DOCUMENT RESUME

ED 284 256 CS 210 697

AUTHOR Salmon, Charles T.; Neuwirth, Kurt
TITLE A Multivariate Test of the Spiral of Silence Hypothesis.
PUB DATE Aug 87
NOTE 28p.; Paper presented at the Annual Meeting of the Association for Education in Journalism and Mass Communication (70th, San Antonio, TX, August 1-4, 1987).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Congruence (Psychology); *Majority Attitudes; *Mass Media Effects; Media Research; Models; Multivariate Analysis; News Media; Predictor Variables; Press Opinion; *Public Opinion; *Social Attitudes
IDENTIFIERS *Spiral of Silence Theory

ABSTRACT

To clarify numerous points of contention surrounding Elizabeth Noelle-Neumann's spiral of silence theory, according to which individuals' media-influenced perception of their congruence or incongruence with dominant opinion determines their willingness to speak out in public, a study examined the relationship between opinion expression, perceived congruence, and several other variables. A telephone survey of opinions on the abortion issue among 432 residents of Madison, Wisconsin, tested the significance of the following factors in the relationship between opinion and expression: (1) individual's perception of the "dominant" opinion both nationally and locally; (2) demographic factors, including political party affiliation; (3) personal knowledge about the issue; (4) personal issue involvement; and (5) previous behavior toward the issue. Multiple regression was used to assess the relative contribution of all of the above factors in predicting willingness to speak out. The results provided only limited support for the spiral of silence tneory. The resulting data showed a greater willingness among members of a minority opinion subgroup to publicly express their opinions than was previously recognized, with issue involvement emerging as a consistently significant predictor. The influence of local opinion appeared to be less compelling than the perceived national opinion. The results suggest that the situation in which an individual is supposed to express his or her opinion, the nature of the issue, demographic and psychographic characteristics of the individual, perceptions of majority opinion, and the salience of opinions of other groups, are also significant conditions which should be integrated into future models of opinion expression. Footnotes, references, and tables of data are included. (JG)

A MULTIVARIATE TEST OF THE SPIRAL OF SILENCE HYPOTHESIS

Charles T. Salmon

and

Kurt Neuwirth

School of Journalism & Mass Communication
University of Wisconsin-Madison
Madison, WI 53706

ABSTRACT

A Multivariate Test of the Spiral of Silence Hypothesis

Charles T. Salmon and Kurt Neuwirth
University of Wisconsin-Madison

The intent of this paper is to examine factors that, conceptually or empirically, have been advanced as influential in determining individuals' willingness to express opinions publicly. Drawing on previous writings on the "climate of opinion" and "spiral of silence" phenomena described by Elizabeth Noelle-Neumann and several of her critics, the authors investigate the relationship between opinion expression and: individuals' perceptions of the "dominant" opinion both nationally and locally; demographic factors; prior attitudes and behavior; and level of involvement. Whereas several of these variables have been found, through simple bivariate relationships, to be significantly related to opinion expression, they generally have not been tested using simultaneous controls. Through the use of multiple regression, the authors find limited support for the original "spiral of silence" hypothesis and offer an elaborated model of predictors of opinion expression.

A MULTIVARIATE TEST OF THE SPIRAL OF SILENCE HYPOTHESIS

Since Elizabeth Noelle-Neumann's seminal writings on the concepts of "climate of opinion" and "spiral of silence" in the early 1970s, (e.g., Noelle-Neumann, 1973, 1974), several researchers have attempted to either replicate portions of her findings or critique her conceptual and methodological approach. The writings of Noelle-Neumann have generated so much controversy that the ratio of critiques to original data articles approaches unity (e.g., critiques include those by Katz, 1982; Salmon & Kline, 1983; Donsbach and Stevenson, 1984; Merton, 1985; Glynn & McLeod, 1985; McLeod, 1986. Original data articles, other than those by Noelle-Neumann mentioned above, include those by Glynn and McLeod, 1982a, 1982b; Taylor, 1982; Neuwirth & Sanchez, 1984; Andreasen and Thompson, 1985; Bergen, 1986; Webb and Wybrow, 1986; Noelle-Neumann, 1977, 1979, 1981).

