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ADOPTION OF PUBLIC FALLOUT SHELTERS

A 1964 National Study

Gerald E. Klonglan
George M. Beal
Joe M. Bohlen

Final Report Contract No. OCD-PS-65-9. . . . . .Research Subtask 4811-E
Submitted to: Office of Civil Defense, Office of the Secretary of the Army, The Pentagon, Washington, D.C.

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Ames, Iowa. . .1966

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Iowa Agricultural and Home Economics Experiment Station
Project No. 401-44-96-09-1529
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in cooperation with

Office of Civil Defense
Office of the Secretary of the Army
Contract No. OCD-PS-65-9
Work Unit 4811-E

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Rural Sociology Report No. 49
Department of Sociology and Anthropology
Iowa State University
Ames, Iowa
1966

PREFACE

This report is one in a series of OCD sponsored reports focusing on the public's awareness and adoption of the idea of using public fallout shelters in the event of nuclear attack.

One of the major OCD programs since 1962 has been the surveying, licensing, marking, and stocking of facilities for public fallout shelter use. Thus, the research reported herein is one means of assessing the impact of this program on the general populace of the United States.

This report is an assessment of the public's adoption of the idea of using public fallout shelters. The data presented are based on a national sample of 1,464 respondents interviewed during the summer of 1964.

There are three general objectives of the research presented in this report:

(1). To determine the extent to which a national sample of people had adopted the idea of using public fallout shelters if there is a nuclear attack.

(2). To determine the relationship between selected demographic variables and the adoption of the idea of using public fallout shelters if there is a nuclear attack.

(3). To determine the relationship between selected attitude variables and adoption of the idea of using public fallout shelters if there is a nuclear attack. Attitude areas studied are:

a. Attitudes toward perception of the situation (perception of threat)

b. Attitudes toward final world outcomes

c. Attitudes toward the innovation of fallout shelters

d. Attitudes toward the deployment of anti-missile missiles

The authors wish to acknowledge the research contributions of E. Walter Coward, Jr. Mr. Coward was responsible for constructing the tables presented in this report and for carrying out the statistical analysis used in the report.

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Chapter 1

INTRODUCTION

Background

World events and civil defense

The possibility of nuclear war has created a major decision making problem for the people and their policy-makers in the United States. The continuing possibility has provided an impetus to improve the national civil defense capability to withstand a possible nuclear attack on the United States.

A major means of improving this civil defense capability has been the over-all program of the Office of Civil Defense (OCD) to provide fallout shelters for all of the nation's population as rapidly as possible and at the least possible cost. An expanded civil defense program was initiated in late 1961 and is being continued at the present time. This over-all program includes the National Fallout Shelter Survey, Marking and Stocking Program which has as its specific objectives to locate, mark and stock public fallout shelters for the largest portion of the nation's population as quickly as possible. The over-all OCD program also includes the Community Shelter Plan Program, a program designed to assign people to available public fallout shelters and to make people aware of their assignment and also to encourage people to make the decision to use their assigned shelter in the event of a nuclear attack.

A 57 city pilot effort to develop community plans was completed in 1964 and 1965. The major effort to develop these plans in local civil defense areas throughout the United States will begin in 1966 and continue through 1967 and 1968 and beyond.

As analysis of fallout shelters available from the National Fallout Shelter Survey, Marking and Stocking Program is completed it is possible to assess the shelter deficiencies in any city, town or county. OCD programs designed to meet this shelter deficiency are being implemented. The Home Basement Shelter Program, initiated on a pilot basis during February 1966 in Rhode Island, is designed to identify fallout shelter space in home basements. In addition, the Small Structures Survey is designed to locate buildings with adequate fallout protection but because of size limitations (too few shelter spaces) have not been included in the National Fallout Shelter Survey. The Shelter Development

Program has as its objective the encouraging of architects to design new buildings so as to obtain maximum amounts of fallout shelter capability in all new construction. To train architects in the principles of obtaining a fallout shelter capability OCD has implemented an architect training program. The construction of fallout shelters in new federal buildings is another program to help eliminate fallout shelter deficits. As Community Shelter Plans are completed and as Home Basement Surveys are completed many individuals and families may find themselves in a decision making situation; should I (or we) use a public fallout shelter or my (our) basement, or perhaps a basement of a friend, relative or neighbor? However, at the present time the major fallout shelter capability is the public fallout shelter identified in the National Fallout Shelter Survey, Marking and Stocking Program. Since 1962 this has been the major OCD fallout shelter effort.

An evaluation of the National Fallout Shelter Survey Program might focus on either the extent to which public fallout shelters have been located, marked and stocked, or the extent to which people are aware of and have made decisions to use public fallout shelters in the event of a nuclear attack. The emphasis of this report is on the latter evaluation.

Other periodic materials such as Selected Statistics on the Fallout Shelter Program provide progress reports on the number of buildings and spaces that have been licensed, marked and stocked as public fallout shelters.

The above publication and others present many relevant measures which may be used to evaluate the public fallout shelter program efforts. There are little data available however, which can be used to evaluate the extent to which people are aware of and have made plans to use public fallout shelters, and hence to evaluate the current progress of the expanded civil defense program. If a nuclear attack occurs it is in the local communities where lives will have to be saved. Master plans on paper at national, state, and local levels will not save lives in local communities in a nuclear attack. Only if citizens in each community respond to and carry out (adopt) the various Office of Civil Defense ideas and programs, will realistic returns be possible from the total civil defense effort.

When evaluating the general public's adoption of civil defense programs it may be helpful to make a distinction between the adoption of abstract ideas and adoption as an overt behavior pattern related to a product or practice.

In some cases OCD may desire that people adopt an abstract idea (symbolic adoption). For example, OCD is licensing, marking, and stocking public fallout shelters across the nation. Current licensing contracts state that shelter space in buildings is not to be used unless there is an attack. Thus, OCD wants the general public to adopt the idea of using a public fallout shelter even though at present they cannot go through behavior adoption, that is, go to a public fallout shelter and try it out.

In other cases OCD may desire that people adopt a behavior (behavior adoption) at a given point in time. For example, OCD wants a portion of the people to attend radiological monitor training schools. In this case people not only have to adopt the idea of being trained as a radiological monitor but also have to behave in order to become trained, that is, physically go to and attend classes.

OCD as a change agent

In the above discussion it has been implicitly assumed that OCD is a change agent. A change agent is a person (or group) who attempts to influence the adoption decisions of other individuals (or groups) in a direction believed to be desirable. It is assumed that OCD as a change agent is interested in understanding and predicting how people will adopt new civil defense ideas and programs. This involves a clear and detailed understanding of the behavior desired and of the factors related to the acceptance or rejection of these new ideas and programs. OCD is also interested in the inter-relationships among the various factors related to adoption. The change agent can use insights about these factors in planning, implementing, and evaluating future adoption programs.

A change agent is usually concerned also with the progress which his programs have made in the past and where things stand now, so he can plan for the future. For example, OCD may ask the following questions:

1. What is the current level of public adoption of civil defense ideas and programs given our past level of resource inputs and methods?
2. How can these data be used as a basis for planning future activities?

Insights into the current adoption rate of civil defense ideas, such as adopting the idea of using public fallout shelters, and factors affecting the adoption rate should be helpful to both OCD policy-makers and operators.

Policy-makers can use the data in setting goals and allocating resources. Operators can use the data in part to help analyze the success of using certain information channels and messages in the past and to help plan information programs for the future.

A 1963 Research Study

Because of the importance of the National Fallout Shelter Survey, Marking, and Stocking Program to the total civil defense effort, a decision was made in late 1962 to attempt to develop a means of determining the extent to which people in the general public were aware of public fallout shelters and if they had thought about or decided to use a public fallout shelter in the event of a nuclear attack. The decision was made to conduct a detailed research project in one community in calendar year 1963.[a] Based on this pilot study a decision would be made as to whether or not a regional or national research study would be feasible. A research project with the following three general objectives was carried out in June and July 1963 in the city of Des Moines, Iowa.[b] The chronology of these three general objectives was as follows:

1. The first objective was of a theoretical and methodological nature: to develop an analytical frame of reference which could be used for planning, implementing and evaluating civil defense programs which have as their primary objective the obtaining of the adoption of new ideas, innovations, or programs by individuals in specified target audiences.

2. Within the analytical frame of reference developed in objective one, the second objective was to determine the extent to which people had adopted the idea of using public fallout shelters if there is a nuclear attack.

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[a] For a detailed description of the 1963 research study see: Klonglan, Gerald E., George M. Beal, and Joe M. Bohlen. Family Adoption of Public Fallout Shelters. Rural Sociology Report No. 30. Department of Economics and Sociology, Iowa State University, Ames, Iowa. 1964.

[b] Des Moines was one of the leading cities in stocking public fallout shelters at the time of the 1963 research study. Based on OCD data as of July 25, 1963, Des Moines had stocked 74,827 shelter spaces, capable to shelter over 28 percent of its population. As of that date only 18 of the 215 Standard Metropolitan Areas in the United States had stocked spaces for more than 20 percent of their 1960 population. And only three Standard Metropolitan Areas had stocked spaces for more than 28 percent of their 1960 population. Des Moines was one of these three.

The third objective was to determine the relationship between selected demographic, knowledge, attitude, and information variables and the adoption of the idea of using public fallout shelters if there is a nuclear attack.

On the basis of the 1963 study it was concluded that the concepts and methods developed under objective one could be used with some modification to assess (see Objective 2) and attempt to explain (see Objective 3) people's adoption of public fallout shelters. The specific findings of Objectives 2 and 3 were of course, only generalizable to Des Moines. In order to provide a basis for nationwide generalizations, a decision was made to carry out a similar study on a national basis in 1964. Thus, a series of questions were developed and included in a 1964 OCD National Probability Sample Study.[a]

Objectives of this Report

The general purpose of this report is to present the findings from the national study of peoples' adoption of the idea of using a public fallout shelter if there is a nuclear attack. The analytical framework is presented in Chapter 2 of this report.[b]

The specific objectives of this report are:

1. To determine the extent to which a national sample of people had adopted the idea of using public fallout shelters if there is a nuclear attack. (See Chapter 3.)
2. To determine the relationship between selected demographic variables and the adoption of the idea of using public fallout shelters if there is a nuclear attack. (See Chapter 4.)

---

[a]See Chapter 3 for a description of the 1964 National Study.

[b]It is believed that the analytical framework presented in Chapter 2 is not limited in its use only to the adoption of the idea of public fallout shelters. Because of its general level conceptualization, it is believed that the framework should be of value in planning, implementing, or evaluating many other types of civil defense ideas, innovations, or programs. Because of this, the most relevant part of this report may not be the empirical findings presented, but rather the concepts used and the method of operationalizing the concepts. The general concepts used and the method employed may have utility long after the empirical findings presented in this report have relevance. This point is emphasized so the reader may read the report from either (or both) a conceptual and an empirical finding point of view. The reader may desire to determine the degree to which the analytical framework and the methods of this report can be applied to other relevant civil defense or other activities with which he is familiar.

3. To determine the relationship between selected attitude variables and the adoption of the idea of using public fallout shelters if there is a nuclear attack. Attitude areas studied are:
   a. Attitudes toward perception of the situation (perception of threat) (Chapter 5.)
   b. Attitudes toward final cold war outcomes (Chapter 6.)
   c. Attitudes toward the innovation of fallout shelters (Chapter 7.)
   d. Attitudes toward the deployment of anti-missle missiles (Chapter 8.)

Chapter 2

FRAMEWORK FOR ANALYSIS

Introduction

Civil defense is a relatively new change agent in the United States. Only since 1950 has a civil defense organization been concerned with communicating information to various individuals and groups throughout the United States. And only since 1961 has the Department of Defense - Office of Civil Defense been the primary change agent for implementing civil defense ideas and programs.

Businesses, governmental agencies, educators, and many others, however, have been in change agent roles for many years. The rapid scientific development of new ideas, practices, and products since 1900 has generated considerable research dealing with the question of how people adopt new ideas. A large body of literature has been generated which focuses on the adoption and diffusion of new ideas, practices, and products. Adoption is a micro concept referring to an individual's acceptance of an idea, practice, or product. Diffusion is a macro concept referring to the spread of an idea, practice, or product through the whole of a potential audience, market, or social system. A number of different academic disciplines have conducted research on the adoption and diffusion processes. Rural sociologists, industrial sociologists, medical sociologists, anthropologists, educators, and mass communication researchers have studied adoption and diffusion.

The major goal of this research has been to better understand individual adoption behavior so social structures and communication programs might be more efficient and effective.

In this report only some of the concepts developed in this research tradition will be introduced. Specifically, this report will focus on the individual's adoption of new ideas rather than on the diffusion of new ideas among individuals.

Innovation

By innovation is meant an idea, practice, or product perceived as new by the individual or group for whom it is intended. OCD innovations include

such ideas, products, and practices as: public fallout shelters, private fallout shelters, medical self-help training, emergency hospitals, shelter management training, shelter utilization plans, licensing buildings for shelter use, marking buildings, stocking buildings, establishing emergency operation centers, developing emergency operation plans, etc. Thus, civil defense officials have been developing many new ideas that they want to introduce into our society. From one point of view all the ideas civil defense wants to introduce into our society may be perceived as innovations. The civil defense innovation which is of central concern to this report is the idea of using public fallout shelters if there is a nuclear attack.

Adoption or Decision Units

Each civil defense innovation will have to be adopted by some portion of the population. Thus, it is important for OCD to delineate who is the adoption unit for each of its innovations. The adoption unit is the individual or group who makes the decision to adopt or not adopt an innovation. The adoption unit for civil defense innovations varies by type of innovation. In some cases the adoption unit may be an individual, such as a building owner, a doctor, a housewife, a head of household, or a mayor. In other cases the adoption unit may be a group such as a school board, a county board of supervisors, a city council, a hospital board, or a family. It is important to note, however, that even though the adoption unit may not be an individual, it is still individuals who make decisions within these multiple-person units.

Some innovations can be adopted by an individual regardless of the decisions of others in his group or social system, e.g., the purchase of emergency supplies. In other cases, an innovation cannot be adopted without the consent of a majority of the members in the social system, e.g., the passage of a bond issue for locally financed public fallout shelters. In this latter type of situation an individual may wish to adopt the innovation but cannot do so until others act coordinately with him.

It is important to note that under the current joint federal-state-local civil defense structure that key adoption units for the Office of Civil Defense are state and local civil defense organizations. Communication and persuasion must be used in many cases to get new innovations accepted by state and local

civil defense personnel. Numerous other OCD adoption units could be delineated. The adoption unit which is the focus of study in this report is the individual.

Adoption as a Process

The adoption process is the mental process through which an individual passes from first hearing about an innovation to its final adoption. A study of the adoption of an innovation is essentially a study of individual decision making. When writers in the adoption-diffusion research tradition use the concept "Adoption Model" they are usually referring to the adoption process as described in this section of the report.

One may conceptualize an individual's decision to adopt an innovation as a process composed of stages. The adoption of a specific innovation is usually not the result of a single decision to act but rather the result of a series of more specific decisions and actions. By dividing the adoption process into stages it is possible for the change agent (OCD in this case) to assess the extent to which an individual has proceeded in his decision making about a specific innovation. It also makes it possible for the change agent to determine what kinds of appeals and information he needs to communicate, since individuals at different adoption stages usually need different kinds of information. Past researchers have most frequently divided the adoption process into five stages: (1) aware, (2) information, (3) evaluation, (4) trial and (5) adoption. It may be noted that these five stages begin to analyze behavior only after a person is aware of an idea. It is obvious that if the change agent wants to account for all the people in a social system there is another category of people, those unaware of the idea. However, major concern here is with the five stages from aware to adoption. Each of the stages is defined below.

Aware stage

At this stage the individual is initially exposed to the innovation. The individual knows of the innovation but lacks complete information about it. The individual may or may not be motivated to seek additional information about the innovation at this stage.

Information stage

The individual becomes interested in the innovation and seeks more information about it. In this stage the individual mainly increases his information about the innovation. The individual is interested in getting both general and more specific information about the intrinsic qualities of the innovation and relating this information to his past experiences and knowledge. At this stage he is building up a data base which will help him to decide whether or not he wishes to become further involved with the innovation.

Evaluation stage

At this stage the individual is concerned with applying the innovation to his own situation. The relative advantages and disadvantages of the innovation to other alternatives are considered. The individual makes a mental application of the innovation to his present and future situation and makes the decision either to try it or not. He is concerned with determining if adoption of this innovation will help him to maximize his goals to a greater degree than will any of the other alternatives which he perceives to be available to him.

Trial stage

At this stage the individual is motivated to use the innovation on a small scale in order to determine its utility in his own situation. When possible, most potential adopters use an innovation on a small experimental scale to test its applicability and compatability to their situations.

Adoption stage

The individual adopts and decides to continue the full use of the innovation. At this stage and point in time the individual is satisfied that the course of action being pursued is best for him.

The Adoption Period

The adoption period is the time in days, months or years required by an individual to pass through the adoption process from aware to adoption. It

is important to note that the adoption period is not the time between the change agent's initial introduction of the innovation and its ultimate adoption by an individual in the social system. This time period is called the availability or market period.

The average length of adoption period has been found to vary widely among innovations. For example, the length of the adoption period (from aware to adoption) for the average Iowa farmer for hybrid seed corn was 9.0 years. It took North Carolina farmers 8.0 years to adopt improved pastures. For Warfarin rat poison the adoption period averaged 0.8 years; for "Miracle" fabrics (orlon and dacron) by housewives it averaged 0.5 years. Fifteen years are normally required for an educational innovation to be adopted by the first three percent of the public schools in the United States. Thus, one can see that the adoption period does vary by innovation. The differing, and often quite lengthy, adoption periods of innovations are data with which the adoption periods of OCD innovations may be compared. Perhaps it will be found that OCD innovations are being accepted as rapidly as one might expect from previous studies of non-civil defense innovations. In some cases adoption of OCD ideas may even be more rapid than expected on the basis of past findings.

The above discussion of the adoption period may leave the reader with the impression that the five stage adoption process is linear in nature, that is, that each individual goes through the adoption process one stage at a time from aware to adoption. Many of the research studies have found the adoption process does occur in a linear order; however, this need not be the case. The stages may not always occur in the same time sequence for all individuals. For example, some individuals may need additional information after the evaluation or trial stages. In other cases the individual may try the product on a small scale before he has gathered much information about it. This is especially true when the product is divisible, is inexpensive, and when there is little chance of negative results.

Rate of Adoption

Rate of adoption (or the adoption rate) is the relative speed with which an innovation is adopted by the members of an audience, market or social system. Rate of adoption is usually measured by the percentage of members in the social

system who have adopted the innovation at a given point in time. Thus, if 10 percent of the people in the United States had adopted a new toothpaste after its first year on the market the rate of adoption would be 10 percent. A similar concept often used in the field of marketing is the market penetration of a potential market at a given point in time.

Increasing the Rate of Adoption

Almost all change agents desire to increase the rate of adoption of their innovations. OCD likewise wants to speed up the adoption of its innovations. One method to speed up the adoption of innovations is to have the potential user of the innovation become aware of it as early as possible. Another method is to shorten the adoption period, that is, the time span between awareness of the idea and its final adoption. The problem most change agents face is how to facilitate the movement of individuals from the aware stage to the adoption stage as rapidly as possible. This problem can be posed by the change agent in question form: What factors affect the decision making (adoption) process? What factors are related to decisions people make about an innovation? How can knowledge of these factors help attain my desired adoption goals? Stating the problem in OCD terms: What factors are related (or are not related) to decisions people make about civil defense innovations? If OCD knew what these factors were (or at least some of them) it could attempt to use its knowledge about these factors to attain its desired adoption goals.

Many research studies have sought to delineate factors related to the adoption of innovations. Some of the categories of factors which have been studied in relation to adoption include: (1) demographic factors, (2) knowledge factors, (3) attitudinal factors, and (4) sources of information (communication factors).

Demographic factors and stage of adoption

Demographic factors include personal characteristics such as age, education, income, and home ownership. Three of the most substantiated generalizations about the relationship of demographic factors and adoption from past studies are: (1) Earlier adopters of innovations are usually younger in age than later adopters. (2) Earlier adopters of innovations have had more education than later adopters. (3) Earlier adopters of innovations have had more income than later adopters.

In this report a number of demographic factors will be related to an individual's stage of adoption in an attempt to determine if such factors are related to the adoption of a civil defense innovation: the idea of using public fallout shelters if there is a nuclear attack.

Knowledge and stage of adoption

Research workers have also attempted to determine how knowledge is related to adoption. A basic question most change agents want to know is: How much specific knowledge about an innovation do individuals need before they will adopt it? The change agent is also usually concerned with how much general knowledge is needed by the individual to adopt an innovation, that is, information which helps set a context for the innovation to be more easily comprehended. Past studies have found that a person with more technical knowledge of an idea or product (innovation) area is more likely to adopt a specific innovation in that area than those with less knowledge.

Since there was not sufficient space in the 1964 National Study questionnaire for general civil defense knowledge questions, data are not available to relate an individual's general knowledge about civil defense to his stage of adoption of public fallout shelters. The reader is referred to the 1963 study report for empirical data on these types of relationships.[a]

Attitude and stage of adoption

Research workers have also sought to determine how attitudes are related to adoption. An attitude is a predisposition to act. It is the state of readiness of an individual to deal with an object. Attitudes arise from the effects of personal experience and the pressures of personal need. Obviously, attitudes of individuals are very important factors for change agents to take into account when planning adoption programs.

An individual may have many attitudes that affect his adoption of an innovation. Two of the most important attitudes will probably be: (1) those

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[a]See Chapter 7 in Klonglan, Gerald E., George M. Beal, and Joe M. Bohlen. Family Adoption of Public Fallout Shelters. Rural Sociology Report No. 30. Department of Economics and Sociology, Iowa State University, Ames, Iowa. 1964.

toward the situation in which the innovation will be relevant, and (2) those toward the innovation itself. In this report individuals' perceptions of the threat of war, fallout, and other situational factors will be related to stage of adoption of public fallout shelters. Also, the individual's perception of fallout shelters will be related to stage of adoption. Other attitude areas that will be related to an individual's stage of adoption of public fallout shelters include the individual's perceptions of (1) likely and desirable world outcomes; (2) disarmament and arms control; and (3) ballistic missile defense.

Some change agents ask how a knowledge of people's attitudes can help the change agent speed up the adoption of his innovation. There are a number of ways the change agent may use his knowledge of the attitudes of his adoption unit. Let us assume that OCD change agents know the attitudinal frame of reference people have about certain aspects of civil defense. How will this knowledge aid OCD in planning and implementing the public fallout shelter program?

It is known that people will use their attitude framework as one basis for interpreting messages received about civil defense. A knowledge of current civil defense attitudes will give OCD officials some insight as to whether future messages should be primarily designed to reinforce existing attitudes (which may be the case if existing attitude frameworks are already structured as OCD desired) or to change existing attitudes from negative to positive. In some cases civil defense may find that people may have neither a positive nor negative attitude about a specific innovation. People may not have heard of the idea. In this case OCD may want to invest resources to introduce the idea to people. OCD may find that certain attitudinal ideas could be de-emphasized in future messages. Also, OCD may find it would be desirable to be more parsimonious in some of its messages. Too many attitudinal ideas may make the general public ignore the problem because of its complexity. That the problem is complex is known. However, some of the complexities may not have to be communicated to people in some instances. The change agent may also use his knowledge of people's attitudes in many other ways. Some of these are discussed later in this report.

Sources of information and stage of adoption

Many change agents have attempted to determine the relative importance of various information sources at different adoption stages. Researchers have

categorized the various sources of information named by individuals on two general bases.

One categorization has been the grouping of sources of information into four general types: (1) mass media, including such media as newspapers, magazines, radio, and television; (2) government agencies, including colleges, extension services, and other government agencies; (3) commercial sources, including such sources as dealers and salesmen; and (4) informal sources, including relatives, neighbors, and friends.

The second method of categorization has been on the basis of personal and impersonal sources of information. Personal sources of information are those communication contacts which involve a direct face-to-face exchange between a sender of information and the receiver of that information. Impersonal sources of information are non-face-to-face exchanges between the communicator and the communicatee.

It has been found that communication media are used differentially at the different stages of adoption. A survey of 35 studies of agricultural innovation finds the following generalizations about communication media and the stages of adoption. At the Aware stage, when an individual first learns about a new idea or practice, mass media were the most frequently used, followed by government agencies, informal sources, and commercial sources; at the Information stage mass media were again most often mentioned, followed by government agencies, informal sources, and commercial sources. At the Evaluation stage informal sources were most frequently mentioned, followed by government agencies, mass media, and commercial sources. The ordering of the information sources used at the Trial and Adoption stages was the same as for the evaluation stage.

It is also important to note that it is possible for an individual to use the same source of information in different ways at several stages in the adoption process. Also, the importance of each of the four general level media categories at each adoption process stage has been found to vary from innovation to innovation. In other words, the sources of information used at different adoption stages will, to some extent, depend upon the innovation.

When personal and impersonal sources of information are compared to stage of adoption the following generalizations are supported by past research:

1. At the Aware and Information stages impersonal sources are used by a greater proportion of the people than personal sources.
2. At all other stages personal sources are somewhat (although not necessarily extremely) more important than impersonal sources.
3. Personal sources are most important in the evaluation stage.

Studies have also found that the importance of personal or impersonal source varies depending upon the type of innovation. Also, the use of personal and impersonal sources has been found to be related to innovativeness. A greater proportion of those first to adopt an idea use impersonal sources, mainly specialized mass media, or technically competent personal sources. Those last to adopt are more prone to use personal sources, especially neighbors and friends.

As was the case with civil defense knowledge questions, sufficient space was not available in the 1964 National Study to allow the inclusion of any analysis of civil defense and public fallout shelter sources of information.

Change agents and factors related to adoption

Why do change agents want to know which factors are related to the adoption of innovations? An obvious answer is that they want to be able to control the rate at which their innovations are adopted. A knowledge of factors related to adoption may make it possible for the change agent to change these factors in order to increase the rate of adoption of his innovation. The change agent will thus not only want to know which factors are related to adoption, but also those factors which can be influenced by him in order to increase the rate of adoption of his innovation.

In the preceding four sections four general level factors which may be related to adoption were discussed. These factors were demographic, knowledge, attitudes, and sources of information.

If it is found that a positive relationship exists between a factor and an adoption decision desired by OCD, OCD could try to influence this factor in order to obtain the same adoption decision from people who have not yet made the adoption decision. If it is found, for example, that the people who strongly believe that public fallout shelters will increase a person's chance of survival are the same people who have adopted the idea of using a public fallout shelter, OCD may want to try to develop messages for non-adopters which would stress the idea of fallout shelters increasing one's chance of survival.

In the above example, OCD has an opportunity to try to change the factor which is related to adoption, i.e., an attitude. By a public information program, classes, etc., attempts can be made to bring about a change in the attitude which would result then, hopefully, in a change in adoption.

OCD also has the possibility of changing knowledge factors.

