

Fear of Social Isolation: Testing an Assumption from the Spiral of Silence

**Pamela J. Shoemaker,
Michael Breen,
Marjorie Stamper**

Pamela J. Shoemaker is the John Ben Snow Professor in the Newhouse School of Public Communication, Syracuse University. Michael Breen is Head of Media & Communication Studies, Mary Immaculate College, University of Limerick. Marjorie Stamper is a doctoral candidate in the Newhouse School.

Introduction

Although Elisabeth Noelle-Neumann's Spiral of Silence Theory (1984) has been regarded as a basis for studying changes in public opinion, a major assumption in the theory – that people fear social isolation and therefore are hesitant to voice their unpopular opinions – has been given little empirical testing. Although Noelle-Neumann (1977) has conducted field experiments and surveys in which fear of isolation was manipulated, other scholars' work has taken fear of isolation as an assumption.

This study is designed specifically to test the fear of isolation assumption and to explore its position in the Spiral of Silence model. It has been unclear from the literature whether fear of isolation is antecedent to opinion formation and dominant opinion assessment or an intervening variable between opinion formation and willingness to voice the opinion. Path analyses are used to empirically investigate the relationship of the fear of isolation variable to other variables in the model.

The study helps determine the importance of fear of isolation in the overall Spiral of Silence model. Several studies (e.g., Glynn & McLeod, 1984; Katz & Baldassare, 1992; Shamir, 1995) have found little or no support for the Spiral of Silence theory, but these did not include fear of isolation as a variable. We hope that measuring fear of isolation and including it in hypothesis testing will help move the development of the theory.

Theory

The Spiral of Silence is Noelle-Neumann's attempt to explain public opinion as a dynamic process. It has been an important theory, because previous theoretical work had studied public opinion as a static concept, looking at interrelationships between public opinion and other variables at one point in time. Noelle-Neumann (1984) hypothesizes that public opinion changes across time in relationship to people's monitoring of the 'climate of opinion.'

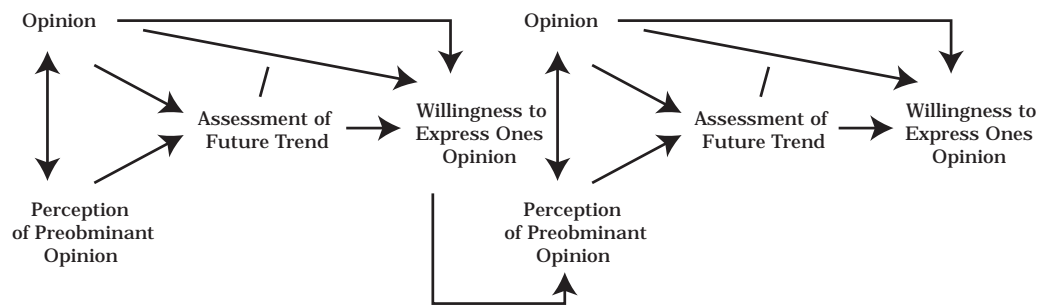
According to the theory, if the majority of people hold an opinion opposite mine, then I may be hesitant to voice my opinion in public. This is especially true if I perceive that my opinion is likely to lose more support in the future.

Thus, if people who have opinions similar to mine also do not speak out in public, I will observe a decreasing amount of publicly voiced support for my opinion. Over time, I perceive that support for my opinion spirals downward, hence the name of the theory. It is not clear, however, whether the downward spiral represents only a decline in public support for an opinion or an actual shift in private opinions, i.e., that I have actually changed my own opinion to be consistent with the dominant opinion.

Figure 1 shows this process in a model by Garth Taylor (1982, p.315). Taylor specifies the theory as consisting of four variables at two or more time periods: (1) individual's opinion, (2) individual's perception of predominant opinion, (3) individual's assessment of future trend concerning the opinion, and (4) individual's willingness to express her/his opinion public.

FIGURE 1

TAYLOR'S (1982, P.315) MODEL OF THE SPIRAL OF SCIENCE THEORY.



This is a useful model, because it outlines the variables in theoretical order for hypothesis testing, but at least two important concepts are missing. First, there is no communication variable in the model. From where does my perception of the dominant opinion come? With Noelle-Neumann's emphasis on 'willingness to voice opinion' as the dependent variable, interpersonal sources for opinions may shape my perception of the dominant opinion. However, with many opinions involving topics for which I have no immediate interpersonal source, we must also conclude that the mass media play a very important role in shaping perceptions of the dominant opinion.

Second, although Taylor (1982, p.314) asserts the importance of the fear of isolation concept in his article, he did not include it as a variable in the model. He is not the only scholar to have taken this approach (e.g., Glynn, Hayes & Shanahan, 1996; Willnat, 1996; Baldassare & Katz, 1996; Eveland, McLeod, & Signorielli, 1995; Katz & Baldassare, 1994; Katz & Baldassare, 1992; Kennamer, 1990; Glynn & McLeod, 1984). Other than Noelle-Neumann's experimental approaches to manipulating levels of fear of isolation, it seems that researchers have mostly been content to assume that the downward spiral of opinion is due to a fear of social isolation without actually testing it. As Glynn & McLeod (1984) suggest, the theory may be improved if fear of isolation were measured and used as a variable, rather than being an assumption. Noelle-Neumann (1984, p.42) has herself argued for operationalizing fear of isolation.