This unusual circumstance has proffered an unusually fertile set of hypotheses, rival explanations and recommendations for additional relevant variables that warrant testing. The present article draws on all of Noelle-Neumann's work in English and several of the noteworthy critiques to describe the first of several studies in a program of research on the spiral of silence. In particular, this paper uses a hierarchical regression approach to assess the relative influence of respondents' perceptions of majority opinion on their own willingness to express an opinion publicly. In so doing, the paper examines the contribution of other possible influences on one's willingness to express an opinion publicly: (1) perceptions of majority opinion versus actual majority opinion status; (2) demographic differences; (3) issue involvement; and (4) issue knowledge. Secondly, the paper attempts to clarify and reconcile various points of contention among Noelle-Neumann and her critics.

The Noelle-Neumann Model

Elizabeth Noelle-Neumann's conceptualization of public opinion is based upon the work of the German sociologist Tonnies, who considered public opinion a form of social control, the imposition of sanctions on individuals who violate social norms (Noelle-Neumann, 1973, 1977). From this theoretical base, Noelle-Neumann has developed a model that integrates research on media effects, content analyses of media portrayals of opinion, and longitudinal public opinion polling data.

The mass media, Noelle-Neumann argues, are ubiquitous and consonant; they are ubiquitous because of their proliferation in contemporary Western society, and consonant because media content reflects the homogeneity of shared values and conventions of professional communicators. Due to this ubiquity and consonance, the media structure an information environment, a pseudo-environment in the terminology of Walter Lippmann, that envelopes individuals in society. Individuals, by means of a "quasi-statistical organ," sense the climate of opinion created, in large part, by mass media portrayals. The mass media, Noelle-Neumann contends, tend to be more liberal than the general populace; this liberality is uniformly portrayed by consonant mass media content. Thus, the media act as agents of social change by presenting one opinion as dominant or desirable and an opposing opinion as declining or undesirable. If individuals sense that the opinion they hold is the dominant one, or expected to be dominant in the near future, they will be willing to express their opinion publicly. If, on the other hand, they sense that their opinion is in the minority, or on the decline, the individuals will remain silent. Over time, "the tendency of the one to speak up and the other to be silent starts off a spiraling process which increasingly establishes one opinion as the prevailing one" (Noelle-Neumann, 1974, 44). In this

eventuality, supporters of an unpopular opinion are reduced to a few "hardcores," i.e., individuals who are willing to defy the popular sentiment.

To Noelle-Neumann, public opinion is simply opinion that can be made public without the fear of isolation or sanction. This notion is based upon the research of Solomon Asch who demonstrated that certain individuals will defer to judgments of others in certain ambiguous social situations. Noelle-Neumann has generalized findings from small-group research to formulate hypotheses about macro-level societal processes.

Perception of Opinion Climates and Willingness to Speak Out

Critics of this model, while recognizing its significance for theories of the relationship between media and social change, have questioned a number of conclusions and findings pertaining to the model. For example, Noelle-Neumann argues that it is one's perception of whether one is in the majority or minority that determines one's willingness to speak out in public. Yet as Salmon and Kline (1983) observe, Noelle-Neumann consistently analyzes data in terms of individuals' actual congruence with majority or minority opinion. In only one example among literally dozens of data tables in various articles and books published in English does Noelle-Neumann compare perceived opinion congruence with actual opinion congruence, and in that case the hypothesis is not entirely supported. The use of actual opinion incongruence--as defined statistically by a researcher--is irrelevant if the respondent does not perceive that his or her opinion is incongruent with the majority opinion. Thus one point that needs to be addressed in a proper analysis of the climate of opinion phenomenon is a comparison between perceived and actual opinion congruence and resulting willingness to express an opinion publicly.

Demographic Predictors of Willingness to Speak

A second issue that has been raised in critiques of Noelle-Neumann's work

is an alternative explanation for the willingness to speak out in public. In her 1974 article, Noelle-Neumann demonstrated that different demographic groups differed in their willingness to express opinions in general: "Men, younger persons, and the middle and upper classes are generally the most likely to speak out, and these differences hold for all other findings. I shall, therefore examine the survey results without further breakdowns into these demographic subgroups" (Noelle-Neumann, 1974). This finding is consistent with the observation by Tichenor, Donohue and Olien (1970) that certain population segments tend to be differentially positioned within a system in terms of their ability to gain access to and control the channels of communication.

Because willingness to speak out has been demonstrated, by Noelle-Neumann, to be a function of demographic differences, these variables must be controlled for when testing the central hypothesis that it is perceptions of majority opinion--not demograpics--that actually determine one's willingness to speak out (Glynn & McLeod, 1985). No such multivariate test has ever been conducted using general population data, nor has there been a replication of these bivariate relationships between selected demographics and willingness to speak out.