OCD will probably have only limited opportunity to change the sources of information people use. Thus OCD will probably not change TV viewing habits, radio listening patterns, magazine and newspaper reading habits, or personal interaction patterns. However, if OCD has knowledge of present communication sources used by individuals, they can use these channels to send relevant messages to their designated target audience. OCD may also change some sources of information. OCD may increase the number of contacts people have with OCD by holding classes, encouraging voluntary organizations to teach civil defense ideas, etc.

Demographic variables are one general level factor, however, which may be related to adoption which civil defense cannot change. OCD cannot change a person's age, number of years of formal schooling, family size, home ownership and so on.

However, even though OCD cannot change demographic variables, a knowledge of the relation of demographic variables to adoption may be helpful to OCD operators and policy-makers in a number of ways. Demographic factors may be helpful in differentiating the total population into meaningful audiences for which special designed information programs may be developed. For example, if older people have not adopted civil defense ideas or programs to the extent to which younger people have, OCD may decide to develop a special information campaign telling why older people should be concerned with civil defense. To implement the program OCD could use research data showing the sources of information used by older people. These information sources could then be selected as the media to carry a special designed message to the special category of receivers (older people).

On the other hand, if one finds that demographic variables are not related to adoption then they may not be relevant variables to consider when planning OCD public information or education programs. The finding of no relationship between a demographic variable and desired decision or action may mean that so little adoption has taken place that people along a whole distribution of

factors such as age or education are not differentiated by stage of adoption. Thus, many types of public information or education programs may be helpful to increase the adoption of civil defense ideas. However, even if demographic variables are found not to be differentiated by stage of adoption, it still may be relevant and desirable to develop different messages for different audiences and use specially selected media to reach these audiences.

Summary

The Office of Civil Defense is perceived as a change agent. As a change agent one of its goals is to obtain adoption of its innovations. By innovation is meant an idea, practice, or product perceived as new by the individual or group for whom it is intended. The civil defense innovation which is of central concern to this report is the idea of using public fallout shelters if there is a nuclear attack. The adoption unit is the individual or group who has to make the decision to adopt or not adopt an innovation. The adoption unit in this report is an individual. The adoption process is the mental process through which an individual passes from first hearing about an innovation to its final adoption. Conceptually, the adoption process is usually referred to as an adoption model. The adoption process may be conceptually divided into five stages: (1) aware, (2) information, (3) evaluation, (4) trial and (5) adoption. The adoption period is the time required for an individual to pass through the adoption process from aware to adoption. The rate of adoption is the relative speed with which an innovation is adopted by members of a social system. One of the goals of the change agent is to increase the rate of adoption of his innovation. One way to attempt this is to shorten the adoption period. Four categories of factors whose relationship to adoption have been studied are: demographic, knowledge, attitudes, and sources of information. Knowledge of these four factors can be used by a change agent to effectively and efficiently shorten the adoption period and increase the rate of adoption of his innovation.

Chapter 3

THE ADOPTION MODEL APPLIED TO A CIVIL DEFENSE INNOVATION

Introduction

The primary purpose of this chapter is to operationalize those concepts of the adoption model that have been employed in this study. The concepts operationalized are: innovation, adoption, adoption unit, the adoption process and the rate of adoption. Following these operationalizations is a brief discussion of the setting of the 1964 Research Study. The findings of this study with regard to the total number of respondents in each adoption stage is then presented. The 1964 findings are then compared to the findings of the 1963 Des Moines Study. The final section in this chapter is a brief discussion of the method of analyzing the relationship of demographic and attitudinal factors to stage of adoption.

The Innovation

The first concept to be operationalized is the innovation. The change agent has to define what innovation he wants adopted. The civil defense innovation under study in this report is the concept (idea) of using a public fallout shelter if there is a nuclear attack. This innovation was selected because the program to license, mark and stock public fallout shelters has been the major civil defense program since 1961.

The innovation being studied in this report is quite different from most innovations studied by previous adoption-diffusion researchers. For example, a majority of past adoption studies have been concerned with products or practices which require an economic investment or expense by the adoption unit. Many of the innovations have also offered a promise of immediate economic reward to the adoption units who adopted its use. Another important characteristic of many previously studied innovations is that of divisibility, that is, it is possible for the adoption unit to try out a small amount of a product, or try a practice for a short period of time before deciding to adopt its use over time. These characteristics of previously studied innovations are not present in the innovation being studied in this report. For example, there is no direct

number of children and family income. There will be some individuals (and families) who have private fallout shelters and therefore, may appear not to have a need for a public fallout shelter. However, they may not be in the vicinity of these shelters if there is a nuclear attack and thus under these circumstances would need to use a public fallout shelter. Thus, it is assumed that all individuals may have a possible need for public fallout shelters if there is a nuclear attack.

The Adoption Process and the Rate of Adoption

Having defined the innovation, the adoption desired, and the adoption unit, the change agent implements a program to promote the adoption of the innovation by the target adoption unit(s). As the program is carried out the change agent is concerned with the rate of adoption of his innovation. At selected points in time the change agent may desire to evaluate the extent to which adoption units have accepted his innovation. One way of evaluating the change agent's program is to determine the number of adoption units who are at each stage in the adoption process.

In this study rate of adoption has been operationalized by determining the number of individuals in each stage of adoption at the time of the study. The individual's stage of adoption was determined by analyzing the individual's responses to a series of questions asked of each individual. It should be pointed out that in analyzing the responses to this series of questions this study has assumed the adoption process to be "linear" in nature. Thus, for an individual to be in Stage 5 of the adoption process he has to have met the criteria of all the earlier stages (the criteria for each adoption stage are discussed later in this chapter).

The following seven questions were designed for the 1964 National Study as the means to determine the adoption stage of individuals with respect to the idea of using public fallout shelters if there is a nuclear attack. The questions are presented by stage of adoption.[a]

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[a]The questions asked in the 1964 National Study are somewhat different from the 1963 Des Moines study questions. The changes were due to a number of reasons: (1) the national study included both single and family households, while only family households were interviewed in Des Moines; (2) the national sample included both rural areas and large metropolitan areas whereas the Des Moines sample was all urban; (3) the general over-all orientation of the total national research study; that is, to world outcomes and ballistic missile defense rather than to civil defense per se; and (4) the amount of space available for civil defense adoption questions in the two studies, with much less space available in the national study.

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The series of questions used to analyze an individual's stage of adoption consisted of one or more questions for each adoption stage. These questions were designed to determine whether or not the respondent had completed the core action of each adoption stage.

Aware questions

Three different questions were designed to ascertain whether or not an individual was aware of public fallout shelters or the public fallout shelter program.[a] The three questions were:

Have you seen this sign posted on any buildings around here? (The respondent was shown a card with the civil defense shelter symbol on it.)

NO (If no, ask second question below)

YES (If yes, ask question below)

What does this sign mean to you? (Ask only if a "yes" to question above.)

IDENTIFIED IT AS RELATED TO FALLOUT SHELTERS

DOES NOT IDENTIFY IT AS RELATED TO FALLOUT SHELTERS (If the respondent says "no" to the first question or gives a "does not identify it as related to fallout shelters" response to the above question ask the following question:)

Have you seen or heard about any public fallout shelters around here which will be available in case of nuclear attack?

NO

YES

Information questions

Two different questions were designed to ascertain whether or not an individual had obtained any additional information about public fallout shelters:

Since you first heard about fallout shelters, have you had any additional information about them?

NO

YES

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[a]In this study Aware questions are designed to determine an individual's awareness of public fallout shelters only in his local area. Thus a person who is not aware of public fallout shelters in his local area is considered in the Unaware stage even though he might be aware of public fallout shelters in other communities or states (because of visits, travel, etc.). One rationale for focusing on awareness in his local community (i.e., around here) was based on the assumption that a person would probably have to use a public fallout shelter near him, because time would not allow for considerable travel to another community for shelter. Thus, the adoption stages presented herein may in one sense be regarded as functional stages.

Can you recall any specific buildings which have been selected as public fallout shelters?

NO

YES

Evaluation questions

One question was designed to determine whether or not an individual had evaluated public fallout shelters:[a]

Have you ever thought at all about using a public fallout shelter in case of nuclear attack?

NO

YES

Trial questions

Questions pertaining to the trial stage were not included in the study for two reasons: First, the adoption idea being studied was a concept, i.e., was of a symbolic nature. Second, since licenses signed by building owners do not allow the use of public fallout shelters except in a nuclear attack, in most cases it is not possible for an individual to "try" a public fallout shelter.

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[a]Two other questions were designed to obtain evaluation stage data but were not used as criteria in categorizing individuals by stage of adoption, as is explained later in this chapter. These two questions were:

Have you ever discussed the possibility of using a public fallout shelter in case of nuclear attack with anyone in your household?

NO

YES

Have you ever discussed the possibility of using a public fallout shelter in case of nuclear attack with anyone else - not in your household?

NO

YES

Adoption questions

One question was used to determine whether an individual had adopted the symbolic concept or idea of using a public fallout shelter if a nuclear attack should occur:[a]

> In case of nuclear attack do you think you would definitely try to use a public fallout shelter, probably try to use one, probably not, or definitely not use one?
>
> DEFINITELY TRY
>
> PROBABLY TRY
>
> PROBABLY NOT TRY
>
> DEFINITELY NOT TRY

The 1964 Research Study

In this section the 1964 National OCD Research Study designed to obtain the answers to the above questions is briefly described. Following the description of the field study a detailed explanation of how an individual's answers to the above questions were used to determine his stage of adoption is presented. In addition to the seven criteria questions a number of other questions relating to civil defense and civil defense adoption were also asked. Most of these questions are presented and discussed later in this report.

The 1964 National Study was sponsored jointly by the Office of Civil Defense (OCD) in the Office of the Secretary of the Army and the Advanced Research Projects Agency (ARPA) in the Office of the Director of Defense Research and Engineering, Department of Defense. Major portions of the questionnaire used in the study were developed by members of the Sociology

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[a]A second "adoption" question was also asked if the respondent answered "definitely try" to the above adoption question. The purpose of the second question was to determine how many of those who indicated that they were committed to "definitely use" a public fallout shelter had also thought through the concept to a sufficient degree to have a definite plan to get to a public fallout shelter if there was a nuclear attack. This question was:

> (If definitely try) Have you made any specific plans to get to a public fallout shelter in case of a nuclear attack?
>
> NO
>
> YES

Department at the University of Pittsburg and by members of Tempo, the General Electric Company.[a] The authors of this Iowa State University report submitted the initial questions designed to ascertain the public fallout shelter adoption stage of respondents. The study was designed to interview a probability sample of 1500 adult respondents. People 21 years of age or older or married people under 21 were included in the sample.

The survey field work was conducted by the National Opinion Research Center (NORC) of the University of Chicago. Field interviewing began early in June and was completed in September. A total of 1464 respondents completed questionnaires in 78 sampling locations throughout the United States.[b]

Public Fallout Shelter Adoption Stages

The methodology used to analyze an individual's responses to the seven adoption stage questions to determine his stage of adoption is presented in this section. The reader who is not interested in the specific criteria used to empirically define the stages of adoption may proceed to Table 3.1, page 29 for a brief definition of the civil defense adoption stages and the number and percent of individuals in each adoption stage.

Assigning an individual to a final adoption stage is the result of three considerations: (1) he must have "correctly" answered the set of questions for that final adoption stage; (2) he must have "incorrectly" answered the set of questions for the next immediate adoption stage; and (3) for the latter stages, he must have "correctly" answered the set of questions for each of the adoption stages prior to the final adoption stage.

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[a]See for example:

1) Research Office of Sociology, "Data Book for the 1964 National Probability Sample Study," University of Pittsburgh. 1964. (A number of other publications using data from the 1964 study have also been published by the University of Pittsburg Sociology Department.)

2) R. H. McMahan, Jr., R. E. Ehrlich, and A. T. Ewald, "Public Opinion and Ballistic Missile Defense," Tempo, General Electric Company. Santa Barbara, California. 1964. (A complete copy of the questionnaire is included in this report.)

[b]For a more detailed description see both of the references in the previous footnote. The number of respondents in each sampling location are presented in the Tempo report.

An overview of this methodology is presented in Diagram 3.0 below. Following the diagram the use of each adoption question is discussed in detail.

Diagram 3.0. An Overview of Procedure Used to Categorize Respondents in Each Adoption Stage

Questions Used to Determine Adoption Stage	Final Adoption Stage				
	Unaware	Aware	Information	Evaluation	Adoption
Aware questions	No*	Yes	Yes	Yes	Yes
Information questions		No	Yes	Yes	Yes
Evaluation questions			No	Yes	Yes
Adoption questions				No	Yes

Aware stage

Three questions were used to determine if an individual was aware of public fallout shelters. The three questions were:

Q. 22: Have you seen this sign posted on any buildings around here?

YES (If yes, ask 22A)

NO

Q. 22A. What does this sign mean to you?

IDENTIFIED IT AS RELATED TO FALLOUT SHELTERS

DOES NOT IDENTIFY IT AS RELATED TO FALLOUT SHELTERS

Q. 23. Have you seen or heard about any public fallout shelters around here which will be available in case of nuclear attack?

YES

NO

Respondents who: (1a) answered yes to both Q. 22 and Q. 22A, or (1b) answered no to Q. 22 but answered yes to Q. 23, and (2) answered no to both of the information questions:

*In this diagram the terms "yes" and "no" are used in place of the terms "correctly" and "incorrectly."

Q. 24. Since you first heard about fallout shelters, have you had any additional information about them?

YES

NO

Q. 25. Can you recall any specific buildings which have been selected as public fallout shelters?

YES

NO

were considered to be at the Aware stage of the adoption process.

One hundred fifty (150) or approximately 10 percent of the 1464 respondents answered the above questions in this manner and were thereby classified as being in the Aware stage.

The above methodology also delineated respondents whose answers indicate that they were not aware of public fallout shelters. There were 655 respondents, approximately 45 percent of the total 1464 respondents, who (1) answered "no" to questions 22 or 23 or (2) answered "yes" to Q. 22, but did not identify the sign as related to fallout shelters in Q. 22A, and then answered "no" to Q. 23. These individuals were considered to be unaware of the public fallout shelter program. They are perceived as composing an Unaware stage.

Information stage

Respondents who:

(1) answered the aware questions (questions 22, 22A, 23) so that they were at least in the Aware stage; and

(2) answered "yes" to either one or both of the additional information questions (see questions 24 and 25 above); and

(3) answered "no" to evaluation question 26:

Q. 26. Have you ever thought at all about using a public fallout shelter in case of a nuclear attack?

YES

NO

were considered to be at the Information stage of adoption.

Two hundred forty-three (243) or approximately 17 percent of the 1464 respondents answered the questions in this manner and thus were classified in the Information stage.

Evaluation stage

A respondent was considered to be in the Evaluation stage if he answered "yes" to evaluation question 26 (after having been aware of and received information about public fallout shelters) but did not say "definitely try to use a shelter" when asked adoption question 29.

Q. 29. In case of nuclear attack do you think you would definitely try to use a public fallout shelter, probably try to use one, probably not, or definitely not use one?

DEFINITELY TRY TO USE A SHELTER
PROBABLY TRY TO USE A SHELTER
PROBABLY NOT USE A SHELTER
DEFINITELY NOT USE A SHELTER
DON'T KNOW

One hundred fifty (150) or approximately 10 percent of the 1464 respondents answered questions 26 and 29 in the above manner and were thereby classified in the Evaluation stage.

Adoption stage

A respondent was considered to be at the Adoption stage if he:

(1) was aware of public fallout shelters (see awareness criteria above; and

(2) had information about public fallout shelters (see information criteria above); and

(3) answered "yes" to evaluation question 26; and

(4) gave a "definitely try to use a public fallout shelter" response to question 29.

A total of two hundred sixty-six (266) or approximately 18 percent of the 1464 respondents answered the survey questions in this manner and were thereby classified as being in the Adoption stage.

Of the 266 individuals in the Adoption stage, 66 individuals said they had a plan for going to a public fallout shelter in the event of a nuclear attack. These 66 respondents represent 4.5 percent of the 1464 respondents in the sample.

The five adoption stages are summarized in the following table.

Table 3.1. Public Fallout Shelter Stage of Adoption 1964

Adoption Stages		Number	Percent
1. Unaware	The respondent was unaware of the existence of any public fallout shelters	655	44.7
2. Aware	The respondent was aware of public fallout shelters but did not have information about them	150	10.2
3. Information	The respondent was aware of and had information about public fallout shelters but had not thought about using them	243	16.6
4. Evaluation	The respondent was aware of and had information about public fallout shelters and said he had thought about using a public fallout shelter in case of nuclear attack but had not decided to definitely try to go to a public fallout shelter if there was a nuclear attack	150	10.2
5. Adoption	The respondent was aware of, had information about, had thought about, and had said he would definitely try to go to a public fallout shelter if there was a nuclear attack	266	18.2
TOTALS		1464	99.9

Cumulative stage of adoption analysis

The number of respondents in each stage of adoption of public fallout shelters can also be analyzed in a cumulative framework. The cumulative stages of adoption based on the 1964 data are presented in Table 3.2.

In the summer of 1964 (June through September) 55 percent of the national study respondents were aware of public fallout shelters (see column 1; stages 2, 3, 4 and 5 in Table 3.2). Forty-five percent of the study respondents had obtained additional information about public fallout shelters (see column 2; stages 3, 4, and 5 in Table 3.2).

Approximately 28 percent of the study respondents said they had thought about using a public fallout shelter in case of a nuclear attack (see column 3; stages 4 and 5 in Table 3.2).

As noted previously, approximately 18 percent of the respondents said they had decided to go to a public fallout shelter if there was a nuclear attack; and 45 percent were unaware of public fallout shelters.

Table 3.2. Cumulative Presentation of Public Fallout Shelter Stage of Adoption 1964

Adoption Stages	Percent of Sample			
	(1) Aware of Public Fallout Shelters	(2) With Additional Information About Public Fallout Shelters	(3) Had Thought About Using Public Fallout Shelters: Evaluation	(4) Decided to Use Public Fallout Shelters: Adoption
1. Unaware				
2. Aware	55%			
3. Information		45%		
4. Evaluation			28%	
5. Adoption				18%

As mentioned above, the major program of civil defense since 1961 has been the National Fallout Shelter Survey, Marking, and Stocking Program. No major direct and specific program effort had been made at the time of the research study to secure shelter utilization by the general public. However, from both indirect effects and some limited effort, the general public had had an opportunity to become exposed to the idea of using public fallout shelters. The obvious end in view of the survey, licensing, marking, and stocking program is to prepare public facilities that could protect the greatest percentage of

the American public in case of a nuclear attack. These facilities may be of little use unless the general public is aware of their existence and has enough information upon which to base a decision to use them in case of a nuclear attack.

As civil defense change agents begin to make plans for intensifying public information and utilization programs, data regarding the present public state of awareness and symbolic adoption such as that presented in this report should be of great value to them.

Comparison of Public Fallout Shelter Stage of Adoption: 1964 vs. 1963

Comparison of individual stages of adoption

The number and percent of respondents in each adoption stage in the 1964 National Study and in the 1963 Des Moines Study are compared in Table 3.3.

Table 3.3. Public Fallout Shelter Stage of Adoption: 1964 National Compared to 1963 Des Moines.

Adoption Stages	1963 Des Moines		1964 National	
	No.	% of 246	No.	% of 1464
1. Unaware	31	13	655	45
2. Aware	6	2	150	10
3. Information	32	13	243	17
4. Evaluation	35	14	150	10
5. Adoption	142	58	266	18
TOTALS	246	100	1464	100

The reader will note differences in the percent of respondents in adoption stages when the 1963 and the 1964 studies are compared. The major differences are found in an analysis of the Unaware and Adoption stages. Almost one-half (45 percent) of the 1964 National sample was unaware of public fallout shelters compared to 13 percent being unaware in Des Moines, or a 32 percent difference. On the other hand, almost 60 percent of the Des Moines sample was at the Adoption

stage, while less than one-fifth (18 percent) of the 1964 National sample was at the Adoption stage. There were smaller percentage differences between the other three adoption stages.

There are at least two possible explanations for the large differences between the two populations. First, as was noted earlier in the report, Des Moines was one of the leading cities in licensing, marking, and stocking public fallout shelters at the time of the 1963 study. It may be that the energy put into this pilot program of licensing, marking, and stocking fallout shelters produced a high awareness of the public fallout shelter program among the people in Des Moines. Second, the 1964 National Study included both rural and urban areas, whereas the Des Moines study was entirely an urban setting. Although the existence of shelters in rural areas (or urban areas either) was not ascertained in the 1964 National Study, it is assumed that because of the inclusion of rural areas in the study there is a great possibility of respondents not being aware of public fallout shelters.

Comparison of cumulative stages of adoption

One can also compare the percentage difference in the number of respondents in the stages of adoption from the 1963 study to the 1964 study on a cumulative basis. A comparison of the cumulative stage of adoption data for the two studies is presented in Table 3.4 and briefly discussed below.

The public's total awareness of public fallout shelters was 87 percent in the Des Moines Study and 55 percent in the 1964 National Study; a difference of 32 percent. (See Aware stage in Table 3.4.)

The total percent of respondents who have additional information about public fallout shelters was 85 percent in the Des Moines Study and 45 percent in the 1964 National Study; a difference of 40 percent. (See Information stage in Table 3.4.)

The total percent of respondents who have thought about using public fallout shelters was 72 percent in the Des Moines Study and 28 percent in the 1964 National Study; a difference of 44 percent. (See Evaluation stage in Table 3.4.)

The total percent of respondents who have decided to go to a public fallout shelter in the event of nuclear attack was 58 percent in the

Des Moines Study and 18 percent in the 1964 National Study; a difference of 40 percent. (See Adoption stage in Table 3.4.)

The explanation for these large differences in the cumulative public fallout shelter stages of adoption are probably the same as those discussed above when the comparison of the individual stages of adoption was made.

Table 3.4. Cumulative Public Fallout Shelter Stage of Adoption, Comparison of 1964 National Study and 1963 Des Moines Study

Adoption Stage	Cumulative Percentage Totals		Percentage Differences Between 1963 and 1964
	1963	1964	
1. Unaware	13	45	32 percent difference
2. Aware	87	55	32 percent difference
3. Information	85	45	40 percent difference
4. Evaluation	72	28	44 percent difference
5. Adoption	58	18	40 percent difference

Analysis of Factors Related to Stage of Adoption

The first general objective of this report was to determine the extent to which a national sample of people had adopted the idea of using public fallout shelters if there is a nuclear attack. This objective was met in the preceding section of this chapter. The remainder of this report is devoted to the fulfillment of general objectives two and three.

The second general objective was to determine the relationship between selected demographic variables and the adoption of the idea of using public fallout shelters if there is a nuclear attack. Chapter 4 will present data and findings regarding the relationship of 14 demographic variables and stage of adoption of public fallout shelters.

The third general objective was to determine the relationship between selected attitude variables and the adoption of the idea of using public fallout shelters if there is a nuclear attack. The following attitude areas will be discussed in the following chapters. Chapter 5 will present data on the relationships of perception of the situation attitudes and stage of public fallout shelter adoption. Chapter 6 presents the relationships between attitudes about final world outcomes and stage of public

when they are found to be related to stage of public fallout shelter adoption. The data are not derived from an experimental study of cause and effect. However, in many instances theory, past research, or logical derivations do suggest a logic for inferring a causal relation.

Some readers may be interested in analyzing the data presented in the remainder of the report without focusing specifically on the relationships between specific variables and stage of adoption. For example, the reader may be interested in the percentage of respondents in the total sample who responded favorably to a specific attitude statement. This type of data is presented in the total column of the relationship tables in Chapters 4, 5, 6, 7 and 8. Thus the total column shows the response distribution of the total sample for each variable analyzed.

A statistical note: relationship criteria

Each change agent must decide upon the criterion (or criteria) he will use in determining if a variable is related to stage of adoption. Some may want to use formal statistical criteria. They will do this because when a sample is taken from a population, the differences among the sample data, or values one calculates from these data, may be different from the true population values because of sampling error, i.e., that error which is due to the selection of a sample of individuals from the population being studied rather than taking a complete enumeration of the population. Statistical tests of significance take into account the possibility that the sampling data obtained may be due to a unique selection of a sample of individuals from a population.

Others may not want to use formal statistical criteria. They will accept as a criterion of a meaningful relationship between two variables a difference in percentage trends without subjecting these values to formal statistical tests.

The change agent's selection of a criterion to decide if variables are related to stage of adoption is compounded by the fact that he must make day to day operating decisions. Thus, even though data are not statistically significant at a given probability level, the change agent may believe that the percentage trends are such that a decision based on them is better than a decision based on more limited data, feelings, or "hunches." Thus, the data may have practical significance even though they do not meet certain formal statistical significant levels.

In this report both criteria mentioned above are presented. Formal statistical tests are used to evaluate the relationship between stage of adoption and demographic and attitude variables. In addition, percentage trends are presented. Thus the reader may evaluate the relationships of variables and stage of adoption in either or both of these criterion frameworks.

The chi-square statistical test is used in this report to analyze the relationships between stage of public fallout shelter adoption and the demographic and attitude variables introduced in Chapters 4, 5, 6, 7 and 8. Two chi-square tests are used to test relationships; the "regular" chi-square test and the median chi-square test. The median chi-square statistical test was used to analyze those variables measured as a continuum (or para-continuum).

Both the regular and median chi-square statistical tests are concerned with testing the existence of a relationship between two variables. The chi-square statistical test is used in this study to test the relationship of certain demographic and attitude variables and stage of adoption of public fallout shelters. Whenever the chi-square statistical test is used the null hypothesis of independence is formulated. That is, it is hypothesized that there is no relationship between the two variables being analyzed; for example, stage of adoption and years of education. Saying that there is no difference among stages of adoption with respect to years of education is essentially saying there is no relationship between stage of adoption and years of education.

By utilizing the chi-square statistical test this hypothesis of no relationship can be tested. For each comparison of stage of adoption and one other variable, such as years of education, a chi-square value is calculated. This calculated chi-square value is then compared to a tabular (theoretical) chi-square value. The tabular value to which the calculated chi-square value is compared depends upon the degrees of freedom (d.f.) in the comparison (in this report the d.f. are most often 4) and the significance level the change agent is willing to select. The significance level indicates the probability that the selection of a sample of individuals from a population provides a reasonable explanation for the differences between the calculated value and the tabular value. With 4 degrees of freedom the following significance levels have the respective tabular chi-squares:

Significance level	Tabular chi-square
.01	13.28
.02	11.67
.05	9.49
.10	7.78
.20	5.99
.30	4.88

Thus, one would expect to obtain a calculated value of chi-square larger than 9.49 (which is the tabular value of chi-square at the .05 level) only 5 times in 100 samples when, in the population being studied, there is no relationship between the two variables being compared. Therefore, when one obtains a calculated value larger than 9.49, he is usually willing to conclude that there is a relationship between the two variables in the population being studied (although he knows a value larger than 9.49 may be expected to be found 5 times in 100 because of the sample selected from the population.) One of the change agent's decision problems is to decide upon the significance level he is willing to use in deciding whether two variables may (or may not) be related in the population which he is studying. For example, if he selects the .10 significance level he will conclude that there is a relationship between two variables whenever he has a calculated chi-square larger than 7.78 (which is the tabular value of chi-square at the .10 level). In this report all of the findings are statistically evaluated using the .05 significance level.

