Predicting interpersonal communication generated by a mass communication event

by

Orlando Lugo Nasser

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TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

During the past 40 to 50 years, social scientists have expressed considerable interest in understanding the processes and mechanisms by which communication achieves effect. There has been special interest in understanding the effects of communications conveyed through the mass media.

As DeFleur (1966) notes, most of the early conceptualizations of communication effect viewed the audience of mass media (either explicitly or implicitly) as being composed of a multitude of atomized individuals. Media was perceived to impact each member of the audience separately. If there were connections and relationships among the various members of the audience, the connections were not viewed as being important to the mass communication event. DeFluer contends that this "atomized" view of the audience prevaded the mass communication effect theories of a rather disparate group of authors. Those behaviorial psychologists who viewed communication in terms of the stimulus-response reflex arc S R, saw the causes of response as residing in the nature of the stimulus and certain "wired-in" or inherited biological mechanisms. Other theorists contended that there was an intervening interpretative process between the stimulus and the response. They viewed the causes of receiver response to communication as residing primarily in a set of learned dispositions - attitudes, beliefs and habits - toward the

stimulus. Some of these S-I-R theorists contended that receipt of a message initiated such latent psychological processes as the drive for dissonnance reduction, and it was these latent processes which could account for the responses which individuals made to the message. However, just as had been the case with the earlier S R theorists, this view of communication effect continued to conceptualize communication response as a one-to-one relationship between a sender and a receiver.

During the 1940's and 1950's however, a number of communication researchers began to find evidence that the social relationships among members of the audience influenced the way individual members of that audience responded to messages conveyed through the mass media. This new conceptualization held that people did not receive messages in isolation. Rather, they received the messages within a social environment complete with other actors, and the evaluations of these other actors were important in determining the response to individual receivers. The researchers found that one frequent response which people made to a mass mediated message was to talk to others about it. This talking to others and the opinions and evaluations exchanged in the process, was seen as a major determinant of communication effectiveness.

The best known formulation of this social relationship theory of communication effect is Katz and Lazarsfeld's (1955)

"two-step flow" hypothesis. They contend that information and opinions flow from the mass media to opinion leaders, and from them to less active portions of the audience.

Another group of researchers, rural sociologists working on the problem of the diffusion and adoption of innovations, independently reached conclusions similar to those of Lazarsfeld and his associate. They found that while mass media was important in creating awareness of new ideas and providing a base of information about them, most people credited conversations with their friends and neighbors or with governmental and commercial agricultural experts as being the most important information source when it came to their evaluating whether or not to try the new idea. These researchers found that part of the audience - especially those who were last to adopt - depended almost exclusively upon personal sources at all stages of the decision-making process awareness, information gathering and evaluation (Beal and Rogers, 1960).

Most communication theorists today concede that social relationships do play an important part in determining individual response to mass mediated events. However, there is considerable disagreement on precisely how this "social mediation" process occurs. Especially, there has been debate about the information transfer and opinion leadership notions included in Katz and Lazarsfeld's hypothesis. Several attempts have been made to reformulate and expand this

hypothesis. It is the position of this thesis that none of these attempts at reformulation have been completely satisfactory, but that a number of useful ideas have been offered.

A purpose of this thesis will be to review the several conceptualizations which have been offered about the role of interpersonal communication in mass mediated communication events, and to review the specific findings related to these concepts. From this review, and from logical constructions, a series of hypotheses will be developed about the likelihood of interpersonal communication occurring, who is likely to talk and for what reasons they might talk.

These hypotheses will be tested with data obtained from the study of one mass mediated communication event in Des Moines, Iowa - the Home Fallout Protection Survey which was sponsored by the United States Office of Civil Defense in 1967. The implications of the findings for mass communication strategists will be discussed.

CHAPTER 2: CONCEPTUAL FRAMEWORK

The attempts to understand the process and effects of interpersonal communication generated by mass communication events has resulted in considerable debate over the relative importance of the phenomenon in creating communication effects. As Troldahl (1966) and Allen (1969) point out, much of the debate stems from the fact that many of the authors appear to be talking about different things. Two major topics of concern have been evidenced.

One group of researchers has been concerned with the role of interpersonal communication in providing people with information about events initially reported in the mass media. They have concluded that such conversations are generally not important in relaying information (at least initial information) about most news events. The mass media are most important in this function, they contend.

Another group of social scientists, including the authors of the two-step flow of information hypothesis and students of adoption and diffusion processes, have viewed interpersonal communication in a somewhat broader perspective. They have been concerned with the role of conversations in mediating the effects of messages originally conveyed through the mass media. They have been more concerned with the way receivers of mass communication convey to others their opinions and evaluations of what they encounter in the more

impersonal mass media. Their's is a focus upon a process of legitimizing the information conveyed through mass media into the social system of importance to the actors involved. They have been only secondarily concerned with the information relay function of conversations.

It is the position of the author that there is much to be learned from both approaches. A primary need at this point is to synthesize the varying viewpoints. A purpose of this thesis will be to attempt such a synthesis in the form of a series of hypotheses about the likelihood of occurrence of interpersonal communication about events originally appearing in the mass media; about who will talk with whom, for what purposes, and under what circumstances. First, however, a brief review of the major concepts and findings of those previously involved in the study of interpersonal communication will be presented.

Diffusion of News

Perhaps the earliest study of news dissemination or diffusion was Delbert Miller's (1945) investigation of the flow of information about the death of President Franklin D. Roosevelt. He reported that word of mouth was the most important initial source of information of this event. Nearly 85 percent of his subjects, students at Kent State University, first heard about the event through interpersonal sources. Each person who heard by word of mouth told, on the average,

one person who had not heard. In one hour, 90 percent of the population knew about the death.

Later studies of another dramatic news event - the assassination of President Kennedy - showed similar importance of word-of-mouth communication in conveying initial information about major news events (Hill and Bonjean, 1964, Greenberg, 1964a, and Spitzer and Spitzer, 1965).

Studies of less important events than the death of a President have not supported the importance of interpersonal communication in relaying information, however. Adams et al. (1969) estimate that since 1945, about 30 significant studies have dealt with single events, in a single community and with a varying but limited range of audience classification variables. The weight of evidence from the studies is that normally interpersonal communication does not function to spread initial awareness of new ideas and events through a social system. The mass media are usually more important in this function. A few examples of the specific findings will suffice.

Larsen and Hill (1954), studied the diffusion of news among two groups with marked differences in socio-economic status in Seattle about the death of Senator Taft. They found mass media to be more important in the diffusion of the news for both groups.

Danielson (1956) studied the impact in Palo Alto, California, of Eisenhower's decision to run for a second

presidential term. He reported radio as being the most important source of initial information. Allen and Colfax (1968) made a similar study in Willimantic, Connecticut, of President Johnson's decision not to seek a second term. Their results were similar. Mass media was much more important than interpersonal communication in conveying initial information about this announcement.

Budd and others (1966) made simultaneous studies in Iowa City, Iowa, and East Lansing, Michigan, of the diffusion of news about three events: the Walter Jenkins case, the downfall of Khrushchev and the Chinese atomic bomb. They reported mass media as being the most important source of initial information about all three events.

In 1964, Greenberg (1964b) compared the findings of studies about the diffusion of news for 18 events which ranged in news value from President Kennedy's assassination to the "result of a vote on building a student union at a nearby state college". He found that, except for Kennedy's death, mass media was more important as a source of information for the news events.

One of the most significant studies of the role of interpersonal communication in news diffusion was that reported by Deutschmann and Danielson (1960). They studied the diffusion of news in Lansing, Michigan, about President Eisenhower's light stroke. News diffusion about the

launching of Explorer I satellite was studied in three communities: Lansing, Madison, Wisconsin, and Palo Alto, California. The diffusion of news about Alaskan statehood was studied in Lansing and Madison.

Similar patterns of diffusion were found for all three events in all communities. Television was the most important first source of information with about 36 percent of the respondents learning about the events that way. Radio was next most important, providing initial information for about 36 percent of the sample. Newspapers provided initial information to about 23 percent and interpersonal communication was reported as the first source of information by about 15 percent of the respondents. Newspapers were an important source of supplementary information after respondents had initially heard about the news events. And even though interpersonal communication did not provide initial information about the events, a majority of the respondents (68 percent) reported that they had later discussed the events with someone.

These findings led them to the following conclusions regarding the two-stage flow of information:

1. Initial mass media on important events goes directly to people on the whole and is not relayed to any great extent.

2. People talk about important news they have learned from the media.

3. At this stage, opinion leaders who have more information, may do some relaying of information. But this is a supplementary relaying.

> When the subject comes up, the informed leader contributes the additional information he has on it - adding, subtracting, correcting, confirming, etc., (Deutschmann and Danielson, 1960, p. 355).

Most of the studies we have reviewed agree with Deutschmann and Danielson's first conclusion. Mass media is generally more important in providing initial information about events. However, there do appear to be exceptions. One exception is when the news event is of exceedingly high news value[1], such as news of the assassination of a President. In such cases, the inherent time limitations in sending and receiving messages through the mass media are overcome through word-of-mouth communication (Miller, 1945).

Bostian (1970) suggests that interpersonal communication also assumes an important information relay function when the event is of such low news value that it is virtually ignored by the mass media. Thus, it might be an important source for informing people of developments in interest areas too specialized to be reported in depth by the mass media. The author has observed the operation of a highly developed interpersonal communication network among Colombian students at Iowa State University. Little information about

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[1]Most basic journalism texts discuss the "news value" of an event as depending upon such characteristics as timeliness, proximity, prominence of the people involved, human interest, and the number of people affected by the event (significance or importance). For one discussion of news value, see Schwartz (1966).

happenings in Colombia is available to these students through the local mass media. Thus, these students use word-of-mouth communication to share information they have gathered from diverse sources. One student monitors shortwave news broadcasts from Colombia and reports to others what he has heard; another receives a copy of a Colombian newspaper and tells others what he has read; all share with others reports they receive in letters from home.

The importance of interpersonal communication in relaying information may also be controlled by the general availability of mass media. There are many areas of the world, especially rural areas, where people have little access to the mass media (Axinn and Axinn, 1969; Bostian, 1970). In these cases, interpersonal communication would be expected to perform a significant relay function about events of general interest.

It should also be noted that the findings of the diffusion of news do not completely exclude interpersonal communication as a means of creating awareness of events for some people. The findings are that it is simply not the most frequent way people learn about most news events. For example, Deutschmann and Danielson found that 15 percent of their respondents first learned of the events studied by word of mouth. And the findings do not negate the overall importance of interpersonal communication in mediating

the effects of mass communicated messages. Interpersonal communication may still be important in providing evaluations of messages conveyed through the mass media.

Personal Influence

As mentioned in the previous chapter, the most widely known formulation of the social relationships theory of communication effect is Katz and Lazarsfeld's (1955) "two-step flow of communication" hypothesis. They contend that information and opinions flow from the mass media to opinion leaders and from them to the less active portions of the audience. Although as several authors have noted (Trodahl, 1966; Bostian, 1970; Allen, 1969), it was never quite clear precisely what Katz and Lazarsfeld meant by the term "information", certain aspects of the theory do appear to conflict with the findings obtained in the study of diffusion of news events. And a number of extentions and modifications of the hypothesis have been suggested by other authors.

The Katz and Lazarsfeld hypothesis results from several studies conducted by Lazarsfeld and his associates at Columbia University over a considerable period of time. The initial study in which the effects of interpersonal communication were noted was the 1940 study of the presidential campaign in Erie County (Lazarsfeld et al., 1948). In this study, they found that people seemed more prone to changing their

minds during the course of the campaign as a result of talking to others than by what they received directly from the mass media.

The findings of the Erie County study had been unanticipated, but appeared important enough to warrant further test. The most extensive of these further tests by the Columbia University group was a study of the decision-making patterns of women in a midwestern city (Katz and Lazarsfeld, 1955). Decision-making regarding four issues was investigated: marketing, movies, fashions and politics.

Katz (1957) has reported that three distinct findings seem to have been involved in the 1940 presidential campaign. Analyzing four studies made at the Bureau of Applied Social Science Research of Columbia University, he presents evidence supporting these three generalizations about the two-step flow of communication. These are: 1) the impact of personal influence, which holds that interpersonal relations are more effective than mass media in influencing the decision making of the people. 2) The flow of personal influence, which refers to the fact that there are some people in the community or in the group, who are more influential than others. These are the opinion leaders. They are said to be similar to the people over whom they have influence and that they are found in all levels of the society. And 3), the relationship between opinion leaders and the mass media, which refers to

the fact that opinion leaders are more exposed to the mass media than their followers. So the opinion leader function as passing on information to the rest of the people. Katz concludes that interpersonal relations are 1) channels of information, 2) sources of social pressure, and 3) sources of social support. Each of these functions relates interpersonal relations to decision making in some way or another.

Most of the criticisms of the Katz and Lazarsfeld hypothesis have centered around the channels of information notion. Actually, Katz and Lazarsfeld never investigated this particular point. Rather, they established that opinion leaders generally used more sources of mass media and inferred from this that they must transfer this information.

The weight of evidence from studies of the adoption and diffusion of agricultural technology supports the notion that opinion leaders have more information about the technology and are exposed to more mass media messages (Beal and Bohlen, 1957; Rogers, 1961). However, this same research shows that talking with friends and neighbors about new ideas occurs most often when the actor is evaluating whether or not he should try the idea. The research shows that most farmers talk to others before they adopt. However, they are more likely to have learned about the new idea and to have gotten basic information about it from the mass media or through some personal professional source.

The findings of adoption diffusion research, coupled with the findings of studies of diffusion of specific news events, suggest that the Deutschmann-Danielson hypothesis is a more satisfactory explanation of the role of interpersonal communication in mass mediated events. In most instances, people are likely to get initial information about new ideas from the mass media, they then use interpersonal communication to pass on to (or receive from) others evaluations of this content. Interpersonal communication plays a role in mediating the effects of mass communicated messages, but this role is more likely to be evaluational than informational.

Other Reformulations of the Two-Step Flow Hypothesis

Other authors have criticized as being too narrow, both those authors who have stressed the informational aspects of interpersonal communication and those who have stressed the influence and opinion leadership aspects.

Advice seeking

Troldahl (1966) has sought to reformulate the basic Katz and Lazarsfeld hypothesis by suggesting a "two-cycle flow of communication" and by suggesting that advice seeking occurs more frequently than do attempts to influence. His model hypothesizes a "one-step flow of information and a two-step flow of influence on beliefs, attitudes and

behavior". Quoting directly from Troldahl's report, the basic hypotheses of the model are:

1) Among opinion leaders and followers, exposure to mediated communication alone will induce awareness of message content.

2) Among opinion leaders, exposure to mediated communication alone will induce belief change. (This is not expected for the followers.)

3) Followers whose present beliefs are inconsistent with observations and beliefs in a message are induced by exposure to mediated communication to ask for advice on the message topic. (This also holds for opinion leaders when they are performing in their role as followers.)