Fear of Isolation

In her 1984 book, *The Spiral of Silence*, Noelle-Neumann introduces the fear of isolation concept as one of two motives for why we imitate other people. (The other motive is learning.) This is in response to the results of 1950s experiments by Solomon Asch (1951, 1952) in which subjects were swayed by experimental confederates to give clearly incorrect responses to questions involving the length of lines.

Noelle-Neumann found in these experiments the theoretical linkage for her theory: To study changes in public opinion, we must look at changes in individual opinions over time. What might cause someone to change an opinion? Either that something new has been learned about the opinion object or that the person feels a need to express opinions consistent with those of other people. While learning has been used as an explanation for imitation, it is the latter explanation that forms the basis for the fear of isolation concept.

To fear social isolation is to need to agree with other people, an idea she cites from Gabriel Tarde (1969). Noelle-Neumann (1984) says that there is a 'social nature' of human beings that is separate from just using learning as an explanation for imitation. 'Our social nature causes us to fear separation and isolation from our fellows and to want to be respected and liked by them' (p.41).

In her early studies, Noelle-Neumann (1977) defines public opinion as 'pressure to conform,' and her theory's first two theses demonstrate the role that fear of isolation plays in the Spiral of Silence.

1. As social beings, most people are afraid of becoming isolated from their environment. They would like to be popular and respected.
2. In order to avoid becoming isolated and in order not to lose popularity and esteem, people constantly observe their environment very closely. They try to find out which opinions and modes of behavior are prevalent, and which opinions and modes of behavior are becoming more popular. They behave and express themselves accordingly in public (p.144).

When a person's opinion is perceived to be in the majority, the person may speak out in public without fear of losing popularity or self esteem. If the converse is true, the person may elect to remain silent, avoiding situations in which the person will be in a confrontational or embarrassing situation, such as when one's opinion is laughed at or criticized by others.

The problem is that no one has thus far tested the theory with fear of isolation as a measured variable rather than an assumption. To do so requires the explication of the construct fear of social isolation into dimensions or indicators that can be separately measured. Also, when studying fear of isolation as a variable, we must distinguish between its effects on opinions held and its effects on willingness to express opinions. Any empirical test using the fear of isolation as a variable should be able to say something about how and whether fear of isolation affects each. Noelle-Neumann writes: 'We assume that the normal individual's fear of isolation sets the spiral of silence in motion, and the Asch experiment shows for a fact that this fear can be substantial' (1984, p.40). This implies that fear of isolation might be an antecedent variable in a model of the complete theory (Glynn & McLeod, 1984). Yet others (Kennamer, 1990) believe that fear of isolation intervenes between the establishment of the opinions and the individual's willingness to express the opinion.

Social Anxiety

The psychological literature on social anxiety suggests some possibilities. Monfries and Kafer (1994) make a connection between self-consciousness and a fear of being negatively evaluated by others. Cognitive deficits (negative cognitions about one's self) have been shown to be related to internal attributions for failures (Beidel, Turner, & Dancu, 1985; Halford & Foddy, 1982) and to negative self evaluations (Cacioppo, Glass, & Merluzzi, 1979; Jones & Briggs, 1984). Socially anxious people, such as those who may fear social isolation, have been shown to hold negative self images (Schlenker & Leary, 1982; Leary & Atherton, 1986).

The negative self images probably come from the individual's perfectionistic expectations for themselves, although with a life-time of experiences that demonstrate otherwise (Higgins, 1987; Higgins, Bond, Klein, & Strauman, 1986). As the individual monitors the difference between her or his schemata of an idealized performance and memories of actual or anticipated less-than-perfect performances, the individual becomes increasingly self-conscious.

Two types of self-consciousness have been assessed – public and private. Public self-consciousness is closest to the idea of fear of isolation. The individual monitors many elements of the self (not just opinions) that others can and see and evaluate (Monfries & Kafer, 1994; Buss, 1980). Public, but not private self-consciousness, has been found related to social anxiety (Buss, Cheek & Buss, 1981).

Watson and Friend (1969) have developed a scale for measuring social anxiety – the Fear of Negative Evaluation (FNE). It measures social anxiety stemming from public self-

consciousness, including apprehension about what others think (Monfries & Kafer, 1994). Watson and Friend (1969, p.449) define fear of negative evaluation as 'apprehension about others' evaluations, distress over their negative evaluations, avoidance of evaluative situations, and the expectation that others would evaluate oneself negatively.' They go on to say that 'fear of loss of social approval would be identical to FNE' (p.449). As these definitions of FNE indicate, it is very close to Noelle-Neumann's definition of fear of social isolation. Therefore the FNE scale will be adapted for this study and used to operationally define fear of social isolation.

Hypotheses

The purpose of this study is to examine the role of an operationalized fear of isolation variable in a model of the Spiral of Silence theory. Is there more support for using it as an antecedent variable or one which intervenes between opinion assessments and willingness to voice the opinion, as suggested by Kennamer (1990)?