Notes on Reading the Tables

1. Each table number has two parts: the first part refers to the chapter; the second part refers to the table within the chapter.

2. In most cases the table title is the exact question asked the study respondents. In a few cases the table title is a rephrasing of the question in order to better communicate the concept being analyzed.

3. All percents are rounded to the nearest tenth. For this reason table percent totals do not always add to 100 percent.

Chapter 4

DEMOGRAPHIC FACTORS AND STAGE OF ADOPTION

Introduction

The relationships between certain demographic variables and public fallout shelter stage of adoption are analyzed in this chapter. The personal characteristics of an individual and the family situation in which the individual finds himself may be important factors in understanding an individual's stage of public fallout shelter adoption. Persons possessing certain personal characteristics or being in a certain family situation may be more receptive to civil defense ideas and innovations than persons not possessing these characteristics. In the following series of tables the following demographic variables are compared to an individual's stage of public fallout shelter adoption: (1) number of children in household 12 years of age or less, (2) marital status, (3) age of respondent, (4) occupation, (5) years of formal education, (6) family income, (7) perceived social class, (8) home ownership, (9) active military service, (10) combat duty, (11) religious preference, (12) strength of religious belief, (13) political orientation, and (14) sex.

For some of the demographic variables a statement is made as to what one might expect the relationship to be between the variable and stage of adoption. Each statement is based on past research findings. In a sense each statement is a hypothesis to be tested. Following each statement, the study findings pertaining to the statement are presented.

A knowledge of these relationships, or differences among individuals who are at different stages in the adoption process, may have at least three main uses:

1. It allows the change agent to characterize, in concrete terms, the individuals at each stage of adoption. Using this knowledge the change agent should be in a better position to attempt to account for the "why" of their being in their respective adoption stage and to plan strategy in an attempt to motivate people not yet at the desired adoption stage to reach that stage.

2. It provides a test for existing propositions or hypotheses about expected relationships between characteristics and stage of adoption.

3. An analysis of the data may generate new propositions and hypotheses about relationships that should be of value in continuing the public fallout shelter program and developing strategy for future civil defense programs.

Age of Respondent

Past studies have found that age is an important variable influencing a person's attitude toward civil defense. These studies found that persons under age 50 were more aware of and concerned about civil defense matters than those over 50 years of age. In the 1963 Des Moines Study it was found that an individual's age was not statistically related to stage of adoption, although the Unaware stage had proportionately, more older people and the Adoption stage had proportionately more younger people than the other stages. Table 4.1 shows the age distribution for each adoption stage as well as two age sub-totals; (1) ages 10 through 49, and (2) ages 50 through 89. Using a chi-square statistical test a significant relationship was found between stage of adoption and age when a comparison was made between the two sub-total groups. Percentage trends show that in the Unaware stage nearly one-half (45.6 percent) were age 50 or above, while in the Adoption stage less than one-third (31.2 percent) were in this same age group. There is no clear trend however, as the Aware stage has the largest proportion of people under 50 years of age, while the Information stage has proportionately as many people under 50 as does the Unaware stage. Conclusion: Age is statistically related to stage of adoption. The Unaware stage has a smaller portion of younger people in it than any other stage.

Table 4.1. Age of Respondent.

Age	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
10-19 years	11	1.7	0	0.0	1	0.4	3	2.0	2	0.8	17	1.2
20-29	94	14.4	33	22.0	32	13.2	37	24.7	42	15.8	238	16.3
30-39	109	16.6	41	27.3	62	25.5	33	22.0	82	30.8	327	22.3
40-49	136	20.8	35	23.3	41	16.9	38	25.3	56	21.1	306	20.9
(Under 50 sub total)	(350	53.4)	(109	72.7)	(136	56.0)	(111	74.0)	(182	68.4)	(888	60.7)
50-59	107	16.3	22	14.7	62	25.5	24	16.0	47	17.7	262	17.9
60-69	99	15.1	11	7.3	27	11.1	10	6.7	28	10.5	175	12.0
70-79	78	11.9	4	2.7	12	4.9	2	1.3	7	2.6	103	7.0
80-89	15	2.3	2	1.3	5	2.1	2	1.3	1	0.4	25	1.7
(Over 50 sub total)	(299	45.6)	(39	26.0)	(106	43.6)	(38	25.3)	(83	31.2)	(565	38.6)
No answer	6	0.9	2	1.3	1	0.4	1	0.7	1	0.4	11	0.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 43.9438. There is a significant relationship between age and stage of adoption.

Respondent's Years of Education

Prior studies have found that the higher the educational level of a person the more aware and informed he is about developments in the world around him. Past studies, in general, have also found that the higher the educational level of the person the more favorable he is toward civil defense. In the 1963 Des Moines Study a significant relationship in the above expected direction between stage of adoption and level of education was found. However, some studies have found no relationship between education and the acceptance or rejection of civil defense ideas. One might hypothesize that individuals with more education would be further along in the adoption process than those with less education. Table 4.2 shows the respondents' years of formal education distribution by adoption stage. The table also shows two education level sub-totals; (1) education through high school graduation, and (2) education beyond high school. Using a chi-square statistical test a significant relationship was found between stage of adoption and education when a comparison was made between the two sub-total groups. Less than one-sixth (14.7 percent) of the individuals in the Unaware stage had gone beyond high school, whereas one-third (33.8 percent) of those in the Adoption stage had more than high school training. Conclusion: Number of years of formal education is statistically related to stage of adoption. A larger percentage of individuals in the latter stages of adoption had more years of education than individuals in the first two stages of adoption.

Table 4.2. What is the last school grade or year you completed?

Respondent's years of education	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
No schooling	17	2.6	1	0.7	0	0.0	0	0.0	1	0.4	19	1.3
Grammar school	229	35.0	45	30.0	41	16.9	15	10.0	39	14.7	369	25.2
Some high school	148	22.6	30	20.0	44	18.1	25	16.7	50	18.8	297	20.3
Completed high school	165	25.2	40	26.7	79	32.5	63	42.0	86	32.3	433	29.6
(Through high school sub total)	(559	85.3)	(116	77.3)	(164	67.5)	(103	68.7)	(176	66.2)	(1118	76.4)
College, incomplete	57	8.7	19	12.7	38	15.6	25	16.7	54	20.3	193	13.2
College, graduate	22	3.4	11	7.3	24	9.9	10	6.7	20	7.5	87	5.9
Higher than college	17	2.6	2	1.3	16	6.6	12	8.0	16	6.0	63	4.3
(Beyond high school sub total)	(96	14.7)	(32	21.3)	(78	32.1)	(47	31.3)	(90	33.8)	(343	23.4)
Don't know	0	0.0	1	0.7	1	0.4	0	0.0	0	0.0	2	0.1
No answer	0	0.0	1	0.7	0	0.0	0	0.0	0	0.0	1	0.06
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 60.0140. There is a significant relationship between education and stage of adoption.

Sex of Respondent

Table 4.3 shows the distribution of men and women for each adoption stage. As indicated, 44.8 percent of the respondents were men and 55.2 percent were women. In the 1963 Des Moines Study of the adoption of public fallout shelters no significant relationship was found between sex and stage of adoption. Using a chi-square statistical test a significant relationship was found between sex of respondent and stage of adoption in the 1964 National Study. Percentages indicate a curvilinear trend: a larger proportion of the individuals in the first two and last two Adoption stages are women, while the Information stage has proportionately more men. Conclusion: Sex of respondent is statistically related to stage of adoption. Proportionately more women than men are in the first two and last two adoption stages.

Table 4.3. Respondent's sex.

Sex	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Male	277	42.3	64	42.7	130	53.5	65	43.3	120	45.1	656	44.8
Female	378	57.7	86	57.3	113	46.5	85	56.7	146	54.9	808	55.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 9.5144. There is a significant relationship between sex and stage of adoption.

Marital Status of Respondent

Table 4.4 shows the marital status distribution for each stage of adoption. Marital status was not included as a variable in the 1963 Des Moines Study. Using a chi-square statistical test to compare the stage of adoption of married respondents with all other respondents, no significant relationship was found. Conclusion: Marital status is not statistically related to stage of adoption. Approximately the same proportion of individuals is married in each of the adoption stages.

Table 4.4. What is your marital status?

Table 4.4. What is your marital status?

Marital status	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Married	484	73.9	116	77.3	194	79.8	116	77.3	201	75.6	1111	75.9
Single, never married	41	6.[illegible]	12	8.0	16	6.6	16	10.7	24	9.0	109	7.4
Divorced	20	3.1	5	3.3	7	2.9	7	4.7	16	6.0	55	3.8
Widowed	93	14.[illegible]	10	6.7	23	9.5	7	4.7	19	7.1	152	10.4
Separated	17	2.6	7	4.7	3	1.2	4	2.7	6	2.3	37	2.5
(Unmarried sub total)	(171	26.[illegible])	(34	22.7)	(49	20.2)	(34	22.7)	(65	24.4)	(353	24.1)
Number and % of Total	655	44.[illegible]	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 3.8505. There is no significant relationship between marital status and stage of adoption.

Number of Children 12 Years of Age or Less

A number of past civil defense studies have found that families with young children are more receptive to civil defense ideas than families without such children. In the 1963 Des Moines Study, however, no significant relationship was found between stage of adoption and families with young children under 15 years of age, although the data did approach the significance level in the expected direction. Table 4.5 shows the distribution of children 12 years of age or less in each household for each stage of adoption. The table also shows a sub-total group of all families with children 12 years of age or less. Using a chi-square statistical test a significant relationship between stage of adoption of public fallout shelters and number of children 12 years of age or less was found when comparing those respondents without children 12 years of age or less with the sub-total group having children 12 years of age or less. Conclusion: Having children in the family 12 years old or less is statistically related to stage of adoption. A larger proportion of the individuals in the Unaware stage had no children 12 years of age or less (62.0 percent) than any other stage of adoption. There is no clear trend, however, e.g., the Aware stage has the largest proportion of households with children 12 years of age or less.

Table 4.5. How many children do you have that are 12 years old or less?

Number of children 12 years old or less	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
No children	409	62.4	70	46.7	143	58.8	83	55.3	149	56.0	854	58.3
One child	88	13.4	29	19.3	29	11.9	17	11.3	38	14.3	201	13.7
Two children	66	10.1	27	18.0	30	12.3	24	16.0	44	16.5	191	13.0
Three children	49	7.5	12	8.0	23	9.5	18	12.0	18	6.8	120	8.2
Four children	25	3.8	5	3.3	15	6.2	6	4.0	9	3.4	60	4.1
Five children	9	1.4	2	1.3	1	0.4	1	0.7	3	1.1	16	1.1
Six children	1	0.2	1	0.7	2	0.8	0	0.0	3	1.1	7	0.5
Seven or more children	2	0.3	3	2.0	0	0.0	1	0.7	0	0.0	6	0.4
(Children sub total)	(240	36.6)	(79	52.7)	(100	41.2)	(67	44.7)	(115	43.2)	(601	41.1)
No answer	6	0.9	1	0.7	0	0.0	0	0.0	2	0.8	9	0.6
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 14.7018. There is a significant relationship between number of children 12 years old or less and stage of adoption.

Occupation of Main Earner

Table 4.6 shows the distribution of occupations for each stage of adoption. There are three sub-total groups in the table: (1) the professional-managerial group, (2) the clerical-sales-service group and (3) the blue-collar group. Occupation was not included as a variable in the 1963 Des Moines Study. Using a chi-square statistical test a significant relationship was found when comparing the stage of adoption of the three occupation sub-total groups. The percentage trends indicate that a larger proportion of individuals in the Unaware and Aware stages were blue-collar, whereas proportionally more of the individuals in the latter stages of adoption were professional-managers and clerical-sales-service. Conclusion: Occupation is statistically related to stage of adoption. A larger proportion of individuals in the latter adoption stages were in "higher" occupations than were individuals in the earlier adoption stages.

Table 4.6. What sort of work (does, did) (main earner) do?

Occupation	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Professional technical and kindred workers	61	9.3	18	12.0	39	16.0	23	15.3	44	16.5	185	12.6
Managers, officials and proprietors (except farm)	84	12.8	12	8.0	42	17.3	23	15.3	35	13.2	196	13.4
(Professional-managerial sub total)	(145	22.1)	(30	20.0)	(81	33.3)	(46	30.7)	(79	29.7)	(381	26.0)
Clerical and kindred	40	6.1	9	6.0	19	7.8	11	7.3	31	11.7	110	7.5
Sales workers	26	4.0	8	5.3	14	5.8	10	6.7	11	4.1	69	4.7
Private household workers and service workers	62	9.5	12	8.0	23	9.5	12	8.0	28	10.5	137	9.4
(Clerical-sales-service sub total)	(128	19.5)	(29	19.3)	(56	23.0)	(33	22.0)	(70	26.3)	(316	21.6)
Farmers and farm managers	24	3.7	1	0.7	7	2.9	2	1.3	1	0.4	35	2.4
Craftsmen, foremen and kindred workers	120	18.3	36	24.0	39	16.0	28	18.7	48	18.0	271	18.5
Operators and kindred	102	15.6	26	17.3	30	12.3	28	18.7	38	14.3	224	15.3
Farm laborers and foremen	57	8.7	6	4.0	18	7.4	3	2.0	9	3.4	93	6.4
Laborers except farm and mine	79	12.1	22	14.7	12	4.9	10	6.7	21	7.9	144	9.8
(Blue collar sub total)	(382	58.3)	(91	60.7)	(106	43.6)	(71	47.3)	(117	44.0)	(767	52.4)
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 12 d.f., chi-square significant .05 level if $\geq$ 15.507, at .01 level if $\geq$ 20.090.

Calculated chi-square = 32.3827. There is a significant relationship between occupation and stage of adoption.

Calculated chi-square = 32.3827. There is a significant relationship between occupation and stage of adoption.

Family Income

In the 1963 Des Moines Adoption Study no statistical relationship was found between family income and stage of adoption. Table 4.7 shows the family income distribution for each adoption stage. The table also shows two sub-totals: (1) family income less than $7,499 and (2) family income $7,500 and up. Using a chi-square statistical test a significant relationship was found between stage of adoption and family income when a comparison was made between the two sub-total groups. A larger proportion of individuals in the Unaware stage were in the lower income level (72.2 percent) than any other stage. Conclusion: Family income is statistically related to stage of adoption A larger proportion of individuals in the latter stages of adoption were in the upper income categories.

Table 4.7. Counting rents, interests and things like that, in which one of the following groups did your total income fall, before taxes, last year?

Family income	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Under $3,000	179	27.3	32	21.3	34	14.0	19	12.7	31	11.7	295	20.2
$3,000 - $4,999	140	21.4	27	18.0	37	15.2	21	14.0	47	17.7	272	18.6
$5,000 - $7,499	154	23.5	37	24.7	62	25.5	42	28.0	74	27.8	369	25.2
(Under $7,499 sub total)	(473	72.2)	(96	64.0)	(133	54.7)	(82	54.7)	(152	57.1)	(936	63.9)
$7,500 - $9,999	77	11.8	26	17.3	40	16.5	29	19.3	51	19.2	223	15.2
$10,000 - $14,999	57	8.7	16	10.7	35	14.4	22	14.7	36	13.5	166	11.3
$15,000 - $24,999	15	2.3	7	4.7	15	6.2	8	5.3	12	4.5	57	3.9
$25,000 and over	5	0.8	1	0.7	6	2.5	3	2.0	3	1.1	18	1.2
(Over $7,499 sub total)	(154	23.5)	(50	33.3)	(96	39.5)	(62	41.3)	(102	38.3)	(464	31.7)
Don't know	18	2.7	3	2.0	8	3.3	3	2.0	7	2.6	39	2.7
No answer	10	1.5	1	0.7	6	2.5	3	2.0	5	1.9	25	1.7
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 40.9138. There is a significant relationship between family income and stage of adoption.

adoption.

Home Ownership

Prior studies have found that individuals owning their own home or those in the process of buying their home are more interested in finding out about civil defense and determining what they can do about it than those who rent a home or an apartment. This was supported in the 1963 Des Moines Study where home ownership was found to be statistically related to the stage of adoption, e.g., renters were found to be more frequent in the Unaware stage. Table 4.8 shows the distribution of home owners and renters by stage of adoption. Using a chi-square statistical test, a significant relationship was found between stage of adoption and home ownership. Percentages indicate the relationship is curvilinear: a larger proportion of respondents in the first two and last two adoption stages rent their homes than do respondents in the Information stage. Contrary to prior studies, a higher proportion of home owners is in the Unaware stage than in the Aware, Evaluation and Adoption stages. Conclusion: Home ownership is statistically related to stage of adoption. A smaller proportion of respondents in the first two and last two stages of adoption own their own home than do respondents in the Information stage.

Table 4.8. Do you own your own home here or do you rent it?

Home ownership	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Own	427	65.2	92	61.3	174	71.6	97	64.7	154	57.9	944	64.5
Rent	211	32.2	54	36.0	62	25.5	47	31.3	107	40.2	481	32.9
Other	16	2.4	4	2.7	7	2.9	6	4.0	5	1.9	38	2.6
No answer	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.06
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 12.9412. There is a significant relationship between home ownership and stage of adoption.

Perceived Social Class

Past studies have found different results concerning the relationship of socio-economic position (social class) and attitudes toward civil defense. Some have found members of a higher social class more likely to believe in the utility of shelters. Others did not confirm this and found no significant relationship between social class (socio-economic level) and attitudes toward civil defense. Perceived social class was not included as a variable in the 1963 Des Moines Study. Table 4.9 shows the perceived social class distribution for each adoption stage. Perceived social class was determined by asking the respondent to indicate the social class in which he believed himself to be. The table also indicates two sub-totals; (1) a combination of the upper and middle classes, and (2) a combination of the working and lower classes. Using a chi-square statistical test to compare these two sub-total groups a significant relationship was found between perceived social class and stage of adoption. Percentage trends show that in the Unaware stage and the Aware stage there is a higher portion of the working-lower group, while in each of the latter three stages there is a higher portion of the upper-middle group. Conclusion: Perceived social class is statistically related to stage of adoption. A larger proportion of individuals in the latter stages of adoption perceived themselves to be in the "upper middle" social class, than did individuals in the earlier adoption stages.

Table 4.9. What social class do you believe yourself to be in; the lower class, working class, middle class or upper class?

Perceived social class	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Upper	25	3.8	4	2.7	12	4.9	3	2.0	11	4.1	55	3.8
Middle	240	36.6	57	38.0	108	44.4	79	52.7	138	51.9	622	42.5
(Upper-middle sub total)	(265	40.5)	(61	40.7)	(120	49.4)	(82	54.7)	(149	56.0)	(677	46.2)
Working	330	50.4	77	51.3	107	44.0	60	40.0	110	41.4	684	46.7
Lower	28	4.3	6	4.0	3	1.2	1	0.7	3	1.1	41	2.8
(Working-lower sub total)	(358	54.7)	(83	55.3)	(110	45.3)	(61	40.7)	(113	42.5)	(725	49.5)
There are no classes	15	2.3	2	1.3	8	3.3	5	3.3	0	0.0	30	2.0
Don't know	15	2.3	3	2.0	4	1.6	2	1.3	4	1.5	28	1.9
No answer	2	0.3	1	0.7	1	0.4	0	0.0	0	0.0	4	0.3
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 24.0920. There is a significant relationship between perceived social class and stage of adoption.

Religious Preference

In the 1963 Des Moines Study no significant difference was found between religious preference and stage of adoption, when Protestants and Catholics were compared. Table 4.10 shows the religious preference distribution for each adoption stage. Using a chi-square statistical test comparisons were made between stage of adoption and: (1) Protestants and Catholics, (2) Protestants and Jews, and (3) Catholics and Jews: using a chi-square statistical test a significant relationship was found in the second and third comparisons but not in the first. In the first comparison approximately the same proportion of Protestants and Catholics were in each adoption stage. In the second and third comparison a larger proportion of Jews were in the Adoption stage than would be expected by chance. Conclusion: Religious preference is statistically related to stage of adoption when Jews are compared with either Protestants or Catholics. A higher portion of Jewish respondents is found in the Adoption stage than is true for either the Protestants or Catholics.

Table 4.10. What is your religious preference?

Religious preference	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Protestant	476	72.7	102	68.0	163	67.1	97	64.7	173	65.0	1011	69.0
Roman Catholic	142	21.7	37	24.7	58	23.9	39	26.0	65	24.4	341	23.3
Jewish	13	2.0	4	2.7	8	3.3	4	2.7	20	7.5	49	3.3
Other	5	0.8	4	2.7	6	2.5	4	2.7	3	1.1	22	1.5
None	19	2.9	3	2.0	8	3.3	4	2.7	5	1.9	39	2.7
Don't know	0	0.0	0	0.0	0	0.0	1	0.7	0	0.0	1	0.06
No answer	0	0.0	0	0.0	0	0.0	1	0.7	0	0.0	1	0.06
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ °.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 3.3288 (Protestant and Catholic). Calculated chi-square = 19.2270 (Protestant and Jewish). Calculated chi-square = 12.5088 (Catholic and Jewish). There is a significant relationship between religious preference and stage of adoption when Jews are compared with either Protestants or Catholics.

Strength of Religious Beliefs

From the previous table it was concluded that religious preference is statistically related to stage of adoption. In Table 4.11 strength of religious beliefs is compared to stage of adoption. Respondents were asked to indicate how strongly they felt about their religious beliefs; very strongly, strongly, moderate, not so strongly, or not strongly at all. Strength of religious beliefs was not included as a variable in the 1963 Des Moines Study. Table 4.11 shows the distribution of strength of religious beliefs for each stage of adoption. The table also includes two sub-total groups: (1) a combination of the responses "very strongly" and "strongly," and (2) a combination of the responses "moderate," "not so strongly" and "not strongly at all." Using a chi-square statistical test a significant relationship was found between stage of adoption and strength of religious beliefs when a comparison was made between the two sub-total groups. Percentages indicate a curvilinear relationship: a larger proportion of individuals in the Unaware and Adoption stages had stronger religious beliefs than did individuals in the three "middle" stages of adoption. Conclusion: Strength of religious beliefs is statistically related to stage of adoption. Proportionately more individuals in the first (Unaware) and last (Adoption) stages had strong religious beliefs, than did the middle adoption stages.

Table 4.11. How strongly do you feel about your religious beliefs? Do you feel very strongly, strongly, moderately, not so strongly, or not strongly at all?

Strength of religious beliefs	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Very strongly	298	45.5	59	39.3	83	34.2	64	42.7	116	43.6	620	42.3
Strongly	144	22.0	30	20.0	53	21.8	28	18.7	68	25.6	323	22.1
(Strong sub total)	(442	67.5)	(89	59.3)	(136	56.0)	(92	61.3)	(184	69.2)	(943	64.4)
Moderately	158	24.1	53	35.3	80	32.9	47	31.3	65	24.4	403	27.5
Not so strongly	22	3.4	2	1.3	13	5.3	4	2.7	6	2.3	47	3.2
Not strongly at all	13	2.0	2	1.3	5	2.1	3	2.0	6	2.3	29	2.0
(Not strong sub total)	(193	29.5)	(57	38.0)	(98	40.3)	(54	36.0)	(77	28.9)	(479	32.7)
Does not apply	19	2.9	3	2.0	8	3.3	4	2.7	5	1.9	39	2.7
Don't know	0	0.0	1	0.7	0	0.0	0	0.0	0	0.0	1	0.06
No answer	1	0.2	0	0.0	1	0.4	0	0.0	0	0.0	2	0.1
Number and % of total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 14.7410. There is a significant relationship between strength of religious preference and stage of adoption.

Political Orientation

Table 4.12 shows the political orientation distribution for respondents in each of the adoption stages. In the 1963 Des Moines Study no significant relationship was found between political orientation of individuals and adoption stage. Using a chi-square statistical test comparisons were made between the following groups in the 1964 National Study: (1) Republicans and Democrats; and (2) Republicans, Democrats and Independents. These comparisons found no significant relationship between political party and stage of adoption. Conclusion: Political party is not statistically related to stage of adoption. Approximately the same proportion of individuals with each political orientation was in each adoption stage, although the Information stage had a slightly larger proportion of Republicians than any of the other stages.

Table 4.12. Which political party do you generally support?

Political orientation	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Republican	168	25.6	39	26.0	84	34.6	40	26.7	73	27.4	404	27.6
Democratic	371	56.6	76	50.7	116	47.7	82	54.7	144	54.1	789	53.9
Other	2	0.3	3	2.0	1	0.4	2	1.3	5	1.9	13	0.9
None	50	7.6	11	7.3	13	5.3	9	6.0	11	4.1	94	6.4
Independent	55	8.4	19	12.7	26	10.7	13	8.7	29	10.9	142	9.7
Don't know	5	0.8	1	0.7	2	0.8	2	1.3	2	0.8	12	0.8
No answer	4	0.6	1	0.7	1	0.4	2	1.3	2	0.8	10	0.7
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49 at .01 level if $\geq$ 13.28.

Calculated chi-square = 8.0944 (first test: Republican and Democratic).

With 12 d.f., chi-square significant at .05 level if $\geq$ 15.507, at .01 level if $\geq$ 20.090.

Calculated chi-square = 11.6607 (second test: Republican, Democratic, and Independent). There is no significant relationship between political oreintation and stage of adoption.

Military Service and Combat Duty

One might hypothesize that persons who are in households in which someone has had military service would be more aware of and concerned about civil defense. A related hypothesis might be that men who have had combat experience would be more aware of and concerned with civil defense than men with military service but no combat experience. In the 1963 Des Moines Study, however, no statistical relationship was found between active service and stage of adoption; and, combat duty and stage of adoption. Table 4.13 shows: (1) the distribution of active military service for each adoption stage, and (2) the distribution of combat experience for each adoption stage. Using a chi-square statistical test to compare active military service and stage of adoption a significant relationship was found when a comparison was made between people with military service and those with no military service. Using a chi-square statistical test no significant relationship was found between combat duty and stage of adoption when a comparison was made between people with combat military service and people with military service, but no combat experience. An analysis of percentage trends indicates a greater portion of individuals in the Evaluation and Adoption stages had military service. Percentage trends regarding combat experience show a higher portion of individuals with combat experience in the Adoption stage than any other stage. Conclusion: Military service is statistically related to stage of adoption. There is no statistical relationship, however, between combat duty and stage of adoption.

Table 14.13. (Have you) (Has your husband) ever served in the armed forces? If Yes: (were you) (was he) ever in combat?

Military service	Stage of Adoption										TOTAL	
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION			
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Yes	260	39.7	70	46.7	107	44.0	85	56.7	135	50.8	657	44.9
No	357	54.5	69	46.0	121	49.8	54	36.0	102	38.3	703	48.0
Does not apply	19	2.9	9	6.0	10	4.1	6	4.0	19	7.1	63	4.3
Don't know	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No answer	19	2.9	2	1.3	5	2.1	5	3.3	10	3.8	41	2.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.
Calculated chi-square = 26.1033. There is a significant relationship between military service and stage of adoption.