Involvement and Willingness to Speak Out

A third major issue raised in critiques of this model is the advancement of an alternative hypothesis to the the spiral of silence phenomenon, one that posits that certain cognitive, affective, behavioral and/or motivational variables, such as issue-knowledge, affect, previous behavior or issue-involvement, are more significant predictors of willingness to speak out than are perceptual variables pertaining to the climate of opinion. The lack of knowledge about some issue, for example, may inhibit an individual from

expressing an opinion in public. Using this explanation, the spiral of silence phenomenon would occur among individuals who feared appearing ignorant--rather than in the minority--when expressing an opinion publicly (Neuwirth and Sanchez, 1984).

One's previous behavior, it can be argued, also can influence one's subsequent participation in behaviors relating to the same issue. That is, behavioral commitment reinforces opinion and may increase the likelihood of further public expressions of opinion. Commitment, in this sense, is a logical outgrowth of level of involvement, i.e., the degree to which an issue or object is particularly salient for a particular individual. Involvement is a concept that has been demonstrated to be central in predicting individuals' motivation to seek (a behavioral outcome) and systematically process (a cognitive outcome) information (Salmon, 1986). The application in this case is that a high level issue-involvement motivates an individual to speak out on an issue of great personal relevance; conversely, a low level of involvement means that a person is insufficiently motivated to express an opinion on an issue. Thus the positive concept of personal relevance rather than the negative concept of fear of isolation may be the mechanism fueling expression.

While each individual concept may be influential in determining one's willingness to express an opinion publicly, it is likely that these cognitive, affective and conative factors mentioned above are likely to covary and thus need to be subjected to a multivariate test (Chaffee and Roser, 1986).

Perceptions of Different Groups
and Willingness to Speak Out

Finally, a question has been raised regarding the lack of consideration of reference or primary group ties in mediating the effects of the media in creating a climate of opinion. In fact, Noelle-Neumann's model has been referred to as a "mass society" argument (Katz, 1982). In contrast, critics

have speculated, for example, that perceptions of the dominant opinion of some vague, amorphous mass society may be less compelling than perceptions of the dominant opinion of one's actual community or neighborhood (Glynn & McLeod, 1985; Glynn, 1983). If fear of isolation is indeed the mechanism through which certain opinion is expressed while other opinion is not, then fear should be most acute in a setting in which the probability of face-to-face contact with a hostile majority is maximized. Since an individual encounters fellow community residents on a much more frequent and regular basis than residents of the larger society, one might suspect that an individual would be more susceptible to the influence of the more immediate surroundings than to the national system.

Hypotheses

Based upon the above discussion, the working hypotheses are: (1) consistent with Noelle-Neumann's conceptualization of the process, perceived opinion congruence is significantly related to one's willingness to express a controversial opinion publicly; (2) demographic subgroups differ in their inherent willingness to speak out, and that males, those with higher levels of education and younger individuals will show the greatest tendency to publicly voice an opinion, in general; (3) greater knowledge, affect, involvement and behavioral commitment associated with an issue will result in increased willingness to speak out; and (4) perceptions of majority opinion in the local community will be stronger predictors of willingness to speak out than will be perceptions of majority opinion in the nation as a whole. In addition to the testing of these hypotheses, analysis using multiple regression will be used to assess the relative contribution of all of the above factors in predicting willingness to speak out.

Methodology

Telephone interviews were conducted with 432 residents of Madison, Wisconsin, in the Spring of 1986. An initial directory-based systematic sample of telephone numbers was drawn from the Madison telephone directory to ensure representativeness in terms of working telephone exchanges and banks. This sample of numbers was subsequently adapted via the "plus-one" procedure to permit the inclusion of households with voluntarily and involuntarily listed telephone numbers. Respondents within households were selected by means of a male/female quota system.

The community in which the study was conducted, Madison, is a university town and political center; as such, it is characterized by a a disproportionately high number of higher-educated white-collar workers. In addition, the city is widely viewed as having a distinct political orientation, i.e., as being more politically liberal than much of the rest of the state. These structural characteristics are important considerations in attempts to generalize findings from this study to other social systems.

Respondents were asked a series of standardized items tapping opinions on the issue of abortion. The topic of abortion was selected because it meets Noelle-Neumann's criteria that an issue have a moral component and be controversial within a social system (Noelle-Neumann, 1985). In addition, the issue has been used in two previous studies of the spiralling phenomenon, i.e., those by Bergen (1986) and Donsbach and Stevenson (1984). The actual items were derived from a Harris study commissioned by Planned Parenthood in September, 1985, and from the work of Coombs and Welch (1982). Every effort was made to maintain the exact wording used in these previous studies of opinion on abortion to facilitate comparisons with other data sets. The respondent's issue position was assessed by the question, "Do you personally favor or oppose a constitutional amendment to ban abortions?".