- H1. *The more a person fears negative evaluation, the less discrepancy there will be between the person's opinion and perception of the predominant opinion.* If fear of isolation is antecedent to opinion formation, then we should expect that, in a dynamic public opinion system, over time the person's own opinion should move closer to the predominant opinion. Therefore, at one point in time, there should be a positive relationship between fearing and holding the majority opinion. We assume that we are not entering a discussion about the opinion subject at the beginning, but rather that at the time of the survey the opinion subject has already been under public discussion for some time. The more a person fears social isolation, the more that person's opinion should move toward the predominant opinion over time. In this scenario, fear of isolation impacts opinion formation directly. It impacts willingness to voice the opinion through other variables in the model.

The discrepancy of opinion is the difference between the individual's private opinion and the individual's perception of the predominant opinion on a specific topic. Fear of isolation is defined as a person's fear of being negatively evaluated by others.

- H2. *The more a person fears negative evaluation, the less likely he or she will be to discuss a minority opinion.* If fear of isolation is intervening, we should observe this relationship. Opinions are formed and then the person considers his or her fear of social isolation. Fear will then mediate the relationship between opinions and willingness to voice opinions. A minority opinion is one which the individual perceives to be supported by less than half of the public; a majority opinion is one perceived to be supported by half or more of the public.

In addition, the study aims to look at an inference of making fear of isolation an assumption in the theory - that it applies to everyone and is therefore a nonvariable. We already know that some 'hard-core' people do not seem to fear being in the minority. However, in this study, it would be reassuring to see that there is substantial variance among respondents in their fear of negative evaluation. This would allow for the 'hard-core' supporters of minority opinions, as well as for those who feel a stronger need to socially conform. Treating fear of isolation as an assumption does not allow for such variability.

Method

A telephone survey of adults 18 years and older was conducted in a mid-size Eastern U.S. city; 403 interviews were completed. Graduate students in two classes acted as supervisors and interviewers in a centralized telephone facility. Telephone

numbers were selected at random from a CD-ROM directory of the area's telephone numbers (SelectPhone CD-ROM Northeast, 4th quarter, 1994). The procedural response rate was .77.

Opinion Variables

Individual's opinion – 'Women should have the right to a legal abortion.' Responses were to a 5-point Likert scale, with 5 indicating 'strongly agree.'

Individual's perception of the predominant opinion – 'Thinking about the people you normally socialize with, would most of them strongly agree, agree, be neutral, disagree or strongly disagree that women should have the right to a legal abortion? Responses were to the same Likert scale.

Discrepancy of opinion – Absolute difference between the above two Likert scales. The minimum value of the scale is 0, indicating perfect agreement between the individual's opinion and the individual's perception of the predominant opinion. A value of 4 indicates the most difference.

Willingness to express individual's opinion – 'Now I want to come back to the abortion issue for a moment. If you were at a social gathering and people there were discussing abortion, how *likely* would you be to enter into the conversation if their views on abortion were *different from your own*? Would you be very likely [5], likely, neutral, unlikely, very unlikely [1]?' (adapted from Glynn & McLeod, 1984, p.55).

Fear of Negative Evaluation Variables

The complete scale as developed by Watson & Friend (1969) has 30 items. We were unable to use that many items on our omnibus questionnaire, so we selected six items that seemed most appropriate to the fear of social isolation. Five items were measured on a 5-point Likert scale, with 5 as strongly agree; one item was reverse coded.

- 'I worry about seeming foolish to others.'
- 'I worry about what people will think of me even when I know it doesn't make any difference.'
- 'I become tense and jittery if I know someone is sizing me up.'
- 'Other people's opinions of me do not bother me.' [reverse coded]
- 'When I am talking to someone, I worry about what they may be thinking about me.'
- 'I often worry that people who are important to me won't think very much of me.'

The scale yielded a Cronbach's alpha coefficient of .81.

Media use variables

Television exposure – The product of the number of days a week R watches television and the number of minutes per day television is watched.

Television news exposure – 'On days when you watch TV, about how much time do you spend watching news or public affairs programs?' Coded in minutes.

Other television exposure – 'Now I'd like to ask you how often you watch different types of TV programming. In an average week, how many days do you watch... (Coded in days per week.)

- Morning news programs
- National network news
- Local news
- News magazine shows
- Talk shows
- Tabloid TV news like A Current Affair
- Public TV news shows like the McNeil-Lehrer News Hour

Newspaper exposure – The product of the number of days a week R reads a daily local newspaper and the number of minutes per day spent reading the newspaper.

National newspaper exposure – The product of the number of days a week R reads daily national newspapers and the number of minutes per day spent reading national newspapers.

Newsmagazine exposure – ‘Now I want to ask about other news sources you might use. In an average week, about how many *news magazines* do you read?’

Radio talk show exposure – ‘What about radio? In an average week, how many days do you listen to a radio talk show?’

National radio news exposure – ‘In an average week, how many days do you listen to a public radio news program, like NPR’s Morning Edition or All Things Considered?’