4) Opinion leaders who seek advice talk to "professional intermediaries" more frequently than followers do.

5) Opinion leaders seek advice from intimates less often than followers.

6) Opinion leaders and followers who ask for advice about the message topic after being exposed to mediated communication will exhibit more belief change than persons who do not ask for advice (Troldahl, 1966, p.

Although Troldahl found little support for his hypothesis among his own data, the propositions are intriguing. The emphasis he places upon advice seeking, rather than leaving the impression that opinion leaders initiate attempts to influence others, probably is more realistic than earlier conceptualizations.

Social validation

Yarbrough and Klonglan (1970b) have suggested that one purpose people try to serve in their interpersonal

communication about a mass mediated event is to obtain social validation for a proposed response to the message. They state:

> "A more important consequence (than imparting information or changing opinions) of such conversations, however, may be the influence it has on the person who initiates the conversation. Our responses to mass media are usually mediated by our evaluations of what others will think of our actions. Research indicates that we especially value opinions of those persons with whom we frequently interact - our close friends co-workers, family members. Generally, we value these associations much more than we value the sender, the content or the potential consequences of a mass media message. For this reason, before we arrive at a firm response to a mass media message, we make "trial" responses in conversations with members of referent groups. If the response of the other is favorable (or at least not negative), we have evidence that our tentative response to the mass media is legitimate. In short, we hypothesize that in most interpersonal communication, we talk to others to convince ourselves." (Yarbrough and Klonglan, 1970b, p. 291.)

Although they may have overstated the frequency with which the behavior occurs, the social validation notion appears to be one useful way of viewing the purposes of interpersonal communication.

Opinion/information exchange

The conceptualizations of interpersonal communication discussed to date have tended to view the behavior as instrumental activity. That is, people engage in the activity because in and of itself it serves some end in view. They attempt to influence the opinions and behaviors of others, they seek advice, or they attempt to obtain social validation

for their tentative responses to a mass mediated message.

To the author, this is an overstructured view of human behavior. People may talk to others for less obvious reasons. People talk to others to pass the time of day, to be friendly, to maintain their social relations, or to express their own opinion without any intent of influencing the other person. That actual influencing may take place is beside the point. The purpose of the conversation was not to change the behavior. Parsons and others (1961) have referred to such non-instrumental activity as "expressive" or "consummatory" behavior.

We believe that many of the conversations which people initiate with others about what they encounter in the mass media are initiated for such expressive reasons.

General Hypotheses

From the preceding review of literature and from logical constructions, the author has developed a series of hypotheses relating to the likelihood that interpersonal communication will occur, with whom it will occur, for what purposes, and under what conditions it will occur in a given communication event.

The hypotheses proceed from the general proposition (well supported by the literature reviewed) that one response some people make to a mass mediated communication event is

to talk to others about what they have received. The extent of the conversations, who becomes involved, for what reasons they become involved and the consequences of their talking varies with (1) the nature of the mass-mediated message, (2) the situation wherein the mass mediated event occurs, and (3) the characteristics which actors (potential receivers and conversers) bring to the communication event.

Extent of conversations (likelihood of occurrence)

G.H.1. The liklihood that interpersonal communication will be generated by a mass communication event varies with (1) the news value of that event, (2) the adequacy of the mass media system to report the event, and (3) the potential importance of the news event to the actors involved.

General hypothesis 1 is based upon the general notion that interpersonal communication will function to fill the gaps in the communicative system left by the mass media. The first part of this hypothesis is drawn directly from the findings of studies of the diffusion of news events. One would expect interpersonal communication to be most likely to occur where the event is of either extremely high news value, or is of such low news value as to be ignored by the mass media. The second part of the hypothesis is drawn from Bostian's (1970) speculation. It appears to be a logical extension of the findings of news diffusion. Although little emphasis has been placed on the "personal importance" aspect of the hypothesis in past research, studies of communication response in

general indicate that we are most responsive to those things which are in our own self interest.

Who will converse

G.H.2. In interpersonal communication generated by mass mediated events, conversation partners will be limited almost exclusively to the actor's established primary groups.

G.H.3. Among the primary groupings, conversation will occur most frequently in those groups most directly affected by the message.

General hypothesis 2 simply attempts to express the notion that interpersonal communication about what is encountered in the mass media occurs during the course of normal social interaction. We generally don't seek out people to talk about such subjects. The available research strongly supports this hypothesis.

The third hypothesis is an extension of the principle of self interest. Although we don't necessarily seek out people to talk with about specific mass communication messages, we do select what part of the content we have encountered in mass media we will mention when we do talk. We will attempt to talk about things which we think are relevant to their and our interest.

When interpersonal communication will occur

G.H.4. Unless an event is of exceedingly high news value, or is of such extremely low news value as to be ignored by the mass media, or mass media systems are generally absent, the

> individual is likely to have heard about the news event through another source before talking to others about it.

This hypothesis is drawn directly from the findings of studies of news diffusion, especially the findings of Deutschmann and Danielson (1960).

Content of the conversations

The literature on interpersonal communication gives few guides as to what, specifically, one might expect from conversations generated by a given mass mediated event. On logical grounds, one might posit the rather vague general proposition that the content will be related to what respondents are asked to do with the information conveyed through the mass media. However, this is far from the specific level needed for theory, and even further from a testable level. The approach of this thesis will be to attempt to describe the content of communications generated in the specific communication event studied. The development of a priori hypotheses about such content is left for other researchers.

Purpose of the conversations

The review of literature has led the author to the conclusion that the actors involved may have any one (or combination) of a number of purposes when they talk to others about something they have encountered in a mass

mediated communication event. At least four purpose-types have been identified:

1. Attempts to influence the other. This is the traditional assumption of opinion leadership research. A person encounters something in the mass media, makes his own response to it and attempts to convince others to accept his point of view.

2. Attempts to share opinions and/or information without an obvious attempt to change the behavior of another. Conversations with this purpose include those where people talk simply to be friendly or to maintain their social relations. It also includes those where the actor simply wishes to assert his own feelings on a subject. He may care little whether or not his opinion influences the other person. We have also included in this category, those instances where people pass on to others basic information about what they have encountered in the media. They do not color this information with their own opinions.

3. Advice seeking. In these conversations, the focal actor attempts to obtain from the other information and opinions on how he should respond to a message he has encountered in mass media.

4. Social validation. In this case, the actor has already decided upon a tentative response to the mass media message, but he wishes to learn how others will accept his

response. Thus, he discusses the problem and his tentative course of action with a member of his reference groups.

When we view a conversation from the viewpoint of a particular actor (as will be done in this thesis), the four basic types of purpose can be elaborated into nine types. For two of the purposes, attempts to influence and opinion/information sharing, either or both partners may be active and either or both may express positive or negative evaluations of the topic being discussed. In addition, in the opinion/information sharing type behavior, it is possible for conversers to be completely neutral regarding the topic being discussed.

For the other two types of purpose, advice seeking and attempts at social validation, we are not concerned with the evaluations which conversation partners make of the subject being discussed. However, we are concerned with which of the partners is active - the respondent, the other, or both.

Thus, when viewed from the vantage point of one of the actors, a conversation may serve one or more of nine purposes:

1. An attempt to influence the other positively about the topic.
2. An attempt to influence the other negatively about the topic.
3. An attempt to exchange positive opinions and/or information about the topic.
4. An attempt to exchange negative opinions and/or

information about the topic.

5. An attempt to share neutral information.

6. An attempt to seek the other's advice about the topic.

7. The respondent's advice is sought by the other.

8. An attempt to seek social validation from the other on a tentative response to the topic.

9. The respondent's social validation is sought by the other.

At present, we have no basis for hypothesizing which of these purpose-types of conversations might occur most frequently in a given communication event. However, hypotheses about the characteristics of persons who would engage in each type of conversation, and the consequences of each type of behavior, have been developed.

G.H.5. A person's engaging in interpersonal communication of each of the nine designated purpose-types will be a function of his dispositions toward the issue being communicated and his immediate personality and social needs.

G.H.6. Except where the respondent takes a negative position on the topic being communicated, the consequence of his engaging in interpersonal communication about it will be to make him respond more favorably to the total communication event. In cases where he does take a negative stand, his attention to the total event will be higher, but his acceptance will be lower.

More specific sub-hypotheses of the nature of these relationships are outlined in Table 1. It is hypothesized that those who attempt to influence others and those who merely

wish to express their opinion will be alike in that they will both be highly knowledgeable about the subject and will be either highly favorable or unfavorable toward the subject (in the direction of their expressed opinion). They will differ primarily in their personality needs. The person who attempts to influence another on a specific topic will be found to have a rather deeply ingrained need to influence others in a wide variety of matters. They will have a general need to dominate; a need for power.

Those who seek the advice of another person, or those who attempt to obtain social validation for their proposed action will differ from the influencers and opinion sharers. They will be like each other in that they will have only average knowledge about the subject, will be highly favorable toward it, and will be in the decision-making process on innovations related to the subject. They will differ primarily in their personality needs. The advice seeker will have a low tolerance for indecision on nearly all subjects. He will feel compelled after receiving a message, to decide, either positively or negatively, on a response, He talks to others to help speed up the process of arriving at the decision. The person who seeks social validation, on the other hand, may be able to tolerate indecision, but will display a general trait of a high need for social approval.

Those whose advice or social validation is sought, will

of conversation[a]				
Positive opinion/info sharing	Negative opinion/info sharing	Neutral information sharing	Seek social validation	Social validation is sought
Knowledge-able Favorable	Knowledge-able Unfavorable	Knowledge-able Unfavor-able	Average knowl-edge Favorable In decision-making stages	Knowledge-able Neutral
Need to assert self	Need to assert self	Need to maintain social relations	Need for social ap-proval	?
+ Attend + Adopt	+ Attend + Reject	+ Attend + Adopt	+ Attend + Adopt	+ Attend + Adopt

be knowledgeable about the issue, but will be neutral toward the issue. We reason that people will not seek the opinions of those they know to be biased. We can make no hypothesis about the personality and social needs of those persons whose advice or social validation is sought.

In all cases, except those where the actor takes a negative stand toward the issue, a consequence of talking to others will be to respond more favorably toward the issue being communicated in the mass media.

CHAPTER 3: RESEARCH METHODOLOGY

This thesis is based upon secondary analysis of data collected to measure the impact of the Home Fallout Protection Survey (HFPS) in Des Moines, Iowa. The original study was conducted under the direction of Drs. George M. Beal, Joe M. Bohlen, Gerald E. Klongan and Paul Yarbrough, under Iowa Agricultural and Home Economics Experiment Station project 1529. Their findings are reported in Rural Sociology Report Nos. 85A and 85B (Yarbrough and Klonglan, 1970). Most of the fundings for the original study was provided by a contract between Iowa State University and the Office of Civil Defense.

The HFPS study in Des Moines is a part of an extensive research effort undertaken by Iowa State University in order to better understand the process by which individuals and families make their decisions on whether or not they would be likely to use civil defense innovations. According to the Office of Civil Defense, the HFPS program had as its purpose to obtain from each householder (by means of a mail questionnaire or by personal visit of an enumerator) information on the fallout protection characteristics of the building in which he lives. After computing and printing out the protection factor, according to the data written in the questionnaire, the Office of Civil Defense informed the householder of the protection offered by his home and

the ways he could improve the protection for his family.

Because this data was not collected for the purpose of this thesis, a number of limitations are introduced. Thus, only a part of the hypotheses outlined in the previous chapter can be tested. Other limitations will be discussed later in this chapter.

In this chapter, the communication event studied, the study design, sampling and methods of data collection will be described. The operationalization of the concepts developed and the empirical hypothesis will also be discussed.

The Communication Event Studied

The Home Fallout Protection Survey was constituted of two interdependent communication inputs. We label these the "questionnaire phase" and the "return material phase". The first communication input was a questionnaire mailed to homeowners in Des Moines and its suburb, West Des Moines, during April 1960. The questionnaires provided the Office of Civil Defense with the information on the fallout protection characteristics of the building in which the householder lives. Two follow-up questionnaires were mailed to those who did not answer the initial inquiries.

Enumerators obtained the same information in other towns and open country areas of the county.

The program was given limited publicity through mass media at its beginning. This included reports of a

Governor's press conference before radio, newspaper and television reporters announcing the program.

Approximately 85 percent of the householders in Polk County returned questionnaires with the data needed to compute the protection factor of the home. These data provided Civil Defense with a basis to make recommendations to the householders about the way they could improve their fallout protection, in case they needed it. Data on the protection factor calculations and recommendations were sent to householders. This was called the "return material" phase of the HFPS program.

Not all persons received the same messages during the return material phase. The return material can be divided into two categories:

1) Material for householders who were living in buildings without basements or with four or more housing units. They were advised to go over public fallout shelters and given a copy of the OCD publication, "Personal and Family Survival".
2) Material for householders who were living in buildings of no more than three housing units which have a basement. They were given a copy of the OCD publication, "Fallout Protection for Homes with Basements".

The communication inputs, and their functions within a model of receivers dispositions and interpretation and acceptance responses are diagrammed in Figure 1. The model includes four major concepts:

1) Communication inputs, or the messages prepared by change agents and communicators and sent to target audience. This includes the overall communication strategy as well as the physical information inputs such as booklets, brochures, news releases, etc.
2) Receiver dispositions, that is, the knowledge and attitudes receivers have about civil defense before the message is sent to them; the prior civil actions they have taken; their social status and other situational factors.
3) Interpretative responses. This includes the level of attention the receiver gives to the message input, his comprehension of the meaning of the message, and any related communication behavior he may engage in including talking to others about HFPS and hearing about HFPS, through the mass media.
4) Acceptance responses. This includes the changes and/or reinforcements of the receiver's

civil defense knowledge, attitudes and overt action.