To tap more fully respondents' opinions on the issue of abortion, nine items from Coombs and Welch (1982) were factor analyzed using an oblique rotation. These nine items were concerned with the following circumstances under which abortion ought to be available for a woman: if the child would be unwanted; if the mother would have to go on welfare; if the woman's physical health would be endangered; if the woman's mental health would be endangered; if the future life of the woman might be seriously disrupted; if the child would be deformed; if the pregnancy resulted from rape or incest; or if the woman's life would be in danger from the pregnancy. Three factors emerged from the factor analysis: "social circumstances," "physical health," and "extraordinary circumstances." Factor scores were calculated and used in subsequent analysis. The first two factors were positively correlated. The third factor was negatively correlated with the first two.[1]

Perceived opinion congruence was measured at two levels of analysis. First, respondents were asked, "Do you think most people in the city of Madison favor or oppose a constitutional amendment to ban abortions?". Next, they were asked, "Do you think most people in the United States favor or oppose a constitutional amendment to ban abortions?". Perceived trend of future opinion was assessed by asking respondents whether they thought abortions would ever be banned again in the United States, or whether they will continue to be legal.

Traditionally, willingness to speak out is assessed, in Noelle-Neumann's studies of the phenomenon, by asking respondents about their willingness to speak about an issue to a stranger on a train during a six-hour train journey. Because this situation is not as commonplace in the United States as in West Germany, two different operationalizations of this variable were employed. First, respondents were asked: "Suppose a TV reporter with a camera and a

microphone were interviewing people on the street about whether there should be a constitutional amendment to ban abortion. The interview would be shown on a local TV station. Would you be willing to give your opinion on a 'onstitutional amendment to ban abortions, or wouldn't you?". This measure was derived from the work of Donsbach and Stevenson (1984). Next, respondents were asked: "Suppose you're sitting next to stranger on a bus or airplane who disagrees with you on the issue of a constitutional amendment to ban abortions. Would you be willing to enter into a discussion with this person, or wouldn't you?". In both cases, the situations can be interpreted as having both threatening and non-threatening consequences. In the first instance, respondents are confronted by an impartial questioner, but the respondent's opinion may be seen and heard by literally hundreds of fellow townspeople. In the second instance, respondents are confronted by a partial questioner who can supply immediate and negative feedback, but the reach of the opinion expression is very limited.

Personal issue-involvement was gauged by asking respondents how concerned they were about the issue of abortion and how strongly they held their opinion on the issue. Perceived issue-involvement was indexed by the respondent's perception of how concerned most residents of Madison and, in a separate item, most residents of the United States were about the issue.

Personal knowledge about abortion was represented by two items: knowing a person who had had an abortion and the respondent's closeness to that person. Issue actor knowledge was formed by summing three items: knowledge of the organizations, Planned Parenthood and Right to Life, and a self-reported knowledge measure on the issue of abortion.

Previous behavior toward the abortion issue was measured by asking respondents whether had contributed any mo ; to an organization either supporting or opposing abortion.

Demographic variables included gender, education, age, and party affiliation.

Results and Discussion

Demographics and Willingness to Speak Out

Table 1 shows the relationship between selected demographic variables and two types of opinion expression: willingness to enter into a discussion with a stranger who holds an opposing viewpoint, and willingness to express one's opinion to a TV reporter. In the latter case, education and age are significantly related to opinion expression, with more highly educated and younger respondents more likely to express their opinion publicly. In the case of speaking to a stranger, no demographics emerge as significant predictors of public opinion expression.

This finding is significant for several reasons. First, it demonstrates that demographic factors do account for variance in willingness to express an opinion in some situations, and hence must be controlled for in multivariate tests of the spiral of silence hypothesis. Secondly, the finding suggests that there is something peculiar or unique about expressing one's opinion on television. Although the actual reason for this cannot be determined from these data, it is conceivable that speaking to a TV reporter may evoke feelings of discomforture among older or less educated persons who may not feel as comfortable with technology, in general, as their younger or better educated counterparts. In addition, older and less educated persons may feel that they lack sufficient communication skills necessary for making a favorable impression on a mass medium such as television. As mentioned earlier, the "publicness" or reach of expressing one's opinion on television greatly exceeds the "publicness" of expressing one's opinion to a stranger in a transient encounter.