Results

As Table 1 shows, there is similarity between the individual’s opinion and the individual’s perception of the predominant opinion, with both showing support for a woman’s right to a legal abortion. Thus, there was minimal discrepancy between the two opinion variables, yielding an opinion discrepancy score of only .74. Respondents were also willing to express their opinions to others.

The Fear of Negative Evaluation index, which is the operationalization of the fear of social isolation construct, is also shown on Table 1. When the six items were added, they formed a reliable index (Cronbach’s alpha = .81).

Means and standard deviations for media use variables are shown on Table 2. Respondents watch about 2.5 hours of television per day, with one hour spent watching news. They also spend one-half hour per day reading local newspapers.

Table 2 shows Pearson correlation coefficients for the opinion and Fear of Negative Evaluation items. Individuals’ opinions were positively correlated with their perceptions of the predominant opinion ($r = .52$). The more a person supported a woman’s right to a legal abortion, the more the person perceived that most others also supported abortion.

In addition, perception of the predominant opinion was positively correlated with the person’s willingness to voice an unpopular opinion. The more support a person thinks there is for abortion, the more willing the person is to voice her/his own opinion in public ($r = .15$).

Hypothesis 1 stated that the more a person fears negative evaluation, the less discrepancy there will be between the person’s opinion and perception of the predominant opinion. As Table 3 shows, this is not supported. The correlation between the discrepancy of opinion (absolute value of the difference between the individual’s opinion and the individual’s perception of predominant opinion) and any of the Fear of Negative Evaluation items never exceeds -.09 and is not statistically significant.

The FNE index is, however, negatively correlated ($r = -.11$, $p < .05$) with the person's opinion, indicating that the less fearful a person is of negative evaluation, the more the person supports a woman's right to a legal abortion. The same is true of the index item 'worry about seeming foolish;' it is negatively correlated with the individual's opinion at $-.13$ ($p < .01$). The less a person worries about seeming foolish, the more the person supports the abortion item.

Hypothesis 2 stated that the more a person fears negative evaluation, the less likely the person will be to voice her/his opinion in public. Table 3 indicates no support for the hypothesis.

We were also interested in whether media use variables would be related to the opinion and FNE variables. As Table 4 shows, there are only a few statistically significant coefficients, possibly indicative of Type I error rather than meaningful relationships. The FNE index negatively correlates with two of the fourteen media variables – watching national TV network news and watching public television news. The more fearful a person is, the less she or he watches these types of shows.

Finally, we looked at two path analyses to determine the amount of support for Fear of Negative Evaluation as either an antecedent or intervening variable. Figure 2 shows FNE as an antecedent variable, along with media exposure. Path coefficients are standardized beta coefficients. The results show modest support for the Spiral of Silence model. Fear of negative evaluation is negatively related to the individual's own opinion. The individual's perception of the predominant opinion is positively related to willingness to voice an opinion, even if it is in the minority.

- 'The less fearful I am, the more I support a woman's right to a legal abortion.'
- 'The more I think others support abortion, the more willing I am to voice my opinion.'

Figure 3 shows media exposure as antecedent and fear of negative evaluation as intervening between the opinion variables and the person's willingness of express an opinion. The individual's opinion is negatively related to fear of negative evaluation. And, as before, perceived opinion is related to willingness to voice the opinion.

- 'The more I support abortion, the less I fear negative evaluation.'
- 'The more I think others support abortion, the more willing I am to voice my opinion.'

Discussion

In their review of research of the Spiral of Silence Theory, Price and Allen (1990) note that most tests of the theory in the United States have not supported the idea that holders of minority opinions are loath to present their opinions in public due to a fear of social isolation. They also note that fear of isolation has been assumed and not measured as a variable in the studies. We have attempted to do just that, using a modified scale of Fear of Negative Evaluation (Watson & Friend, 1969) as an operationalization of fear of social isolation.

Like many other tests of the theory in the United States, our study showed only the most modest support for the theory. On the other hand, we have shown that it is possible to operationalize fear of social isolation. Our adaptation of the Fear of Negative Evaluation index (Watson & Friend, 1969) did allow us to put a measure of fear of social isolation into two path diagrams – one with the fear variable antecedent and the other intervening. Fear of social isolation appears to be negatively correlated with the individual's opinion, but the negative direction may be a function of the opinion topic – a woman's right to a legal abortion. This is a highly politicized and controversial topic, yet it also has strong support among the public and is the law of the land. Among this

sample of respondents, most people thought that their opinion was identical to most other people's opinions. A topic less entrenched might react differently.

Although we were pleased at the way our six-item Fear of Negative Evaluation index came together ($\alpha = .81$), it is certainly possible that a revision in this scale could increase its usefulness in the path diagrams.

It is difficult to say from our results that fear of social isolation is either antecedent or intervening. To say 'The more I support abortion, the less fearful I am' may be equally sensible as saying 'The less fearful I am, the more I support abortion.' The former assumes that fear is a function of the opinion, whereas the latter assumes that the opinion is a function of one's level of fear.