Study Design

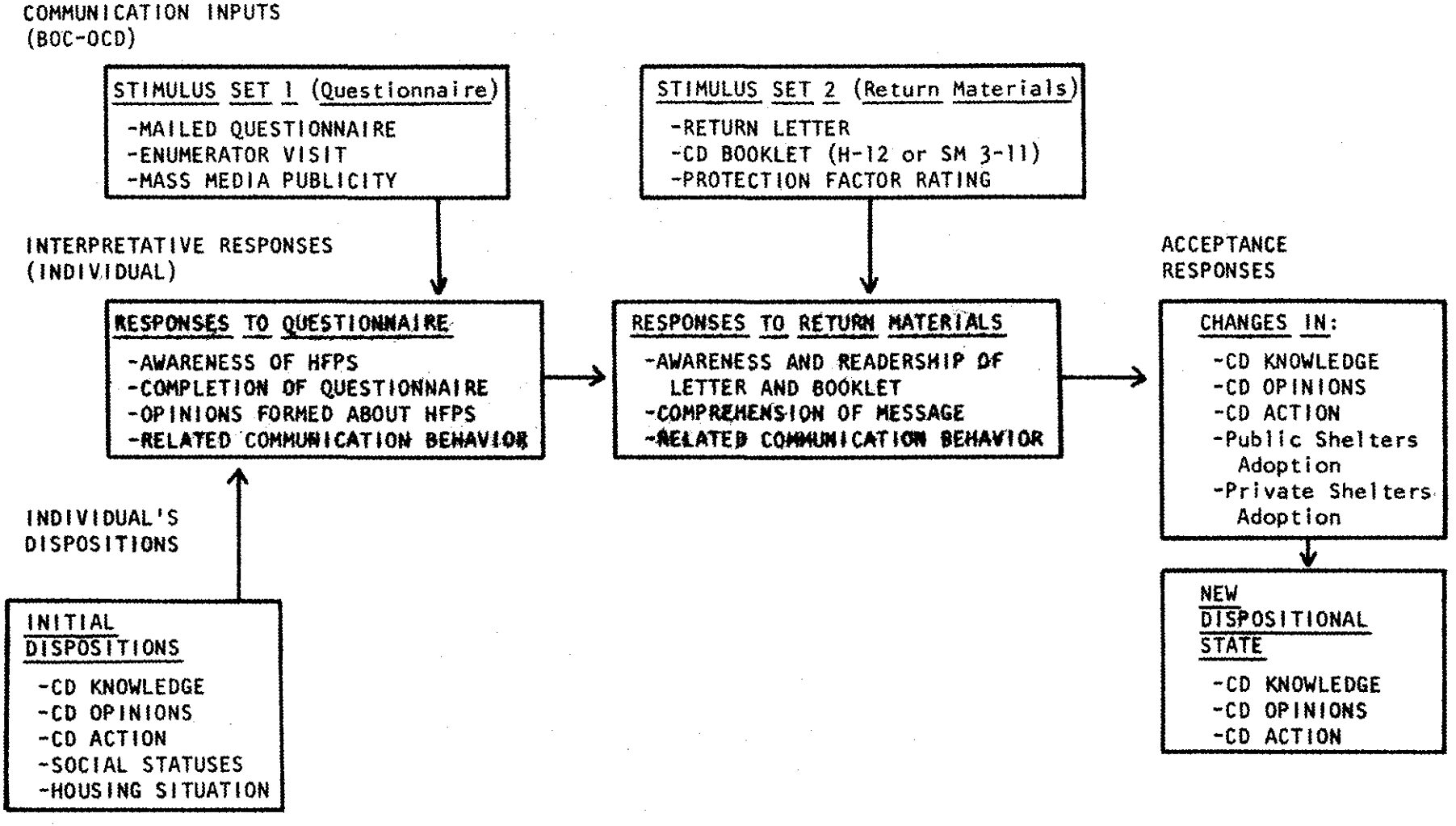
The Bureau of Census conducted the Home Fallout Protection Survey in Iowa during the months of April through August, 1967. Iowa State University collected the data for a "before" study of the impact of this survey in the city of Des Moines and in Polk County, Iowa, during February and March, 1967. An "after" study was conducted in September and October, 1967. Professional interviewers obtained the data in a personal interview at the respondent's home.

Sampling

In the original study, two random samples of adults were drawn using area sampling techniques. In the first sample, interviews were completed before HFPS with 435 individuals representing a cross-section of adults residing within Polk County. A total of 308 of these persons interviewed before HFPS were reinterviewed in the "after HFPS" study. A second random sample of 222 persons was drawn and interviewed after HFPS.

Only the panel data (N = 308) is used in this thesis. These data provide estimates of the extent to which people talked to others about the civil defense messages and what these conversations were about. They provide data from which

Figure 1. A model of an individual's response to HFPS. Interpretative response stages are shaded.


COMMUNICATION INPUTS
(BOC-OCD)
STIMULUS SET 1 (Questionnaire)
-MAILED QUESTIONNAIRE
-ENUMERATOR VISIT
-MASS MEDIA PUBLICITY
STIMULUS SET 2 (Return Materials)
-RETURN LETTER
-CD BOOKLET (H-12 or SM 3-11)
-PROTECTION FACTOR RATING
INTERPRETATIVE RESPONSES
(INDIVIDUAL)
RESPONSES TO QUESTIONNAIRE
-AWARENESS OF HFPS
-COMPLETION OF QUESTIONNAIRE
-OPINIONS FORMED ABOUT HFPS
-RELATED COMMUNICATION BEHAVIOR
RESPONSES TO RETURN MATERIALS
-AWARENESS AND READERSHIP OF LETTER AND BOOKLET
-COMPREHENSION OF MESSAGE
-RELATED COMMUNICATION BEHAVIOR
ACCEPTANCE RESPONSES
CHANGES IN:
-CD KNOWLEDGE
-CD OPINIONS
-CD ACTION
-Public Shelters Adoption
-Private Shelters Adoption
NEW DISPOSITIONAL STATE
-CD KNOWLEDGE
-CD OPINIONS
-CD ACTION
INDIVIDUAL'S DISPOSITIONS
INITIAL DISPOSITIONS
-CD KNOWLEDGE
-CD OPINIONS
-CD ACTION
-SOCIAL STATUSES
-HOUSING SITUATION

one can establish the relationship between this interpersonal communication behavior and dispositional factors. The panel data also provide a means for determining how the individuals change as a result of engaging in this face-to-face communication.

Operationalization of Concepts

The basic concepts to be used in this thesis were defined at an abstract level in the conceptual framework chapter. General level hypotheses about the type of behavior expected and factors leading to this behavior were also outlined in that chapter. The task now is to define these concepts and hypotheses at the empirical level in order that they may be subjected to empirical test.

The focal behavior - interpersonal communication about HFPS

Extent of interpersonal communication The following general hypothesis has been stated about the extent of interpersonal communication:

> G.H.1. The likelihood that interpersonal communication will be generated by a mass communication event varies with (1) the news value of that event, (2) the adequacy of the mass media system to report the event, and (3) the potential importance of the news event to the actors involved.

In the case of the Home Fallout Protection Survey, the first two of these general factors would lead to a hypothesis of quite low levels of interpersonal communication about the program. The third condition, however, would lead to a

hypothesis of a relatively high level of interpersonal communication about the program.

One indicator of the news value of an event might be the "play" professional newsmen give the event in their news columns. From the news coverage given the HFPS program in Des Moines, we conclude that editors in the several mass media there judged the program to be of moderate (but transient) interest to their readers. All media carried stories of the initiation of the program, giving the story moderate "play" in their news columns and time space. The media also carried shorter stories reporting the progress of questionnaire return. Thus, we have concluded that the program was of low to moderate news value. Since the general hypothesis was that people are more likely to talk about events of extremely low or extremely high news value, we would hypothesize that, based on the news value of the event alone, people would likely talk very little about HFPS.

The mass media in Des Moines would appear adequate to cover an event such as HFPS. In fact, Yarbrough[1] contends that during the decade of the 1960's, mass media coverage reflected rather accurately the changing levels of public interest in the issue of civil defense. When the issue has been of high salience for large numbers of persons (e.g.,

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[1]Paul Yarbrough, Ames, Iowa. Private communication. June 1971.

during the Berlin and Cuban Crises) mass media coverage of civil defense related topics has been quite high. At other times during the 1960's, media coverage of, and general public interest in the issue has been quite low.

Thus, based solely on the adequacy of the mass media to cover such events as the Home Fallout Protection Survey, we would predict that relatively few persons would talk to others about the program.

However, HFPS had potentially high personal significance for the audience. They were being asked to provide the government with substantial information about their home. Some of the information could be considered sensitive. In addition, those persons living in the urban center were asked to complete the HFPS questionnaire themselves. This required 15 to 30 minutes of their time. The message returned to the household gave a personalized evaluation of the fallout protection capability of his residence. It also suggested steps he could take to improve this protection. Thus, on the basis of the potential personal importance of the news event, we would hypothesize a relatively high level of interpersonal communication about HFPS.

The different aspects of the hypothesis about the likelihood of occurrence of interpersonal cummunication have led to different predictions about what to expect in the case of HFPS. In this thesis, the assumption is made that the

effects are additive. Thus, any single factor could lead to the prediction of relatively high levels of attention regardless of what would be expected on the basis of other factors.

The available literature is not very adequate in providing precise estimates of the levels of interpersonal communication to expect under different circumstances. However, Yarbrough has concluded through the study of several communication programs of moderate consequence for the audience that about half as many persons will talk about a mass mediated message as are aware of it through any channel[1]. Since we judge HFPS to be of high personal consequence to the audience, we would predict that more than half of those aware of the program in any way will talk to others about it. Yarbrough and Klonglan (1970b) found that 72 percent of the panel members were aware of HFPS. Thus the hypothesis:

E.H.1. More than 36 percent of the panel will talk to others about the HFPS program.

To measure the extent of interpersonal communication raised about the Home Fallout Protection Survey, respondents were asked three questions about their conversation during the questionnaire phase. They are as follows.

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[1]Paul Yarbrough, Ames, Iowa. Private communication. June 1971.

Q. 8. In the process of becoming aware of the "Home Fallout Protection Survey", or after you became aware of the survey, did you talk with anyone, or did anyone talk with you, about the survey either in person or by phone? This might include your wife (husband), another member of your family, a relative, a neighbor, a friend, a business associate or someone such as the mayor, a city councilman or a civil defense director.

No ..(Ask 11).....-1
Yes...(Ask 9).....-2

Q. 9. We don't need the names of the persons you talked to about the "Home Fallout Protection Survey", but we would like to know the relation of these persons to you. So let's think of the people you talked with as Person 1, Person 2, and so on. Which of the categories on Card 29 best describes your relation to the persons with whom you talked?

1 = Member of my immediate family (husband, wife, son, daughter).

2 = Relative not a member of my immediate family (father, mother, aunt, uncle, cousin, etc.).

3 = Neighbor.

4 = Business associate.

5 = Friend who is neither a relative, neighbor nor business associate.

6 = Government official (mayor, city councilman, civil defense director, etc.).

Q.10a. On how many separate occasions did you discuss the Home Fallout Protection Survey with _____?

Three similar questions were asked about conversations occurring in the return material phase:

Q.27. After you received the letter and booklet, did you talk with anyone or did anyone talk with you about fallout shelter protection either in person or by phone? This might include your wife (husband), another member of your family, a relative, a neighbor, a friend, a

business associate or someone such as the mayor, a city councilman or a civil defense director.

No ..(Ask 30).....-1
Yes...(Ask 28 and 29).-2

Q.28. We don't need the names of the persons you talked to about the "Home Fallout Protection Survey", but we would like to know the relation of these persons to you. So let's think of the people you talked with as Person 1, Person 2, and so on. Which of the categories on Card __ best describes your relation to the persons with whom you talked?

1 = Member of my immediate family (husband, wife, son, daughter).

2 = Relative not a member of my immediate family (father, mother, aunt, uncle, cousin, etc.).

3 = Neighbor.

4 = Business associate.

5 = Friend who is neither a relative, neighbor nor business associate.

6 = Government official (mayor, city councilman, civil defense director, etc.).

Q.29a. On how many separate occasions did you discuss civil defense with _____ since you received the results of the Home Fallout Protection Survey from the Bureau of Census?

From these questions, we can develop a number of indexes such as: 1) the number of respondents talking (Q.8 and Q.27), 2) the number of conversation partners each conversing respondent had (Q.9 and Q.28), and 3) the number of separate occasions on which respondent talked to each conversation partner (Q.10a and Q.29a).

The first of these indices will be used in the test of

E.H.1. The others are included for descriptive purposes only.

Relation to the conversation partner Two general hypotheses were developed about who people are likely to talk with about what they encounter in the mass media:

G.H.2. In interpersonal communication generated by mass mediated events, conversation partners will be limited almost exclusively to the actor's established primary groups.

G.H.3. Among the primary groupings, conversations will occur most frequently in those groups most directly affected by the message.

Decision-making about civil defense topics has been shown to be almost exclusively the domain of the nuclear family - husband, wife and children (Klonglan et al., 1964, Greer and Winch, 1965). This family-centered nature of civil defense was accentuated in the HFPS program. In this case, the message was about the use families could make of their home in a nuclear emergency. Thus these following hypotheses:

E.H.2. Nearly all conversations about HFPS will occur with persons who are relatives, neighbors, business associates or friends of the respondent.

E.H.3. Conversations about HFPS will occur most frequently within the nuclear family.

Questions 9 and 28 also provide information on the specific persons to whom the respondent talked to. These were preclassified in the questionnaire showed as follows:

1 = Member of my immediate family (husband, wife, son, daughter).

2 = Relative not a member of my immediate family (father, mother, aunt, uncle, cousin, etc.).

3 = Neighbor.

4 = Business associate.

5 = Friend who is neither a relative, neighbor nor business associate.

6 = Government official (mayor, city councilman, civil defense director, etc.).

Data from this index can be used to test both empirical hypotheses, E.H.2 and E.H.3.

Primacy of interpersonal communication in the total communication event Past research has shown that interpersonal communication is more often used in deciding what to do about an event of which the individual is aware than it is in creating awareness of that event. Thus, the following general hypothesis has been stated:

G.H.4. Unless an event is of exceedingly high news value or of such extremely low news value as to be ignored by the mass media, or the mass media systems are generally absent, the individual is likely to have heard about the news event through another source before talking to others about it.

As discussed previously, the Home Fallout Protection Survey met none of these conditions. Thus, the following two empirical hypotheses were developed:

E.H.4. During the questionnaire phase, interpersonal communication is most likely to occur after the respondent has heard about the program from another source,

but before he has decided what to do about the questionnaire.

E.H.5. During the return materials phase, interpersonal communication is most likely to occur after the respondent has read the HFPS booklet, but before he has decided what to do about its recommendations.

To determine when each conversation occurred (in relation to the total communication program), respondents were asked question 10g during the questionnaire phase and question 29g during the return material phase. Those questions are given as follows:

Q.10g. (Card 31) Which of the statements on Card 31 describe the time or times when your conversation(s) with _____ took place? (NOTE: IF TALKED MORE THAN ONCE WITH A GIVEN PERSON, GET TIME FOR EACH CONVERSATION, BUT NOTE THAT ALL COULD TAKE PLACE WITHIN ONE OF THE DESIGNATED TIME PERIODS.)

Before hearing from another source.....-1

After heard about from another source, but before completing questionnaire.....-2

After completing questionnaire.....-3

Q.29g. (Card 38) Which of the statements on Card 38 describe the time or times when your conversation(s) with _____ took place? (NOTE: IF TALKED MORE THAN ONCE WITH A GIVEN PERSON, GET TIME FOR EACH CONVERSATION, BUT NOTE THAT ALL COULD TAKE PLACE WITHIN ONE OF THE DESIGNATED TIME PERIODS.)

Before reading the information returned.....-1

After reading the information but before deciding

what to do about it.....-2

After deciding what to do about the information returned.....-3

Responses to these questions can be used directly to test E.H.4 and E.H.5.