Perception of Majority Opinion

The core of Noelle-Neumann's hypothesis is that persons with issue positions congruent with their perception of majority opinion will be more likely to express their opinion publicly than will persons with an incongruent alignment between their opinion and perception of majority opinion. As can be seen in Table 2, the data provide limited support for this contention. First of all, the most striking finding is the lack of any clearcut distinction between individuals who perceive themselves in the minority and those who perceive themselves in the majority in terms of willingness to express an opinion. A majority of respondents--regardless of whether they perceive themselves as in the majority or minority--say they are willing to express their opinion on the issue. It is hardly a situation in which only a handful of "hardcores" holding the minority position are willing to speak out whereas the vast majority of those holding the majority opinion will speak out. Since a majority of both groups are willing to speak out, the "silencing" effect is virtually non-existant. This pattern holds regardless of whether the referent majority opinion is at the national or community level.

In one case, however, the Noelle-Neumann model is supported; individuals who themselves favor a ban on abortion and who believe that abortion will indeed be banned in the future are more likely to express their opinion to a stranger than are those individuals who believe that their opinion will not prevail (see Table 2). This lends some support to the dynamic version of Noelle-Neumann's hypothesis, i.e., that perceptions of future trends may be a better predictor of willingness to speak out than assessment of the current climate of opinion.

The second striking result in Table 2 is the lack of support for the hypothesis that perceptions of the climate of opinion in the local community would be more important than perceptions of the climate of opinion in some

vast, amorphous public constituting society. Because, as mentioned above, differences in willingness to speak out do not differ according to majority or minority issue positions, it is difficult to test this hypothesis regarding local/national climates of opinion. But the only case in which patterns of responses are consistent with Noelle-Neumann's model is when respondents' willingness to speak to a stranger (rather than a TV reporter) is analyzed in terms of their perception of the national (rather than the local) climate of opinion. And while this pattern is consistent with the model, the differences are not statistically significant.

In reconciling this finding with data from Noelle-Neumann, there is one obvious explanation. The nature of the issue, abortion, may affect the ability of the climate of opinion to suppress opinion expression. In one other spiral-of-silence study employing the issue of abortion (Donsbach and Stevenson, 1984), a similar phenomenon occurred--a majority of both the "winning" and "losing" factions expressed willingness to give an opinion publicly. The interpretation of Donsbach and Stevenson, however, was that the notion of a spiral of silence phenomenon was substantiated because a "larger" majority of those in the winning faction were more likely to speak out than the "smaller" majority in the losing faction. The interpretation in this paper is that when a majority of the members of the losing faction are still willing to speak out, it does not represent "silence."

In any case, the issue of abortion may be so consuming and socially significant that trepidation about expressing one's opinion in public may be overwhelmed by one's sense of obligation or involvement regarding the issue. The evidence clearly supports the contention that if such a spiralling process occurs, it is issue-specific as well as contingent upon the mode of expression invoked.

Attitudes, Involvement and Behavior

There appears to be little relationship between attitudes about the circumstances justifying abortion and expression of opinion. As Table 3 shows, the sole exception is the inverse relationship between not accepting social circumstances for abortion (e.g., the child would not be wanted or the mother would have to go on welfare) and willingness to speak to a TV reporter.

Personal involvement, however, consistently is correlated with willingness to express one's opinion--regardless of the form of that expression. The same finding occurs for behavioral commitment, i.e., having donated money. Perceived involvement is significantly correlated with willingness to express an opinion for the situation of speaking with a stranger.

Issue-actor knowledge similarly is significantly correlated with willingness to express an opinion, whereas self-reported knowledge about the issue is significantly correlated only with willingness to speak to a TV reporter.

Thus, cognitive, motivational, and behavioral variables are also significantly related to willingness to express one's opinions, variables that have not been considered in prior formal tests of the spiral of silence hypothesis.

A Multivariate Test

Given that opinion expression is a function of demographics, cognitions, involvement, prior attitudes and involvement, the real question that ought to be considered in a test of the spiral of silence hypothesis is whether perceptions of being in the minority can account for any further variance beyond that explained by the above variables.