Noelle-Neumann, we think, would argue in favor of the latter – that fear of social isolation (operationalized in this study as fear of negative evaluation) is antecedent, a trait of humans, existing prior to the development of opinions. If fear of social isolation is an intervening variable, then it is not a trait, but rather ebbs and flows as each opinion topic comes up. In this study, however, the fact that fear of social isolation is not related to willingness to voice one's opinion (Figure 3) sheds doubt on the status of fear of social isolation as an intervening variable.

In conclusion, support for the Spiral of Silence Theory is minimal, but we have perhaps advanced the theory by operationalizing fear of social isolation and by considering whether it is an antecedent or intervening variable.

Much more research and concept explication are necessary before we can say that we know anything definitive about the role of the concept *fear of social isolation* in the Spiral of Silence Theory. Although neither hypothesis was supported (one where fear is antecedent and other intervening), we still believe in their logic and hope that future researchers will retest the hypotheses with new measures and/or new topics.

TABLE 1

MEANS AND STANDARD DEVIATIONS FOR OPINION AND FEAR OF
NEGATIVE EVALUATION VARIABLES

Variables	Mean	Standard Deviation	N
Individual's opinion*	3.82	1.19	396
Individual's perception of the predominant opinion*	3.55	1.06	363
Discrepancy between opinion and perception of predominant opinion**	0.74	0.87	359
Willingness to express individual opinion***	3.33	1.29	400
I worry about seeming foolish to others*	2.52	1.13	403
I worry about what people think of me even when I know it doesn't make any difference *	2.42	1.02	402
I become tense and jittery if I know somebody is sizing me up*	2.59	1.05	401
Other people's opinions do not bother me****	2.75	1.09	403
When I am talking to someone I worry what they may be thinking about me*	2.36	0.97	403
I often worry that people who are important to me won't think very much of me*	2.32	0.97	402
Fear of negative evaluation index	14.94	4.44	400

* 5=strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree

**Absolute difference between two Likert scales

*** 5 = very likely, 4 = likely, 3 = neutral, 2 = unlikely, 1 = very unlikely

**** 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, 5 = strongly disagree

*****The sum of the six individual items above. Cronbach's alpha = .81

TABLE 2

MEANS AND STANDARD DEVIATIONS FOR MEDIA USE VARIABLES

Variables	Mean	Standard Deviation	N
Minutes per week watch TV	1070.58	814.09	402
Minutes per week watch TV news	433.14	364.22	401
Days per week watch TV shows...			
morning news programs	1.81	2.61	403
national network news	3.62	2.68	403
local news	4.47	2.45	403
news magazine shows	1.33	1.8	401
talk shows	1.34	1.95	402
tabloid tv shows	0.83	1.47	403
public TV news	0.99	1.68	401
Minutes per week read daily local paper	209.86	196.8	401
Minutes per week read national paper	32.51	98.15	402
# of news magazines read per week	0.59	0.97	402
Days per week listen to radio talk shows	1.62	2.42	403
Days per week listen to national radio news	1.09	2.14	401

TABLE 3
PEARSON CORRELATION COEFFICIENTS FOR OPINION AND FEAR OF NEGATIVE EVALUATION VARIABLES

	2	3	4	5	6	7	8	9	10	11
1 Individual's Opinion										
2 Perception of Dominant Opinion P= .000	0.52 (359)									
3 Discrepancy of Opinion P=.08	-0.09 (359) P=.000	-0.35 (363)								
4 Willingness to Express Opinion P= .337	0.05 (394) P= .005	0.15 (363) P=.626	-0.03 (359)							
5 Worry about seeming foolish P= .008	-0.13 (396) P= .073	-0.09 (363) P= .482	0.04 (359) P= .184	-0.07 (400)						
6 Worry about what people think of me P= .113	-0.08 (395) P= .137	-0.08 (362) P= .371	0.05 (358) P= .110	-0.08 (399) P= .000	0.54 (402)					
7 Become tense and jittery if somebody is sizing me up	-0.08 (394) P= .129	-0.04 (361) P= .478	-0.01 (357) P= .887	0.01 (398) P= .905	0.50 (401) P= .000	0.46 (400) P= .000				
8 Other people's opinions do not bother me	-0.05 (396) P= .277	-0.03 (363) P= .550	0.02 (359) P= .759	-0.05 (400) P= .288	0.30 (403) P= .000	0.39 (402) P= .000	0.33 (401) P= .000			
9 When talking to someone I worry what they think of me	-0.06 (396) P= .219	-0.04 (363) P= .427	0.03 (359) P= .526	-0.05 (400) P= .276	0.47 (403) P= .000	0.45 (402) P= .000	0.53 (401) P= .000	0.35 (403) P= .000		
10 I often worry that important people won't think much of me	-0.09 (395) P= .080	-0.02 (362) P= .745	0.06 (358) P= .281	0.03 (399) P= .611	0.38 (402) P= .000	0.40 (401) P= .000	0.37 (401) P= .000	0.28 (402) P= .000	0.47 (402) P= .000	
11 Fear of Negative Evaluation Index P= .037	-0.11 (393) P= .186	-0.07 (360) P= .526	-0.05 (356) P= .345	-0.05 (397) P= .000	0.75 (400) P= .000	0.75 (400) P= .000	0.74 (400) P= .000	0.62 (400) P= .000	0.75 (400) P= .000	0.67 (400) P= .000