* *

Combat duty (of those in service)	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Yes	95	14.5	29	19.3	35	14.4	28	18.7	60	22.6	247	16.9
No	157	24.0	40	26.7	71	29.2	56	37.3	74	27.8	398	27.2
Does not apply	395	60.3	80	53.3	136	56.0	65	43.3	131	49.2	807	55.1
Don't know	6	0.9	1	0.7	1	0.4	0	0.0	1	0.4	9	0.6
No answer	2	0.3	0	0.0	0	0.0	1	0.7	0	0.0	3	0.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 4.9511. There is no significant relationship between combat duty and stage of adoption.

Summary of Chapter 4

A knowledge of the relationships or lack of relationships between demographic variables and stage of adoption of public fallout shelters should be helpful to civil defense change agents. Such an analysis makes it possible for the change agent to develop a profile of the people who have been motivated to adopt a civil defense innovation and to compare these people with those who have not yet been motivated to adopt a civil defense idea. These data can be used in planning and implementing future civil defense programs. Eleven of the 14 demographic variables were related to stage of adoption of public fallout shelters when formal statistical tests were used as the decision criteria of relationship.

One of the significant variables had a strong positive relationship to stage of adoption: a larger proportion of individuals in the latter stages of adoption had more years of formal education than did individuals in the earlier stages of adoption. Four of the other significant variables also had a positive relationship to stage of adoption, but not quite as strong a relationship as the above variable: a larger proportion of the individuals in the latter adoption stages (when compared to individuals in the early adoption stages) were in higher occupations (professional-managerial), had higher family incomes, perceived themselves to be in "higher" social classes, and had had more active military service. A larger proportion of individuals in the last four adoption stages, i.e., those who were aware of public fallout shelters, had children under 12 years of age in their home than did individuals in the Unaware stage. The Adoption stage had proportionately more Jews than did the four earlier stages. (Protestants and Catholics were equally distributed among the adoption stages.)

Three of the significant variables had a curvilinear relationship to stage of adoption: a larger proportion of individuals in the first two and last two adoption stages were women, while the Information stage had proportionately more men. Similarly, a larger proportion of individuals in the first two and last two adoption stages rent their homes than do respondents in the Information stage. Likewise, a larger percentage of individuals in the first (Unaware) and last (Adoption) stages had stronger religious beliefs than did individuals in the three middle adoption stages.

One significant variable (age) had a slight negative relationship to stage of adoption: the latter two adoption stages had more younger people (under 50

years of age) than did the Unaware and Information stages, although the Aware stage had a similar proportion of people under 50 years of age as did the last two adoption stages.

None of the three statistically non-significant variables had an apparent relationship to stage of adoption: marital status, political orientation, and military combat duty.

When one analyzes the 266 respondents in the Adoption stage the following "profile" of the "adopter" is obtained. Approximately four out of the ten "adopters" will have at least one child 12 years of age or less. Three out of four "adopters" are currently married. The "adopter" is somewhat younger than the rest of the adult population. One out of three "adopters" will have had some type of formal training beyond high school. Approximately one-third of the adopters have professional or managerial occupations, one-fourt clerical, sales, or service occupations; the remaining blue collar occupations. Four out of ten adopters had a family income above $7,500. Over one-half of the "adopters" perceived themselves to be in the upper and middle social classes. Approximately six of every ten "adopters" are home owners. In one of every two "adopter" homes the husband has been in active military service. Approximately one of these husbands in five has been in combat. About two of three "adopters" are Protestant. Seven of ten "adopters" have strong or very strong religious beliefs. Politically, one "adopter" in ten is an Independent, three are Republican oriented and five are Democratic oriented.

Table 4.14. Summary: Demographic Variables and Stage of Adoption of Public Fallout Shelters

Demographic Variable	Relationship to Stage of Adoption		
	Statistical at .05 level[a]		Percentage Trend[c]
	Tabular Value	Calculated Value	
1. Age of respondent	9.49	43.94[b]	Negative tendency
2. Years of formal education	9.49	60.01[b]	Positive trend
3. Sex of respondent	9.49	9.51[b]	Curvilinear: F-M-F
4. Marital status	9.49	3.85	None apparent
5. Number children in household 12 years of age or less	9.49	14.70[b]	No clear over-all trend; Some positive tendency
6. Occupation	15.51	32.38[b]	Positive tendency
7. Family income	9.49	40.91[b]	Positive tendency

(Continued)

Table 4.14. Summary: Demographic Variables and Stage of Adoption of Public Fallout Shelter (Continued)

Demographic Variable	Relationship to Stage of Adoption: Statistical at .05 level[a] Tabular Value	Calculated Value	Percentage Trend[c]
8. Home ownership	9 49	12.94[b]	Curvilinear: R-O-R
9. Perceived social class	9.49	24.09[b]	Positive tendency
10. Religious preference			
A. Protestant-Catholic	9 49	3.33	None apparent
B. Protestant-Jew	9.49	19.23[b]	Jews more
C. Catholic-Jew	9.49	12.51[b]	Jews slightly more
11. Strength of religious belief	9.49	14.74[b]	Curvilinear: S-W-S
12. Political orientation			
A. Republicans-Democrat	9.49	8.09	None apparent
B. Rep.-Dem.-Independent	15.50	11.66	None apparent
13. Active military service	9.49	26.10[b]	Positive tendency
14. Combat duty	9.49	4.95	None apparent

[a]All statistical tests were chi-square tests. Statistical at .05 level means that a calculated value larger than the tabular value would be expected to occur only 5 times out of 100 because of the selection of the sample from the population being studied rather than because there is an actual relationship in the population.

[b]Statistically significant value.

[c]Five different percentage trend statements are used in this table to describe the percentage trend relationship between a demographic variable and stage of adoption:

1. Positive trend refers to those situations where there is a strong positive linear percentage trend relationship between the demographic variable (as phrased in the summary table) and stage of adoption.
2. Positive tendency refers to those situations where there is a weak positive linear percentage trend relationship between the demographic variable (as phrased in the summary table) and stage of adoption.
3. Curvilinear refers to those situations where the percentage trend from Unaware to Adoption is not linear, but rather where the first and last adoption stages are similar to each other but different from the middle stage or stages.
4. Negative tendency refers to those situations where there is a weak negative linear percentage trend relationship between the demographic variable (as phrased in the summary table) and stage of adoption.
5. None apparent refers to those situations where there is no positive or negative linear relationship and no curvilinear relationship between the demographic variable and stage of adoption.

Chapter 5

PERCEPTION OF THREAT ATTITUDES AND STAGE OF ADOPTION

Introduction

The relationships between individuals' civil defense related attitudes and their public fallout shelter stage of adoption are presented in the next four chapters of this report. As was discussed in Chapter 2, past researchers have attempted to determine how attitudes are related to the adoption process. Past non-civil defense studies of innovation adoption have found that certain attitudes are important in understanding an individual's decision-making process. In this report the individual decision-making process of concern is that of deciding to use a public fallout shelter if there is a nuclear attack.

In the 1963 Des Moines study 35 different attitude variables, categorized into six general attitude areas, were compared to stage of adoption of public fallout shelters. Approximately one third of these attitude variables were found to be significantly related to stage of public fallout shelter adoption.

In this report 110 different attitude variables are compared to stage of adoption of public fallout shelters. These attitudes have been categorized into four attitude complexes. Chapter 5 presents the relationship of perception of the situation (perception of threat) attitudes and stage of public fallout shelter adoption. In Chapter 6 the relationships of final cold war outcome attitudes and stage of public fallout shelter adoption are presented. In Chapter 7 the relationships of attitudes about the innovation, i.e., public fallout shelters, and public fallout shelter stage of adoption are presented. And finally, in Chapter 8 the attitudes about the deployment of anti-missle missles are analyzed by stage of public fallout shelter adoption.

Dimensions of Attitudes

One of the important ideas to keep in mind when evaluating the attitude findings presented in this report is that attitudes have different dimensions. Four of these dimensions are discussed below. One dimension of an attitude is its direction, that is, whether a person agrees or disagrees with the idea or object being studied. A second dimension is the degree of an attitude. For example, two people may agree about an idea but one may strongly agree with the idea while the other may weakly agree with the idea. For almost all of

the attitudes presented in this report both direction and degree are recorded. A few of the attitudes have only direction measured.

A third dimension of attitude is intensity. Intensity is the degree of conviction with which an attitude is held by a person. Intensity is related to the degree dimension of an attitude, but it differs from degree. Two individuals may have the same attitude but hold it with different intensities. Also, two people may hold different attitudes but the intensity with which they hold the attitudes may be the same. The intensity dimension is not focused upon in this study.

A fourth dimension of an attitude is salience. By salience is meant the relative importance of any given attitude for an individual. An individual usually has an attitude about almost everything of which he is aware. And most individuals usually have a hierarchy of attitudes, that is, some attitudes are more important than others in affecting behavior in different situations. For example, a person will have attitudes about his wife, his work, his home, his car and so on. He will structure these and other attitudes in a hierarchy when he makes decisions involving these items. Of importance to a study of civil defense attitudes is the place of civil defense attitudes in an individual's hierarchy of attitudes. How salient is civil defense to an individual? Do attitudes about the specific elements of civil defense have high salience and thus affect behavior, or do specific civil defense attitudes have low salience and thus have little effect on behavior, such as the adoption of public fallout shelters?

The idea of salience is important when interpreting the findings presented in this report. For example, a person may indicate a very favorable attitude toward civil defense as measured by direction and degree but it may be of low salience, that is, the attitude may be low on his attitude hierarchy. On the other hand it may be high on his attitude hierarchy. Although the saliency of civil defense attitudes is not measured in this report, the authors believe an awareness of the idea of salience is important when evaluating the relationships between attitudes and public fallout shelter adoption behavior.

A distinction should also be made between the attitudes salient to individuals in the general public and attitudes salient to the change agent (in this case civil defense personnel). The change agent may have developed a set of logical relations among attitudes which may or may not be constructed by individuals in the general public. The logical relations among attitudes

developed by an individual may depend in part upon the salience of the attitudes.

It is important to exercise caution in attributing causal effects to the attitudinal and stage of adoption findings presented in this report. The data presented are relationship and difference data, and are not necessarily cause and effect. It is quite possible, however, that specific attitudes may influence behavior. Further, in some cases specific attitudes may be related to other attitudes and that attitude complex (or more general level attitude) may be causally related to behavior. It is also possible that specific attitudes may not in themselves affect behavior but they may be related to a highly salient attitude that does affect behavior.

In the following four chapters a number of the ideas and arguments that have been introduced into the civil defense dialogue are presented and the respondent's attitude position on the idea or argument is related to his stage of public fallout shelter adoption. The purpose of these four chapters is to determine which attitudes are related (or are not related) to stages of public fallout shelter adoption. In these chapters no attempt will be made to hypothesize the expected relationships between the attitudes and stages of adoption. Rather, data will be presented to determine what relationship, if any, is found between specific attitudes and stage of public fallout shelter adoption.

Perception of Threat (Situation)

In this chapter the relationships between people's perceptions of threat in terms of: (1) world tension levels; (2) the possibility of a future world war; and (3) the possibility of future disarmament, and their stage of adoption of public fallout shelters are analyzed. The adoption of any innovation will probably be more relevant in certain situations than in others. Since public fallout shelters are an innovation designed to be used in the event of nuclear attack, one might hypothesize (expect) that the more an individual perceives the danger of nuclear war in various aspects of current and future world situations, the farther along in the public fallout shelter adoption process he will be. In this chapter, 22 specific perception of threat attitudes are analyzed in the following three sections: (1) world tension levels (4 attitudes), (2) possibility of future world war (14 attitudes), and (3) possibility of disarmament (4 attitudes).

Section One: World Tension

Introduction

In this section attitudes pertaining to people's perceptions of current, future, and prior world tension levels are related to stage of adoption of public fallout shelters. In general, one might expect to find individuals who perceive high tension levels in any or all of these time periods to perceive a greater threat in the world situation and thus be farther along the public fallout shelter adoption process, than individuals who do not perceive high tension levels. The relationships of the following world tension attitudes to public fallout shelter stage of adoption are examined in this section: (1) current world tension (1964); (2) future world tension (1966); (3) future world tension (1969); and (4) prior world tension (1962).

Current world tension (1964)

To determine an individual's perception of the level of current world tension each respondent was asked to indicate what he would say best represents the level of world tensions just about now (1964). To indicate this, each respondent was asked to choose a number from zero through ten, where zero represented a situation in which there was no world tension at all and where ten represented extreme tensions in the world. The relationship between individuals' perceptions of the current world tension level and stage of public fallout shelter adoption is presented in Table 5.1. The table includes three subtotals: (1) the low tension subtotal, (2) the high tension subtotal, and (3) the middle tension level (score 5).

Using a median chi-square statistical test no significant relationship was found between perception of current world tension level and stage of adoption of public fallout shelters. However, percentages indicate that a slightly larger proportion of individuals in the Adoption stage were in the high tension subtotal than any of the earlier stages.

Conclusion: Perception of current world tension level is not statistically related to stage of adoption. However, the Adoption stage contains a slightly larger proportion of individuals perceiving high current world tension than any other stage.

Table 5.1. What number would you say best represents the level of world tensions just about now (1964)?

Current world tensions (1964)	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Tension 0 (Low)	8	1.2	1	0.7	2	0.8	1	0.7	0	0.0	12	0.8
Tension 1	5	0.8	1	0.7	1	0.4	0	0.0	0	0.0	7	0.5
Tension 2	4	0.6	2	1.3	2	0.8	1	0.7	4	1.5	13	0.9
Tension 3	15	2.3	8	5.3	4	1.6	4	2.7	8	3.0	39	2.7
Tension 4	34	5.2	12	8.0	19	7.8	18	12.0	14	5.3	97	6.6
(Low tension subtotal)	(66	10.1)	(24	16.0)	(28	11.5)	(24	16.0)	(26	9.8)	(168	11.5)
Tension 5	117	17.9	19	12.7	46	18.9	22	14.7	37	13.9	241	16.5
Tension 6	74	11.3	23	15.3	38	15.6	16	10.7	40	15.0	191	13.0
Tension 7	99	15.1	20	13.3	44	18.1	20	13.3	56	21.1	239	16.3*
Tension 8	117	17.9	24	16.0	35	14.4	25	16.7	58	21.8	259	17.7
Tension 9	66	10.1	13	8.7	18	7.4	14	9.3	13	4.9	124	8.5
Tension 10 (High)	105	16.0	26	17.3	34	14.0	29	19.3	36	13.5	230	15.7
(High tension subtotal)	(461	70.4)	(106	70.7)	(169	69.5)	(104	69.3)	(203	76.3)	(1043	71.2)
Don't know	5	0.8	1	0.7	0	0.0	0	0.0	0	0.0	6	0.4
No answer	6	0.9	0	0.0	0	0.0	0	0.0	0	0.0	6	0.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 4.3390. There is no significant relationship between perception of current world tension level (1964) and stage of adoption.

Future world tension (1966)

To determine an individual's perception of the level of future world tension (1966) each respondent was asked: "Which number (from 0 - 10) best represents the world tension that you personally expect by about 1966, that is, just about two years from now?" The respondent was again asked to select his answer from a scale of numbers ranging from zero to ten, where zero represented a situation in which there would be no world tension at all, and where ten represented a situation of extreme tension in the world. The relationship between individuals' perceptions of the future world tension level (1966) and stage of adoption of public fallout shelters is presented in Table 5.2. This table includes three subtotals; (1) the low tension subtotal, (2) the high tension subtotal, and (3) the middle tension level (score 5).

Using a median chi-square statistical test no significant relationship was found between perception of future world tension level (1966) and stage of adoption. There are only minor percentage differences among the tension level distributions of each adoption stage.

Conclusion: Perception of future world tension level (1966) is not statistically related to stage of adoption. Percentages indicate very little difference among adoption stages in perceived future world tension level.

Table 5.2. Which number on the card best represents the world tensions that you personally expect by about 1966---that is, just about two years from now?

Future world tension (1966)	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Tension 0 (Low)	7	1.1	1	0.7	0	0.0	2	1.3	0	0.0	10	0.7
Tension 1	7	1.1	2	1.3	1	0.4	0	0.0	0	0.0	10	0.7
Tension 2	17	2.6	6	4.0	11	4.5	4	2.7	6	2.3	44	3.0
Tension 3	35	5.3	10	6.7	5	2.1	9	6.0	7	2.6	66	4.5
Tension 4	40	6.1	9	6.0	25	10.3	9	6.0	21	7.9	104	7.1
(Low tension subtotal)	(106	16.2)	(28	18.7)	(42	17.3)	(24	16.0)	(34	12.8)	(234	16.0)
Tension 5	80	12.2	23	15.3	32	13.2	23	15.3	37	13.9	195	13.3
Tension 6	54	8.2	14	9.3	36	14.8	6	4.0	23	8.6	133	9.1
Tension 7	93	14.2	17	11.3	32	13.2	19	12.7	51	19.2	212	14.5*
Tension 8	114	17.4	21	14.0	39	16.0	36	24.0	46	17.3	256	17.5
Tension 9	80	12.2	16	10.7	23	9.5	15	10.0	31	11.7	165	11.3
Tension 10 (High)	110	16.8	27	18.0	38	15.6	26	17.3	38	14.3	239	16.3
(High tension subtotal)	(451	68.9)	(95	63.3)	(168	69.1)	(102	68.0)	(189	71.1)	(1005	68.6)
Don't know	6	0.9	2	1.3	1	0.4	0	0.0	4	1.5	13	0.9
No answer	12	1.8	2	1.3	0	0.0	1	0.7	2	0.8	17	1.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 5.2828. There is no significant relationship between perception of future world tension level (1966) and stage of adoption.

Future world tension (1969)

To determine an individual's perception of the level of future world tension (1969) each respondent was asked: "How about five years from now--which number (0 to 10) best stands for the level of tensions in the world which you think might exist then?" To answer this question each respondent was asked to choose a number ranging from zero through ten, where zero represented a situation in which there would be no world tension at all, and where ten represented a situation in which there would be extreme tension in the world. The relationship between individuals' perceptions of the future world tension level (1969) and stage of public fallout shelter adoption is presented in Table 5.3. The table includes three subtotals; (1) the low tension subtotal, (2) the high tension subtotal, and (3) the middle tension level (score 5).

Using a median chi-square statistical test no statistical relationship was found between perception of future world tension level (1969) and stage of adoption. Percentages indicate very little difference in perceived tension level among adoption stages.

Conclusion: Perception of future world tension level (1969) is not statistically related to stage of adoption. Percentages indicate very little difference among adoption stages in perceived tension level.

Table 5.3. How about five years from now---which number stands best for the level of tensions in the world which you think might exist then?

Future world tension (1969)	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Tension 0 (Low)	14	2.1	3	2.0	2	0.8	3	2.0	2	0.8	24	1.6
Tension 1	5	0.8	6	4.0	4	1.6	3	2.0	3	1.1	21	1.4
Tension 2	31	4.7	4	2.7	11	4.5	2	1.3	9	3.4	57	3.9
Tension 3	44	6.7	14	9.3	13	5.3	16	10.7	18	6.8	105	7.2
Tension 4	53	8.1	12	8.0	27	11.1	15	10.0	32	12.0	139	9.5
(Low tension subtotal)	(147	22.4)	(39	26.0)	(57	23.5)	(39	26.0)	(64	24.1)	(346	23.6)
Tension 5	101	15.4	26	17.3	45	18.5	26	17.3	49	18.4	247	16.9
Tension 6	72	11.0	19	12.7	24	9.9	15	10.0	25	9.4	155	10.6*
Tension 7	65	9.9	21	14.0	31	12.8	15	10.0	26	9.8	158	10.8
Tension 8	78	11.9	14	9.3	29	11.9	16	10.7	42	15.8	179	12.2
Tension 9	55	8.4	10	6.7	22	9.1	12	8.0	18	6.8	117	8.0
Tension 10 (High)	96	14.7	17	11.3	27	11.1	20	13.3	28	10.5	188	12.8
(High tension subtotal)	(366	55.9)	(81	54.0)	(133	54.7)	(78	52.0)	(139	52.3)	(797	54.4)
Don't know	21	3.2	3	2.0	4	1.6	5	3.3	9	3.4	42	2.9
No answer	20	3.1	1	0.7	4	1.6	2	1.3	5	1.9	32	2.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 1.9772. There is no significant relationship between perception of future world tension level (1969) and stage of adoption.

tension level (1969) and stage of adoption.

Prior world tension (1962)

To determine an individual's perception of the level of prior world tension (1962) each respondent was asked: "And which number represents best your opinion as to world tensions just about two years ago, about the beginning of 1962?" Each respondent was asked to select his answer from a scale of numbers ranging from zero to ten, where zero represented a situation in which there was no world tension at all, and where ten represented a situation of extreme tension in the world. The relationship between individuals' perceptions of the prior world tension level (1962) and stage of public fallout shelter adoption is presented in Table 5.4. The table includes three subtotals; (1) the low tension subtotal, (2) the high tension subtotal and (3) the middle tension level (score 5).

Using a median chi-square statistical test no significant relationship was found between perception of prior world tension level (1962) and stage of adoption. However, percentages indicate that a somewhat larger proportion of individuals in the Adoption and Evaluation stages perceived a past high tension level than did individuals in the earlier adoption stages.

Conclusion: Perception of prior world tension level (1962) is not statistically related to stage of adoption. A larger proportion of respondents in the latter[a] two adoption stages perceived a high tension level than did respondents in the earlier adoption stages.

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[a]The stages of adoption referred to as being "latter" (or later) and "earlier" vary from table to table throughout this report. In a few tables "latter" refers to the last four adoption stages; in many tables it refers to the last three adoption stages; in many others it refers to the last two adoption stages; and in some it refers to only the last adoption stage. In some tables the notion of "latter" is meaningful in each of the four comparisons stated above, that is, within a given table stage 1 can be meaningfully compared to the "latter" stages 2, 3, 4, and 5, stages 1 and 2 to the "latter" stages 3, 4, and 5; stages 1, 2, and 3 to the "latter" stages 4 and 5; and stages 1, 2, 3, and 4 to the "latter" stage 5. The terms latter (or later) and earlier are often used to state a more generalized conclusion or statement of relationship, rather than referring to specific adoption stages.

Table 5.4. And which number represents best your opinion as to world tension just about two years ago, about the beginning of 1962?

Prior world tension (1962)	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Tension 0 (Low)	7	1.1	0	0.0	5	2.1	1	0.7	2	0.8	15	1.0
Tension 1	19	2.9	3	2.0	0	0.0	2	1.3	0	0.0	24	1.6
Tension 2	26	4.0	7	4.7	7	2.9	1	0.7	10	3.8	51	3.5
Tension 3	44	6.7	4	2.7	15	6.2	8	5.3	11	4.1	82	5.6
Tension 4	54	8.2	14	9.3	24	9.9	11	7.3	17	6.4	120	8.2
(Low tension subtotal)	(150	22.9)	(28	18.7)	(51	21.0)	(23	15.3)	(40	15.0)	(292	19.9)
Tension 5	78	11.9	24	16.0	35	14.4	23	15.3	26	9.8	186	12.7
Tension 6	73	11.1	20	13.3	25	10.3	13	8.7	39	14.7	170	11.6
Tension 7	90	13.7	14	9.3	30	12.3	28	18.7	33	12.4	195	13.3*
Tension 8	103	15.7	20	13.3	47	19.3	29	19.3	57	21.4	256	17.5
Tension 9	59	9.0	23	15.3	31	12.8	15	10.0	33	12.4	161	11.0
Tension 10 (High)	85	13.0	19	12.7	22	9.1	19	12.7	35	13.2	180	12.3
(High tension subtotal)	(410	62.6)	(96	64.0)	(155	63.8)	(104	69.3)	(197	74.1)	(962	65.7)
Don't know	10	1.5	1	0.7	2	0.8	0	0.0	3	1.1	16	1.1
No answer	7	1.1	1	0.7	0	0.0	0	0.0	0	0.0	8	0.5
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 6.0382. There is no significant relationship between perception of prior world tension level (1962) and stage of adoption.

Section Two: Possibility of Future World War

Introduction

In this section attitudes related to people's perceptions of various aspects of a possible future world war are related to stage of adoption of public fallout shelters. Again, one might expect to find individuals who perceive the threat of nuclear war as very certain, or very imminent, or very likely to affect their local area, to be farther along the public fallout shelter adoption process. Conversely, individuals seeing the threat of nuclear war as unlikely, or far in the future, or not affecting the local area, might be expected to be found in the earlier stages of public fallout shelter adoption.

The relationship of the following future war attitudes to stage of public fallout shelter stage of adoption are analyzed in this section: (1) the length of the Cold War; (2) the likelihood of nuclear war; (3) the nature of a possible future war; (4) the timing of a possible future war; (5) present warning time of war; (6) future warning time of war; (7) the likelihood of the local community being a target; (8) the likelihood of local community survival; (9) the likelihood of fallout danger to the local community; (10) relative importance of various targets, (military bases, factories and transportation centers, people and cities), and (11) personal concern about a possible nuclear attack.

Length of the Cold War

To determine an individual's perception of the length of the Cold War each respondent was asked: "The way it looks to you today, when, would you say, is the Cold War going to end--in the next two years, in two to five years, within ten years, ten to twenty years, within fifty years, or even later?" Table 5.5 shows the distribution of responses to this question for each adoption stage. In addition, the table includes three subtotal groups; (1) those expecting the Cold War to end within five years or less, (2) those expecting the Cold War to end sometime beyond five years, and (3) those saying it will "never" end.

Using a median chi-square statistical test a significant relationship was found between perception of length of the Cold War and stage of adoption. A larger proportion of individuals in the latter three adoption stages perceived a longer Cold War than did individuals in the earlier adoption stages.

Conclusion: Perception of the length of the Cold War is statistically related to stage of adoption. Percentages indicate that a larger proportion of individuals in the latter stages of adoption expected the Cold War to last longer than did respondents in the earlier adoption stages.

Table 5.5. The way it looks to you today, when, would you say, is the Cold War going to end---in the next two years, in two to five years, within ten years, ten to twenty years, within fifty years, or even later?

Table 5.5. The way it looks to you today, when, would you say, is the Cold War going to end---in the next two years, in two to five years, within ten years, ten to twenty years, within fifty years, or even later?

Cold War will end . . .	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Within 2 years	54	8.2	14	9.3	14	5.8	7	4.7	14	5.3	103	7.0
Within 5 years	164	25.0	28	18.7	37	15.2	27	18.0	64	24.1	320	21.9
(Within 5 years or less subtotal)	(218	33.3)	(42	28.0)	(51	21.0)	(34	22.7)	(78	29.3)	(423	28.9)
Within 10 years	144	22.0	29	19.3	64	26.3	51	34.0	57	21.4	345	23.6*
10 to 20 years	75	11.5	24	16.0	42	17.3	25	16.7	50	18.8	216	14.8
20 to 50 years	39	6.0	9	6.0	18	7.4	11	7.3	13	4.9	90	6.1
Over 50 years	34	5.2	11	7.3	17	7.0	8	5.3	14	5.3	84	5.7
(Within 10 years or more subtotal)	(292	44.6)	(73	48.7)	(141	58.0)	(95	63.3)	(134	50.4)	(735	50.2)
Never	84	12.8	21	14.0	38	15.6	18	12.0	44	16.5	205	14.0
Don't know	60	9.2	14	9.0	12	4.9	3	1.9	9	3.4	98	6.7
No answer	1	0.2	0	0.0	1	0.4	0	0.0	1	0.4	3	0.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 11.4130. There is a significant relationship between perception of the length of the Cold War and stage of adoption.