To answer this question, hierarchical regression was used to assess the relative impact of variables in the study for the sample as a whole as well as

for subgroups favoring and opposing a constitutional ban on abortion. Two approaches can be taken in such an analysis strategy. The first is to enter variables such as involvement and knowledge prior to the perceptions of the climate of opinion. This approach represents a conservative test of the spiral of silence hypothesis. The second approach is to enter the perceptual variables earlier in the equation to allow that block to account for more variance; hence, this is a more liberal test of the hypothesis. Both approaches were used in this analysis; however, space precludes reporting both regression tables, and both tables are markedly similar. In order to provide the fairest possible test of Noelle-Neumann's contentions, findings from the latter approach only--the more liberal test--are presented in this paper.

Subgroup analysis was conducted to control for the possibility that different factors, e.g., fear of isolation, might be more influential in determining willingness to speak out among members of the minority subgroup than among members of the majority subgroup. As can be seen in Table 4, the results vary by dependent variable and by subgroup.

For the overall sample, personal involvement and issue-actor knowledge emerge as the only two variables that significantly predict both forms of opinion expression. Importantly, perceptions of opinion congruency with the United States as a whole emerged as a significant predictor of willingness to speak to a stranger, but not to a TV reporter. In addition, the attitude position of justifying abortion under certain social circumstances was also a significant predictor of interpersonal opinion expression.

With minor variations, results from the "against ban" subgroup showed similar patterns in terms of willingness to express an opinion. Personal involvement is the only variable that significantly predicts both modes of opinion expression within this subgroup. Perceptions of national opinion

congruency again emerges as a significant predictor of willingness to speak to a stranger, as do the variables gender (males more likely than females), and perceived issue involvement.

Because of the small sample size, analysis of the "favor ban" subgroup is severely limited. The only significant predictors of opinion expression that emerge within this subgroup are attitudes toward the circumstances justifying abortion. Personal involvement is not a significant predictor of expression among members of this group as it had been for the other groups. A possible explanation for this is that supporters of a constitutional ban on abortion are inherently highly involved in the issue, thereby minimizing the amount of variance in involvement within the group.

Summary

Based upon these data, support for Noelle-Neumann's model of opinion expression is mixed. On one hand, the data indicate that, contrary to Noelle-Neumann's line of reasoning, it is possible to have a majority of members of a "losing" or minority subgroup be willing to publicly express an unpopular opinion. Other factors--most notably issue involvement--may interrupt the spiralling process and induce members of a minority faction to risk censure by the majority. Issue involvement emerged as a consistently significant predictor of willingness to speak out in various bivariate and multivariate analyses.

On the other hand, there is evidence that individuals are, in certain situations, influenced by their perceptions of majority opinion. This influence appears to be greatest when a respondent is placed in the scenario of speaking to a stranger who holds an opposing viewpoint. The influence of the climate of opinion in the residents' community appears to be less compelling than the perceived climate of opinion in society as a whole. There

are several explanations for this finding. First, the failure to find that perceived opinion congruency with local opinion had an impact on a person's willingness to speak out suggests that it may be necessary to specify the perceived domain of discourse that a particular issue evokes. Thus, the perceived political unit or level at which an issue can be resolved may determine the appropriate level at which majority opinion will matter to a respondent. If an issue is local in scope, then perhaps local opinion congruency may be more important.

A second possible explanation for this finding is that fear of isolation may not be the actual mechanism determining respondents' opinion expression. As stated before, one presumably fears isolation from individuals with whom one interacts. If national opinion is evaluated as more important than local opinion, then an alternative explanation might involve some type of positive "bandwagon" theory rather than Noelle-Neumann's notion of negative sanctions. In order to evaluate the relative impact of different influences on expression, however, longitudinal data are needed to assess actual shifts in the perceived climate of opinion.

One clear finding that emerges from this paper is that Noelle-Neumann's model, as presently stated, needs further elaboration to account for the myriad of influences on respondents' willingness to express opinions publicly. Synthesizing the findings of this paper with those of previous researchers, one can safely conclude that opinion expression is a function of: the situation in which an individual is supposed to express his or her opinion; the type or nature of the issue on which the opinion is to be expressed; demographic and psychographic characteristics of the individual; perceptions of majority opinion of an amorphous national public or society; and the salience of opinions of other groups, e.g., society as a whole versus one's community. Subsequent studies should seek to incorporate these varied

conditions into an integrated model that goes beyond examining fear of isolation in isolation.

FOOTNOTES

[1]A three factor solution using principal components and oblique rotation was used in analysis. The pattern matrix and factor correlation matrix is given below.