TABLE 4
 PEARSON CORRELATION COEFFICIENTS FOR OPINION AND FEAR OF NEGATIVE EVALUATION VARIABLES WITH MEDIA USE VARIABLES
 MEDIA USE VARIABLES

Fear of Negative Evaluation & Opinion Variables	TV		Morning		National		Local		TV News		TV Talk		Tabloid		Public		National		Local		News		Radio	
	Exposure	TV News	Exposure	TV News	Exposure	TV News	Exposure	TV News	Exposure	TV News	Exposure	TV News	Exposure	TV News	Exposure	TV News	Exposure	TV News	Exposure	TV News	Exposure	TV News	Exposure	TV News
Individual's Opinion	-0.01 (395) P=.780	0.03 (394) P=.608	0.06 (396) P=.215	0.06 (396) P=.254	0.06 (396) P=.254	-0.03 (396) P=.500	0.01 (394) P=.776	0.01 (395) P=.890	0.02 (396) P=.721	0.02 (394) P=.117	-0.08 (394) P=.143	-0.07 (394) P=.143	-0.09 (395) P=.064	-0.03 (395) P=.601	-0.15 (396) P=.002	0.03 (395) P=.512								
Perception of Dominant Opinion	0.02 (363) P=.723	-0.01 (363) P=.851	0.00 (363) P=.968	0.07 (363) P=.212	0.07 (363) P=.212	-0.05 (363) P=.357	0.04 (361) P=.486	0.04 (362) P=.414	-0.03 (363) P=.586	-0.01 (361) P=.786	-0.05 (362) P=.316	0.02 (363) P=.683	0.02 (362) P=.627	-0.03 (362) P=.627	-0.03 (363) P=.581	0.04 (361) P=.502								
Discrepancy of Opinion	-0.05 (359) P=.379	0.02 (359) P=.670	-0.02 (359) P=.712	-0.04 (359) P=.478	-0.04 (359) P=.478	0.01 (359) P=.827	0.01 (357) P=.920	0.03 (358) P=.562	-0.05 (359) P=.363	-0.06 (357) P=.261	0.05 (358) P=.312	0.09 (359) P=.103	0.11 (358) P=.043	0.11 (358) P=.043	-0.04 (359) P=.467	-0.01 (358) P=.827								
Willingness to Express Opinion	-0.07 (399) P=.176	0.00 (398) P=.941	-0.09 (400) P=.087	-0.02 (400) P=.620	-0.02 (400) P=.620	-0.10 (400) P=.054	0.01 (398) P=.842	-0.01 (399) P=.806	-0.03 (400) P=.534	0.03 (398) P=.611	-0.13 (398) P=.009	0.10 (399) P=.043	0.13 (399) P=.011	0.13 (400) P=.229	-0.06 (400) P=.424	0.04 (398) P=.424								
Worry about seemingly foolish	0.01 (402) P=.920	-0.01 (401) P=.895	0.00 (403) P=.972	-0.06 (403) P=.218	-0.06 (403) P=.218	0.06 (403) P=.212	-0.01 (401) P=.834	0.07 (402) P=.159	-0.01 (403) P=.891	-0.08 (401) P=.118	0.00 (401) P=.967	-0.07 (402) P=.182	-0.12 (402) P=.018	0.07 (403) P=.135	-0.07 (401) P=.189									
Worry about what people think of me	0.00 (401) P=.965	0.00 (400) P=.990	-0.01 (402) P=.893	-0.09 (402) P=.080	-0.09 (402) P=.080	0.03 (402) P=.491	-0.02 (400) P=.625	0.11 (401) P=.025	0.07 (402) P=.192	-0.02 (400) P=.643	0.02 (400) P=.691	-0.05 (401) P=.337	-0.09 (401) P=.086	0.08 (402) P=.101	0.01 (400) P=.921									
Become tense and jittery if somebody is sizing me up	-0.03 (400) P=.507	-0.05 (399) P=.359	-0.03 (401) P=.544	-0.08 (401) P=.107	-0.08 (401) P=.107	-0.03 (401) P=.585	0.03 (399) P=.525	0.07 (400) P=.151	0.03 (401) P=.616	-0.12 (399) P=.020	0.04 (399) P=.430	-0.07 (400) P=.195	-0.02 (400) P=.621	0.03 (401) P=.541	-0.08 (399) P=.132									

TABLE 4 (cont.)