Likelihood of nuclear war

To determine an individual's perception of the likelihood of nuclear war each respondent was asked: "Right now, how likely do you think it is that we're in for another big World War---one where nuclear bombs would be used--very likely, fairly likely, fairly unlikely, or very unlikely?" The relationship between individuals' perceptions of the likelihood of nuclear war and stage of adoption of public fall-out shelters is presented in Table 5.6. The table also includes two subtotal groups; (1) those perceiving nuclear war as likely, and (2) those perceiving nuclear war as unlikely.

Using a median chi-square statistical test a significant relationship was found between perception of the likelihood of nuclear war and stage of adoption. Percentage trends indicate that a larger proportion of individuals in the latter stages of adoption perceive war as more unlikely than do individuals in the earlier adoption stages.

Conclusion: Perception of the likelihood of nuclear war is statistically related to stage of adoption. A larger proportion of individuals in the first two adoption stages perceive nuclear war as more likely than do individuals in the latter stages of adoption.

Table 5.6. Right now, how likely do you think it is that we're in for another big World War---one where nuclear bombs would be used--very likely, fairly likely, fairly unlikely, or very unlikely?

Likelihood of nuclear war	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Very likely	99	15.1	31	20.8	22	9.1	17	11.4	28	10.5	197	13.5
Fairly likely	191	29.2	44	29.5	46	18.9	35	23.5	65	24.4	381	26.0
(Likely subtotal)	(290	44.3)	(75	50.0)	(68	28.0)	(52	34.7)	(93	35.0)	(578	39.5)
Fairly unlikely	161	24.6	33	22.1	93	38.3	59	39.6	93	35.0	439	30.0*
Very unlikely	170	26.0	38	25.5	76	31.3	37	24.8	74	27.8	395	27.0
(Unlikely subtotal)	(331	50.5)	(71	47.3)	(169	69.5)	(96	64.0)	(167	62.8)	(834	57.0)
Don't know	31	4.7	4	2.6	5	2.1	2	1.3	5	1.9	47	3.2
No answer	3	0.5	0	0.0	1	0.4	0	0.0	1	0.4	5	0.3
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 20.1572. There is a significant relationship between perception of the likelihood of nuclear war and stage of adoption.

Nature of a possible future war

To determine an individual's perception of the nature of a possible future war each respondent was asked: "Of all the things listed on this card, which do you think is the most likely way a World War would be fought if it should come?" The possible responses to this question are listed in Table 5.7. The table also shows the distribution of responses to this question for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of the nature of a possible future war and stage of adoption. Percentages indicate a curvilinear relationship: a slightly larger proportion of respondents in the Unaware stage perceived a future war with nuclear weapons than did respondents in any of the other stages (see use nuclear weapon subtotal and row 1); however, the Evaluation and Adoption stages had the next largest proportion of respondents perceiving a future war to be nuclear. The Information stage had the smallest proportion of respondents perceiving a future war to be nuclear.

Conclusion: Perception of the nature of a possible future war is statistically related to stage of adoption. A larger proportion of respondents in the Unaware stage perceived the maximum use of nuclear weapons in a future war than did respondents in any other stage (see row 1).

Table 5.7. Of all the things listed on this card, which do you think is the most likely way a World War would be fought if it should come?

Nature of a possible future war	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
All nuclear weapons would be used just about at once	176	26.9	34	22.7	42	17.3	32	21.3	53	19.9	337	23.0
Many nuclear weapons would be used but each side would try to keep plenty in reserve to use them in later attacks	154	23.5	29	19.3	60	24.7	35	23.3	65	24.4	343	23.4
Few nuclear weapons would be used and those only against carefully selected military targets	95	14.5	28	18.7	41	16.9	27	18.0	49	18.4	240	16.4*
Few nuclear weapons would be used but primarily against civilians in cities	5	0.8	1	0.7	5	2.1	3	2.0	2	0.8	16	1.1
(Use nuclear weapons subtotal)	(430	65.6)	(92	61.3)	(148	60.9)	(97	64.7)	(169	63.5)	(936	63.9)
No nuclear weapons would be used at first, but they might be used later on depending on how the war went	152	23.2	46	30.7	74	30.5	43	28.7	71	26.7	386	26.4
No nuclear weapons would be used at all and the war would be fought by conventional means	32	4.9	6	4.0	9	3.7	8	5.3	18	6.8	73	5.0
Other (specify)	4	0.6	3	2.0	2	0.8	1	0.7	2	0.8	12	0.8
There will never be a world war	8	1.2	1	0.7	6	2.5	1	0.7	1	0.4	17	1.2
(No nuclear weapons subtotal)	(196	29.9)	(56	37.3)	(91	37.4)	(53	35.3)	(92	34.6)	(488	33.3)
Don't know	24	3.7	2	1.3	3	1.2	0	0.0	5	1.9	34	2.3
No answer	5	0.8	0	0.0	1	0.4	0	0.0	0	0.0	6	0.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.
With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.
Calculated chi-square = 10.8204. There is a significant relationship between perception of the nature of a possible future war and stage of adoption.

Timing of a possible future war

To determine an individual's perception of the timing of a possible future war each respondent was asked: "If another World War should come, when do you think it would happen---within six months, within the next year or two, within five years, ten years, twenty years, or even more?" Table 5.8 shows the distribution of responses to this question for each stage of adoption. In addition, the table includes two subtotal groups: (1) those expecting war to happen within five years or less, and (2) those expecting war to happen within ten years or more.

Using a median chi-square statistical test no significant relationship was found between perception of the timing of a possible future war and stage of adoption, although the test does approach significance at the .05 level. Percentages indicate that a larger proportion of individuals in the first two adoption stages perceived war as likely to occur within five years or less than did respondents in the latter three adoption stages.

Conclusion: Perception of the timing of a possible future war is not statistically related to stage of adoption. However, a larger proportion of individuals in the first two stages perceived war as possibly occurring within five years, whereas individuals in the latter adoption stages more frequently perceived a war occurring in the more distant future.

Table 5.8. If another World War should come, when do you think it would happen---within six months, within the next year or two, within five years, ten years, twenty years, or even more?

Timing of a possible future war	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Within six months	9	.1.4	1	0.7	4	1.6	2	1.3	0	0.0	16	1.1
Within one to two years	97	14.8	23	15.3	22	9.1	13	8.7	28	10.5	183	12.5
Within five years	184	28.1	50	33.3	68	28.0	48	32.0	75	28.2	425	29.0
(Within 5 years or less subtotal)	(290	44.3)	(74	49.3)	(94	38.7)	(63	42.0)	(103	38.7)	(624	42.6)
Within ten years	146	22.3	32	21.3	46	18.9	47	31.3	77	28.9	348	23.8*
Within twenty years	54	8.2	9	6.0	24	9.9	12	8.0	15	5.6	114	7.8
Over twenty years	40	6.1	14	9.3	26	10.7	9	6.0	31	11.7	120	8.2
Depends (Specify)	21	3.2	2	1.3	10	4.1	4	2.7	12	4.5	49	3.3
(Within 10 years or more subtotal)	(261	39.8)	(57	38.0)	(106	43.6)	(72	48.0)	(135	50.8)	(631	43.1)
Never will happen	39	6.0	6	4.0	24	9.9	9	6.0	12	4.5	90	6.1
Don't know	64	9.8	13	8.7	19	7.8	6	4.0	16	6.0	118	8.1
No answer	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	.06
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 8.7790. There is no significant relationship between perception of the timing of a possible future war and stage of adoption.

Present warning time of war (1964)

People's perceptions of the present warning time to prepare for a nuclear attack may affect their perceived need for public fallout shelters. To determine an individual's perception of the amount of warning time the people in the United States would have of an enemy attack, each respondent was asked: "The way things stand right now, how much time do you think we would have to know about an enemy attack on our country?" The response choices presented to the respondent are listed in Table 5.9, which also shows the distribution of responses for each adoption stage. The table also includes two subtotal groups: (1) those perceiving 14 minutes of warning time or less and (2) those perceiving a warning time from 15 minutes to more than two days.

Using a median chi-square statistical test no significant relationship was found between perception of present warning time of war and stage of adoption. However, percentages indicate that a greater proportion of respondents in the first three stages perceived less warning time than did respondents in the latter two adoption stages.

Conclusion: Perception of warning time is not statistically related to stage of adoption. However, percentages indicate that a somewhat larger proportion of respondents in the earlier adoption stages perceived less warning time than did respondents in the latter adoption stages.

Table 5.9. The way things stand right now, how much time do you think we would have to know about an enemy attack on our country? (Probe: How much warning would you personally expect we would have of such an attack?)

Present warning time of war (1964)	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
No warning time	104	15.9	14	9.3	25	10.3	13	8.7	21	7.9	177	12.1
Less than 5 minutes	60	9.2	18	12.0	21	8.6	7	4.7	16	6.0	122	8.3
5-9 minutes	53	8.1	11	7.3	17	7.0	12	8.0	24	9.0	117	8.0
10-14 minutes	42	6.4	13	8.7	20	8.2	11	7.3	28	10.5	114	7.8
(14 minutes or less subtotal)	(259	39.5)	(56	37.3)	(83	34.2)	(43	28.7)	(89	33.5)	(530	36.2)
15 minutes	64	9.8	18	12.0	37	15.2	19	12.7	33	12.4	171	11.7*
16-19 minutes	8	1.2	2	1.3	9	3.7	7	4.7	3	1.1	29	2.0
20-29 minutes	48	7.3	7	4.7	19	7.8	17	11.3	26	9.8	117	8.0
30-59 minutes	66	10.1	20	13.3	38	15.6	19	12.7	49	18.4	192	13.1
1-2 hours	95	14.5	15	10.0	24	9.9	26	17.3	38	14.3	198	13.5
2-12 hours	37	5.6	10	6.7	14	5.8	8	5.3	10	3.8	79	5.4
12 hours - 1 day	18	2.7	3	2.0	3	1.2	1	0.7	4	1.5	29	2.0
1-2 days	10	1.5	2	1.3	2	0.8	3	2.0	3	1.1	20	1.4
More than 2 days	13	2.0	1	0.7	1	0.4	2	1.3	2	0.8	19	1.3
(15 minutes or more subtotal)	(359	54.8)	(78	52.0)	(147	60.5)	(102	68.0)	(168	63.2)	(854	58.3)
Don't know	35	5.3	16	10.7	13	5.3	4	2.7	9	3.4	77	1.2
No answer	2	0.3	0	0.0	0	0.0	1	0.7	0	0.0	3	0.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 6.7870. There is no significant relationship between perception of the present warning time of war and stage of adoption.

Future warning time of war (1970)

To determine an individual's perception of the amount of warning time people in the United States would have of an enemy attack in about 1970, each respondent was asked: "Various things might happen in the future. An enemy might develop new weapons. We might develop new defenses. If you were to make your best guess on the basis of the information you have right now, how much warning time do you think we would have in about 1970---more warning time, less warning time, or just about what we have right now?" Table 5.10 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of future warning time of war (1970) and stage of adoption. There are no clear percentage trends or differences among adoption stages.

Conclusion: Perception of future warning time of war is not statistically related to stage of adoption. Percentages indicate very little difference among adoption stages in perceived future warning time of war.

Table 5.10. Various things might happen in the future. An enemy might develop new weapons. We might develop new defenses. If you were to make your best guess on the basis of the information you have right now, how much warning do you think we would have in about 1970---more warning time, less warning time, or just about what we have right now?

Future warning time of war (1970)	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
More warning time than now	248	37.9	62	41.3	83	34.2	59	39.3	106	39.8	558	38.1
About the same as now	243	37.1	41	27.3	86	35.4	48	32.0	82	30.8	500	34.2*
Less warning time than now	132	20.2	39	26.0	62	25.5	39	26.0	72	27.1	344	23.5
Don't know	30	4.6	8	5.3	11	4.5	4	2.7	6	2.3	59	4.0
No answer	2	0.3	0	0.0	1	0.4	0	0.0	0	0.0	3	0.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.
Calculated chi-square = 1.4370. There is no significant relationship between perception of future warning time of war (1970) and stage of adoption.

Likelihood of local community being a target

To determine an individual's perception of the likelihood of his local community being a target each respondent was asked: "In case of nuclear war, how great a danger do you think there is that the area around here would be a target--a certain danger, great danger, some danger, little danger, or no danger at all?" Table 5.11 shows the distribution of responses for each stage of adoption. In addition, the table includes two subtotal groups, (1) those perceiving certain or great danger and (2) those perceiving little or no danger.

Using a median chi-square statistical test a significant relationship was found between perception of the local community being a target and stage of adoption. Percentages indicate that a larger proportion of respondents in the latter two stages of adoption perceived a greater danger that their local community will be a target than did individuals in the first three adoption stages.

Conclusion: Perception of the likelihood of the local community being a target is statistically related to stage of adoption. A larger proportion of respondents in the latter adoption stages perceived a greater local danger than did respondents in the earlier adoption stages.

Table 5.11. In case of nuclear war, how great a danger do you think there is that the area around here would be a target---a certain danger, great danger, some danger, little danger, or no danger at all?

Likelihood of local community being a target	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Certain danger	110	16.8	32	21.3	55	22.6	43	28.7	72	27.1	312	21.3
Great danger	184	28.1	49	32.7	76	31.3	56	37.3	101	38.0	466	31.8*
Everywhere would be hit, no local difference	7	1.1	2	1.3	2	0.8	0	0.0	1	0.4	12	0.8
(Great danger subtotal)	(301	46.0)	(83	55.3)	(133	54.7)	(99	66.0)	(174	65.4)	(790	54.0)
Some danger	193	29.5	42	28.0	63	25.9	37	24.7	54	20.3	389	26.6
Little danger	109	16.6	16	10.7	34	14.0	12	8.0	27	10.2	198	13.5
No danger at all	38	5.8	2	1.3	12	4.9	2	1.3	8	3.0	62	4.2
Never will happen	4	0.6	3	2.0	0	0.0	0	0.0	1	0.4	8	0.5
(Little danger subtotal)	(344	52.5)	(63	42.0)	(109	44.9)	(51	34.0)	(90	33.8)	(657	44.9)
Don't know	9	1.4	4	2.7	1	0.4	0	0.0	2	0.8	16	1.1
No answer	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.06
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 36.6218. There is a significant relationship between perception of the likelihood of the local community being a target and stage of adoption.

Likelihood of local community survival

To determine an individual's perception of the likelihood of his surviving in his local community should there be a nuclear war, each respondent was asked: "If a nuclear war started next week, how good are the chances that people around here would survive--very good, fairly good, fairly bad, or very bad?" Table 5.12 shows the distribution of responses for each stage of adoption, as well as three subtotal groups: (1) those perceiving good chances of local survival, (2) those perceiving bad chances of local survival, and (3) those perceiving a 50-50 chance of local survival.

Using a median chi-square statistical test no significant relationship was found between perception of the likelihood of local community survival and stage of adoption. Percentages indicate little or no difference within or between subtotal groups for the five stages of adoption.

Conclusion: Perception of the likelihood of local community survival is not statistically related to stage of adoption. Percentages show literally no differences among the various adoption stages.

Table 5.12. If a nuclear war started next week, how good are the chances that people around here would survive---very good, fairly good, fairly bad, or very bad?

Likelihood of local community survival in the event of a nuclear war	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
War never will happen	2	0.3	1	0.7	0	0.0	0	0.0	0	0.0	3	0.2
Very good	34	5.2	6	4.0	10	4.1	5	3.3	12	4.5	67	4.6
Fairly good	137	20.9	31	20.7	53	21.8	30	20.0	52	19.5	303	20.7
(Good subtotal)	(173	26.4)	(38	25.3)	(63	25.9)	(35	23.3)	(64	24.1)	(373	25.5)
50-50 chance	67	10.2	12	8.0	31	12.8	19	12.7	32	12.0	161	11.0
Fairly bad	129	19.7	26	17.3	50	20.6	32	21.3	64	24.1	301	20.6*
Very bad	224	34.2	58	38.7	76	31.3	53	35.3	86	32.3	497	33.9
No chance at all	45	6.9	10	6.7	16	6.6	9	6.0	19	7.1	99	6.8
(Bad subtotal)	(398	60.8)	(94	62.7)	(142	58.4)	(94	62.7)	(169	63.5)	(897	61.3)
Don't know	15	2.3	6	4.0	7	2.9	2	1.3	1	0.4	31	2.1
No answer	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
Number and % of Total	655	44.7	150	10.2	243	41.2	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 1.7378. There is no significant relationship between perception of the likelihood of local community survival and stage of adoption.

Likelihood of fallout danger to the local community

To determine an individual's perception of the likelihood of fallout danger to his local community in the event of nuclear war each respondent was asked: "If a nuclear war occurred and this area itself was not destroyed, how great a danger do you think there would be from fallout around here--very great, fairly great, or little or no danger?" Table 5.13 shows the distribution of responses for each adoption stage, as well as two subtotal groups: (1) those perceiving a great danger from fallout and (2) those perceiving little or no danger from fallout.

Using a chi-square statistical test a significant relationship was found between perception of the likelihood of fallout danger to the local community and stage of adoption when a comparison was made between the two subtotal groups. Percentages indicate that a larger proportion of individuals aware of public fallout shelters (stages 2 through 5) perceived a greater danger from fallout than did individuals who were unaware of public fallout shelters (stage 1).

Conclusion: Perception of the likelihood of fallout danger to the local community is statistically related to stage of adoption. A larger proportion of individuals in the latter adoption stages perceived a local fallout danger than did individuals in the earlier adoption stages.

Table 5.13. If nuclear war occurred and this area itself was not destroyed, how great a danger do you think there would be from fallout around here---very great, fairly great, or little or no danger?

Likelihood of fallout danger to the local community	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Very great	211	32.2	50	33.3	82	33.7	48	32.0	93	34.4	484	33.1
Fairly great	250	38.2	69	46.0	114	46.9	74	49.3	131	48.5	638	43.6
(Great danger subtotal)	(461	70.4)	(119	79.3)	(196	80.7)	(122	81.3)	(224	84.2)	(1122	76.6)
Little danger	143	21.8	25	16.7	39	16.0	21	14.0	30	11.1	258	17.6
No danger	12	1.8	0	0.0	2	0.8	1	0.7	6	2.2	21	1.4
Never will happen	1	0.2	1	0.7	0	0.0	0	0.0	0	0.0	2	0.1
(Little or no danger subtotal)	(156	23.8)	(26	17.3)	(41	16.9)	(22	14.7)	(36	13.5)	(281	19.2)
Don't know	36	5.5	5	3.4	6	2.5	6	4.0	6	2.3	59	4.0
No answer	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 20.4464. There is a significant relationship between perception of the likelihood of fallout danger to the local community and stage of adoption.

Relative importance of various targets for an enemy

An individual's perception of the targets an enemy might select in a possible future war may affect his public fallout shelter adoption behavior. To determine an individual's perception of the relative importance of various targets an enemy could select in the event of a major war the following procedure was used. Each respondent was read and asked the following: "If a major war were to come, an enemy might have different objectives in mind. On this card are four purposes he might have." (The choices were: "(a) destroying our military bases, (b) destroying our factories and transportation centers, (c) destroying our cities and (d) destroying our people.") "Which one do you think he would consider most important? Which next most? And which next?" Each respondent then ranked the four possible target objectives. The distribution of the ranking for each of these target objectives for each stage of adoption is presented in the following four tables. The tables are ordered on the basis of the first choice ranking of the target objectives by the total sample of respondents.

Destroying our military bases

In Table 5.14 the distribution of responses to the target objective choice "destroying our military bases" is shown for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between the rank given to the choice "destroying our military bases" and stage of adoption. However, percentages indicate that a slightly larger proportion of respondents in the latter adoption stages gave this target objective a "most important"ranking as a possible enemy target than did respondents in the first two adoption stages.

Conclusion: The perception of the relative importance of an enemy selecting to destroy our military bases is not statistically related to stage of adoption. However, a larger proportion of individuals in the latter adoption stages perceived that destroying our military bases is the most important enemy target, than did any of the respondents in the earlier stages.

Table 5.14. How important is destroying our military bases?

Importance of military bases as an enemy target	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Most important	366	55.9	86	57.3	144	59.3	97	64.7	164	61.7	857	58.5*
Second most important	180	27.5	52	34.7	76	31.3	40	26.7	72	27.1	420	28.7
Third most important	66	10.1	8	5.3	16	6.6	9	6.0	21	7.9	120	8.2
Least important	30	4.6	4	2.7	4	1.6	4	2.7	6	2.3	48	3.3
Don't know	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
No answer	11	1.7	0	0.0	3	1.2	0	0.0	3	1.1	17	1.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 3.1530. There is no significant relationship between perception of the relative importance of destroying military bases and stage of adoption.

Destroying our factories and transportation centers

In Table 5.15 the distribution of responses to the target objective choice "destroying our factories and transportation centers" is shown for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between the rank given to the choice "destroying our factories and transportation centers" and stage of adoption. There were essentially no percentage differences among adoption stages in the proportion of respondents indicating this target as "most important."

Conclusion: Perception of the relative importance of destroying our factories and transportation centers is not statistically related to stage of adoption. Percentages indicate very little difference among adoption stages in perceived importance of factories and transportation centers as the most important enemy targets.

Table 5.15. How important is destroying our factories and transportation centers?

Importance of factories and transportation centers as enemy target	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Most important	192	29.3	43	28.7	68	28.0	41	27.3	77	28.9	421	28.8
Second most important	314	47.9	68	45.3	137	56.4	85	56.7	138	51.9	742	50.7*
Third most important	92	14.0	27	18.0	27	11.1	14	9.3	36	13.5	196	13.4
Least important	44	6.7	10	6.7	8	3.3	9	6.0	12	4.5	83	5.7
Don't know	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
No answer	11	1.7	2	1.3	3	1.2	1	0.7	3	1.1	20	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = .4590. There is no significant relationship between perception of the relative importance of destroying factories and transportation centers and stage of adoption.

Destroying our people

In Table 5.16 the distribution of responses to the target objective choice "destroying our people" is shown for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between the rank given to the choice "destroying our people" and stage of adoption, although the test does approach significance at the .05 level. Percentages indicate that a larger proportion of respondents in the earlier stages of adoption see this target objective as more important to an enemy than do individuals in the latter stages of adoption.

Conclusion: Perception of the relative importance of destroying our people is not statistically related to stage of adoption. However, individuals perceiving this target as the most important enemy objective were more frequently in the earlier stages of the adoption process than the latter stages.

Table 5.16. How important is destroying our people?

Importance of our people as an enemy target	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Most important	50	7.6	12	8.0	11	4.5	2	1.3	8	3.0	83	5.7
Second most important	44	6.7	8	5.3	4	1.6	6	4.0	14	5.3	76	5.2
Third most important	95	14.5	21	14.0	23	9.5	21	14.0	25	9.4	185	12.6
Least important	436	66.6	106	70.7	195	80.2	114	76.0	212	79.7	1063	72.6*
Don't know	3	0.5	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2
No answer	27	4.1	3	2.0	10	4.1	7	4.7	7	2.6	54	3.7
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 8.8220. There is no significant relationship between perception of the relative importance of destroying people and stage of adoption.

Destroying our cities

In Table 5.17 the distribution of responses to the target objective choice "destroying our cities" is shown for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between the importance rank given to the choice "destroying our cities" and stage of adoption. There were essentially no percentage differences among adoption stages in the proportion of respondents indicating this target as "most important."

Conclusion: Perception of the relative importance of destroying our cities is not statistically related to stage of adoption. Percentages indicate very little difference among adoption stages in perceived importance of our cities as the most important enemy target.

Table 5.17. How important is destroying our cities?

Table 5.17. How important is destroying our cities?

Importance of our cities as an enemy target	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Most important	35	5.3	7	4.7	17	7.0	10	6.7	14	5.3	83	5.7
Second most important	104	15.9	20	13.3	23	9.5	19	12.7	38	14.3	204	13.9
Third most important	387	59.1	93	62.0	171	70.4	102	68.0	180	67.7	933	63.7*
Least important	115	17.6	27	18.0	26	10.7	16	10.7	29	10.9	213	14.5
Don't know	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
No answer	12	1.8	3	2.0	6	2.5	3	2.0	5	1.9	29	2.0
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = .8944. There is no significant relationship between perception of the relative importance of destroying cities and stage of adoption.

Personal concern about a possible nuclear attack

To determine an individual's personal concern about a possible nuclear attack each respondent was asked: "How much do you, yourself, worry about the possibility of a nuclear attack on the United States--a great deal, some, only a little, or not at all?" Table 5.18 shows the distribution of responses for each stage of adoption, as well as two subtotal groups: (1) those indicating a great deal or some worry and (2) those indicating little or no worry.

Using a median chi-square statistical test a significant relationship was found between personal concern about a possible nuclear attack and stage of adoption. Percentages indicate that there is a curvilinear relationship between worry about nuclear attack and stage of adoption. Both the first two and last two adoption stages have a larger proportion of respondents who "worry" than do individuals in the Information stage; although respondents in the latter two stages were slightly more worried than respondents in the first two stages.

Conclusion: Personal concern about nuclear attack is statistically related to stage of adoption. Percentages indicate that a larger proportion of individuals in the Information stage indicated little or no concern about nuclear war than did respondents in the other stages.

Table 3.18. How much do you, yourself, worry about the possibility of a nuclear attack on the United States---great deal, some, only a little, or not at all?

Personal concern about nuclear attack	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Great deal of concern	124	18.9	23	15.3	19	7.8	23	15.3	40	15.0	229	15.6
Some concern	172	26.3	44	29.3	57	23.5	46	30.7	96	36.1	415	28.3
(Great or some worry subtotal)	(296	45.2)	(67	44.7)	(76	31.3)	(69	46.0)	(136	51.1)	(644	44.0)
A little concerned	149	22.7	44	29.3	64	26.3	50	33.3	68	25.6	375	25.6*
Not at all concerned	206	31.5	39	26.0	103	42.4	30	20.0	60	22.6	438	29.9
(Little or no worry subtotal)	(355	54.2)	(83	55.3)	(167	68.7)	(80	53.3)	(128	48.1)	(813	55.5)
Don't know	3	0.5	0	0.0	0	0.0	1	0.7	2	0.8	6	0.4
No answer	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.06
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 22.8642. There is a significant relationship between personal concern about nuclear attack and stage of adoption.