Topics of conversation The literature on interpersonal communication gives few leads on specifically what one might expect people to talk about in conversations generated by a mass mediated communication event. On logical grounds, one could posit the rather vague general proposition that the content will largely be related to what respondents are asked to do with the information conveyed through the mass media. However, this is far from the specific level of proposition needed for testing.

In this thesis, an attempt will be made to describe the content of conversations occurring during the questionnaire and return materials phases of HFPS. But no a priori prediction will be made of what these conversations are likely to be about.

By analyzing the content of responses made to four questions which probed in depth about the nature of the conversation, we were able to isolate several recurring topics in the conversations. The questions asked during the questionnaire phase were:

Q.10b. As you recall, what was the nature of this (these) conversation(s). (PROBE: Just mentioned that

questionnaire arrived or census-taker visited; ask what should do about questionnaire; discussed in detail, etc.) (NOTE TO INTERVIEWER: If respondent discussed survey with one person on more than one occasion, attempt to establish nature of conversation on each occasion.)

Q.10c. What did you say to the other person in this (these) conversation(s)? That is, what was your position or the points you tried to make?

Q.10d. What did the other person say? That is, what was his position?

Q.10e. What conclusions did you and the other person reach? Was there agreement or disagreement?

These questions are similar to those asked for conversations during the return material phase, questions 29b, c, d, e. On the basis of these questions, the content of the conversations during either time period could be classed as follows:

1 = Told others that had received questionnaire or booklet.

2 = Discussed value of HFPS program.

3 = Discussed if questionnaire should be filled out and returned.

4 = Discussed how to fill out questionnaire.

5 = Discussed aspects of basement (other than fallout protection).

6 = Told others of own decision on what to do with questionnaire.

7 = Discussed protection provided by home.

8 = Discussed building or improvising home shelter.

9 = Discussed what would do in case of nuclear attack (other than home shelter preparation).

10 = Discussed civil defense and nuclear warfare in general.

Ascribed influence of conversation For each conversation reported, the respondent was asked to assess the influence which it had upon his attitudes and/or behavior. For conversations occurring during the questionnaire phase, the question asked was:

Q.10f. What, if any, influence did your conversation with _____ have on the way you felt about the survey? Which of the statements on Card 30 best describes this influence?

Less Favorable.....-1
No Difference.....-2
More Favorable.....-3

For conversations occurring during the return material phase, the question asked was the same, but the response categories differed slightly:

Q.10f. What influence did your conversation with _____ have on the decisions you made about what to do about the information Bureau of Census returned to you? Which of the statements on Card 37 best describes this influence?

None.....-1
Some.....-2
Much.....-3

Data from these questions are included for descriptive purposes only. No hypothesis had been stated on how much influence respondents are expected to ascribe to the conversations.

Purposes of the conversation In the previous chapter, four basic types of purpose were delineated as being present

in conversations. For two of these purposes, attempts to influence and opinion/information sharing, either or both partners may be active and either or both may express positive or negative evaluations of the topic being discussed. In addition, in the opinion/information sharing type behavior it is also possible for respondents to be completely neutral regarding the subject being discussed.

For the other two types of purpose, advice seeking and attempts at social validation, we are not concerned with the evaluations which conversation partners make of the subject being discussed. However, we are concerned with which of the partners is active - the respondent, the other, or both.

Thus, when we view the purpose of an interpersonal communication from the viewpoint of only one of the actors involved, we may hypothesize that he will engage in the behavior to serve one or more of nine purposes:

1) An attempt to influence the other positively about the topic.
2) An attempt to influence the other negatively about the topic.
3) An attempt to exchange positive opinions and/or information about the topic.
4) An attempt to exchange negative opinions and/or information about the topic.
5) An attempt to share neutral information about the topic.
6) At attempt to seek the other's advice about the topic.
7) The respondent's advice is sought by the other.
8) An attempt to seek social validation from the other on a tentative response to the topic.
9) The respondent's social validation is sought by the other.

However, when we examine conversations as they occur, two viewpoints are present: that of our respondent and that of the other. Either or both may be active in the conversation and they may agree or disagree on evaluation of the topic. For this reason a total of 23 empirical types of conversation were possible in the study of interpersonal communication about the Home Fallout Protection Survey. It is possible to classify each conversation into one or more of these 23 types by content analyzing the responses made to the four questions probing into the details of each conversation. (These questions were outlined on pp. 44-46.) In the following paragraphs, we will outline the rationale for classifying conversations into each type of behavior. Table 2 presents an example of a response set to the four questions classes into each purpose category.

It should be noted, however, that that data have some rather severe limitations for this type analysis. For one thing, information was obtained from only one respondent in each conversation - our respondent. The information related to the other's answer is also given by the respondent. It is quite possible that most answers have been colored by the respondents. This "coloring" includes his own interpretation of the messages received by the other person and toward the original message sent by Office of Civil Defense. There is probably also bias in the respondent's

ability to recall another person initiating a conversation. Yarbrough and Klonglan (1970b) found that approximately 80 percent of the reported conversations appear to have been initiated by the respondent. Another serious limitation is that to classify conversations, we must infer the purpose for talking from the respondent's report of the conversation. A more satisfactory method would have been to ask the respondent directly why he talked to the other. Unfortunately, such questions were not asked.

As yet, we have no basis for hypothesizing which of the several purposes for conversing might occur most frequently in a given communication event. However, we have been able to develop hypotheses about the characteristics of persons (antecedent variables) who will engage in each of the types of behavior. And, we have hypothesized the effect of this behavior on their responses to the total communication event wherein the interpersonal communication occurs. These hypotheses will be discussed at the end of the chapter.

Attempts to influence behavior Influence was defined as one's intention to alter some pattern of behavior of any person or group of persons. So this category is related to the fact that many persons talk to others to change the direction of their behavior or the way they are thinking.

Conversations under this category include phrases such

as, "We ought to fill it out", "I wanted him to fill it out", "I insist you do this", "I want you to do this". Several sub-categories were drawn from this category, on the basis of who attempted to influence whom and in what direction. Thus, the respondent is active when he is the one trying to influence the other member of the conversation. He can try to influence the other positively or negatively toward civil defense. He is positive when he speaks pro civil defense and negative in the opposite case. The same criteria is applied to the other member of the conversation, so he can be active positively or negatively toward civil defense.

Under this category, it is possible to identify eight sub-categories. They are:

Positive influence attempt - respondent active This positive behavior of the respondent can be operationalized on the basis of his attempts to get the partner to fill out the questionnaire and send it in, or to encourage him to adopt fallout shelter. He wishes the partner to think that fallout shelters are an important thing to have and that he may trust the government. Sixty-nine conversations involving this type of behavior were reported.

Positive influence attempt - other active Here is included the initiative of the other member of the conversation to influence the respondent positively toward

civil defense. His positive behavior toward civil defense can be operationalized on the basis of his attempts to get the respondent to fill out and send back the questionnaire; also by encouraging him to read and consider the return material and adopt fallout shelters. The respondent is likely to say that he was forced to fill out the questionnaire, "she wanted me to do it", "she said I should fill it out", or "they said it is an important thing". Twenty cases of this type were reported.

Positive influence attempt - both active This category includes both the respondent's and the partner's attempt to encourage each other to fill out and send the questionnaire in, or to read and follow the instructions contained in the return material. Three cases were reported under this sub-category.

Influence attempt - both active, respondent positive and the other negative This sub-category includes the respondent trying to get the partner to fill out and send in the questionnaire, or to read the return material and adopt fallout shelters. At the same time, it includes the partner trying to convince the respondent not to fill out the questionnaire or not to send it in; he does not want the respondent to adopt fallout shelter. Or, he does not trust the government and wants to pass this feeling on to the respondent. The respondent is likely to say that he

was strongly for it and the partner was against it, or that he wanted to fill it out and the partner did not want him to, or that he asked the partner to follow the instructions in the return material and that the partner felt it was not important to do. We found five cases under this category.

Negative influence attempt - respondent active Under this sub-category the respondent tries to encourage the partner not to fill out the questionnaire or to send it in. He also tries to get the partner not to adopt fallout shelters or to convince the partner not to trust the civil defense plan for shelter. He is likely to say, "we do not need them", "this is nonsense", "you may not fill it out", "I don't believe in war". Only two cases of this type of behavior was reported.

Negative influence attempt - other active Here the partner tries to get the respondent not to fill out and send in the questionnaire. He also tries to convince the respondent not to adopt fallout shelters or not to care too much about the return material. Only one case of this type behavior was reported.

Negative influence attempt - both active In this case, both the partner and the respondent try to encourage each other not to fill out the questionnaire or send it in. They try to keep the other from adopting fallout shelters. They do not think it is important or they do

not trust the government. No cases were reported which fit this category.

Influence attempt - both active, respondent negative, other positive This category includes the respondent trying to convince the partner not to fill out and send in the questionnaire. Also, he does not feel fallout shelters are important and tries to encourage the partner not to trust the civil defense plan. At the same time, the partner tries to get the respondent to fill out the questionnaire and send it back. He also wants the respondent to adopt the shelter and trust the government. They are likely to make statements similar to those made by people performing negative and positive behavior toward civil defense. Two cases were reported under this category.

Opinion/information exchange This category includes conversations where partners exchange information or opinions about some mass mediated message, but make no obvious attempt to influence the behavior of the other. While some communication theorists (e.g., Berlo, 1960) argue that any message conveys an attempt to influence, the influence attempt included in a greeting as, "Hi, how are you?" is very different from the types of influence attempts considered in the previous section.

People need to communicate to maintain their social linkages. What they talk about under such circumstances

is often less important than the fact that they are talking. Also, many people appear to share information in a kind of "common surveillance of the environment" function. In other cases, people appear to want to talk simply to express their feelings on a subject. The catharsis of this expression appears more important than how the other responds to the speakers expressed position.

People engaging in opinion/information sharing about HFPS used such phrases as "I told him the questionnaire arrived", "I read the booklet", "I found them interesting", or "I think I can make a shelter by myself".

Nine sub-categories of opinion/information exchange were developed based on who was active - the respondent, the other, or both - and the position expressed toward civil defense - positive, negative or neutral.

Positive opinion/information exchange, respondent active Included here is the respondent talking positively to the partner about the questionnaire, the booklet or the instructions he received from the Office of Civil Defense. He uses phrases such as, "I filled out the questionnaire", "I read the booklet", "I found them interesting", "I am interested in reading the booklet or filling out the questionnaire", "we need a shelter", "the government really cares about us". Here the respondent is active because he is the one giving his opinion about civil defense.

Eighteen cases were reported und this sub-category.

Positive opinion/information exchange - other active This sub-category includes the other member of the conversation talking positively about the civil defense issue, while the respondent is passive. The respondent is likely to say that it was a good thing to do, that he had filled the questionnaire out, he had read the booklet, that he needed a shelter, that he would like to have money to build a shelter. Only two cases were reported here.

Positive opinion/information exchange - both active In this sub-category are included the respondent and the partner talking positively about civil defense issues. Fourteen cases were found under this sub-category.

A conflicting opinion/information exchange - both active, respondent positive, other negative This sub-category includes both the respondent and the other member of the conversation talking about civil defense. But the respondent talks positively about it and the partner talks negatively. The respondent is likely to say that he filled out the questionnaire or read the booklet, that he wants to build a shelter, that he needs a shelter, that fallout shelters are a good thing. But the partner says he would not go to any shelter, he doesn't need any shelter, doesn't find it necessary, he would not build any, does not feel he has money to make one, that he has not filled out the

questionnaire and does not intend to either. Only one case was reported in this sub-category.

Negative opinion/information exchange - respondent active Included here is the respondent talking negatively about civil defense. He is likely to say that he is not going to fill out the questionnaire or read the booklet, he does not feel shelters are important, he would not spend one nickel on that thing. Three cases were reported under this sub-category.

Negative opinion/information exchange - other active In this sub-category is included the other member of the conversation talking negatively about divil defense while the respondent is passive. Six cases were reported in this sub-category.

Negative opinion/information exchange - both active This sub-category includes the respondent and the other member each giving their negative opinions about civil defense and the HFPS program. Those opinions disagree with the goals and request of the Office of Civil Defense. They are likely to express their opinions in the same way made by the respondent and the partner in the last two sub-categories. Five cases were reported in this sub-category.

Conflicting opinion/information exchange - both active, respondent positive, other negative This sub-category includes those conversations where the

respondent gives his opinion against civil defense while the other is favorable toward it. The respondent is likely to say that he would not fill out the questionnaire or send it in, he would not read the booklet, he does not think he needs shelter, he doesn't feel they are important. But the other says he would fill out the questionnaire and would send it in, that shelters are an interesting thing, that he would build a shelter or would go to some shelter. No cases were reported in this category.

Neutral information exchange This sub-category includes the respondent and the partner talking about civil defense, but their opinions are neither positive nor negative toward it. They just say things such as "I got one questionnaire, did you get one?", "my neighbor has a good shelter", "I do not know exactly how to measure the home", "my basement is large", "my basement is short". Seventy-seven cases were reported in this sub-category.

Advice seeking This category includes those cases where one individual comes to another person looking for some information they feel they need. They go to others they perceive to have better knowledge on specific subject matter. People under this category are likely to say things such as, "Can you help me do this?", "Do you think I should do it?", "Can you tell me how to measure the basement?", "I asked for more information", "Can you do

this for me?".

Three sub-categories were identified under this category. They are:

Advice seeking - respondent active Here we included the respondent asking the partner to explain how to fill out the questionnaire, how to measure his basement, asking whether or not to fill out the questionnaire or send it in, or asking more information about civil defense. He is likely to say, "Can you help me measure the home?", "Can you help me fill out the questionnaire?", "Do you know how to fill it out?", "Tell me, should I do it?", "I asked for more information", "Tell me, is it an important thing?". Thirty-six cases in this sub-category were reported.

Advice seeking - other active This sub-category includes the partner asking the respondent how to fill out the questionnaire, how to measure the basement, asking about the importance of the shelters, or asking for more information about civil defense. Seventeen cases were reported of this type.

Advice seeking - both active This sub-category includes the respondent and his partner looking to each other for advice on how to fill out the questionnaire, how to measure the basement, or asking for more information about civil defense. They are likely to make statements similar to those made by the respondent and his partner in

the last two categories. Sixteen cases are reported in this category.

Social validation This category includes those situations in which people "talk to others to convince themselves". This means that there are some persons who must have the opinion of others before committing themselves to an overt act.

Social validation differs from advice seeking primarily in terms of where the actor is in the decision-making process. In advice seeking, the person seeking the other's opinion has not made a decision about how to respond to the mass mediated message, or he lacks specific information on how to go about making the response. When a person seeks social validation through interpersonal communication, he has already made a tentative decision on how he will respond to the mass mediated message. Before he makes this response, however, he needs to make sure it is socially acceptable with his peers.

