-.07 (223)
Preference for US or Quebec chain motels (HOTEL)	** -.16 (202)	-.07 (197)	*** -.19 (281)	* -.10 (267)
Rank of Economy as problem for the US (USECNRNK)	-.03 (178)	.00 (172)	-.03 (253)	.02 (240)
Rank of International Peace as a problem for the US (USPCERNK)	-.10 (180)	.08 (174)	.08 (254)	.06 (241)
Rank of Energy as a problem for the US (USENGRNK)	-.02 (178)	.01 (172)	.00 (256)	.08 (243)
Rank of National Unity as a problem for the US (USUNTRNK)	.10 (172)	.06 (166)	-.06 (242)	** -.18 (229)
Rank of Growing Government as a problem for the US (USSCLRNK)	* -.16 (172)	* -.17 (166)	.04 (244)	.03 (231)
There should be more US programming on Canadian TV (MOREUS)	* -.13 (222)	* -.14 (215)	-.05 (293)	-.05 (279)

* $p < .05$
** $p < .01$
*** $p < .001$
†eta coefficient calculated because of curvilinear data

TABLE D

EFFECTS OF ANGLOPHONE MASS MEDIA

ON RURAL QUEBECOIS OF DIFFERENT

INTERPERSONAL CONTACT LEVELS WITH AND WITHOUT CONTROLS FOR STATUS AND LANGUAGE

MEDIA COMPOSITE	LOW INTERPERSONAL CONTACT SUBSAMPLE		HIGH INTERPERSONAL CONTACT SUBSAMPLE	
	0 order	with controls	0 order	with controls
Semantic differential Quebec good-bad (QGOOD)	-.06 (218)	-.02 (212)	-.02 (296)	.03 (282)
Semantic differential Quebec active-passive (QACTIVE)	-.06 (218)	-.03 (212)	* -.10 (296)	-.02 (282)
Semantic differential Quebec strong-weak (QSTRONG)	** -.13 (218)	* -.12 (212)	-.02 (296)	-.01 (282)
Semantic differential Quebec friendly-unfriendly (QFRIEND)	-.05 (218)	.02 (212)	-.04 (296)	.07 (282)
Semantic differential Quebec fast-slow (QFAST)	-.02 (218)	.03 (212)	-.00 (295)	.07 (281)
Semantic differential Quebec effective-ineffective (QEFFECT)	-.09 (217)	-.06 (211)	-.00 (296)	.04 (282)
Rank of Economy as a problem for Quebec (QECONRNK)	-.05 (218)	-.03 (212)	.08 (293)	.08 (279)
Rank of International Peace as a problem for Quebec (QPCERNK)	.02 (215)	-.07 (209)	.09 (291)	-.02 (277)
Rank of Energy as a problem for Quebec (QENGRNK)	.09 (215)	-.07 (209)	.07 (292)	-.00 (278)
Rank of National Unity as a problem for Quebec (QUNITRNK)	.09 (214)	** .16 (208)	*** .20 (294)	-.07 (280)
Rank of Growing Government as a problem for Quebec (QSCLRNK)	* -.14 (214)	* -.14 (208)	.02 (291)	.03 (277)

* $p < .05$
** $p < .01$
*** $p < .001$
†eta coefficient calculated because of curvilinear data

TABLE D

EFFECTS OF ANGLOPHONE MASS MEDIA

ON RURAL QUEBECOIS OF DIFFERENT

INTERPERSONAL CONTACT LEVELS WITH AND WITHOUT CONTROLS FOR STATUS AND LANGUAGE

MEDIA COMPOSITE	LOW INTERPERSONAL CONTACT SUBSAMPLE		HIGH INTERPERSONAL CONTACT SUBSAMPLE	
	0 order	with controls	0 order	with controls
Choice of a new French or US TV channel (NATTV)	***-.21 (213)	** -.16 (207)	**.19 (291)	-.08 (277)
Semantic differential Canada good-bad (CGOOD)	-.01 (218)	-.03 (212)	-.06 (296)	-.01 (282)
Semantic differential Canada active-passive (CACTIVE)	* -.12 (218)	-.11 (212)	-.01 (295)	.04 (281)
Semantic differential Canada strong-weak (CSTRONG)	-.03 (218)	-.01 (212)	.01 (295)	.02 (282)
Semantic differential Canada friendly-unfriendly (CFRIEND)	* -.13 (217)	-.10 (211)	-.05 (295)	.04 (281)
Semantic differential Canada fast-slow (CFAST)	-.02 (217)	-.02 (211)	-.00 (296)	.04 (282)
Semantic differential Canada effective-ineffective (CEFFECT)	+.08 (218)	-.07 (212)	-.03 (301)	.01 (282)
Rank of National Unity as a problem for Canada (CECONRNK)	.03 (211)	-.02 (205)	* .12 (291)	* .14 (277)
Rank of International Peace as a problem for Canada (CPCERNK)	* .13 (210)	.11 (204)	.05 (289)	-.02 (275)
Rank of Energy as a problem for Canada (CENGRNK)	.05 (210)	.02 (204)	.09 (290)	* .13 (276)
Rank of Internal Unity as a problem for Canada (CUNITRNK)	-.03 (209)	.03 (203)	*** -.25 (288)	*** -.19 (274)
Rank of Growing Government as a problem for Canada (CSCLRNK)	** -.12 (209)	** -.20 (203)	.06 (286)	.01 (272)
We should have more laws regulating labor and agriculture (MRGVTAG)	-.06 (220)	-.05 (213)	-.01 (296)	-.07 (282)
We should have more laws regulating small business (MRGVTBUS)	-.04 (221)	-.03 (214)	-.04 (296)	-.07 (282)
We should have more laws controlling natural resources (MRGVTRCS)	-.10 (219)	-.08 (212)	* -.13 (297)	-.09 (283)
Society would be better with less government (LESGVT)	.01 (220)	-.02 (213)	.02 (297)	-.06 (283)
There should be less violence (VLNCE)	.05 (222)	.02 (215)	**-.14 (295)	* -.13 (282)

* p<.05
** p<.01
*** p<.001
+ ... coefficient calculated because of curvilinear data