Section Three: The Possibility of Future Disarmament

Introduction

The relationship of civil defense programs to possible future disarmament postures are sometimes discussed when analyzing long run defense policy alternatives. In this section individuals' attitudes toward four aspects of possible future disarmament are related to one civil defense program, stage of adoption of public fallout shelters: (1) expected disarmament situation in the next five years, (2) desired disarmament situation, (3) disarmament situation desired by the United States, and (4) the disarmament situation desired by Russia. One might expect to find that individuals who personally do not perceive there will be a disarmament in the future, or who perceive that the United States and/or Russia do not desire disarmament, will be more knowledgeable about public fallout shelters and, thus, may be farther along the public fallout shelter adoption process.

Expected disarmament situation in next five years

To determine the kind of disarmament situation that an individual expects most in the next five years the following procedure was used. Each respondent was shown a card with seven possible disarmament situations and then asked: "Will you please look at them and tell me which one best represents the situation you expect most in the next five years or so?" The seven disarmament situations on the card are listed in Table 5.19. The table also shows the distribution of responses to the seven disarmament situations for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between expected disarmament situation in the next five years and stage of adoption. Percentages indicate a curvilinear relationship between expected disarmament and adoption stages. A larger proportion of respondents in the Information stage perceived the current arms race to continue than did respondents in any other stage.

Conclusion: Expected disarmament situation is not statistically related to stage of adoption. Percentages indicate, however, that a larger proportion of respondents in the Information stage perceived the armament race to continue than did respondents in the other stages.

Table 5.19. On this card are some disarmament situations. Will you please look at them and tell me which one best represents the situation you expect most in the next five years or so?

Expected disarmament situation in next five years	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
The current armament race to continue	247	37.7	52	34.7	105	43.2	54	36.0	99	37.2	557	38.0
Disarmament of nations other than Russia and the United States	18	2.7	4	2.7	4	1.6	3	2.0	7	2.6	36	2.5
Nuclear disarmament, no control	20	3.1	3	2.0	10	4.1	3	2.0	6	2.3	42	2.9
World-wide disarmament, no control provisions	24	3.7	3	2.0	6	2.5	3	2.0	5	1.9	41	2.8
Major arms reduction	113	17.3	32	21.3	46	18.9	31	20.7	61	22.9	283	19.3*
Nuclear disarmament, control	80	12.2	25	16.7	46	18.9	33	22.0	53	19.9	237	16.2
World-wide disarmament, UN police force control	99	15.1	25	16.7	21	8.6	17	11.3	30	11.3	192	13.1
Don't know	49	7.5	6	4.0	4	1.6	5	3.3	5	1.9	69	4.7
Does not apply	5	0.8	0	0.0	1	0.4	1	0.7	0	0.0	7	0.5
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 if $\geq$ 13.28.
Calculated chi-square = 7.4824. There is no significant relationship between expected disarmament situation in the next five years and stage of adoption.

Disarmament situation desired by respondent

To determine the kind of disarmament situation an individual desires most each respondent was asked: "How about the one situation you would want most to see happen? Which one is most desirable to you personally?" Table 5.20 lists the possible response choices to this question and the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between desired disarmament situation and stage of adoption. There are only minor percentage differences among adoption stages. Approximately one-half of the respondents in each adoption stage indicated a desire for, "world wide disarmament, U.N. police force control."

Conclusion: Desired disarmament situation is not statistically related to stage of adoption. Percentages indicate very little difference among adoption stages in disarmament situation desired.

Table 5.20. How about the one situation you would want most to see happen? Which one is most desirable to you personally?

Disarmament situation desired by respondent	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
The current armament race to continue	32	4.9	7	4.7	4	1.6	3	2.0	5	1.9	51	3.5
Disarmament of nations other than Russia and United States	17	2.6	6	4.0	1	0.4	6	4.0	3	1.1	33	2.3
Nuclear disarmament, no control	7	1.1	1	0.7	2	0.8	3	2.0	3	1.1	16	1.1
World-wide disarmament, no control provisions	36	5.5	7	4.7	13	5.3	6	4.0	12	4.5	74	5.1
Major arms reduction	56	8.5	10	6.7	21	8.6	7	4.7	30	11.3	124	8.5
Nuclear disarmament, control	146	22.3	31	20.7	69	28.4	43	28.7	65	24.4	354	24.2
World-wide disarmament, UN police force control	324	49.5	81	54.0	129	53.1	77	51.3	144	54.1	755	51.6*
Don't know	30	4.6	7	4.7	2	0.8	3	2.0	4	1.5	46	3.1
No answer	7	1.1	0	0.0	2	0.8	2	1.3	0	0.0	11	0.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 if $\geq$ 13.28.
Calculated chi-square = 1.0320. There is no significant relationship between desired disarmament situation and stage of adoption.

and stage of adoption.

Disarmament situation desired by the United States

To determine an individual's perception of the disarmament situation most desired by the United States each respondent was asked: "How about the United States? Which one does the United States want most, would you guess?" Table 5.21 lists the possible response choices to this question and the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of the disarmament situation most desired by the United States and stage of adoption. Approximately 50 per cent of the respondents in each adoption stage perceived that the United States most desires "world-wide disarmament, with United Nations police force control." However, a larger proportion of respondents in the latter stages of adoption perceived the U.S. desired nuclear disarmament with control, than did respondents in the earlier stages of adoption.

Conclusion: Perception of the disarmament situation most desired by the United States is not statistically related to stage of adoption.

Table 5.21. How about the United States? Which one does the United States want most, would you guess?

Disarmament situation desired by the United States	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
The current armament race to continue	27	4.1	8	5.3	6	2.5	3	2.0	5	1.9	49	3.3
Disarmament of nations other than Russia and United States	16	2.4	2	1.3	5	2.1	3	2.0	7	2.6	33	2.3
Nuclear disarmament, no control	11	1.7	1	0.7	6	2.5	4	2.7	3	1.1	25	1.7
World-wide disarmament, no control provisions	21	3.2	8	5.3	3	1.2	6	4.0	9	3.4	47	3.2
Major arms reduction	63	9.6	14	9.3	22	9.1	12	8.0	18	6.8	129	8.8
Nuclear disarmament, control	184	28.1	39	26.0	68	28.0	52	34.7	89	33.5	432	29.5*
World-wide disarmament, UN police force control	289	44.1	73	48.7	126	51.9	69	46.0	130	48.9	687	46.9
Don't know	37	5.6	4	2.7	5	2.1	1	0.7	4	1.5	51	3.5
No answer	7	1.1	1	0.7	2	0.8	0	0.0	1	0.4	11	0.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 if $\geq$ 13.28.
Calculated chi-square = 2.9034. There is no significant relationship between perception of the disarmament situation desired by the United States and stage of adoption.

Disarmament situation desired by Russia

To determine an individual's perception of the disarmament situation most desired by Russia each respondent was asked: "Which one would you say Russia wants most?" Table 5.22 lists the possible response choices to this question and also the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of the disarmament situation most desired by Russia and stage of adoption. Almost one-half of the respondents (48.2 percent) perceived that Russia desired disarmament situations with no control (see rows 3 and 4). A larger proportion of respondents in the latter three stages perceived that Russia desired disarmament with no control than did respondents in the first two stages.

Conclusion: Perception of the disarmament situation most desired by Russia is statistically related to stage of adoption. Proportionately more of the respondents in the latter adoption stages perceived Russia wanting disarmament, but with no control, than did individuals in the earlier stages.

Table 5.22. Which one would you say Russia wants most?

Disarmament situation desired by Russia	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
The current armament race to continue	109	16.6	23	15.3	28	11.5	20	13.3	40	15.0	220	15.0
Disarmament of nations other than Russia and United States	110	16.8	27	18.0	29	11.9	19	12.7	41	15.4	226	15.4
Nuclear disarmament, no control	141	21.5	35	23.3	59	24.3	35	23.3	77	28.9	347	23.7*
World-wide disarmament, no control provisions	141	21.5	39	26.0	73	30.0	44	29.3	62	23.3	359	24.5
Major arms reduction	26	4.0	5	3.3	21	8.6	6	4.0	16	6.0	74	5.1
Nuclear disarmament, control	37	5.6	6	4.0	11	4.5	12	8.0	11	4.1	77	5.3
World-wide disarmament, UN police force control	20	3.1	5	3.3	9	3.7	7	4.7	8	3.0	49	3.3
Don't know	60	9.2	9	6.0	11	4.5	7	4.7	11	4.1	98	6.7
No answer	11	1.7	1	0.7	2	0.8	0	0.0	0	0.0	14	1.0
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 if $\geq$ 13.28.
Calculated chi-square = 11.1688. There is a significant relationship between perception of the disarmament situation desired by Russia and stage of adoption.

Summary of Chapter 5

In Chapter 5 twenty-two different perception of threat (situation) attitude variables were analyzed in relation to stage of adoption of public fallout shelters. These 22 attitude variables were categorized into three general attitude areas for discussion purposes. The findings are summarized in Table 5.23. Seven of the specific perception of threat attitude variables were found to be statistically related to stage of adoption.

The first attitude area was composed of individuals' perceptions of the level of world tension at four different time periods. None of the four variables in this attitude area was found to be statistically related to stage of adoption. However, two of the variables had a slight positive percentage trend relationship to stage of public fallout shelter adoption. A slightly larger proportion of respondents in the latter adoption stages perceived that there was a "high current world tension level in 1964" and that there had been a "high prior world tension level in 1962," than did individuals in the earlier adoption stages. The other two variables had no apparent relationship to stage of adoption: "high future world tension level in 1966" and "high future world tension level 1969."

The second attitude area consisted of fourteen attitude variables focusing on people's perceptions of the possibility of a future world war. Six of these variables were found to be statistically related to stage of adoption.

One of the significant variables had a strong positive relationship to stage of adoption: a larger proportion of individuals in the latter adoption stages perceived that there was a "high likelihood of their local community being a target in a future war," than did individuals in the earlier adoption stages.

Two of the significant variables had a positive relationship to stage of adoption, but not as strong a relationship as the above variable: a larger proportion of the respondents in the latter adoption stages perceived that there was a "high likelihood of a long Cold War" and a "high likelihood of fallout danger to their local community in a future war," than did respondents in the earlier adoption stages.

Two of the significant variables had a curvilinear relationship to stage of adoption: a larger proportion of respondents in the first and last stages (than in the "middle" stages) perceived a "high likelihood of the use of

nuclear weapons in a future war" and were "more highly concerned about the possibility of a nuclear attack."

The remaining significant variable had a strong negative relationship to stage of adoption: a larger proportion of respondents in the earlier stages of adoption perceived that there was a "high likelihood of nuclear war in the future," than did respondents in the latter adoption stages.

Of the eight variables found not to be significantly related to stage of adoption when using the statistical criterion, one of the variables had a slight positive percentage trend relationship to stage of adoption: a larger proportion of individuals in the latter stages of adoption perceived that "military bases are the most important enemy target--more important than factories and transportation centers, and people and cities," than did respondents in the earlier adoption stages.

Three of the statistically non-significant variables had a slight negative percentage trend relationship to stage of adoption: a larger proportion of individuals in the earlier stages of adoption perceived that "war will occur sooner," that "there is a shorter present warning time of war," and that "people are the most important enemy target," than did individuals in the latter stages of adoption. The other four non-significant variables, had no apparent relationship to stage of adoption: "less future warning time of war," "likelihood of local community survival," "factories and transportation centers as the most important enemy target," and "cities as the most important enemy target."

The third attitude area consisted of four attitude variables focusing upon the possibility of future disarmament. Only one of the variables, "Russia desired disarmament, but without controls," was statistically related to stage of adoption. The relationship was a positive one: a larger proportion of respondents in the latter adoption stages perceived that "Russia wanted disarmament but with no controls," than did respondents in the earlier adoption stages. One of the statistically non-significant variables had a slight positive percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the latter stages of adoption, perceived that the U.S. desired "nuclear disarmament with control," than did respondents in the earlier stages. One of the statistically non-significant variables had a curvilinear percentage relationship to stage of adoption: a larger proportion

of the respondents in the "middle" adoption stage (Information stage) perceived the "armament race to continue," than did respondents in either the earlier or later adoption stages. The other variable showed no apparent relationship to stage of adoption: approximately the same proportion of respondents in each adoption stage "personally desired a well controlled disarmament situation."

Table 5.23. Summary: Perception of threat attitudes and stage of adoption of public fallout shelters

Attitude variable[a]	Relationship to Stage of Adoption: Statistical at .05 level[b] Tabular Value	Calculated Value	Percentage Trend[c]
World tension levels			
1. High current world tension (1964)	9.49	4.34	Positive tendency
2. High future world tension (1966)	9.49	5.28	None apparent
3. High future world tension (1969)	9.49	1.98	None apparent
4. High prior world tension (1962)	9.49	6.04	Positive tendency
Possibility of future world war			
5. High likelihood of long Cold War	9.49	11.41[b]	Positive tendency
6. High likelihood of nuclear war	9.49	20.16[b]	Negative trend
7. High likelihood of use of nuclear weapons	9.49	10.82[b]	Curvilinear: P-N-P
8. War will occur soon	9.49	8.78	Negative tendency
9. Short present warning time	9.49	6.79	Negative tendency
10. Less warning time in future	9.49	1.44	None apparent
11. High likelihood of local community being a target	9.49	36.62[b]	Positive trend
12. Low likelihood of local community survival	9.49	1.74	None apparent
13. High likelihood of fallout danger to the local community	9.49	20.45[b]	Positive tendency
14. Military bases most important target	9.49	3.15	Positive tendency
15. Factories and transportation centers most important target	9.49	0.46	None apparent
16. People most important target	9.49	8.82	Negative tendency
17. Cities most important target	9.49	0.89	None apparent
18. High personal concern about nuclear attack	9.49	22.86[b]	Curvilinear: P-N-P

Table 5.23. Summary: Perception of threat attitudes and stage of adoption of public fallout shelters

Attitude variable[a]	Relationship to Stage of Adoption		
	Statistical at .05 level[b]		Percentage trend[c]
	Tabular Value	Calculated Value	
Possibility of future disarmament			
19. Individual expects arms race to continue	9.49	7.48	Curvilinear: N-P-N
20. Individual desires controlled disarmament	9.49	1.03	None apparent
21. U.S. desires controlled disarmament	9.49	2.90	Positive tendency
22. Russia desires disarmament with no control	9.49	11.17[b]	Positive tendency

[a]Attitude statements in this table are paraphrasings of actual question wordings. For actual wordings see the table headings in the body of the chapter.

[b]All statistical tests were chi-square tests. Statistical at .05 level means that a calculated value larger than the tabular value would be expected to occur only 5 times out of 100 because of the selection of the sample from the population being studied rather than because there is an actual relationship in the population. Statistically significant values are footnoted in the table.

[c]Six different percentage trend statements are used in the attitude chapters (Chapters 5-8) to describe the percentage trend relationship between an attitude variable and stage of adoption:

1. Positive trend refers to those situations where there is a strong positive linear percentage trend relationship between the attitude variable (as phrased in the summary table) and stage of adoption. For example, if a much larger proportion of individuals in the latter stages of adoption agreed with the statement as written in the summary table, than did individuals in the earlier adoption stages, there would be a strong positive relationship between the variable and stage of adoption. Thus, for Variable 11 a larger proportion of individuals in the latter adoption stages agreed that there was high likelihood of local community being a target than did individuals in the earlier adoption stages. The percentage trend relationship between likelihood of local community being a target and stage of public fallout shelter adoption would be called a positive trend.

2. Positive tendency refers to those situations where there is a weak positive linear percentage trend relationship between the attitude variable (as phrased in the summary table) and stage of adoption.

3. Curvilinear refers to those situations where the percentage trend from Unaware to Adoption is not linear, but rather positive-negative-positive (P-N-P) or negative-positive-negative (N-P-N). For example, P-N-P means that a larger portion of individuals in the first and last adoption stages agreed or had a positive attitude, while a larger portion of individuals in the middle three stages (or the Information and/or Evaluation stage) disagreed or had a negative attitude. N-P-N would be the opposite percentage trend of P-N-P.

4. Negative tendency refers to those situations where there is a weak negative linear percentage trend relationship between the attitude variable (as phrased in the summary table) and stage of adoption.

5. Negative trend refers to those situations where there is a strong negative linear percentage trend relationship between the attitude variable(as phrased in the summary table) and stage of adoption.

6. None apparent refers to those situations where there is no positive or negative linear relationship and no curvilinear relationship between the attitude variable and stage of adoption.

Chapter 6

PERCEPTION OF FINAL COLD WAR OUTCOMES AND STAGE OF ADOPTION

Introduction

An individual's perceptions as to how the Cold War might end, as well as his perception of how he would desire the Cold War to end, might affect his knowledge of and interest in public fallout shelters. In this chapter the relationships between individuals' perceptions of final Cold War outcomes and their public fallout shelter stage of adoption are analyzed.

Two general frameworks are used to analyze these relationships. One framework focuses on how individuals believe the Cold War will end; that is, what is the likelihood of possible future situations in the world. The second framework focuses on what individuals personally would like to see happen; that is, what is the desirability of possible future world situations.

The attitudes (perceptions) discussed in this chapter are closely related to the perception of threat attitudes presented in the previous chapter. One might expect to find, for example, that individuals who would perceive "safe" Cold War outcomes as being highly likely would also perceive less need for public fallout shelters, and thus be less far along in the public fallout shelter adoption process.

Altogether ten separate Cold War outcomes are analyzed. For each outcome (item) individuals were asked the likelihood of the outcome and the desirability of the outcome. For presentation and discussion purposes these ten outcome items are divided into three topic areas: (1) alternative ends (final outcomes) of the Cold War (4 outcome items), (2) the Communists will lose the Cold War (3 outcome items), and (3) the Communists will win the Cold War (3 outcome items).

The scale used to measure the likelihood of each outcome item ranges from zero through ten; where zero stands for something that is impossible or nearly impossible to occur, where ten stands for something certain or just about certain to happen, and where five means that something is as likely to happen as not.

The scale used to measure the desirability of each outcome item ranges from minus three through plus three; where minus three stands for something

a person would dislike very much to occur, where plus three stands for something a person would very much want to happen, and where zero stands for something that a person doesn't care much about one way or another.

Section One: End of the Cold War

Introduction

In this section attitudes pertaining to four "end of the Cold War" alternatives are related to stage of adoption of public fallout shelters. The likelihood and desirability of the following outcomes are examined: (1) that the Cold War will continue indefinitely, (2) that the Cold War will end through disarmament or reconciliation, (3) that World War III will end the Cold War, and (4) that a Third Force will emerge.

In one framework it might be assumed that those individuals who perceive a continuance of the Cold War, or its end through World War III, perceive more threat and thus would be more likely to adopt the idea of using public fallout shelters. On the other hand, it may be that individuals who perceive these outcomes (continuance of the Cold War or its end through World War III) are generally less knowledgeable about the world, including less knowledgeable about civil defense, and consequently are less far along in their public fallout shelter adoption process.

Conversely, one might expect that individuals who believe the Cold War will end through disarmament or reconciliation, or by the emergence of a Third World Force, would be less likely to adopt the idea of using public fallout shelters, and thus be less far along in public fallout shelter adoption.

Likelihood that the Cold War will continue indefinitely

To determine an individual's perception of the likelihood that the Cold War will continue indefinitely each respondent was asked how likely he personally felt that: "The Cold War will continue indefinitely; no end is in sight at all." The relationship between the individuals' perceptions of the likelihood that the Cold War will continue indefinitely and their stage of public fallout shelter adoption is presented in Table 6.1. The table includes three subtotal groups: (1) those perceiving a low likelihood that the Cold War will continue indefinitely, (2) those perceiving a 50-50 chance, and (3) those perceiving a high likelihood of the Cold War continuing indefinitely.

Using a median chi-square statistical test no significant relationship was found between perception of the likelihood that the Cold War will continue indefinitely and stage of adoption. However, a smaller proportion of individuals in the Unaware stage perceived an indefinite continuation of the Cold War than did individuals in any other stage.

Conclusion: Perception of the likelihood that the Cold War will continue indefinitely is not statistically related to stage of adoption. However, a somewhat larger proportion of individuals aware of public fallout shelters (stages 2-5) perceived a high likelihood of the indefinite continuation of the Cold War than did individuals in the Unaware stage.

Table 6.1. Likelihood that Cold War will continue indefinitely; no end is in sight at all.

Likelihood Cold War will continue indefinitely	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Likelihood 0 (Minimum)	69	10.5	14	9.3	21	8.6	13	8.7	22	8.3	139	9.5
Likelihood 1	30	4.6	6	4.0	12	4.9	4	2.7	8	3.0	60	4.1
Likelihood 2	33	5.0	10	6.7	11	4.5	8	5.3	14	5.3	76	5.2
Likelihood 3	28	4.3	8	5.3	12	4.9	9	6.0	15	5.6	72	4.9
Likelihood 4	46	7.0	9	6.0	18	7.4	15	10.0	14	5.3	102	7.0
(Low likelihood subtotal)	(206	31.5)	(47	31.3)	(74	30.5)	(49	32.7)	(73	27.4)	(449	30.7)
Likelihood 5	131	20.0	23	15.3	44	18.1	26	17.3	56	21.1	280	19.1*
Likelihood 6	47	7.2	16	10.7	13	5.3	10	6.7	28	10.5	114	7.8
Likelihood 7	44	6.7	8	5.3	16	6.6	10	6.7	22	8.3	100	6.8
Likelihood 8	44	6.7	16	10.7	17	7.0	17	11.3	24	9.0	118	8.1
Likelihood 9	57	8.7	13	8.7	28	11.5	12	8.0	29	10.9	139	9.5
Likelihood 10 (Maximum)	105	16.0	26	17.3	43	17.7	25	16.7	32	12.0	231	15.8
(High likelihood subtotal)	(297	45.3)	(79	52.7)	(117	48.1)	(74	49.3)	(135	50.8)	(702	48.0)
Don't know	3	0.5	0	0.0	1	0.4	0	0.0	0	0.0	4	0.3
No answer	18	2.7	1	0.7	7	2.9	1	0.7	2	0.8	29	2.0
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 2.6390. There is no significant relationship between perception of the likelihood that the Cold War will continue indefinitely and stage of adoption.

Desirability that the Cold War will continue indefinitely

To determine an individual's perception of the desirability of the Cold War continuing indefinitely each respondent was asked how much he wanted the following to happen: "The Cold War will continue indefinitely; no end is in sight at all." The relationship between individuals' perceptions of the desirability of the Cold War continuing indefinitely and their public fallout shelter stage of adoption is presented in Table 6.2. The table includes three subtotal groups: (1) those perceiving the outcome as undesirable, (2) those who don't care about the outcome, and (3) those perceiving the outcome as desirable.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability of the Cold War continuing indefinitely and stage of adoption. However, an analysis of subtotal percentages indicates that a larger proportion of individuals in the Adoption stage perceived the continuation of the Cold War as undesirable than did individuals in any other stage; while a slightly larger proportion of individuals in the Unaware stage indicated the continuation of the Cold War as desirable than did individuals in any other stage.

Conclusion: Perception of the desirability that the Cold War will continue indefinitely is not statistically related to stage of adoption. However, a larger proportion of the Adoption stage respondents perceived the Cold War as undesirable than did individuals in any other stage.

Table 6.2. Desirability that Cold War will continue indefinitely; no end is in sight at all.

Desirability that Cold War will continue indefinitely	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	462	70.5	100	66.7	169	69.5	101	67.3	187	70.3	1019	69.6*
Undesirable -2	41	6.3	15	10.0	20	8.2	16	10.7	33	12.4	125	8.5
Undesirable -1	26	4.0	8	5.3	12	4.9	7	4.7	10	3.8	63	4.3
(Undesirable subtotal)	(529	80.8)	(123	82.0)	(201	82.7)	(124	82.7)	(230	86.5)	(1207	82.4)
Don't care 0	18	2.7	8	5.3	9	3.7	10	6.7	4	1.5	49	3.3
Desirable 1	13	2.0	6	4.0	6	2.5	2	1.3	7	2.6	34	2.3
Desirable 2	16	2.4	1	0.7	5	2.1	1	0.7	3	1.1	26	1.8
Desirable 3 (Highly)	58	8.9	11	7.3	14	5.8	12	8.0	20	7.5	115	7.9
(Desirable subtotal)	(87	13.3)	(18	12.0)	(25	10.3)	(15	10.0)	(30	11.3)	(175	12.0)
Don't know	3	0.5	0	0.0	1	0.4	0	0.0	0	0.0	4	0.3
No answer	18	2.7	1	0.7	7	2.9	1	0.7	2	0.8	29	2.0
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.
Calculated chi-square = 1.0258. There is no significant relationship between perception of the desirability of the Cold War continuing indefinitely and stage of adoption.

Likelihood that the Cold War will end through disarmament

To determine an individual's perception of the likelihood that the Cold War will end through disarmament or reconciliation each respondent was asked how likely he personally felt that: "The Cold War will end through disarmament or reconciliation." Table 6.3 shows the distribution of responses to this statement for each adoption stage.

Using a median chi-square statistical test no significant relationship was found between perception of the likelihood that the Cold War will end through disarmament or reconciliation and stage of adoption. Percentages indicate, however, that a somewhat larger proportion of individuals in the last two adoption stages perceived a high likelihood of disarmament than did individuals in the first three stages.

Conclusion: Perception of the likelihood that the Cold War will end through disarmament is not statistically related to stage of adoption. However, a larger proportion of respondents in the latter two adoption stages perceived a high likelihood of the Cold War ending through disarmament than did respondents in the earlier stages.

Table 6.3. Likelihood that the Cold War will end through disarmament or reconciliation.

Likelihood that Cold War will end through disarmament	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Likelihood 0 (Minimum)	93	14.2	19	12.7	34	14.0	14	9.3	40	15.0	200	13.7
Likelihood 1	27	4.1	10	6.7	15	6.2	7	4.7	10	3.8	69	4.7
Likelihood 2	37	5.6	10	6.7	20	8.2	9	6.0	13	4.9	89	6.1
Likelihood 3	42	6.4	14	9.3	18	7.4	7	4.7	18	6.8	99	6.8
Likelihood 4	54	8.2	12	8.0	14	5.8	8	5.3	25	9.4	113	7.7
(Low likelihood subtotal)	(253	38.6)	(65	43.3)	(101	41.6)	(45	30.0)	(106	39.8)	(570	38.9)
Likelihood 5	131	20.0	25	16.7	43	17.7	40	26.7	45	16.9	284	19.4*
Likelihood 6	48	7.3	14	9.3	19	7.8	11	7.3	17	6.4	109	7.4
Likelihood 7	59	9.0	19	12.7	17	7.0	13	8.7	27	10.2	135	9.2
Likelihood 8	54	8.2	9	6.0	14	5.8	14	9.3	19	7.1	110	7.5
Likelihood 9	20	3.1	6	4.0	15	6.2	11	7.3	24	9.0	76	5.2
Likelihood 10 (Maximum)	62	9.5	10	6.7	25	10.3	15	10.0	25	9.4	137	9.4
(High likelihood subtotal)	(243	37.1)	(58	38.7)	(90	37.0)	(64	42.7)	(112	42.1)	(567	38.7)
Don't know	6	0.9	0	0.0	1	0.4	0	0.0	1	0.4	8	0.5
No answer	22	3.4	2	1.3	8	3.3	1	0.7	2	0.8	35	2.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 3.4088. There is no significant relationship between perception of the likelihood that the Cold War will end through disarmament or reconciliation and stage of adoption.