Conversations in this category include such statements as, "What do you think about this? (questionnaire or booklet", "I would like to know what you did about it", "Are you going to fill out your questionnaire?", "What do you think about your results?" Three sub-categories are identified in this category. They are:

Social validation - respondent active

This sub-category includes the respondent trying to know

what the partner thinks about filling out the questionnaire or adopting shelter, before giving his own opinion. Sixteen cases were reported in this sub-category.

Social validation - other active This sub-category includes the partner trying to know what the respondent thinks about the questionnaire or about the shelters before committing himself to an overt action. Only one case was reported in this sub-category.

Social validation - both active Included here are cases where the respondent and the other member of the conversation each attempt to learn what the other thinks about the program before committing themselves to action. No cases were found of this type.

Antecedent variables

Measures of attitudinal, knowledge, and behavioral response to civil defense collected before occurrence of HFPS can be used to test our hypotheses about the kinds of conversations in which the respondent will engage. Data are not available to test the hypothesis generated about personality and social needs as antecedents of interpersonal communication behavior.

In the following paragraph sections, the methods used to measure each of these antecedent variables is briefly outlined. For a more complete discussion of questions asked and scoring procedures, the reader will be referred

Table 2. Examples of content of conversations classed into each purpose type

Respondent	Nature of the conversation	Respondent's position	Other's position	Conclusion reached
POSITIVE INFLUENCE ATTEMPT - RESPONDENT ACTIVE				
020	Told him to read it and where to put it and then later we talked about what to do. (P) We just talked of how mostly.	I felt with 7 children I should make our place safer.	He thought so too.	We'd bank up with the dirt and keep extra sand or dirt to cover windows.
POSITIVE INFLUENCE ATTEMPT - OTHER ACTIVE				
104	My daughter was concerned and encouraged our filling out the questionnaire.	I was interested in the HFPS but just kept putting it off.	My daughter INSISTED we get it filled out and sent in.	We were in agreement that it should be filled out and then sent in.
POSITIVE INFLUENCE ATTEMPT - BOTH ACTIVE				
745	We talked about getting it and filling it out.	I wanted to fill it out.	He wanted me to do it.	We filled it out and sent it back.

Table 2. (Continued)

Respondent number	Nature of the conversation	Respondent's position	Other's position	Conclusion reached
INFLUENCE ATTEMPT - BOTH ACTIVE, RESPONDENT POSITIVE AND OTHER NEGATIVE				
005	It was a pro and con conversation. We agreed a lot.	I was strong for it.	Against survey. She was feeling they were investigating an individual and should not be done.	None reached. Neither changed other's opinion.
NEGATIVE INFLUENCE ATTEMPT - RESPONDENT ACTIVE				
230	If we should build a shelter in our basement.	I don't believe we need it now. If the world situation stays as it is.	She agreed.	We would not build a shelter at this time. We don't see the need for it.
NEGATIVE INFLUENCE ATTEMPT - OTHER ACTIVE				
108	We discussed answer to the questions and stuff.	I said we should probably do something about it.	For one thing, he didn't think it was so important. Why be buried in your own basement?	He filled it out and sent it in. His answers were different than mine would have been. He wanted to get his opinion across.

Table 2. (Continued)

Respondent number	Nature of the conversation	Respondent's position	Other's position	Conclusion reached
NEGATIVE INFLUENCE ATTEMPT - BOTH ACTIVE				
Found no examples of this category.				
INFLUENCE ATTEMPT - BOTH ACTIVE, RESPONDENT NEGATIVE, OTHER POSITIVE				
049	We talked about if we'd do it and all the time we worked on it and then after we sent it in.	I said it wouldn't do any good. We'd go if we were supposed to.	That it might be a good idea even if it was hard to do.	We disliked the bother but did it anyhow. (P) The government tells us what to do and we do it.
POSITIVE SHARE INFORMATION - RESPONDENT ACTIVE				
001	Was how well protected our home would be.	I said it was safer than most of others.	She agreed.	We felt it safest in neighborhood and we'd make it even safer.
POSITIVE SHARE INFORMATION - OTHER ACTIVE				
293	Went over it together.	I though about the war.	She felt the PF was better than we thought.	What good a shelter would be.

Table 2. (Continued)

Respondent number	Nature of the conversation	Respondent's position	Other's position	Conclusion reached
POSITIVE SHARE INFORMATION - BOTH ACTIVE				
276	The cost of doing this. What would have to be done. Getting the basement fixed up.	I would like to be able to afford it.	He would like to afford it too.	Decide we couldn't afford it right now. Agreed on.
SHARE INFORMATION - BOTH ACTIVE, RESPONDENT POSITIVE, OTHER NEGATIVE				
402	Wondered if it was legitimate.	It was OK.	We might be all set up to be robbed.	We'd go ahead and do it - we just talked it together.
NEGATIVE SHARE INFORMATION - RESPONDENT ACTIVE				
127	Neighbor. The only thing mentioned was the fact it should have been sent to the landlord, because she probably wouldn't be living in the house any more.	I thought it was a bunch of nonsense because I think they should educate the people.	She felt that she wasn't too concerned.	I decided to fill mine out as it was the second one I'd received.

Table 2. (Continued)

Respondent number	Nature of the conversation	Respondent's position	Other's position	Conclusion reached
NEGATIVE SHARE INFORMATION - OTHER ACTIVE				
437	My father-in-law mentioned census had been to his home. I said she had been here also.	I didn't say too much more about it to him.	His comment was "I don't think any bomb falling in DM will bother me".	----------
NEGATIVE SHARE INFORMATION - BOTH RESPONDENT AND OTHER ACTIVE				
270	Improbable she would build one in her basement or outside.	Improbable I would build a shelter.	She would probably not build one.	Maybe we feel too safe. Would neither of us do anything now.
SHARE INFORMATION - BOTH ACTIVE, RESPONDENT NEGATIVE, OTHER POSITIVE				
Found no examples of this category.				
SHARE INFORMATION - NEUTRAL				
083	We just said we'd received the questionnaire.	I said I hadn't filled mine out but intended to.	She said she had filled hers out and had sent it in.	I said I was still planning to fill it out.

Table 2. (Continued)

Respondent number	Nature of the conversation	Respondent's position	Other's position	Conclusion reached
276	Just talked about what a person would do to keep occupied. What to do.	Play cards, talk, listen to the radio, play games.	Same mainly.	I think it could be done if we had to.
ADVICE SEEKING - RESPONDENT ACTIVE				
034	Asked her if she knew how and would help me.	I wanted her to help me with it.	Said it was too complicated.	She couldn't do either. Neither of us did it.
ADVICE SEEKING - OTHER ACTIVE				
027	They asked if they should send it in. Was it an invasion of their privacy?	I said it was for our own benefit.	Was it an invasion of privacy?	I stated it was OK. They said OK to them.
ADVICE SEEKING - BOTH ACTIVE				
524	We didn't have basement. What to do.	Would it do any good to go?	What are chances of survival?	Don't know whether or not wanted to be alive. Rather than have radiation eating you up.

Table 2. (Continued)

Respondent number	Nature of the conversation	Respondent's position	Other's position	Conclusion reached
SOCIAL VALIDATION - RESPONDENT ACTIVE				
001	I wanted to know what he thought.	I said how important do you think it is?	Real important.	Was of value but should be more personalized.
SOCIAL VALIDATION - OTHER ACTIVE				
173	Just asked if I'd done it yet.	Just was slow.	Asked me why I hadn't gotten it sent in.	I said I'd get at it and do it.
SOCIAL VALIDATION - BOTH ACTIVE				
Found no examples in this category.				

to the appropriate sections of the base report of the HFPS study (Yarbrough and Klonglan, 1970b) from which data for this thesis were drawn.

Variable X-1: attitude toward fallout shelters The goal of stimulating the construction of home fallout shelters and the use of existing public buildings as shelters in the United States, has been widely debated. Some persons have expressed their belief in the necessity of preparing fallout shelters, others think that they constitute only a "waste of time and money", that fallout shelters "increase the possibility of nuclear war".

The way people react to a message is conditioned by his previous experience. This previous experience of the people "becomes organized into enduring systems called attitudes" (Krech et al., 1962). Attitudes referred "to certain regularities of an individual's feeling, thoughts and predispositions to act toward some aspect of his environment" (Secord and Backman, 1964). Attitudes are very important in the process of becoming aware, comprehending or adopting a new idea. They are expected to condition the way people talk about a specific subject in the much same way he feels or thinks about that subject.

Respondents were also asked to express their favorableness toward seven statements regarding fallout shelters. The response scale on each item ranged from 0 to 16, with

the higher score indicating greatest favorability toward the notion of fallout shelters. The total score is a summation of an individual's response to each of these seven items. Scale analysis on four occasions indicates that the reliability coefficient (R_{tt}) of these seven items ranges between .77 and .78. For a complete listing of questions and scoring procedures, see Yarbrough and Klonglan (1970b, pp. 58-64).

Variable X-2: technical knowledge An individual's actions toward an idea are related to the knowledge he has about that idea or subject matter, so the HFPS behavior of the individual is likely to have a close relationship with his degree of knowledge about fallout, fallout protection, radiation, radiation decay, etc.

Technical knowledge was measured by asking respondents to assess the accuracy of 8 statements pertaining to such civil defense topics as the nature of fallout and radiation, and the means of protecting oneself from these adverse effects. One point was given for each correct answer, thus total scores could range from 0 to 8. The coefficient of reliability for this variable has ranged between .56 and .62. For a complete listing of the questions and scoring procedures, see Yarbrough and Klonglan (1970b, pp. 113-119).

Variable X-3: use of competent source of information The actions taken by an individual have relationship with

the information sources he has used. One way of assessing prior communication behavior is to investigate the level of technological competence of the sources used.

Generally speaking, radio, newspapers, television, and magazines convey messages at a low level of technological competence. This is because they downgrade and simplify the messages in order to make them understandable for more people. On the other hand, journal articles, books, and monographs written by an expert to be read by other experts in the same field have a high level of technological competence. They can be understood only by people with a specialized training. Those who used more competent sources of information would be able to understand and comprehend yet other messages from the same source.

To measure this behavior, we inventoried the sources each respondent used to obtain civil defense information. These sources were then weighted for their assumed technological competence (ranging from 1 for talking with friends to 5 for having personal communication with civil defense officials). An individual's total score is thus a summation of the sources he used times the competence rating of each source. Totals could range from 0 to 30. The questions used to inventory civil defense information source use, the assumptions behind each assigned level of technological competence, and the details of the indexing

procedure are elaborated in Yarbrough and Klonglan (1970b, pp. 127-136).

Variable X-4: adoption of public fallout shelters

Adoption is the actor's decision to accept an innovation. An innovation is any idea perceived as new by the actor. Fallout shelters are the innovation receiving most of the attention of the Office of Civil Defense. This office has been offering the people two types of fallout shelter; these are the public shelter and the home fallout shelter.

The adoption of an idea is the result of a series of decisions and actions. These series of decisions has been called the adoption process. The model of the adoption process begins with the assumption that at some point in time, all actors in the relevant social system are unaware of the innovation. Through exposure to a change, agent's messages about the innovation, or through information from the mass media, the individual becomes aware of the existence of the innovation. If he perceives the innovation to be of potential utility, he may become interested and would seek more information about it. Once he has obtained the information, he evaluates the innovation and makes a decision to try it or not. If the trial results are satisfying, the individual may decide to adopt the innovation and continue its use on a full scale. Another alternative which can follow the evaluation or trial is the rejection of the innovation.

Respondents were asked a series of seven questions which allowed us to classify them in terms of how far they were progressed in the process of adopting public shelters. The adoption stages respondents could achieve, and the scores assigned to each are 1 = unaware stage; 2 = aware only stage; 3 = information stage; 4 = evaluation stage; 5 = rejection stage; 6 = adoption stage. The questions asked and the filtering procedures and assumptions used to arrive at this stage classification are elaborated in Yarbrough and Klonglan (1970b, pp. 144-156).

Variable X-5: adoption of home fallout shelters Respondents can also be classified in terms of how far they have progressed in the process of adopting the alternate innovation, the use of home basements as fallout shelters.

The procedure for measuring the stage of the adoption process the respondent had achieved regarding the use of home basements as fallout shelters was similar to that used for public shelter adoption. For all of those persons who had a basement in their home, a series of 5 questions were asked which allowed us to classify each in one of the six stages of adoption ranging from unaware (1) to adoption (6). The questions asked and the filtering procedures used to arrive at this stage classification are elaborated in Yarbrough and Klonglan (1970b, pp. 163-168).

Consequences variables

Data from the after HFPS study also can be used to determine measures to be used in testing hypothesis concerning the consequences of engaging in each type of interpersonal communication behavior. Three consequence variables were measured:

Variable X-6: attention to questionnaire phase The design of the HFPS program may be thought of as constituting two independent communication messages, or stimulus set. The first stimulus set was that of the "questionnaire phase" of HFPS in which the Office of Civil Defense collected information (by means of mailed questionnaire or personal visit of the enumerator) on the fallout protection characteristics of the building in which the householder lived. The data so collected were used to compute the "protection factor" of the home and provide a basis for making recommendations to the householder about steps he might take to secure more adequate fallout protection. Data on "protection factor" calculations and recommendations were returned to the householder in what was termed the return material phase of the HFPS program.

One interpretative response which an individual can make to HFPS is to give attention to the questionnaire phase. His attention can range from being unaware of the program, to reading the questionnaire, to completing it

and returning it to the Bureau of Census.

From the responses individuals made to five questions probing in detail about the attention they and other members of their family gave to the HFPS questionnaire, it was possible to classify each into one of seven categories: 1 = unaware of the program; 2 = aware of program, but unaware it applied to his home; 3 = aware of program but no read or completed questionnaire; 4 = aware of program, read questionnaire, but not completed it; 5 = aware of program, not read questionnaire, but someone else in household completed it; 6 = aware of program, read questionnaire, but someone else in household completed it; and 7 = aware of program, read and personally completed the questionnaire.

The specific questions asked and the procedures for filtering the questions and constructing the questionnaire attention index is elaborated in Yarbrough and Klonglan (1970b, pp. 254-257).

Variable X-7: attention given to return material

The information on housing characteristics obtained during the questionnaire phase was used to calculate the protection offered by each home. On the basis of this information, the householder received some recommendations for possible actions he could make to increase his protection. One type of interpretative response an individual could make to HFPS was to attend to this "return material".

However, not all people received the same recommendations. They varied by the type of housing he occupied and the calculated protection factor. The return material can be divided into two categories:

1) Materials for those persons living in buildings without basements or with four or more housing units. They did not receive a PF evaluation, but were advised in an accompanying letter to investigate the possibility of going to a public fallout shelter. They were also mailed a copy of OCD book SM 3-11A, "Personal and Family Survival".

2) Materials for persons living in buildings with no more than 3 housing units which have a basement. They received a letter, an evaluation of the Protection Factor offered by their basement, and the OCD publication H-12, "Fallout Protection for Homes with Basements". If they happened to have a special constructed fallout shelter in their home, they received both the H-12 and SM 3-11A booklets.