Item	Factors I	II	III
Child would be unwanted.	.87	-.04	-.09
Mother would go on welfare.	.94	.03	.07
Future life of teen would be disrupted.	.61	-.01	-.40
Pregnancy endangers woman's physical health.	.02	.95	.04
Pregnancy would endanger woman's life.	-.10	.88	-.12
Pregnancy endangers woman's mental health.	.45	.49	-.04
High probablity child would be deformed/retarded.	.18	.02	-.74
Pregnancy result of rape/incest.	-.09	.07	-.92
Percent of total variance	55.7%	16.3%	7.6%

Factor Correlation Matrix

	Factor I	Factor II	Factor III
Factor I	--		
Factor II	.33	--	
Factor III	-.53	-.51	--

REFERENCES

Andreasen, M. and M. Thompson (1985) "The Silence Effect: Fear of Isolation or Association?" presented at the annual meeting of the Association for Education in Journalism and Mass Communication, Memphis.

Bergen, L. (1986) "Testing the Spiral of Silence Theory With Opinions on Abortion," presented at the annual meeting of the International Communication Association, Chicago.

Chaffee, S.H. and C. Roser, (1986) "Involvement and Consistency of Knowledge, Attitudes and Behaviors," Communication Research, 13:373-400.

Donsbach, W. and R. Stevenson (1984) "Challenges, Problems and Empirical Evidence of the Theory of the Spiral of Silence," presented at the annual meeting of the International Communication Association, San Francisco.

Glynn, C. and J. McLeod (1982) "Public Opinion, Communication Processes, and Voting Decisions," in M. Burgoon (ed.) Communication Yearbook 6, Beverly Hills: Sage.

Glynn, C. and J. McLeod (1984) "Public Opinion Du Jour: An Examination of the Spiral of Silence" Public Opinion Quarterly, 48:731-740.

Glynn, C. and J. McLeod (1985) "Implications of the Spiral of Silence Theory for Communication and Public Opinion Research," in K. Sanders, L. Kaid and D. Nimmo (eds.) Political Communication Yearbook 1984, Carbondale: Southern Illinois University Press.

Katz, D. (1981) "Publicity and Pluralistic Ignorance: Notes on the 'Spiral of Silence,'" in H. Baier and H. Kepplinger (eds.) Public Opinion and Social Change, Opladen: Westdeutscher Verlag.

McLeod, J. (1985) "An Essay: Public Opinion--Our Social Skin," Journalism Quarterly, 62:649-653.

Merton, K. (1985) "Some Silence in the Spiral of Silence," in K. Sanders, L. Kaid and D. Nimmo (eds.) Political Communication Yearbook 1984, Carbondale: Southern Illinois University Press.

Neuwirth, K. and C. Sanchez (1984) "Family Communication Patterns and the Spiral of Silence," presented at the Midwest Association for Public Opinion Research, Chicago.

Noelle-Neumann, E. (1973) "Return to the Concept of Powerful Mass Media," Studies of Broadcasting, 68-105.

Noelle-Neumann, E. (1974) "The Spiral of Silence," Journal of Communication, 24:43-51.

Noelle-Neumann, E. (1977) "Turbulences in the Climate of Opinion," Public Opinion Quarterly, 41:113-58.

Noelle-Neumann, E. (1979) "Public Opinion and the Classical Tradition," Public Opinion Quarterly, 43:143-56.

Noelle-Neumann, E. (1981) "Mass Media and Social Change in Developed Societies," in E. Katz and T. Szecsko (eds.) Mass Media and Social Change, Beverly Hills: Sage.

Noelle-Neumann, E. (1984) The Spiral of Silence, Chicago: University of Chicago Press.

Salmon, C. (1986) "Perspectives on Involvement in Consumer and Communication Research," in B. Dervin and M. Voigt (eds.) Progress in Communication Sciences, vol. 7, New York: Ablex.

Salmon, C. and F. Kline (1983) "The Spiral of Silence Ten Years Later: An Examination and Evaluation," presented at the annual meeting of the International Communication Association, Dallas.

Taylor, D. (1982) "Pluralistic Ignorance and the Spiral of Silence: A Formal Analysis," Public Opinion Quarterly, 46:311-35.

Tichenor, P., G. Donohue and C. Olien (1980) Community Conflict and the Press, Beverly Hills: Sage.

Webb, N. and R. Wybrow (1986) "The Spiral of Silence: A British Perspective," in I. Crewe and M. Harrop (eds.) Political Communications: The General Election Campaign of 1983, Cambridge: Cambridge University Press.