Desirability that the Cold War will end through disarmament

To determine an individual's perception of the desirability of the Cold War ending through disarmament each respondent was asked how much he wanted the following to happen: "The Cold War will end through disarmament or reconciliation." The distribution of responses to this statement for each adoption stage is presented in Table 6.4.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability that the Cold War will end through disarmament and stage of adoption. However, percentages indicate that the last two stages of adoption contain a larger proportion of individuals answering desirable than do the first three adoption stages.

Conclusion: Perception of the desirability that the Cold War will end through disarmament or reconciliation is not statistically related to stage of adoption. However, a slightly larger proportion of respondents in the latter two stages of adoption perceived the desirability that the Cold War will end through disarmament than did respondents in the earlier adoption stages.

Table 6.4. Desirability that the Cold War will end through disarmament or reconciliation.

Desirability that Cold War will end through disarmament	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Undesirable -3 (Highly)	57	8.7	12	8.0	16	6.6	10	6.7	21	7.9	116	7.9
Undesirable -2	7	1.1	2	1.3	3	1.2	2	1.3	3	1.1	17	1.2
Undesirable -1	9	1.4	3	2.0	8	3.3	0	0.0	5	1.9	25	1.7
(Undesirable subtotal)	(73	11.1)	(17	11.3)	(27	11.1)	(12	8.0)	(29	10.9)	(158	10.8)
Don't care 0	23	3.5	9	6.0	14	5.8	3	2.0	5	1.9	54	3.7
Desirable 1	32	4.9	6	4.0	9	3.7	6	4.0	14	5.3	67	4.6
Desirable 2	50	7.6	17	11.3	23	9.5	14	9.3	20	7.5	124	8.5
Desirable 3 (Highly)	449	68.5	99	66.0	161	66.3	114	76.0	195	73.3	1018	69.5*
(Desirable subtotal)	(531	81.1)	(122	81.3)	(193	79.4)	(134	89.3)	(229	86.1)	(1209	82.6)
Don't know	6	0.9	0	0.0	1	0.4	0	0.0	1	0.4	8	0.5
No answer	22	3.4	2	1.3	8	3.3	1	0.7	2	0.8	35	2.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 2.2246. There is no significant relationship between perception of the desirability that the Cold War will end through disarmament or reconciliation and stage of adoption.

Likelihood that World War III will end the Cold War

To determine an individual's perception of the likelihood that World War III will end the Cold War each respondent was asked how likely he personally felt that: "World War III will end the Cold War." Table 6.5 shows the distribution of responses to this statement for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of the likelihood that World War III will end the Cold War and stage of adoption. Percentages indicate a curvilinear relationship between the likelihood that World War III will end the Cold War and stage of adoption. A larger proportion of individuals in the Information stage perceived a low likelihood of this final outcome than did individuals in any other stage.

Conclusion: Perception of the likelihood that World War III will end the Cold War is not statistically related to stage of adoption. Proportionately more respondents in the first two and last two stages perceived a high likelihood of this outcome than did respondents in the Information stage.

Table 6.5. Likelihood that World War III will end the Cold War.

Likelihood World War III will end the Cold War	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Likelihood 0 (Minimum)	136	20.8	31	20.7	52	21.4	38	25.3	61	22.9	318	21.7
Likelihood 1	51	7.8	4	2.7	26	10.7	6	4.0	16	6.0	103	7.0
Likelihood 2	49	7.5	10	6.7	21	8.6	8	5.3	18	6.8	106	7.2
Likelihood 3	33	5.0	9	6.0	19	7.8	11	7.3	17	6.4	89	6.1
Likelihood 4	46	7.0	13	8.7	16	6.6	7	4.7	20	7.5	102	7.0*
(Low likelihood subtotal)	(315	48.1)	(67	44.7)	(134	55.1)	(70	46.7)	(132	49.6)	(718	49.0)
Likelihood 5	113	17.3	33	22.0	37	15.2	32	21.3	47	17.7	262	17.9
Likelihood 6	37	5.6	3	2.0	11	4.5	4	2.7	20	7.5	75	5.1
Likelihood 7	33	5.0	12	8.0	15	6.2	9	6.0	11	4.1	80	5.5
Likelihood 8	35	5.3	8	5.3	10	4.1	3	2.0	18	6.8	74	5.1
Likelihood 9	34	5.2	11	7.3	8	3.3	7	4.7	13	4.9	73	5.0
Likelihood 10 (Maximum)	70	10.7	15	10.0	21	8.6	23	15.3	21	7.9	150	10.2
(High likelihood subtotal)	(209	31.9)	(49	32.7)	(65	26.7)	(46	30.7)	(83	31.2)	(452	30.9)
Don't know	1	0.2	0	0.0	1	0.4	0	0.0	1	0.4	3	0.2
No answer	17	2.6	1	0.7	6	2.5	2	1.3	3	1.1	29	2.0
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 6.4086. There is no significant relationship between perception of the likelihood that World War III will end the Cold War and stage of adoption.

Desirability that World War III will end the Cold War

To determine an individual's perception of the desirability that World War III will end the Cold War each respondent was asked how much he wanted the following to happen: "World War III will end the Cold War." The distribution of responses to this statement for each adoption stage is presented in Table 6.6.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability that World War III will end the Cold War and stage of adoption. The last three stages of adoption each contain a larger proportion of individuals who perceive this final outcome as undesirable than the first two adoption stages.

Conclusion: Perception of the desirability that World War III will end the Cold War is not statistically related to stage of adoption. However, a larger proportion of individuals in the latter stages of adoption saw World War III as a more undesirable Cold War outcome than did individuals in the earlier stages of adoption.

Table 6.6. Desirability that World War III will end the Cold War.

Desirability World War III will end the Cold War	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Undesirable -3 (Highly)	444	67.8	94	62.7	175	72.0	113	75.3	196	73.7	1022	69.8*
Undesirable -2	42	6.4	7	4.7	13	5.3	4	2.7	17	6.4	83	5.7
Undesirable -1	18	2.7	10	6.7	8	3.3	7	4.7	7	2.6	50	3.4
(Undesirable subtotal)	(504	76.9)	(111	74.0)	(196	80.7)	(124	82.7)	(220	82.7)	(1155	78.9)
Don't care 0	15	2.3	4	2.7	7	2.9	5	3.3	3	1.1	34	2.3
Desirable 1	23	3.5	2	1.3	7	2.9	5	3.3	6	2.3	43	2.9
Desirable 2	13	2.0	7	4.7	2	0.8	3	2.0	3	1.1	28	1.9
Desirable 3 (Highly)	82	12.5	25	16.7	24	9.9	11	7.3	30	11.3	172	11.7
(Desirable subtotal)	(118	18.0)	(34	22.7)	(33	13.6)	(19	12.7)	(39	14.7)	(243	16.6)
Don't know	1	0.2	0	0.0	1	0.4	0	0.0	1	0.4	3	0.2
No answer	17	2.6	1	0.7	6	2.5	2	1.3	3	1.1	29	2.0
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 if $\geq$ 13.28.
Calculated chi-square = 3.9418. There is no significant relationship between perception of the desirability that World War III will end the Cold War and stage of adoption.

Likelihood of the emergence of a Third Force

To determine an individual's perception of the likelihood that a Third Force will emerge in the world each respondent was asked how likely he personally felt that: "A Third Force will emerge in the world able to control the actions of the Communist nations as well as of the United States." Table 6.7 shows the distribution of responses to this statement for each adoption stage.

Using a median chi-square statistical test no significant relationship was found between perception of the likelihood that a Third Force will emerge and stage of adoption. A larger proportion of individuals in the Adoption stage perceived a low likelihood of the emergence of a Third Force than did individuals in any other stage.

Conclusion: Perception of the likelihood that a Third Force will emerge able to control the actions of both the Communists and the United States is not statistically related to stage of adoption. However, the Adoption stage contains the largest proportion of individuals perceiving low likelihood of this final outcome.

Table 6.7. Likelihood that a Third Force will emerge in the world able to control actions of Communist nations as well as of the United States.

Likelihood of emergence of a Third Force	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Likelihood 0 (Minimum)	193	29.5	30	20.0	76	31.3	39	26.0	73	27.4	411	28.1
Likelihood 1	65	9.9	19	12.7	17	7.0	15	10.0	43	16.2	159	10.9
Likelihood 2	45	6.9	13	8.7	20	8.2	12	8.0	23	8.6	113	7.7
Likelihood 3	50	7.6	9	6.0	17	7.0	13	8.7	11	4.1	100	6.8*
Likelihood 4	40	6.1	10	6.7	19	7.8	.7	4.7	28	10.5	104	7.1
(Low likelihood subtotal)	(393	60.0)	(81	54.0)	(149	61.3)	(86	57.3)	(178	66.9)	(887	60.6)
Likelihood 5	93	14.2	25	16.7	34	14.0	27	18.0	25	9.4	204	13.9
Likelihood 6	28	4.3	8	5.3	23	9.5	7	4.7	12	4.5	78	5.3
Likelihood 7	47	7.2	12	8.0	9	3.7	7	4.7	14	5.3	89	6.1
Likelihood 8	29	4.4	5	3.3	7	2.9	9	6.0	17	6.4	67	4.6
Likelihood 9	17	2.6	5	3.3	7	2.9	5	3.3	3	1.1	37	2.5
Likelihood 10 (Maximum)	22	3.4	13	8.7	7	2.9	7	4.7	12	4.5	61	4.2
(High likelihood subtotal)	(143	21.8)	(43	28.7)	(53	21.8)	(35	23.3)	(58	21.8)	(332	22.7)
Don't know	6	0.9	0	0.0	1	0.4	1	0.7	2	0.8	10	0.7
No answer	20	3.1	1	0.7	6	2.5	1	0.7	3	1.1	31	2.1
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 4.8978. There is no significant relationship between perception of the likelihood that a Third Force will emerge and stage of adoption.

Desirability of the emergence of a Third Force

To determine an individual's perception of the desirability of the emergence of a Third Force each respondent was asked how much he wanted the following to happen: "A Third Force will emerge in the world able to control the actions of the Communist nations as well as the United States." The distribution of responses to this statement for each adoption stage is presented in Table 6.8.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability that a Third Force emerge and stage of adoption. Percentages indicate, however, that the Evaluation stage contains the largest proportion of individuals answering undesirable, while the Information stage contains the largest proportion of those answering desirable.

Conclusion: Perception of the desirability that a Third Force will emerge able to control the actions of both the Communists and the United States is not statistically related to stage of adoption. The latter stages of adoption contain a slightly larger proportion of individual's answering desirable than do the earlier stages.

Table 6.8. Desirability of a Third Force emerging in the world able to control actions of Communist nations as well as of the United States.

Desirability of emergence of a Third Force	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INTERPRETATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	348	53.1	78	52.0	120	49.4	76	50.7	135	50.8	757	51.7*
Undesirable -2	43	6.6	10	6.7	15	6.2	16	10.7	17	6.4	101	6.9
Undesirable -1	30	4.6	11	7.3	18	7.4	9	6.0	22	8.3	90	6.1
(Undesirable subtotal)	(421	64.3)	(99	66.0)	(153	63.0)	(101	67.3)	(174	65.4)	(948	64.8)
Don't care 0	71	10.8	20	13.3	19	7.8	12	8.0	18	6.8	140	9.6
Desirable 1	28	4.3	8	5.3	14	5.8	8	5.3	11	4.1	69	4.7
Desirable 2	24	3.7	3	2.0	8	3.3	6	4.0	17	6.4	58	4.0
Desirable 3 (Highly)	85	13.0	19	12.7	42	17.3	21	14.0	41	15.4	208	14.2
(Desirable subtotal)	(137	20.9)	(30	20.0)	(64	26.3)	(35	23.3)	(69	25.9)	(335	22.9)
Don't know	6	0.9	0	0.0	1	0.4	1	0.7	2	0.8	10	0.7
No answer	20	3.1	1	0.7	6	2.5	1	0.7	3	1.1	31	2.1
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 1.9080. There is no significant relationship between perception of the desirability that a Third Force emerge and stage of adoption.

Section Two: The Communists Will Lose the Cold War

Introduction

In this section attitudes pertaining to individuals' perceptions of three outcomes in which the Communists will lose the Cold War are related to stage of adoption of public fallout shelters. Attitudes regarding both the likelihood and desirability of the following outcomes are analyzed in this section: (1) that the Communists will lose due to wars within Communist nations, (2) that the Communists will surrender without war because of the development of new weapons by the U.S., and (3) that the Communists will accept the Western way of life. One might expect that those individuals who perceive these three relatively "safe" final outcomes as highly likely will also perceive fallout shelters as less important, and thus be less far along in their public fallout shelter decision making process.

Likelihood Communists will lose due to wars within Communist nations

To determine an individual's perception of the likelihood that the Communists will lose because of internal conflict each respondent was asked how likely he personally felt that: "The Communists are going to lose due to revolutions, civil wars and small wars in Communist nations." Table 6.9 shows the distribution of responses to this statement for each adoption stage.

Using a median chi-square statistical test no significant relationship was found between perception of the likelihood that the Communists will lose because of internal conflict and stage of adoption. There are no clear linear percentage trends; however, the Unaware stage and the Adoption stage each contain a larger proportion of individuals answering high likelihood than any other stage.

Conclusion: Perception of the likelihood that the Communists will lose due to revolutions, civil wars and small wars in Communist nations is not statistically related to stage of adoption. However, there is a slight tendency for a curvilinear relationship between the two variables as the first and last stages had a slightly larger proportion of respondents who perceived a high likelihood of this outcome than did the three middle stages.

Table 6.9. Likelihood that the Communists are going to lose due to revolutions, civil wars, and small wars in Communist nations.

Likelihood Communists will lose due to wars within Communist nations	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Likelihood 0 (Minimum)	51	7.8	10	6.7	19	7.8	17	11.3	24	9.0	121	8.3
Likelihood 1	33	5.0	7	4.7	15	6.2	4	2.7	9	3.4	68	4.6
Likelihood 2	37	5.6	12	8.0	20	8.2	9	6.0	24	9.0	102	7.0
Likelihood 3	48	7.3	17	11.3	13	5.3	4	2.7	26	9.8	108	7.4
Likelihood 4	46	7.0	14	9.3	22	9.1	12	8.0	23	8.6	117	8.0
(Low likelihood subtotal)	(215	32.8)	(60	40.0)	(89	36.6)	(46	30.7)	(106	39.8)	(516	35.2)
Likelihood 5	133	20.3	30	20.0	51	21.0	48	32.0	47	17.7	309	21.1*
Likelihood 6	57	8.7	10	6.7	17	7.0	19	12.7	25	9.4	128	8.7
Likelihood 7	56	8.5	6	4.0	17	7.0	10	6.7	24	9.0	113	7.7
Likelihood 8	50	7.6	15	10.0	21	8.6	7	4.7	25	9.4	118	8.1
Likelihood 9	47	7.2	12	8.0	17	7.0	7	4.7	11	4.1	94	6.4
Likelihood 10 (Maximum)	76	11.6	16	10.7	25	10.3	12	8.0	26	9.8	155	10.6
(High likelihood subtotal)	(286	43.7)	(59	39.3)	(97	39.9)	(55	36.7)	(111	41.7)	(608	41.5)
Don't know	3	0.5	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2
No answer	18	2.7	1	0.7	6	2.5	1	0.7	2	0.8	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 3.1806. There is no significant relationship between perception of the likelihood that the Communists are going to lose due to revolutions, civil wars and small wars in Communist nations and stage of adoption.

Desirability that Communists will lose due to wars within Communist nations

To determine an individual's perception of the desirability that the Communists will lose because of internal conflict each respondent was asked how much he wanted the following to happen: "The Communists are going to lose due to revolutions, civil wars and small wars in Communist nations." The distribution of responses to this statement for each adoption stage is presented in Table 6.10.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability that the Communists will lose because of internal conflict and stage of adoption. Percentages indicate, however, that the Adoption stage has a larger proportion of individuals answering desirable than do the other four stages.

Conclusion: Perception of the desirability that the Communists are going to lose due to revolutions, civil wars and small wars in Communists nations is not statistically related to stage of adoption. However, a slightly larger proportion of respondents in the Adoption stage perceived as desirable that the Communists are going to lose due to revolutions, etc., than individuals in the earlier adoption stages.

Table 6.10. Desirability that the Communists are going to lose due to revolutions, civil wars, and small wars in Communist nations.

Desirability Communists will lose due to war within Communist nations	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	76	11.6	12	8.0	21	8.6	11	7.3	24	9.0	144	9.8
Undesirable -2.	15	2.3	4	2.7	5	2.1	5	3.3	4	1.5	33	2.3
Undesirable -1	10	1.5	5	3.3	9	3.7	5	3.3	5	1.9	34	2.3
(Undesirable subtotal)	(101	15.4)	(21	14.0)	(35	14.4)	(21	14.0)	(33	12.4)	(211	14.4)
Don't care 0	32	4.9	15	10.0	14	5.8	12	8.0	15	5.6	88	6.0
Desirable 1	40	6.1	8	5.3	24	9.9	16	10.7	19	7.1	107	7.3
Desirable 2	64	9.8	11	7.3	20	8.2	16	10.7	33	12.4	144	9.8
Desirable 3 (Highly)	397	60.6	94	62.7	144	59.3	84	56.0	164	61.7	883	60.3*
(Desirable subtotal)	(501	76.5)	(113	75.3)	(188	77.4)	(116	77.3)	(216	81.2)	(1134	77.5)
Don't know	3	0.5	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2
No answer	18	2.7	1	0.7	6	2.5	1	0.7	2	0.8	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 1.4054. There is no significant relationship between perception of the desirability that the Communists are going to lose due to revolutions, civil wars, and small wars in Communist nations and stage of adoption.

Likelihood Communists will have to surrender without war

To determine an individual's perception of the likelihood that the Communists will have to surrender without war each respondent was asked how likely he personally felt that: "The Communist nations will have to surrender without war because of the development of such new weapons by the United States that the Communists could not possibly win." Table 6.11 shows the distribution of responses to this statement for each adoption stage.

Using a median chi-square statistical test a significant relationship was found between perception of the likelihood of the Communists having to surrender without war and stage of adoption. Percentages indicate that the last three stages of adoption each contain a larger proportion of individuals perceiving low likelihood than do the first two stages.

Conclusion: Perception of the likelihood that the Communist nations will have to surrender without war because of the development of such new weapons by the United States that the Communists could not possibly win is statistically related to stage of adoption. A larger proportion of the individuals in the latter stages of adoption saw this outcome as less likely than did individuals in the earlier adoption stages.

Table 6.11. Likelihood that the Communist nations will have to surrender without war because of development of such new weapons by the U.S. that the Communists could not possibly win.

Likelihood Communists will have to surrender without war	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Likelihood 0 (Minimum)	117	17.9	32	21.3	58	23.9	34	22.7	57	21.4	298	20.4
Likelihood 1	43	6.6	12	8.0	21	8.6	13	8.7	23	8.6	112	7.7
Likelihood 2	35	5.3	13	8.7	24	9.9	15	10.0	26	9.8	113	7.7
Likelihood 3	47	7.2	11	7.3	15	6.2	10	6.7	26	9.8	109	7.4
Likelihood 4	48	7.3	7	4.7	20	8.2	9	6.0	18	6.8	102	7.0*
(Low likelihood subtotal)	(290	44.3)	(75	50.0)	(138	56.8)	(81	54.0)	(150	56.4)	(734	50.1)
Likelihood 5	84	12.8	26	17.3	30	12.3	26	17.3	35	13.2	201	13.7
Likelihood 6	44	6.7	7	4.7	13	5.3	13	8.7	14	5.3	91	6.2
Likelihood 7	46	7.0	4	2.7	13	5.3	6	4.0	15	5.6	84	5.7
Likelihood 8	54	8.2	13	8.7	14	5.8	6	4.0	13	4.9	100	6.8
Likelihood 9	37	5.6	7	4.7	10	4.1	5	3.3	14	5.3	73	5.0
Likelihood 10 (Maximum)	80	12.2	17	11.3	18	7.4	12	8.0	23	8.6	150	10.2
(High likelihood subtotal)	(261	39.8)	(48	32.0)	(68	28.0)	(42	28.0)	(79	29.7)	(498	34.0)
Don't know	4	0.6	0	0.0	1	0.4	0	0.0	0	0.0	5	0.3
No answer	16	2.4	1	0.7	6	2.5	1	0.7	2	0.8	26	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 16.5660. There is a significant relationship between perception of the likelihood that the Communist nations will have to surrender without war and stage of adoption.

Desirability that Communists will have to surrender without war

To determine an individual's perception of the desirability of the Communists having to surrender without war each respondent was asked how much he wanted the following to happen: "The Communist nations will have to surrender without war because of the development of such new weapons by the United States that the Communist nations could not possibly win." The distribution of responses to this statement for each adoption stage is presented in Table 6.12.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability of the Communists having to surrender without war and stage of adoption. Percentages indicate, however, a curvilinear relationship between the desirability of the Communists having to surrender without war and stage of adoption. The last two and first two stages of adoption each contain a larger proportion of those answering desirable than does the Information stage; although the last two stages had a larger portion stating desirable than the first two stages.

Conclusion: Perception of the desirability that Communists will have to surrender without war because of the development of such new weapons by the United States that the Communist nations could not possibly win is not statistically related to stage of adoption. However, proportionately more respondents in the first two and last two stages perceived this outcome as desirable than did respondents in the Information stage.

Table 6.12. Desirability of Communist nations having to surrender without war because of the development of such new weapons by the U.S. that the Communist nations could not possibly win.

Desirability Communists will have to surrender without war	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Undesirable -3 (Highly)	86	13.1	18	12.0	35	14.4	13	8.7	30	11.3	182	12.4
Undesirable -2	11	1.7	2	1.3	8	3.3	5	3.3	5	1.9	31	2.1
Undesirable -1	13	2.0	3	2.0	6	2.5	4	2.7	7	2.6	33	2.3
(Undesirable subtotal)	(110	16.8)	(23	15.3)	(49	20.2)	(22	14.7)	(42	15.8)	(246	16.8)
Don't care 0	24	3.7	8	5.3	9	3.7	6	4.0	5	1.9	52	3.6
Desirable 1	32	4.9	6	4.0	12	4.9	8	5.3	15	5.6	73	5.1
Desirable 2	48	7.3	15	10.0	19	7.8	19	12.7	36	13.5	137	9.4
Desirable 3 (Highly)	421	64.3	97	64.7	147	60.5	94	62.7	166	62.4	925	63.2*
(Desirable subtotal)	(501	76.5)	(118	78.7)	(178	73.3)	(121	80.7)	(217	81.6)	(1135	77.5)
Don't know	4	0.6	0	0.0	1	0.4	0	0.0	0	0.0	5	0.3
No answer	16	2.4	1	0.7	6	2.5	1	0.7	2	0.8	26	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 1.0210. There is no significant relationship between perception of the desirability of the Communist nations having to surrender without war and stage of adoption.

Likelihood Communists will accept the Western way of life

To determine an individual's perception of the likelihood that the Communists will accept the Western way of life each respondent was asked how likely he personally felt that: "The Communists will accept the Western way of life, and the Communist powers will become like the United States, Great Britain, or Sweden." Table 6.13 shows the distribution of responses to this statement for each adoption stage.

Using a median chi-square statistical test no significant relationship was found between perception of the likelihood that the Communists will accept the Western way of life and stage of adoption. Percentages indicate that the Unaware stage contains a larger proportion of individuals perceiving high likelihood than any other stage, although there are only small percentage differences among the stages.

Conclusion: Perception of the likelihood that Communists will accept the Western way of life, and the Communist powers will become like the United States, Great Britain, or Sweden is not statistically related to stage of adoption. However, the Unaware stage contains a slightly larger proportion of those perceiving high likelihood than any other stage.

Table 6.13. Likelihood that the Communists will accept the Western way of life, and the Communist powers will become like the U.S., Great Britain, or Sweden.

Likelihood Communists will accept the Western way of life	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Likelihood 0 (Minimum)	166	25.3	49	32.7	60	24.7	49	32.7	75	28.2	399	27.3
Likelihood 1	58	8.9	13	8.7	24	9.9	9	6.0	28	10.5	132	9.0
Likelihood 2	57	8.7	13	8.7	34	14.0	15	10.0	17	6.4	136	9.3
Likelihood 3	49	7.5	5	3.3	15	6.2	8	5.3	24	9.0	101	6.9*
Likelihood 4	45	6.9	11	7.3	27	11.1	12	8.0	17	6.4	112	7.7
(Low likelihood subtotal)	(375	57.3)	(91	60.7)	(160	65.8)	(93	62.0)	(161	60.5)	(880	60.1)
Likelihood 5	87	13.3	26	17.3	24	9.9	22	14.7	38	14.3	197	13.5
Likelihood 6	39	6.0	8	5.3	17	7.0	8	5.3	16	6.0	88	6.0
Likelihood 7	38	5.8	5	3.3	10	4.1	9	6.0	13	4.9	75	5.1
Likelihood 8	29	4.4	6	4.0	11	4.5	9	6.0	15	5.6	70	4.8
Likelihood 9	20	3.1	7	4.7	8	3.3	1	0.7	14	5.3	50	3.4
Likelihood 10 (Maximum)	46	7.0	6	4.0	7	2.9	7	4.7	7	2.6	73	5.0
(High likelihood subtotal)	(172	26.3)	(32	21.3)	(53	21.8)	(34	22.7)	(65	24.4)	(356	24.3)
Don't know	4	0.6	0	0.0	1	0.4	0	0.0	0	0.0	5	0.3
No answer	17	2.6	1	0.7	5	2.1	1	0.7	2	0.8	26	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 2.1182. There is no significant relationship between perception of the likelihood that the Communists will accept the Western way of life and stage of adoption.

Desirability that Communists will accept the Western way of life

To determine an individual's perception of the desirability of the Communists accepting the Western way of life each respondent was asked how much he wanted the following to happen: "The Communists will accept the Western way of life, and the Communists powers will become like the United States, Great Britain or Sweden." The distribution of responses to this statement for each adoption stage is presented in Table 6.14.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability of the Communists accepting the Western way of life and stage of adoption. Percentages indicate that the last three stages of adoption contain a larger proportion of individuals answering desirable than do the earlier stages.

Conclusion: Perception of the desirability that the Communists will accept the Western way of life and the Communist powers will become like the United States, Great Britain or Sweden is not statistically related to stage of adoption. However, a larger proportion of respondents in the latter adoption stages perceived this outcome as desirable than did respondents in the earlier adoption stages.

Table 6.14. Desirability that the Communists will accept the Western way of life, and the Communist powers will become like the U.S., Great Britain or Sweden.