Regardless of which message treatment the respondent received, the index of his attention to the return materials was based on two factors: his awareness of having received those materials, and, if aware, the extent to which he read them. Three questions were asked to determine awareness and which booklet the respondent received. Those aware were asked for each section of the appropriate booklet how thoroughly they had read that section. Responses were then weighted for the length of the booklet. The result of this measurement procedure was an attention index ranging from 0 (unaware of the return materials, or had not read any) to

100 (read all sections of the booklet more than once). The questions asked and a detailed explanation of the scoring procedures can be found in Yarbrough and Klonglan (1970b, pp. 263-375).

Variable X-8: adoption of home shelters after HFPS

The primary purpose of the HFPS program was to promote the adoption of the idea of using home basements as fallout shelters in event of nuclear attack. The rationale and procedure for measuring this variable after the occurrence of HFPS is the same as outlined for adoption of home shelter before the program, (see variable X-5).

Empirical Hypotheses of Antecedents and Consequences of Engaging in Different Types of Conversations

Only six of the nine general purpose-types of conversations occurred with sufficient frequency in the HFPS program to allow us to test hypotheses about the antecedents and consequences of these behaviors. Those we can test are as follow:

1) Respondent's attempting to positively influence the other.
2) Respondent's exchanging positive opinions and/or information with the other.
3) Respondent's neutral information sharing with the other.
4) Respondent's seeking advice from the other.
5) Respondent's seeking social validation from the other.

In the conceptual framework chapter, the following general hypothesis was stated regarding the antecedents of

engaging in conversations:

> G.H.5. A person's engaging in interpersonal communication of each of the nine purpose-types will be a function of his dispositions toward the issue being communicated and his immediate personality and social needs.

The valience of these dispositions and needs was varied for each purpose-type and were outlined in Table 1. At the empirical level, we have been able to develop five measures of the dispositional antecedents for six of the types of behavior. The expected empirical relationships between these dispositions and each type of behavior are outlined in Table 3. (See E.H. 6-10, 14-18, 22-26, 30-34, 38-42, and 46-50.)

A general hypothesis was also developed regarding the consequences of engaging in each of the types of conversations:

> G.H.6. Except where the respondent takes a negative position on the topic being communicated, the consequence of his engaging in interpersonal communication about it will be to make him respond more favorably to the total communication event. In cases where he does take a negative stand, his attention to the total event will be higher, but his acceptance of the event will be lower.

Three empirical measures of consequences of six purpose-types of conversations about HFPS were developed. The empirical hypotheses regarding the nature of these relationships are outlined in Table 3. (See E.H. 11-13, 19-21, 27-29, 35-37, 43-45, and 51-53.)

Table 3. Empirical hypotheses of relationships between conversation purpose-types and antecedent and consequence variables

Antecendents	Type of conversation purpose					
	Positive attempt to influence	Positive opinion information sharing	Neutral opinion information sharing	Seek advice	Advice is sought	Seek social validation
Attitude toward fallout shelters	EH6 +[a]	EH14 +	EH22 0	EH30 +	EH38 0	EH46 +
Technical knowledge of civil defense	EH7 +	EH15 +	EH23 +	EH31 0	EH39 +	EH47 0
Use of competent source of information	EH8 +	EH16 +	EH24 +	EH32 0	EH40 +	EH48 0
Adoption of public fallout shelters	EH9 +	EH17 +	EH25 0	EH33 more likely in decision stages.	EH41 +	EH49 more likely in decision stages.

[a]A plus sign (+) indicates that those who engage in the designated behavior will score higher in the designated antecedent or consequence variable than those who do not. A negative sign (-) indicates the opposite. A "0" indicates that no difference is expected between those who do and those who do not engage in the behavior.

Table 3. (Continued)

Antecedents	Type of conversation purpose: Positive attempt to influence	Positive opinion information sharing	Neutral opinion information sharing	Seek advice	Advice is sought	Seek social validation
Adoption of home fall-out shelters	EH10 +	EH18 +	EH26 0	EH34 more likely in decision stages.	EH42 +	EH50 more likely in decision stages.
Consequences						
Attention given to questionnaire phase	EH11 +	EH19 +	EH27 +	EH35 +	EH43 +	EH51 +
Attention given to return material phase	EH12 +	EH20 +	EH28 +	EH36 +	EH44 +	EH52 +
Adoption of home shelters after HFPS	EH13 +	EH21 +	EH29 +	EH37 +	EH45 +	EH53 +

CHAPTER 4: FINDINGS

The Focal Behavior: Conversing about HFPS

The act of talking with others about the Home Fallout Protection Survey can be examined from a number of viewpoints. One viewpoint is the extent of the behavior - how many respondents talked about HFPS, with how many people did they talk and when during the campaign did they talk? One might also be interested in the relationship of the conversation partners, what they talked about and for what reasons they talked, and what were the consequences of their talking. The responses made to the questions about each of these dimensions will be described in the section which follows.

Frequency of talking to others about HFPS

The data in Table 4 indicates that about half the respondents talked to others about the Home Fallout Protection Survey. These data support empirical hypothesis 1. About 40 percent talked to someone during the questionnaire phase of the program; about 20 percent talked to someone during the return booklet phase of the program. Many of those who talked had conversations with more than one person. In the questionnaire phase of the program, nearly half of those talking talked with two or more persons; about one-fourth of those talking talked to more than one

person in the return booklet phase.

Although slightly more than half of those surveyed did not talk to others about the HFPS program, the percentage talking in this program is somewhat higher than has been found in studies of comparable programs (cite references).

The greater frequency of talking during the questionnaire phase than during the return materials phase may be related to the structure of the communication event. In the questionnaire phase, respondents had to do something with the information they had received. They had been asked to complete and return a questionnaire about their house to the Office of Civil Defense. Some disposition of this request (either positive or negative) had to be made. The task of completing the questionnaire gave occasion for discussion about the program. In the return materials phase, respondents had been asked to do nothing other than read the booklet returned to them.

For the purposes of this thesis, a "conversation" has been defined as talking with one partner about HFPS during either the questionnaire or return materials phase. However, this conversation could have occurred over several different time periods. Indeed, the data in Table 5 indicate that nearly half the reported conversations occurred during more than one time period.

Table 4. Frequency of talking to others about HFPS

Number of persons talked with	Time: Questionnaire phase No.	% 308	% 121	"Return materials" phase No.	% 308	% 68	Anytime No.	% 308	% 150
One person	68	22.1	56.1	50	16.2	73.5	70	22.7	46.7
Two persons	35	11.4	28.9	14	4.5	20.6	40	13.0	26.7
Three persons	15	4.9	12.4	3	1.0	4.4	21	6.8	14.0
Four persons	3	1.0	2.5	1	0.3	1.5	12	3.9	8.0
Five persons	-	-	-	-	-	-	-	-	-
Six persons	-	-	-	-	-	-	7	2.3	4.7
Talked to someone	(121)	(39.2)		(68)	(22.0)		(150)	(48.7)	

Table 5. Number and percentages of occasions on which respondents discussed HFPS with each conversation partner

Number of occasions talked	Time			
	Questionnaire phase		"Return materials" phase	
	No.	% 195[a]	No.	% 91[b]
Once	105	53.8	55	60.4
Twice	45	23.1	21	23.1
Three times	13	6.7	3	3.3
Four times	23	11.7	6	6.6
Don't know	4	2.1	6	6.6
No answer	5	2.6	-	-
	195	100.0	91	100.0

[a]Number of conversations engaged in by the 121 persons talking to others about HFPS during questionnaire phase.

[b]Number of conversations engaged in by the 45 persons talking to others about HFPS during "return materials" phase.

Relation of conversation partners

When asked who they talked with, the respondents replied that nearly half their conversations had been with an immediate number of their family. The next most frequent conversation partners were other relatives (reported in about 15 percent of the conversations). Neighbors, business associates and other friends were next, each reported for about 10 percent of the conversations. Only 2 percent had

talked with a government official about HFPS.

These data support empirical hypothesis 2. They also conform to the finding of others that most interpersonal communication is likely to occur within well-established primary groups. For this reason, interpersonal communication is not likely to be an agent for widely diffusing information about events.

The data in Table 6 also provide support for empirical hypothesis 3. That hypothesis related to the fact that among the primary groups involved in conversations, the group most frequently involved would be the one which is most directly affected by the content of the message. In the case of HFPS, this would be expected to be the nuclear family. Such was the case. Nearly 52 percent of the conversations during the questionnaire phase and 60 percent during the return materials phase involved other members of the respondent's immediate family.

Primacy of conversation

During the questionnaire phase, most people talked to others about HFPS after they heard about the program from another source, but before completing the questionnaire. This finding supports empirical hypothesis 4. The same type of behavior was observed for the "return materials" phase. There, most conversations occurred after reading

Table 6. Relation of conversation partner to respondent

Relation to respondent	Time: Questionnaire phase No.	Questionnaire phase % 195[a]	"Return materials" phase No.	"Return materials" phase % 91[a]
Member of immediate family	101	51.8	55	60.4
Relative, not immediate family	31	15.9	12	13.2
Neighbor	23	11.8	10	11.0
Business associate	23	11.8	6	6.6
Friend, not relative, neighbor, or business associate	20	10.3	8	8.8
Government official	2	1.0	-	-

[a]Columns may total to more than 100 percent because some conversations involved partners from more than one category.

the booklet, but before deciding what to do about it. Thus, empirical hypothesis 5 is also supported.

In both cases, there is a close relationship between those who were engaged in the process of making a decision such as deciding about completing the questionnaire or deciding what to do about what they read. At the same time, most of the people in both cases talked less after they decided or did what was expected for them to do.

All of these suggest that most of the people here talked more while they were deciding what to do than after they had made a decision.

Table 7. When conversation occurred (first time talked to conversation partner

Time	Time: Questionnaire phase No.	Time: Questionnaire phase % 195	Time: "Return materials" phase No.	Time: "Return materials" phase % 91
Before hearing from another source	7	3.6	D/A	-
After hearing from another source; before completing questionnaire	137	70.2	D/A	-
After completing questionnaire	45	23.1	D/A	-
Before reading return information	D/A	-	9	9.9
After reading, but before deciding what to do	D/A	-	61	67.0
After deciding what to do about returned information	D/A	-	13	14.3
No answer	6	3.1	8	8.8

Content of conversations

About a third of the conversations included purely informational content - informing others that the

questionnaire or booklet had been received, or telling others the decision the actor had made about what to do with these materials (see Table 8). However, most of the conversations involved evaluational type content. During the questionnaire phase, respondents were likely to discuss the general value of the HFPS program, discuss whether or not they should fill out the questionnaire, and how to fill it out. After receiving the returned booklet, they were likely to discuss the protection provided by the home, how to improve that protection, or about civil defense matters in general.

From these findings, we draw the conclusion that the content of interpersonal communication is more likely to be evaluational than informational. We also conclude that these conversations tend to be structured by nature of the mass mediated message on which they are based. Ask people to complete a task and they will talk to others about whether and how to complete the task. Provide them with an evaluation and recommendation about what to do with their home and they will discuss that message with others before doing anything about it.

The purposes of talking

The purposes of talking were reviewed extensively from a methodological and measurement viewpoint in Chapter 3. In this chapter (see Table 9) the relative frequency of the

Table 8. Content of conversations

Content of conversation	Questionnaire phase % 195[a]	Return materials phase % 91[a]
Told others that had received questionnaire or booklet	22.0	33.8
Discussed value of HFPS program	37.9	11.0
Discussed if questionnaire should be filled out	14.2	D/A
Discussed how to fill out questionnaire	16.8	D/A
Discussed aspects of basement (other than fallout protection)	8.1	D/A
Told others of own decision on what to do with questionnaire	15.8	D/A
Discussed protection provided by home	10.6	22.8
Discussed building or improvising home shelter	4.5	32.6
Discussed what would do in case of nuclear attack (other than home shelter preparation)	16.9	42.4
Discussed civil defense and nuclear warfare in general	7.6	8.8

[a]Columns add to more than 100 percent because some conversations encompassed more than one topic.

various types of conversations are summarized. Our primary concern in this thesis is with the data in the last column of Table 9. This summarizes the number of respondents active in at least one conversation of the designated type. From this we conclude that the most likely behavior was to engage in opinion and information sharing, followed by making attempts to influence the other party. Advice seeking was next with 34 of the respondents seeking someone else's advice and 23 reporting that their advice was sought. The social validation type conversation was the least likely to occur.

The relationships of these various types of conversation purpose with antecendent and consequence variables will be explored in a later section of this chapter.

Ascribed influence of conversations

More than two-thirds of the people did not change their feelings toward the HFPS program during the questionnaire phase as a result of their conversations. About a fourth became more favorable during the same phase. Very few became less favorable.

These results may be due to the fact that the questionnaire was not intended to influence people toward the HFPS program, but to evaluate the characteristics of the building in which the householder lives. Those who became more favorable may have perceived this evaluation as a good

Table 9. Frequency of types of reported conversations for designated "active" conversation partners

Purpose of conversation	Active conversation partner is... Respondent	Other	Both	Conflict[a]	Total conversations this type[b]	Respondents active in at least one conversation of this type
Attempt to influence - pro CD	69	20	3	5	97	57
Attempt to influence - anti CD	2	1	0	2	5	3
Advice seeking	36	17	6	D/A	59	34(23)[c]
Info and opinion sharing - pro CD	18	2	14	1	35	25
Info and opinion sharing - anti CD	3	6	5	0	14	7
Info and opinion sharing - neutral	77	D/A	D/A	D/A	77	58

[a]Respondent took designated position; partner took opposite position.

[b]Some respondents active in more than one conversation of the designated type.

[c]Thirty-four respondents reported that they sought someone else's advice; 23 reported their advice was sought by someone else.

Table 9. (Continued)

Purpose of conversation	Active conversation partner is... Respondent	Other	Both	Conflict[a]	Total conversations this type[b]	Respondents active in at least one conversation of this type
Social validation	16	1	0	D/A	18	14(2)[d]
Not classifiable	-	-	-	-	6	-

[d]Fourteen respondents reported that they sought validation of tentative responses from someone else; 2 reported their approval was sought by someone else.

thing which would give them more protection in case of a nuclear attack.

Table 10. Ascribed influence of conversation during questionnaire phase on the way respondent felt about the HFPS program

Ascribed influence	No.	% 195
Became less favorable	6	3.1
No difference	140	71.8
Became more favorable	49	25.1
	195	100.0

Almost half the people reported some influence on conversations during the "return materials" phase on the decision the respondent made regarding the information they received from the Office of Civil Defense. About 42 percent reported no influence and 9 percent reported much influence on conversations about what to do with the returned information.

The influence here is more critical than in the questionnaire phase because many people had to make decisions about investing some money to improve their shelters or to build them. Furthermore, they had to begin thinking in terms of a new dimension of civil defense. They may not have known too much about the hazards of nuclear fallout

and the level of protection they actually had against it.