TABLE 1

DEMOGRAPHIC FACTORS AND WILLINGNESS TO EXPRESS AN OPINION

	AGE			GENDER		EDUCATION			PARTY I.D.		
	18-34	35-44	45+	Male	Female	HS or less	Some college	College grad	Dem.	Ind.	Rep.
Willing to speak to stranger	71%	65%	60%	67%	60%	64%	63%	71%	63%	63%	72%
Willing to be interviewed on TV	72%	75%	59% *	69%	66%	57%	66%	77% *	70%	69%	65%
n:	(217)	(93)	(103)	(224)	(203)	(86)	(131)	(197)	(148)	(196)	(57)

2

* $p < .05$, X test of significance

TABLE 2

PERCEPTION OF THE CLIMATE OF OPINION AND WILLINGNESS TO EXPRESS AN OPINION

	Perceives Majority in Community				Perceives Majority in Nation				Perceives Future Will			
	Favor		Oppose		Favor		Oppose		Result in Ban		Not	
	Personally		Personally		Personally		Personally		Personally		Personally	
	Fav.	Opp	Fav.	Opp.	Fav.	Opp.	Fav.	Opp.	Fav.	Opp.	Fav.	Opp
Willing to speak to stranger	71%	57%	80%	64%	74%	53%	57%	69%	76%	60%	80%	62%*
Willing to be Interviewed On TV	58%	64%	73%	70%	71%	62%	57%	72%	76%	76%	66%	68%
n:	(24)	(28)	(40)	(249)	(38)	(55)	(28)	(205)	(21)	(42)	(50)	(255)

^{2}

* $p < .05$, X Test of Significance

TABLE 3

CORRELATIONS OF ABORTION ATTITUDES, INVOLVEMENT AND KNOWLEDGE WITH OPINION EXPRESSION

	Willingness to Speak With Stranger	Willingness to Be Interviewed on TV
Abortion Attitudes		
social circumstances	.054	-.106*
physical health	.037	.046
extraordinary circumstances	-.041	-.087
Involvement		
personal involvement	.193***	.304***
perceived involvement	.148***	.036
prior behavioral commitment	.118*	.138**
Knowledge		
personal knowledge	.041	.131**
issue actor knowledge	.189***	.269***
n = 436		

Entries are Pearson Correlation Coefficients.

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

TABLE 4

PREDICTORS OF WILLINGNESS TO EXPRESS AN OPINION

	Overall sample n=384				Group Opposing Ban n=312				Group Favoring Ban n=72			
	To stranger		On TV		To stranger		On TV		To stranger		On TV	
	β	R^2 ch.	β	R^2 ch.	β	R^2 ch.	β	R^2 ch.	β	R^2 ch.	β	R^2 ch.
Age	-.05[illegible]		-.078		-.069		-.039		-.183		-.156	
[illegible]	.08[illegible]		-.076		-.113*		-.083		-.048		-.033	
Education	.05[illegible]		.070		-.021		.049		.101		-.033	
Political Party	.[illegible]6		.001		-.043		.065		-.094		-.064	
		(.017)		(.034)*		(.012)		(.038)*		(.100)		(.055)
Social circumstances	.16[illegible]*		-.017		.144		-.075		-.095		.656*	
Physical health	.07[illegible]		.068		.071		.049		-.072		.517*	
Extraordinary circum.	.11[illegible]		-.06[illegible]		-.096		-.001		.072		-.799*	
		(.021)*		(.015)		(.006)		(.017)		(.008)		(.178)*
Perceived community congruence	.01[illegible]		-.017		.017		-.025		.052		-.071	
Perceived national congruence	.10[illegible]*		.06[illegible]		.139*		.024		-.057		.075	
Perceived future congruence	-.01[illegible]		-.001		.012		-.045		-.036		-.041	
		(.013)*		(.008)		(.041)*		(.008)		(.000)		(.013)
[illegible]	.05[illegible]		.011		.073		.018		-.011		-.005	
Personal involvement	.12[illegible]*		.25[illegible]*		.133*		.249*		.194		.128	
Perceived involvement	.17[illegible]*		.011		.168*		.011		-.157		-.014	
[illegible] Action knowledge	.19[illegible]*		.10[illegible]*		.093		.164*		.257		-.021	
		(.031)*		(.008)*		(.071)*		(.103)*		(.091)		(.011)
Standard R[a]		.18[illegible]*		.155*		.130*		.165*		.200		.256
Adjusted R[a]		.087*		.123*		.089*		.126*		.003		.073

Entries are standardized betas. Parenthetical entries are incremental variance for each block. * $p < .05$