Other people's opinions do not bother me	-0.07 (402) P = .179	-0.04 (401) P = .437	0.01 (403) P = .888	-0.05 (403) P = .284	-0.01 (403) P = .784	0.04 (401) P = .457	-0.03 (402) P = .611	-0.06 (403) P = .209	-0.09 (401) P = .073	0.08 (401) P = .101	-0.07 (402) P = .157	-0.03 (402) P = .493	0.06 (403) P = .260	0.07 (401) P = .180
When talking to someone I worry what they think of me	-0.07 (402) P = .191	-0.12 (401) P = .018	-0.02 (403) P = .650	-0.07 (403) P = .142	-0.05 (403) P = .278	-0.03 (401) P = .521	0.02 (402) P = .648	0.08 (403) P = .111	-0.10 (401) P = .046	-0.03 (401) P = .553	-0.08 (402) P = .106	-0.04 (402) P = .394	0.07 (403) P = .176	0.00 (401) P = .965
I often worry that important people won't think much of me	-0.01 (401) P = .880	-0.05 (400) P = .366	-0.07 (402) P = .180	-0.07 (402) P = .135	-0.05 (402) P = .323	-0.04 (400) P = .402	0.06 (401) P = .213	0.00 (402) P = .977	-0.04 (400) P = .465	0.05 (400) P = .283	-0.04 (401) P = .471	-0.03 (401) P = .534	0.04 (402) P = .395	-0.04 (400) P = .396
Fear of Negative Evaluation Index	-0.04 (399) P = .485	-0.07 (398) P = .193	-0.03 (400) P = .546	-0.11 (400) P = .034	-0.01 (400) P = .842	-0.01 (398) P = .767	0.08 (399) P = .101	0.01 (400) P = .806	-0.10 (398) P = .039	0.03 (398) P = .497	-0.08 (399) P = .119	-0.07 (399) P = .139	0.07 (400) P = .145	-0.02 (398) P = .622

FIGURE 2

PATH ANALYSIS WITH FEAR OF NEGATIVE EVALUATION AS AN ANTECEDENT VARIABLE

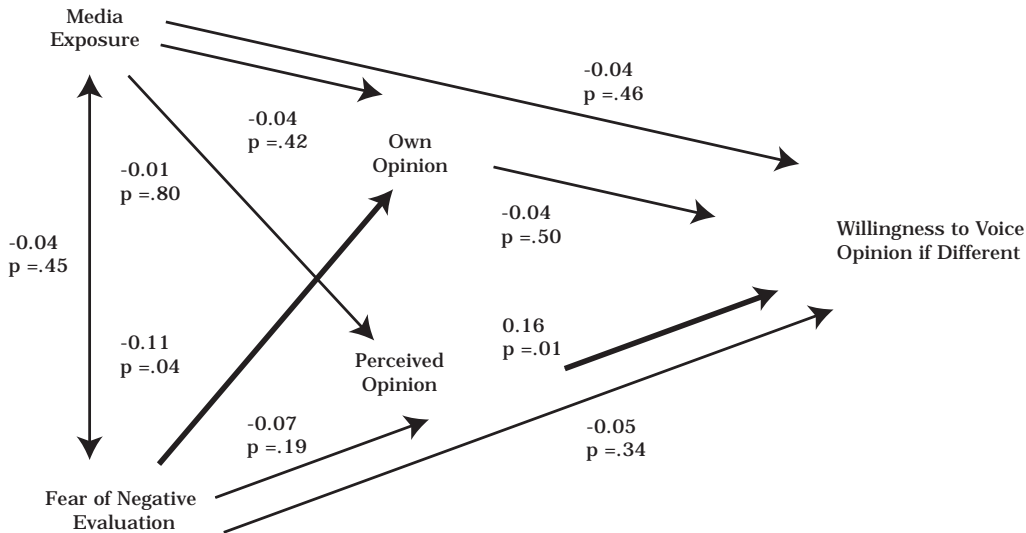
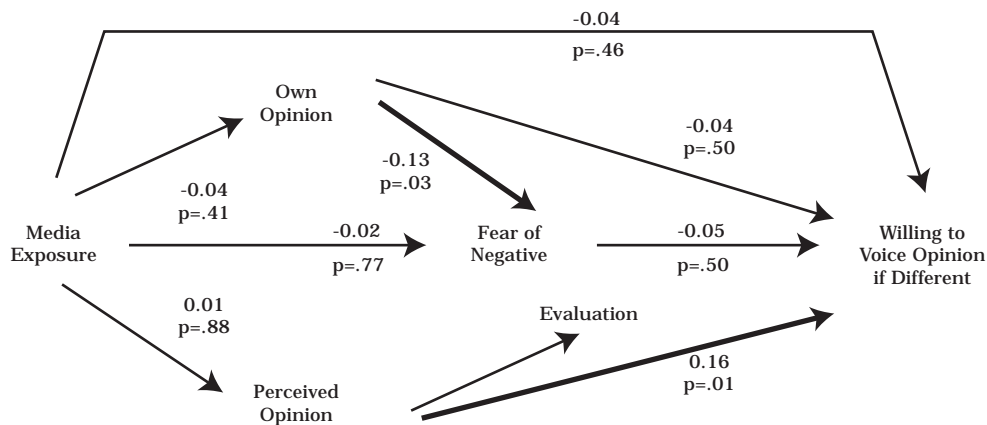


FIGURE 3

PATH ANALYSIS WITH FEAR OF NEGATIVE EVALUATION AS AN INTERVENING VARIABLE



References

Asch, S.E. (1951) Effects of group pressure upon the modification and distortion of judgments. In H. Guetzkow (Ed.), *Groups, leadership, and Men*. Pittsburgh: Carnegie. Reprinted 1953 in D. Cartwright & A. Zander (Eds.), *Group Dynamics: Research and Theory*, pp. 151-162. Evanston IL: Row, Peterson.