Table 11. Ascribed influence of conversation during "return materials" phase on decision respondent made about what to do with HFPS information returned

Ascribed influence	No.	% 91
None	38	41.8
Some	43	47.2
Much	8	8.8

The Antecedents and Consequences of Several Types of Conversations

In Chapter 3, a total of 48 empirical hypotheses regarding the relationship between six purpose-types of conversations and five antecedent and three consequence variables were developed. The tests of these hypotheses are presented in tabular form in Tables 12 through 17, and are discussed in detail in the remaining pages of this chapter.

In each case, the test is of the differences between persons who did and persons who did not engage in the designated type of behavior. For the most part, the differences tested are differences in mean score and the statistical test is "t".[1] In the case of four hypotheses regarding

[1]All of the tests involved unequal numbers in the two comparison groups. For this reason, a pooled test-test as outlined in Snedecor and Cochran (1969) was used in computing both the actual and expected value of t.

stages of adoption, the hypothesis difference was in the proportion of persons expected in the decision-making stages. The Chi-Square test was used to test this difference. The .05 level of probability is used as a rejection point for both tests.

In general, we conclude that most of our hypotheses about the antecedents and consequences of the several purpose-types of conversations were supported. The major exception was the case where the respondent's advice was sought by the other. This behavior was not predictable on the basis of the variables we investigated.

Antecedents and consequences of attempts to influence

An attempt to influence through interpersonal communication was defined as one's intention to alter some pattern of behavior in another person or group of persons. From the point of view of the sender of the original mass mediated message, this attempt may be either positive or negative. One or both of the conversation partners may be active in the attempt to influence the other. In this thesis, we tested factors related to only one type of influence attempt: where the respondent is active in attempting to positively (pro civil defense) influence his conversation partner.

The data in Table 12 indicate that as hypothesized, the 57 who attempted to influence others positively about HFPS were generally more favorably disposed to the issue

E.H. no. and hypothesized direction[a]	Calculated t,	t, needed for Significance	Conclusion	
E.H. 6 +	1.80	1.67	P < .05	Supported
E.H. 7 +	1.73	1.66	P < .05	Supported
E.H. 8 +	1.95	1.67	P < .05	Supported
E.H. 9 +	2.52	1.67	P < .05	Supported
E.H.10 +	0.42	1.68	n.s.	Rejected
E.H.11 +	7.36	1.66	P < .05	Supported
E.H.12 +	5.64	1.67	P < .05	Supported
E.H.13 +	4.51	1.67	P < .05	Supported

of civil defense before the HFPS program occurred, compared to those who did not engage in this behavior. They had positive attitudes toward fallout shelters, greater knowledge of civil defense, they had used more competent sources of information and were more advanced in the adoption of public fallout shelters. However, contrary to expectations, they were not more likely to be further advanced in the adoption of home fallout shelters.

Those persons who positively attempted to influence others, were likely to give greater attention to the HFPS questionnaire and booklet, and to be more advanced in the adoption of home fallout shelters after the HFPS than were those who did not engage in the behavior. These data support our hypotheses, about the consequences of attempting to positively influence others by face to face communication.

Antecedents and consequences of positive opinion/information sharing

The act of sharing positive information or giving a positive opinion about civil defense is defined as the talking pro civil defense, without any obvious intention of influencing anybody. From the viewpoint of the sender of the original message, this talking can be positive, negative or neutral. One or both of the conversation partners can be active in performing the behavior. This thesis considers only the positive and the neutral behavior, and only when

Table 13. Findings related to hypothesized antecedent and consequence variables of sharing positive (pro CD) opinion and information with others about HFPS

Variable	Shared positive opinion and information (N=25)		Did not share opinion and information (N=283)	
	$\bar{X}$	Std. Dev.	$\bar{X}$	Std. Dev.
ANTECEDENTS (Before HFPS)				
X-1: Attitudes toward fallout shelters	83.1	26.5	83.3	19.8
X-2: Knowledge of technical aspects of civil defense	5.4	1.6	4.6	1.9
X-3: Use of competent civil defense information sources	1.1	6.3	9.7	6.0
X-4: Adoption of public fallout shelters	4.4	1.5	3.6	1.6
X-5: Adoption of home fallout shelters	2.4	1.6	2.0	1.4
CONSEQUENCES (After HFPS)				
X-6: Attention to HFPS questionnaire	6.3	1.3	4.4	2.6
X-7: Attention to return booklet	2.7	1.5	1.2	1.5
X-8: Adoption of home fallout shelters (after)	4.0	1.6	3.4	2.0

[a]A plus sign (+) indicates those who shared positive opinions and information are predicted to score higher on designated antecedent and consequence variables than did those who did not share positive information. A minus sign indicates the opposite; "0" indicates no difference is expected.

E.H. no. and hypothesized direction[a]	Calculated t,	t, needed for significance	Conclusion	
E.H.14 +	0.02	1.74	n.s.	Rejected
E.H.15 +	2.34	1.71	P < .05	Supported
E.H.16 +	0.78	1.70	n.s.	Rejected
E.H.17 +	2.48	1.70	P < .05	Supported
E.H.18 +	1.21	1.72	n.s.	Rejected
E.H.19 +	6.11	1.69	P < .05	Supported
E.H.20 +	4.95	1.70	P < .05	Supported
E.H.21 +	1.63	1.70	n.s.	Rejected

they are performed by the respondent.

The data in Table 13 indicate that as hypothesized, the 25 respondents who engaged in positive opinion/information sharing had greater technical knowledge of civil defense than those who did not perform the same behavior. They also were advanced in the process of adopting public fallout shelters. Contrary to the hypotheses, they were not more favorably disposed toward fallout shelters; did not use competent sources of information and were not more likely to be advanced in the adoption of home fallout shelters.

Those who gave their positive opinion or share positive information with others were likely to give greater attention to the HFPS questionnaire and to the booklet, as was hypothesized. But they were not further advanced in the process of adopting home fallout shelters as had been expected.

Antecedents and consequences of neutral information sharing

To give information without including evaluative expressions is what is understood here to be neutral information sharing. Both the respondent and the partner can be active in performing this kind of behavior. In this thesis, we consider only the behavior performed by the respondent.

The data in Table 14 indicate that as hypothesized, the 58 respondents who engaged in neutral information sharing conversations had no more positive or negative attitudes toward fallout shelters than did those who did not talk.

E.H. no. and hypothesized direction[a]	Calculated t,	t, needed for significance	Conclusion	
E.H.22 0	1.06	1.66	n.s.	Supported
E.H.23 +	0.29	1.66	n.s.	Rejected
E.H.24 +	2.16	1.67	P < .05	Supported
E.H.25 0	0.77	1.66	n.s.	Supported
E.H.26 0	.90	1.67	n.s.	Supported
E.H.27 +	6.50	1.66	P < .05	Supported
E.H.28 +	4.00	1.68	P < .05	Supported
E.H.29	1.90	1.67	P < .05	Supported

Table 14. Findings related to hypothesized antecedent and consequence variables of sharing neutral opinion and information with others about HFPS

Variable	Shared neutral opinion and information (N=58) $\bar{X}$	Std. Dev.	Did not share neutral opinion and information (N=250) $\bar{X}$	Std. Dev.
ANTECEDENTS (Before HFPS)				
X-1: Attitudes toward fallout shelters	84.8	18.7	82.9	20.8
X-2: Knowledge of technical aspects of civil defense	4.7	2.0	4.7	1.82
X-3: Use of competent civil defense information sources	11.4	6.9	9.4	5.7
X-4: Adoption of public fallout shelters	3.9	1.7	3.7	1.6
X-5: Adoption of home fallout shelters	2.2	1.5	2.0	1.4
CONSEQUENCES (After HFPS)				
X-6: Attention to HFPS questionnaire	6.0	1.7	4.2	2.7
X-7: Attention to return booklet	2.1	1.7	1.1	1.5
X-8: Adoption of home fallout shelters (after)	3.9	1.8	3.4	2.0

[a]A plus sign (+) indicates those who shared neutral information and opinions are predicted to score higher on designated antecedent and consequence variables than did those who did not share neutral information. A minus sign indicates the opposite; "0" indicates no differences.

They used more competent sources of information but were not more advanced in the process of adopting public and home fallout shelters. However, contrary to expectation, those sharing neutral information did not have greater technical knowledge of civil defense.

Those people engaged in neutral information sharing were more likely to attend the HFPS questionnaire and the booklet and to be advanced in the process of adopting home fallout shelters.

Antecedents of consequences of respondent's seeking other's advice

Advice seeking is the act of attempting to obtain from another person information on what to do about the questionnaire or information in the booklet. This thesis is concerned with both those instances where the respondent seeks the advice of someone else, and those cases where the respondent's advice is sought. In this section, we are concerned with the respondent's advice-seeking behavior.

The data in Table 15 indicate that as hypothesized, the 34 respondents who sought someone else's advice had more favorable attitudes but (also as hypothesized) did not have more knowledge or use more competent sources of information than did those who did not engage in the behavior. Contrary to expectations, however, they were not more likely to be in the decision-making stages (aware, information or

Table 15. Findings related to hypothesized antecedent and consequence variables of respondent's seeking advice from others for making a decision about what to do about the questionnaire or the booklet

Variable	Sought advice (N=34) $\bar{X}$	Sought advice (N=34) Std. Dev.	Did not seek advice (N=274) $\bar{X}$	Did not seek advice (N=274) Std. Dev.
ANTECEDENTS (Before HFPS)				
X-1: Attitudes toward fallout shelters	87.4	19.9	74.7	31.3
X-2: Knowledge of technical aspects of civil defense	4.5	1.8	4.2	2.2
X-3: Use of competent civil defense information sources	9.9	5.3	8.9	6.7
X-4: Adoption of public fallout shelters	3.6	1.7	3.4	1.9
X-5: Adoption of home fallout shelters	1.8	1.2	1.9	1.5
CONSEQUENCES (After HFPS)				
X-6: Attention to HFPS questionnaire	6.6	1.1	4.0	2.8
X-7: Attention to return booklet	2.1	1.6	1.1	1.5
X-8: Adoption of home fallout shelters (after)	3.7	1.8	3.2	2.1

[a]A plus sign (+) indicates those who sought advice are predicted to score higher on the designated antecedent and consequence variables than did those who did not seek advice. A minus sign indicates the opposite; "0" indicates no difference is expected.

[b]Chi-square value.

E.H. no. and hypothesized direction[a]	Calculated t, χ^2	t, χ^2 needed for significance	Conclusion	
E.H.30 +	3.24	1.68	P < .05	Supported
E.H.31 0	0.80	1.70	n.s.	Supported
E.H.32 0	0.95	1.69	n.s.	Supported
E.H.33 more likely in decision stages	0.78[b]	3.84[b]	n.s.	Rejected
E.H.34 more likely in decision stages	0.02[b]	3.84[b]	n.s.	Rejected
E.H.35 +	10.32	1.67	P < .05	Supported
E.H.36 +	3.46	1.69	P < .05	Supported
E.H.37 +	1.59	1.67	n.s.	Rejected

evaluation) of the process of adopting home and public fallout shelters prior to the HFPS program.

If respondents sought the advice of someone they were more likely to give attention to the questionnaire and the return booklet of the HFPS program. However, they were not more likely to be advanced in the process of adopting home fallout shelters after HFPS. This last finding is contrary to the hypothesis.

Antecedents and consequences of having advice sought

Some 23 respondents reported that someone else sought their advice about what to do with the questionnaire or the booklet. The results of tests of hypotheses related to this behavior are presented in Table 16.

As noted previously, our hypotheses about the antecedents and consequences of having one's advice sought were generally rejected. Those persons whose advice was sought had positive attitudes toward the issue of civil defense. (It had been hypothesized that they would be neutral.) And, also contrary to the hypothesis, they did not have greater technical knowledge of civil defense, did not use more competent sources of information and were not more advanced in the process of adopting fallout shelters.

Those persons whose advice was sought did give greater attention to the questionnaire than did those whose advice was not sought. This was as had been hypothesized. However,

Table 16. Findings related to hypothesized antecedent and consequence variables of other's seeking respondent's advice for making decision on what to do about the questionnaire or booklet.

Variable	Advice is sought (N=23) $\bar{X}$	Advice is sought (N=23) Std. Dev.	Advice is not sought (N=285) $\bar{X}$	Advice is not sought (N=285) Std. Dev.
ANTECEDENTS (Before HFPS)				
X-1: Attitudes toward fallout shelters	90.8	15.4	82.7	20.6
X-2: Knowledge of technical aspects of civil defense	5.2	1.8	4.6	1.8
X-3: Use of competent civil defense information sources	11.1	4.8	9.6	6.1
X-4: Adoption of public fallout shelters	3.8	1.7	3.7	1.6
X-5: Adoption of home fallout shelters	2.1	1.4	2.0	1.4
CONSEQUENCES (After HFPS)				
X-6: Attention to HFPS questionnaire	6.0	2.0	4.4	2.6
X-7: Attention to return booklet	1.9	1.7	1.3	1.5
X-8: Adoption of home fallout shelters (after)	3.5	1.9	3.5	2.0

[a]A plus sign (+) indicates those whose advice was sought are predicted to score higher on designated antecedent and consequences variables than did those who did not give any advice. A minus sign indicates the opposite; "0" indicates no difference is expected.

E.H. no. and hypothesized direction[a]	Calculated t,	t, needed for significance	Conclusion	
E.H.38 0	3.46	1.69	P < .05	Rejected
E.H.39 +	1.50	1.72	n.s.	Rejected
E.H.40 +	1.35	1.71	n.s.	Rejected
E.H.41 +	1.35	1.71	n.s.	Rejected
E.H.42 +	0.39	1.71	n.s.	Rejected
E.H.43 +	3.48	1.71	P < .05	Supported
E.H.44 +	1.68	1.71	n.s.	Rejected
E.H.45 +	-0.02	1.71	n.s.	Rejected

contrary to hypotheses, they did not read more of the return booklet and were not more advanced in the process of adopting home fallout shelters.

Antecedents and consequences of seeking social validation

Social validation has been defined as the act of "talking to others to convince ourselves". In this type conversation, the actor "tries out" his tentative response to a mass mediated message. He wants to know how others are going to react if he takes the intended course of behavior. One or both of the conversation partners can be active in performing this behavior. This thesis tests only factors related to the respondent initiating this type of conversation.

The data in Table 17 indicate that as hypothesized, the 14 respondents engaged in this type of conversation had positive attitudes toward fallout shelters, but did not have higher technical knowledge of civil defense and did not use the more competent source of information than did those who did not seek social validation. Contrary to hypotheses, however, those seeking social validation were not more likely to be in the decision-making stages (aware, information or evaluation) of the process of adopting home and public shelters before occurrence of HFPS.