Asch, S.E. (1952) 'Group forces in the modification and distortion of judgments'. In *Social Psychology*, pp. 450-473. New York: Prentice Hall.

Baldassare, M., & Katz, C.. (1996) 'Measures of attitude strength as predictors of willingness to speak to the media'. *Journalism & Mass Communication Quarterly*, 73, 147-158.

Beidel, D.C., Turner, S.M., & Dancu, C.V. (1985) 'Physiological, cognitive and behavioral aspects of social anxiety'. *Behaviour Research and Therapy*, 23, 109-117.

Cacioppo, J.T., Glass, C.R., & Merluzzi, T.V. (1979) 'Self-statements and self-evaluations: A cognitive response analysis of heterosocial anxiety'. *Cognitive Therapy and Research*, 3, 249-262.

- Eveland, W. P., McLeod, D. M., & Signorielli, N. (1995) 'Actual and perceived U.S. public opinion: The spiral of silence during the Persian Gulf War'. *International Journal of Public Opinion Research*, 7, 91-109.
- Glynn, C. J., Hayes, A. F., & Shanahan, J.. (1996) 'Willingness to speak out and the spiral of silence: A meta analysis'. Paper presented to the Association for Education in Journalism and Mass Communication, Anaheim, CA. August. (In review at *Public Opinion Quarterly*).
- Glynn, C. J., & McLeod, J. M. (1984) 'Implications of the spiral of silence theory for communication and public opinion research'. In Sanders, D.R., Kaid, L.L., & Nimmo, D. (Eds.), *Political communication yearbook 1984* (pp. 43-65). Carbondale, IL: Southern Illinois University Press.
- Halford, K., & Foddy, M. (1982) 'Cognitive and social skill correlates of social anxiety'. *British Journal of Clinical Psychology*, 21, 17-28.
- Higgins, E.T. (1987) 'Self-discrepancy: A theory relating self and affect'. *Psychological Review*, 93, 319-340.
- Higgins, E.T., Bond, R.M., Klein, R., & Strauman, T. (1986) 'Self-discrepancy and emotional vulnerability: How magnitude, accessibility and the type of discrepancy influence affect'. *Journal of Personality and Social Psychology*, 51, 5-15.
- Jones, W.H., & Briggs, S.R. (1984) 'The self-other discrepancy in social shyness'. In R. Schwarzer (Ed.), *The self in anxiety, stress and depression*. Amsterdam: Elsevier Science Publishers.
- Katz, C., & Baldassare, M. (1992) 'Using the 'L-word in public: A test of the spiral of silence in conservative Orange County, California', *Public Opinion Quarterly*, 56, 232-235.
- Katz, C., & Baldassare, M. (1994) 'Popularity in a freefall: Measuring a spiral of silence at the end of the Bush presidency', *International Journal of Public Opinion Research*, 6, 1-12.
- Kennamer, J. D. (1990) 'Self-serving biases in perceiving the opinions of others: Implications for the spiral of silence', *Communication Research*, 17, 393-404.
- Leary, M.R., & Atherton, S.C. (1986) 'Self-efficacy, social anxiety and inhibition in interpersonal encounters', *Journal of Social and Clinical Psychology*, 4, 256-257.
- Monfries, M.M., & Kafer, N.F. (1994) 'Private self-consciousness and fear of negative evaluation', *The Journal of Psychology*, 128, 447-454.
- Noelle-Neumann, E. (1977) 'Turbulences in the climate of opinion: Methodological applications of the Spiral of Silence Theory',... *Public Opinion Quarterly*, 41, 143-158.
- Noelle-Neumann, E. (1984) *The spiral of silence*. Chicago: University of Chicago Press.
- Price, V., & Allen, S. (1990) 'Opinion spirals, silent and otherwise: Applying small-group research to public opinion phenomena', *Communication Research*, 17, 369-392.
- Schlenker, B.R., & Leary, M.R. (1982) 'Social anxiety and self-presentation: A conceptualization and model'. *Psychological Bulletin*, 92, 641-669.
- Shamir, J. (1995) 'Information cues and indicators of the climate of opinion: The spiral of silence theory in the Intifada', *Communication Research*, 22, 24-53.
- Tarde, G. (1969) *Gabriel Tarde on communication and social influence: Selected papers*. Ed. with intro. by Terry N. Clark. Chicago: University of Chicago Press.
- Taylor, D. G. (1982) 'Pluralistic ignorance and the spiral of silence: A formal analysis. *Public Opinion Quarterly*, 46, 311-335.
- Watson, D., & Friend, R. (1969) 'Measurement of social evaluative anxiety', *Journal of Consulting and Clinical Psychology*, 33, 448-458.
- Willnat, L. (1996) 'Mass media and political outspokenness in Hong Kong: Linking the third-person effect and the spiral of silence', *International Journal of Public Opinion Research*, 8, 187-212.