Those people performing this behavior attended the HFPS questionnaire and the booklet, and were further advanced

Table 17. Findings related to hypothesized antecedent and consequence variables of seeking social validation regarding HFPS

Variable	Sought social validation (N=14) $\bar{X}$	Sought social validation (N=14) Std. Dev.	Did not seek social validation (N=294) $\bar{X}$	Did not seek social validation (N=294) Std. Dev.
ANTECEDENTS (Before HFPS)				
X-1: Attitudes toward fallout shelters	92.0	18.7	79.5	30.4
X-2: Knowledge of technical aspects of civil defense	4.8	1.6	4.2	2.2
X-3: Use of competent civil defense information sources	11.1	5.9	9.0	6.5
X-4: Adoption of public fallout shelters	3.6	1.4	3.5	1.9
X-5: Adoption of home fallout shelters	2.1	1.2	1.8	1.5
CONSEQUENCES (After HFPS)				
X-6: Attention to HFPS questionnaire	5.7	2.1	4.3	2.8

[a]A plus sign (+) indicates those who sought social validation are predicted to score higher on designated antecedent and consequence variables than did those who did seek social validation. A minus sign indicates the opposite; "0" indicates no difference is expected.

[b]Chi-square value.

E.H. no. and hypothesized direction[a]	Calculated t, χ^2	t, χ^2 needed for significance	Conclusion	
E.H.46 +	3.10	1.76	P < .05	Supported
E.H.47 0	1.29	1.76	n.s.	Supported
E.H.48 0	1.29	1.76	n.s.	Supported
E.H.49 more likely in decision stages	0.54[b]	3.84[b]	n.s.	Rejected
E.H.50 more likely in decision stages	1.42[b]	3.84[b]	n.s.	Rejected
E.H.51 +	2.48	1.76	P < .05	Supported

Table 17. (Continued)

	Variable	Sought social validation (N=14) $\bar{X}$	Sought social validation (N=14) Std. Dev.	Did not seek social validation (N=294) $\bar{X}$	Did not seek social validation (N=294) Std. Dev.
X-7:	Attention to return booklet	2.0	1.6	1.2	1.5
X-8:	Adoption of home fallout shelters (after)	4.6	1.7	3.2	2.1

E.H. no. and hypothesized direction[a]	Calculated t, χ^2	t, χ^2 needed for significance	Conclusion	
E.H.52 +	1.83	1.77	P < .05	Supported
E.H.53 +	3.00	1.76	P < .05	Supported

in the process of adopting home fallout shelters, as we expected.

CHAPTER 5: SUMMARY AND DISCUSSION

During the 1940's and 1950's, a number of communication researchers found evidence that social relationships among members of the audience influenced the way individual members of that audience responded to messages conveyed through mass media. They found that one frequent response which people made to a mass mediated message was to talk to others about it. This talking to others and opinions and evaluations exchanged in the process, was seen as a major determinant of communication effectiveness.

The best known formulation of this social relationships theory of communication effect is Katz and Lazarsfeld's (1955) two-step flow hypothesis. They contend that information and opinions flow from the mass media to opinion leaders, and from them to less active portions of the audience.

Another group of researchers, rural sociologosts working on the problem of diffusion and adoption of innovations, independently reached conclusions similar to those of Lazarsfeld and his associates. They found that mass media was important in creating awareness of new ideas, but that conversations with friends and neighbors were most important when it came to evaluating whether or not to use the idea. Also, they found that part of the audience - especially those who were last to adopt - depended almost exclusively upon personal sources at all stages of the decision-making

process-awareness, information gathering and evaluation.

The attempts to understand the process and effects of interpersonal communication generated by mass communication events has resulted in considerable debate over the relative importance of the phenomenon in creating communication effects.

One group of researchers have been concerned with the role of interpersonal communication in providing people with information about events initially reported in the mass media. They concluded that such conversations are generally not important in relaying information (at least initial information) about most news events. They contend that mass media is most important in this function.

Another group of social scientists, including the authors of the two-step flow of information hypothesis and students of adoption and diffusion processes, have been more concerned with the role of conversations in mediating the effects of messages originally through the mass media. Their's is a focus upon a process of legitimizing the information conveyed through mass media into the social system of importance to the actors involved.

Several attempts have been made to reformulate and expand those conceptions (especially Katz and Lazarsfeld's hypothesis). It is the position of this thesis that none of these attempts have been completely satisfactory, but that

a number of useful ideas have been offered.

This thesis reviewed several conceptualizations which have been offered about the role of interpersonal communication in mass mediated events, and reviewed the specific findings related to these concepts. From this review and from logical constructions, a series of hypotheses were developed about the likelihood of interpersonal communication occurring, who will talk with whom, for what purposes and under what circumstances. These hypotheses are presented in conjunction with the findings of the thesis later in this chapter.

Methods

This thesis was based upon the secondary analysis of data collected to measure the impact of the Home Fallout Protection Survey (HFPS) in Des Moines. Most of the fundings for the original study was provided by a contract between Iowa State University and the Office of Civil Defense (Yarbrough and Klonglan, 1970a). The HFPS study in Des Moines is part of an extensive research effort undertaken by Iowa State University sociologists in order to better understand the process by which individuals and families make their decisions on whether or not they would be likely to use fallout shelters in event of nuclear war.

The HFPS was constituted of two interdependent communication inputs. They were labeled "the questionnaire phase" and the "return material phase". The first communication

input was a questionnaire mailed to the homeowners in Des Moines and its suburb, West Des Moines, during April 1967. The questionnaires provided the Office of Civil Defense with information on the fallout protection characteristics of the building in which the householder lives. Two follow-up questionnaires were mailed to those who did not answer the initial inquiries. Enumerators obtained the same information in other towns and open country areas of the county.

Data on the protection factor calculations and recommendations for action were sent to householders. This was called the "return material" phase of the HFPS program.

Two random samples of adults were drawn using area sampling techniques. In the first sample, interviews were completed before HFPS with 435 individuals representing a cross-section of adults residing within Polk County. A total of 308 persons interviewed before HFPS were interviewed in the "after HFPS" study. A second random sample of 222 persons were interviewed after HFPS only. This thesis used data from the panel (N=308). All interviews were completed by professional interviewers in a personal interview situation at the respondent's home. The "before" study was conducted in February and March 1967; the "after" study was conducted in September and October 1967.

From the responses to the questionnaire, several measures of interpersonal communication were developed: 1) the

occurrence of talking, 2) the number of persons talked with about HFPS, 3) the relation of the conversation partner to the respondent, 4) when the conversation occurred, 5) the content of that conversation, and 6) the respondent's purpose for engaging in the conversation. Measures were also developed about the respondent's dispositions toward the civil defense issue and his responses to the HFPS program: 1) attitude toward fallout shelters, 2) technical knowledge of civil defense, 3) use of competent sources of civil defense information, 4) adoption of public fallout shelters, 5) adoption of home fallout shelters, 6) attention given the questionnaire phase of HFPS, and 7) attention given the HFPS return booklet.

Findings

Extent of conversations

On the extent of their conversations, we generated the following hypothesis:

> G.H.1. The likelihood that interpersonal communication will be generated by a mass communication event varies with (1) the news value of that event, (2) the adequacy of the mass media system to report the event, and (3) the potential importance of the event to the actors involved.

On the basis of the high potential personal importance involved in the Home Fallout Protection Survey program, a relatively high level of interpersonal communication about the program was hypothesized. The empirical hypothesis that

more than 36 percent (half of those aware) would talk was supported. About half of the respondents (70 percent of those aware) talked to others about HFPS.

Most of the conversations occurred during the questionnaire phase. Yarbrough and Klonglan (1970b) have previously reported that more people talked when asked to complete the questionnaire than when an enumerator visited. This thesis found that a relatively few persons accounted for most of the reported conversations. Half the respondents talked to no one. A fourth talked to one person and accounted for about a fourth of the conversations. About one-eighth of the respondents talked to two persons and accounted for about a fourth of the conversations. The remaining eighth of the respondents talked to three or more persons and accounted for nearly half the reported conversations.

Implication There are large differences in the likelihood that specific individuals will engage in interpersonal communication about what they encounter in the mass media. Where there is a high degree of personal involvement in the communication event, people are likely to talk.

The fact that people are more likely to talk when asked to do something or when there is high and direct personal consequence involved in the response to the mass mediated message, indicates that communication senders may be able to influence the interpersonal communication process. A

communicator might ask his audience to do something. He might seek to get them personally involved in the communication process. Most mass mediated messages now call for only passive involvement (internal response) of the receiver.

However, a communicator should not expect everyone to talk under most circumstances. Some will talk more than others. Half or more are likely not to talk.

Relation of conversation partners

On the relation of conversation partners, it was hypothesized that:

G.H.2. In interpersonal communication generated by mass mediated events, conversation partners will be limited almost exclusively to the actor's established primary groups.

G.H.3. Among the primary groupings, conversations will occur most frequently in those groups most directly affected by the message.

Because of the nature of the civil defense issue in general, and HFPS in particular, it was hypothesized that most communications would occur within the nuclear family. Both hypotheses were supported. Respondents said that more than half of their conversations had been with an immediate member of their family. The next most frequent conversations partner was other relatives, reported in about 15 percent of the conversations. Neighbors, business associates and other friends were next; each reported for about 10 percent of the conversations. Only two persons had talked with a

government official about HFPS.

Implication One implication of these findings is that interpersonal communication is not likely to be an agent for widely diffusing information about events. People generally only talk with members of their established primary groups. Such groups do not cut across the economic and social stratification lines found in most communities. However, a communicator may be able to take advantage of the fact that people talk to their peers about what they encounter in the mass media. He might, for example, organize his audience into discussion groups. Radio listening groups which have been formed in many developing countries are one example of such organized receiver groups.

Primacy of conversations

On the primacy of conversation, the following general hypothesis was generated:

> G.H.4. Unless an event is of exceedingly high news value, or of such extremely low news value as to be ignored by the mass media, or mass media systems are generally absent; the individual is likely to have heard the news event through another source before talking to others about it.

Past research has shown that interpersonal communication is more often used in deciding what to do about an event of which the individual is aware than it is in creating awareness of that event. The same pattern of behavior was found in the HFPS program. During the questionnaire phase, most

people talked to others about HFPS after they had heard about the program from another source, but before completing the questionnaire. The same type of behavior was observed during the "return material phase". There, most conversations occurred after reading the booklet, but before deciding what to do about it. In both cases, people talked when engaged in the process of deciding what to do about the message.

Implication Interpersonal communication is used more for its evaluational function than for its informational function. A communicator shouldn't expect much relay function. He should not expect to spread awareness of ideas through interpersonal communication. Interpersonal communication is used mostly in the legitimation process.

Content and purposes of the conversations

Although there was no formal hypothesis, it was found that most conversations involved evaluational type content. By analyzing the content of responses made to four questions which probed in depth about the nature of the conversation, we were able to isolate several recurring topics in the conversations.

About a third of the conversations included purely informational content informing others that the questionnaire or booklet had been received, or telling others the decision the actor had made about what to do with these materials. But more of the conversations involved evaluational type

content. During the questionnaire phase, respondents were likely to discuss the general value of the HFPS program, discuss whether or not they should fill out the questionnaire, and how to fill it out. After receiving the return booklet they discussed the protection given by their home, how to improve it and the topic of civil defense in general.

Also, we examined the purpose of an interpersonal communication from the point of view of one of the actors involved. We hypothesized that he will engage in the behavior to serve one or more of nine purposes:

1. An attempt to influence the other positively about the topic.
2. An attempt to influence the other negatively about the topic.
3. An attempt to exchange positive opinions and/or information about the topic.
4. An attempt to exchange negative opinions and/or information about the topic.
5. An attempt to share neutral information about the topic.
6. An attempt to seek the other's advice about the topic.
7. The respondent's advice is sought by the other.
8. An attempt to seek social validation from the other on a tentative response to the topic.
9. The respondent's social validation is sought by the other.

The reported conversations were content analyzed to determine if they fit each of these purposes. It was found

that the most frequently occurring behavior was to engage in neutral information sharing or to express opinions about the program and civil defense in general. Attempts to influence were the next more frequent behavior, followed by advice seeking. Attempts to obtain social validation occurred least often. Nearly all of the conversations expressed a favorable view of the issue of civil defense.

We were also interested in determining the antecedents and consequences for engaging in conversations for each of these purposes. The following general hypotheses were stated:

G.H.5. A person's engaging in interpersonal communication of each of the nine purpose-types will be a function of his disposition toward the issue being communicated and his immediate personality and social needs.

G.H.6. Except where the respondent takes a negative position on the topic being communicated, the consequence of his engaging in interpersonal communication about it will be to make him respond more favorably to the total communication event. In cases where he does take a negative stand, his attention to the total event will be higher, but his acceptance of the event will be lower.

A total of 48 empirical hypotheses were generated to test these two general hypotheses. The results of these tests are summarized in Table 18.

A general conclusion is that engaging in most types of conversations were quite predictable from a limited set of antecedent dispositions toward the issue. An exception were those cases where the respondent's advice was sought by

Table 18. Summary of findings related to empirical hypotheses of antecedents and consequences if engaging in six purpose-types of conversations[a]

	Positive attempt to influence		Positive Opinion/ information sharing	
	Hyp.	Find.	Hyp.	Find.
ANTECEDENTS				
Attitude toward fallout shelters	+	+	+	0
Technical knowledge of civil defense	+	+	+	+
Use of competent sources of information	+	+	+	0
Adoption of public fallout shelters	+	+	+	+
Adoption of home fallout shelters	+	0	+	0
CONSEQUENCES				
Attention/response to HFPS questionnaire	+	+	+	+
Attention to HFPS return booklet	+	+	+	+
Adoption of home shelter	+	+	+	0

[a]A plus sign(+) indicates that those who engate in the designated behavior will (or did) score higher on the designated antecedent or consequence variable than those who do not. A negative sign (-) indicates the opposite. A "0" indicates that no difference is expected (or found) between those who do and those who do not engage in the behavior.

Neutral information sharing		Seek advice		Advice is sought		Seek social validation	
Hyp.	Find.	Hyp.	Find.	Hyp.	Find.	Hyp.	Find.
0	0	+	+	0	+	+	+
+	0	0	0	+	0	0	0
+	+	0	0	+	0	0	0
0	0	More likely in decision stages No		+	0	More likely in decision stages No	
0	0	More likely in decision stages No		+	0	More likely in decision stages No	
+	+	+	+	+	+	+	+
+	+	+	+	+	0	+	+
+	+	+	0	+	0	+	+

another person. None of the hypotheses were supported in this case. Also, it was found that a respondent's achieved stage in the process of adopting home fallout shelters before HFPS was not very predictive of the type conversations he would engage in.

The hypothesis on consequences of talking was even more strongly supported. Regardless of the initial purpose for talking, those who talked were more likely to attend to the HFPS messages, and in most instances they were more likely to adopt the innovation of interest: home fallout shelters.

Implication The more favorable response following interpersonal communication (regardless of the initial purpose for engaging in that conversation) may be support for the proposition that when we talk, we are our own best audience. Thus, it may indirectly support Yarbrough and Klonglan's (1970b) hypothesis that "in most interpersonal communication we talk to others to convince ourselves".

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