Desirability Communists will accept the Western way of life	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Undesirable -3 (Highly)	68	10.4	14	9.3	18	7.4	8	5.3	18	6.8	126	8.6
Undesirable -2	10	1.5	1	0.7	3	1.2	0	0.0	6	2.3	20	1.4
Undesirable -1	14	2.1	4	2.7	6	2.5	1	0.7	5	1.9	30	2.0
(Undesirable subtotal)	(92	14.0)	(19	12.7)	(27	11.1)	(9	6.0)	(29	10.9)	(176	12.0)
Don't care 0	44	6.7	13	8.7	12	4.9	12	8.0	12	4.5	93	6.4
Desirable 1	38	5.8	10	6.7	21	8.6	11	7.3	13	4.9	93	6.4
Desirable 2	53	8.1	10	6.7	21	8.6	20	13.3	31	11.7	135	9.2
Desirable 3 (Highly)	407	62.1	97	64.7	156	64.2	97	64.7	179	67.3	936	63.9*
(Desirable subtotal)	(498	76.0)	(117	78.0)	(198	81.5)	(128	85.3)	(223	83.8)	(1164	79.5)
Don't know	4	0.6	0	0.0	1	0.4	0	0.0	0	0.0	5	0.3
No answer	17	2.6	1	0.7	5	2.1	1	0.7	2	0.8	26	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = .5540. There is no significant relationship between perception of the desirability that the Communists will accept the Western way of life and stage of adoption.

Section Three: The Communists Will Win the Cold War

Introduction

In this section attitudes pertaining to individuals' perceptions of three outcomes in which the Communists will win the Cold War are related to stage of adoption of public fallout shelters. Attitudes regarding both the likelihood and desirability of the following outcomes are examined in this section: (1) that the Communists will win by revolutions, civil wars and small wars, (2) that the U.S. will surrender without war because of the development of new weapons by Communist nations, and (3) that the Communists will win by people accepting Communism.

Likelihood Communists will win due to small wars

To determine an individual's perception of the likelihood the Communists will win due to small wars each respondent was asked how likely he personally felt that: "By revolutions, civil wars and small wars, the Communists will come to power in the whole world." Table 6.15 shows the distribution of responses to this statement for each adoption stage.

Using a median chi-square statistical test no significant relationship was found between perception of the likelihood of the Communists winning due to small wars and stage of adoption. Percentages indicate that the last two stages of adoption each contain a larger proportion of individuals perceiving low likelihood than any other stage.

Conclusion: Perception of the likelihood that by revolutions, civil wars and small wars, the Communists will come to power in the whole world is not statistically related to stage of adoption. However, a larger proportion of individuals in the latter adoption stages perceived a low likelihood of this outcome than did individuals in the earlier adoption stages.

Table 6.15. Likelihood that by revolutions, civil wars, and small wars, the Communists will come to power in the whole world.

Likelihood Communists will win due to small wars	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Likelihood 0 (Minimum)	271	41.4	56	37.3	86	35.4	64	42.7	99	37.2	576	39.3
Likelihood 1	78	11.9	17	11.3	29	11.9	20	13.3	31	11.7	175	12.0*
Likelihood 2	49	7.5	11	7.3	26	10.7	14	9.3	36	13.5	136	9.3
Likelihood 3	45	6.9	13	8.7	24	9.9	12	8.0	28	10.5	122	8.3
Likelihood 4	32	4.9	16	10.7	21	8.6	10	6.7	14	5.3	93	6.4
(Low likelihood subtotal)	(475	72.5)	(113	75.3)	(186	76.5)	(120	80.0)	(208	78.2)	(1102	75.3)
Likelihood 5	73	11.1	17	11.3	20	8.2	13	8.7	27	10.2	150	10.2
Likelihood 6	18	2.7	3	2.0	7	2.9	8	5.3	8	3.0	44	3.0
Likelihood 7	21	3.2	4	2.7	7	2.9	2	1.3	3	1.1	37	2.5
Likelihood 8	14	2.1	4	2.7	9	3.7	2	1.3	4	1.5	33	2.3
Likelihood 9	16	2.4	3	2.0	2	0.8	2	1.3	6	2.3	29	2.0
Likelihood 10 (Maximum)	17	2.6	5	3.3	6	2.5	1	0.7	8	3.0	37	2.5
(High likelihood subtotal)	(86	13.1)	(19	12.7)	(31	12.8)	(15	10.0)	(29	10.9)	(180	12.3)
Don't know	3	0.5	0	0.0	1	0.4	1	0.7	0	0.0	5	0.3
No answer	18	2.7	1	0.7	5	2.1	1	0.7	2	0.8	27	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 5.6046. There is no significant relationship between perception of the likelihood that by revolutions, civil wars, and small wars, the Communists will come to power, and stage of adoption.

Desirability that Communists will win due to small wars

To determine an individual's perception of the desirability of the Communists winning due to small wars each respondent was asked how much he wanted the following to happen: "By revolutions, civil wars and small wars, the Communists will come to power in the whole world." The distribution of responses to this statement for each adoption stage is presented in Table 6.16.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability of the Communists winning due to small wars and stage of adoption. Percentages indicate that the last two stages contain a larger proportion of individuals answering undesirable than any of the earlier stages.

Conclusion: Perception of the desirability that by revolutions, civil wars and small wars the Communists will come to power in the whole world is not statistically related to stage of adoption. However, a slightly larger proportion of individuals in the latter adoption stages perceived this outcome as undesirable than did individuals in the earlier adoption stages.

Table 6.16. Desirability that by revolutions, civil wars, and small wars, the Communists will come to power in the whole world.

Desirability Communists will win due to small wars	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Undesirable -3 (Highly)	557	85.0	131	87.3	203	83.5	134	89.3	235	88.3	1260	86.1*
Undesirable -2	25	3.8	5	3.3	11	4.5	6	4.0	11	4.1	58	4.0
Undesirable -1	6	0.9	3	2.0	4	1.6	1	0.7	5	1.9	19	1.3
(Undesirable subtotal)	(588	89.8)	(139	92.7)	(218	89.7)	(141	94.0)	(251	94.4)	(1337	91.3)
Don't care 0	7	1.1	5	3.3	3	1.2	1	0.7	5	1.9	21	1.4
Desirable 1	3	0.5	0	0.0	2	0.8	1	0.7	0	0.0	6	0.4
Desirable 2	6	0.9	1	0.7	4	1.6	1	0.7	0	0.0	12	0.8
Desirable 3 (Highly)	30	4.6	4	2.7	10	4.1	4	2.7	8	3.0	56	3.8
(Desirable subtotal)	(39	6.0)	(5	3.3)	(16	6.6)	(6	4.0)	(8	3.0)	(74	5.1)
Don't know	3	0.5	0	0.0	1	0.4	1	0.7	0	0.0	5	0.3
No answer	18	2.7	1	0.7	5	2.1	1	0.7	2	0.8	27	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = .5236. There is no significant relationship between perception of the desirability that by revolutions, civil wars, and small wars the Communists will come to power, and stage of adoption.

Likelihood that U.S. will have to surrender without war

To determine an individual's perception of the likelihood of the U.S. having to surrender without war each respondent was asked how likely he personally felt that: "The United States will have to surrender without war because of the development of such new weapons by Communist nations that the U.S. could not possibly win." Table 6.17 shows the distribution of responses to this statement for each adoption stage.

Using a median chi-square statistical test no significant relationship was found between perception of the likelihood that the U.S. will have to surrender without war and stage of adoption. However, percentages indicate that the last two stages of adoption each contain a larger proportion of those perceiving low likelihood than any other stage.

Conclusion: Perception of the likelihood that the U.S. will have to surrender without war because of the development of such new weapons by Communist nations that the U.S. could not possibly win is not statistically related to stage of adoption. However, a larger proportion of individuals in the latter adoption stages perceived a low likelihood of this outcome than did individuals in the earlier adoption stages.

Table 6.17. Likelihood that the U.S. will have to surrender without war because of the development of such new weapons by Communist nations that the U.S. could not possibly win.

Likelihood U.S. will have to surrender without war	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Likelihood 0 (Minimum)	327	49.9	75	50.0	135	55.6	73	48.7	157	59.0	767	52.4*
Likelihood 1	83	12.7	23	15.3	26	10.7	26	17.3	38	14.3	196	13.4
Likelihood 2	52	7.9	10	6.7	25	10.3	19	12.7	18	6.8	124	8.5
Likelihood 3	23	3.5	11	7.3	8	3.3	8	5.3	12	4.5	62	4.2
Likelihood 4	21	3.2	3	2.0	5	2.1	4	2.7	4	1.5	37	2.5
(Low likelihood subtotal)	(506	77.3)	(122	81.3)	(199	81.9)	(130	86.7)	(229	86.1)	(1186	81.0)
Likelihood 5	48	7.3	9	6.0	23	9.5	10	6.7	14	5.3	104	7.1
Likelihood 6	19	2.9	1	0.7	2	0.8	2	1.3	2	0.8	26	1.8
Likelihood 7	10	1.5	6	4.0	2	0.8	0	0.0	3	1.1	21	1.4
Likelihood 8	16	2.4	4	2.7	1	0.4	2	1.3	3	1.1	26	1.8
Likelihood 9	15	2.3	3	2.0	6	2.5	1	0.7	4	1.5	29	2.0
Likelihood 10 (Maximum)	19	2.9	4	2.7	4	1.6	4	2.7	9	3.4	40	2.7
(High likelihood subtotal)	(79	12.1)	(18	12.0)	(15	6.2)	(9	6.0)	(21	7.9)	(142	9.7)
Don't know	3	0.5	0	0.0	1	0.4	0	0.0	0	0.0	4	0.3
No answer	19	2.9	1	0.7	5	2.1	1	0.7	2	0.8	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 6.8720. There is no significant relationship between perception of the likelihood that the U.S. will have to surrender without war and stage of adoption.

Desirability that U.S. will have to surrender without war

To determine an individual's perception of the desirability of the U.S. having to surrender without war each respondent was asked how much he wanted the following to happen: "The United States will have to surrender without war because of the development of such new weapons by Communist nations that the U.S. could not possibly win. The distribution of responses to this statement for each adoption stage is presented in Table 6.18.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability of the U.S. having to surrender without war and stage of adoption. However, percentages indicate that the last two stages of adoption each contain a slightly larger proportion of individuals answering undesirable than any other stage.

Conclusion: Perception of the desirability that the United States will have to surrender without war because of the development of such new weapons by Communist nations that the U.S. could not possibly win is not statistically related to stage of adoption. However, a slightly larger proportion of respondents in the latter stages of adoption perceived this outcome as undesirable than did individuals in the earlier stages.

Table 6.18. Desirability of the U.S. having to surrender without war because of the development of such new weapons by Communist nations that the U.S. could not win.

Desirability U.S. will have to surrender without war	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	542	82.7	126	84.0	203	83.5	133	88.7	241	90.6	1245	85.0*
Undesirable -2	26	4.0	10	6.7	12	4.9	5	3.3	7	2.6	60	4.1
Undesirable -1	8	1.2	2	1.3	6	2.5	3	2.0	6	2.3	25	1.7
(Undesirable subtotal)	(576	87.9)	(138	92.0)	(221	90.9)	(141	94.0)	(254	95.5)	(1330	90.8)
Don't care 0	6	0.9	3	2.0	2	0.8	1	0.7	1	0.4	13	0.9
Desirable 1	5	0.8	1	0.7	2	0.8	0	0.0	0	0.0	8	0.5
Desirable 2	4	0.6	2	1.3	0	0.0	0	0.0	2	0.8	8	0.5
Desirable 3 (Highly)	42	6.4	5	3.3	12	4.9	7	4.7	7	2.6	73	5.0
(Desirable subtotal)	(51	7.8)	(8	5.3)	(14	5.8)	(7	4.7)	(9	3.4)	(89	6.1)
Don't know	3	0.5	0	0.0	1	0.4	0	0.0	0	0.0	4	0.3
No answer	19	2.9	1	0.7	5	2.1	1	0.7	2	0.8	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.
Calculated chi-square = 1.1364. There is no significant relationship between perception of the desirability that the U.S. will have to surrender without war and stage of adoption.

Likelihood that the whole world will accept Communism

To determine an individual's perception of the likelihood that the whole world will accept Communism each respondent was asked how likely he personally felt that: "The whole world will become Communistic by people accepting Communism." Table 6.19 shows the distribution of responses to this statement for each adoption stage.

Using a median chi-square statistical test no significant relationship was found between perception of the likelihood that the whole world will accept Communism and stage of adoption. The distribution shows almost no percentage differences among adoption stages.

Conclusion: Perception of the likelihood that the whole world will become Communistic by people accepting Communism is not statistically related to stage of adoption. There are only minor percentage differences among adoption stages.

Table 6.19. Likelihood that the whole world will become Communistic by people accepting Communism.

Likelihood the whole world will accept Communism	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Likelihood 0 (Minimum)	336	51.3	80	53.3	130	53.5	88	58.7	154	57.9	788	53.8*
Likelihood 1	99	15.1	16	10.7	24	9.9	18	12.0	34	12.8	191	13.0
Likelihood 2	49	7.5	15	10.0	20	8.2	11	7.3	17	6.4	112	7.7
Likelihood 3	29	4.4	8	5.3	17	7.0	8	5.3	6	2.3	68	4.6
Likelihood 4	24	3.7	8	5.3	13	5.3	5	3.3	12	4.5	62	4.2
(Low likelihood subtotal)	(537	82.0)	(127	84.7)	(204	84.0)	(130	86.7)	(223	83.8)	(1221	83.4)
Likelihood 5	32	4.9	8	5.3	13	5.3	11	7.3	12	4.5	76	5.2
Likelihood 6	18	2.7	6	4.0	3	1.2	0	0.0	6	2.3	33	2.3
Likelihood 7	10	1.5	0	0.0	4	1.6	2	1.3	1	0.4	17	1.2
Likelihood 8	10	1.5	1	0.7	2	0.8	3	2.0	3	1.1	19	1.3
Likelihood 9	9	1.4	2	1.3	6	2.5	2	1.3	11	4.1	30	2.0
Likelihood 10 (Maximum)	21	3.2	4	2.7	5	2.1	1	0.7	6	2.3	37	2.5
(High likelihood subtotal)	(68	10.4)	(13	8.7)	(20	8.2)	(8	5.3)	(27	10.2)	(136	9.3)
Don't know	1	0.2	0	0.0	1	0.4	0	0.0	1	0.4	3	0.2
No answer	17	2.6	2	1.3	5	2.1	1	0.7	3	1.1	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 3.2242. There is no significant relationship between perception of the likelihood that the whole world will accept Communism and stage of adoption.

Desirability that the whole world will accept Communism

To determine an individual's perception of the desirability that the whole world will accept Communism each respondent was asked how much he wanted the following to happen: "The whole world will become Communistic by people accepting Communism." The distribution of responses to this statement for each adoption stage is presented in Table 6.20.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability that the whole world will accept Communism and stage of adoption. However, the last three stages of adoption each contain a larger proportion of individuals perceiving the outcome as undesirable than the earlier stages.

Conclusion: Perception of the desirability that the whole world will become Communistic by people accepting Communism is not statistically related to stage of adoption. However, a slightly larger proportion of respondents in the latter stages of adoption perceived this outcome as undesirable than did respondents in the earlier stages.

Table 6.20. Desirability that the whole world will become Communistic by people accepting Communism.

Desirability the whole world will accept Communism	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Undesirable -3 (Highly)	561	85.6	125	83.3	208	85.6	138	92.0	244	91.7	1276	87.2*
Undesirable -2	24	3.7	9	6.0	16	6.6	3	2.0	8	3.0	60	4.1
Undesirable -1	16	2.4	2	1.3	2	0.8	2	1.3	3	1.1	25	1.7
(Undesirable subtotal)	(601	91.8)	(136	90.7)	(226	93.0)	(143	95.3)	(255	95.9)	(1361	93.0)
Don't care 0	5	0.8	1	0.7	2	0.8	2	1.3	2	0.8	12	0.8
Desirable 1	3	0.5	1	0.7	2	0.8	1	0.7	1	0.4	8	0.5
Desirable 2	4	0.6	2	1.3	0	0.0	1	0.7	1	0.4	8	0.5
Desirable 3 (Highly)	24	3.7	8	5.3	7	2.9	2	1.3	3	1.1	44	3.0
(Desirable subtotal)	(31	4.7)	(11	7.3)	(9	3.7)	(4	2.7)	(5	1.9)	(60	4.1)
Don't know	1	0.2	0	0.0	1	0.4	0	0.0	1	0.4	3	0.2
No answer	17	2.6	2	1.3	5	2.1	1	0.7	3	1.1	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 1.4258. There is no significant relationship between perception of the desirability that the whole world will accept Communism and stage of adoption.

Summary of Chapter 6

In Chapter 6 twenty different final Cold War outcome attitude variables were compared to public fallout shelter stage of adoption. Two attitudinal aspects of each of 10 possible final outcome situations were examined, (1) the individual's perception of the likelihood of the outcome and (2) the individual's perception of the desirability of the outcome. For analysis purposes the 10 possible outcome situations were categorized into three attitude areas. The findings are summarized in Table 6.21. Only one of the 20 variables was found to be statistically related to stage of adoption.

The first attitude area was composed of people's general perceptions of the end of the Cold War. Eight attitude variables were included in this area, i.e., four likelihood and four desirability statements. None of these eight variables was statistically related to stage of public fallout shelter adoption. However, four of the variables had a slight positive percentage trend relationship with stage of adoption: a slightly larger proportion of respondents in the latter stages of adoption perceived a "high likelihood that the Cold War will continue indefinitely," as well as a "high likelihood Cold War will end through disarmament," and that it was "more desirable that the Cold War will end through disarmament" and "more desirable that a Third-World Force will emerge," than respondents in the earlier adoption stages. One variable had a slight curvilinear percentage trend relationship to stage of adoption: a larger proportion of respondents in the first two and last two stages perceived a "high likelihood of the Cold War ending in World War III," than did the middle adoption stages. Three of the variables showed a slight negative percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the earlier adoption stages perceived that it was more "desirable that the Cold War will continue indefinitely," and "desirable that the Cold War will end in World War III," and perceived a "low likelihood that a Third World Force will emerge," than did respondents in the latter stages of adoption.

The second attitude area consisted of six attitude variables focusing on individuals' perceptions of final Cold War outcomes in which the Communists will lose the Cold War. One of these variables was found to be statistically related to stage of adoption: "high likelihood that the Communists will surrender without war," had a negative relationship to stage of adoption,

that is, a larger proportion of individuals in the latter stages of adoption perceived a low likelihood that "the Communists will surrender without war," than did individuals in the earlier adoption stages.

Two of the statistically non-significant variables showed a slight positive percentage trend relationship to stage of adoption: a slightly larger proportion of individuals in the latter stages of adoption perceived that it was "more desirable that the Communists will lose due to small wars within the Communist nations," and also "more desirable that the Communists will accept the Western way of life," than did respondents in the earlier stages of adoption. Two of the statistically non-significant variables had a slight curvilinear percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the first and last adoption stages perceived a high likelihood that "Communists will lose due to small wars," and that it was "more desirable that the Communists will surrender without war," than did respondents in the middle adoption stages. The remaining variable had a slight negative percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the earlier adoption stages perceived there was a "high likelihood Communists will accept the western way of life," than did respondents in the latter stages.

The third attitude area consisted of six attitude variables composed of individuals' perceptions of final Cold War outcomes in which the Communists will win the Cold War. None of the six variables were found to be statistically related to stage of adoption. However, five of the variables had a slight negative percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the latter adoption stages perceived a low likelihood that "the Communists will win due to small wars," that "the U.S. will surrender without war," and perceived a low desirability that "the Communists will win due to small wars," that "the U.S. will surrender without war," and that "the world will accept Communism." One variable had no apparent relationship to stage of adoption, "high likelihood that the world will accept Communism."

The analyses in this chapter indicate that there is essentially no relationship between people's perceptions of Cold War outcomes and stage of public fallout shelter adoption.

Table 6.21. Summary: Final Cold War Outcome Attitudes and Stage of Adoption of Public Fallout Shelters

Attitude Variable[a]	Relationship to Stage of Adoption: Statistical at .05 level[b] Tabular Value	Statistical at .05 level[b] Calculated Value	Percentage Trend[c]
End of the Cold War			
1. High likelihood Cold War will continue indefinitely	9.49	2.64	Positive tendency
2. Desirable that Cold War will continue indefinitely	9.49	1.03	Negative tendency
3. High likelihood Cold War will end through disarmament	9.49	3.41	Positive tendency
4. Desirable that Cold War will end through disarmament	9.49	2.22	Positive tendency
5. High likelihood Cold War will end in World War III	9.49	6.41	Curvilinear: P-N-P
6. Desirable that Cold War will end in World War III	9.49	3.94	Negative tendency
7. High likelihood that a Third Force will emerge	9.49	4.90	Negative tendency
8. Desirable that a Third Force will emerge	9.49	1.91	Positive tendency
The Communists Will Lose the Cold War			
9. High likelihood Communists will lose due to small wars	9.49	3.18	Curvilinear: P-N-P
10. Desirable that Communists will lose due to small wars	9.49	1.41	Positive tendency
11. High likelihood Communists will surrender without war	9.49	16.57[b]	Negative tendency
12. Desirable that Communists will surrender without war	9.49	1.02	Curvilinear: P-N-P
13. High likelihood Communists will accept Western way of life	9.49	2.12	Negative tendency
14. Desirable that Communists will accept Western way of life	9.49	0.55	Positive tendency

(continued)

Table 6.21. Summary: Final Outcome Variables and Stage of Adoption of Public Fallout Shelters (Continued)

Attitude Variable[a]	Relationship to Stage of Adoption		
	Statistical at .05 level[b]		Percentage Trend[c]
	Tabular Value	Calculated Value	
The Communists Will Win the Cold War			
15. High likelihood Communists will win due to small wars	9.49	5.60	Negative tendency
16. Desirable that Communists will win due to small wars	9.49	0.52	Negative tendency
17. High likelihood U.S. will surrender without war	9.49	6.87	Negative tendency
18. Desirable that U.S. will surrender without war	9.49	1.14	Negative tendency
19. High likelihood the world will accept Communism	9.49	3.22	None apparent
20. Desirable that the world will accept Communism	9.49	1.43	Negative tendency

[a]Attitude statements in this table are paraphrasings of actual question wordings. For actual wordings see the table headings in the body of the chapter.

[b]All statistical tests were chi-square tests. Statistical at .05 level means that a calculated value larger than the tabular value would be expected to occur only 5 times out of 100 because of the selection of the sample from the population being studied rather than because there is an actual relationship in the population. Statistically significant values are footnoted in the table.

[c]See Footnote c of Table 5.23 for an explanation of the percentage trend statements in this column.

Chapter 7

PERCEPTION OF FALLOUT SHELTERS AND STAGE OF ADOPTION

Introduction

The analysis in this chapter focuses upon the relationships between people's perceptions of fallout shelters and their stage of adoption of public fallout shelters. The adoption of any innovation will be dependent in part upon the perceptions of the innovation held by the potential adopters. Thus, it is generally desirable in understanding the adoption process to examine the relationship between the way an individual "sees" the innovation, in this report fallout shelters, and an individual's stage of adoption.

The degree to which an individual perceives fallout shelters as useful may affect his decision about using public fallout shelters. Likewise, his perceptions of the possible implications resulting from the establishment of fallout shelters may affect his decision to use or not use public fallout shelters. For example, an individual who believes that fallout shelters are useful because they are an important complement to our missile defenses may be farther along in the public fallout shelter adoption process. On the other hand, an individual who believes that establishing fallout shelters will increase the likelihood of war may be less far along in the adoption process. In other words, a person who perceives positive consequences resulting from the establishment and use of fallout shelters will probably be more likely to decide to use a fallout shelter than individuals who perceive negative consequences resulting from the establishment and use of fallout shelters.

In this chapter a number of different attitudes related to the possible consequences of the establishment and use of fallout shelters are discussed in relation to stage of public fallout shelter adoption. Some of the attitudes will be about fallout shelters in general, that is, not distinguishing between private and public fallout shelters. Other attitudes will focus on public fallout shelters only. Thus, this chapter will explore some of the ways in which individuals "see" the innovation which is the focus of this study.

The fallout shelter attitudes analyzed in this chapter are discussed in the following four sections: (1) general feelings about fallout shelters, (2) fallout shelters and concern with war, (3) fallout shelters and future civil defense situations, and (4) fallout shelters and anti-missile missiles. In each of the four sections a number of specific fallout shelter attitudes are analyzed.

Section One: General Feelings About Fallout Shelters

Introduction

In this section attitudes pertaining to individuals' general feelings about fallout shelters are related to public fallout shelter stage of adoption. One might expect to find that individuals with favorable feelings about fallout shelters would be farther along in the public fallout shelter adoption process. The following two attitudes are analyzed in this section: (1) general feelings about fallout shelters, and (2) perception of survival chances in fallout shelters.

General feelings about fallout shelters

To determine an individual's general feeling about fallout shelters each respondent was asked: "In general, how do you yourself feel about fallout shelters--are you strongly in favor of them, somewhat in favor, somewhat opposed, or strongly opposed to them?" The distribution of responses for each stage of adoption is presented in Table 7.1. In addition the table includes two sub-total groups: (1) those in favor of fallout shelters, and (2) those opposed to fallout shelters.

Using a median chi-square statistical test a significant relationship was found between general feelings about fallout shelters and stage of adoption. A large majority of the total respondents (86.0 percent) were in favor of fallout shelters. However, percentages indicate a curvilinear relationship between general feelings about fallout shelters and stage of adoption. A larger proportion of individuals in the first two and last two adoption stages have a favorable feeling about fallout shelters than do individuals in the Information stage, although the Adoption stage had a larger proportion of individuals in favor of fallout shelters than any other stage.

Conclusion: General feelings about fallout shelters are significantly related to stage of adoption. Proportionately more respondents in the first two and last two stages of adoption were more favorable about fallout shelters than were respondents in the Information stage. Those in the Adoption stage were most favorable.

Table 7.1. In general, how do you yourself feel about fallout shelters--are you strongly in favor of them, somewhat in favor, somewhat opposed, or strongly opposed to them?

General feelings about fallout shelters	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVAULATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly favor	311	47.5	65	43.3	71	29.2	61	40.7	158	59.4	666	45.5
Somewhat favor	249	38.0	69	46.0	110	45.3	73	48.7	92	34.6	593	40.5*
(Favor subtotal)	(560	85.5)	(134	89.3)	(181	74.5)	(134	89.3)	(250	94.0)	(1259	86.0)
Somewhat opposed	46	7.0	5	3.3	39	16.0	9	6.0	11	4.1	110	7.5
Strongly opposed	22	3.4	6	4.0	18	7.4	7	4.7	1	0.4	54	3.7
(Opposed subtotal)	(68	10.4)	(11	7.3)	(57	23.5)	(16	10.7)	(12	4.5)	(164	11.2)
Don't know	26	4.0	5	3.3	5	2.1	0	0.0	4	1.5	40	2.7
No answer	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.06
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 46.7216. There is a significant relationship between general feelings about fallout shelters and stage of adoption.

Type of fallout shelter

The question about fallout shelters analyzed above in Table 7.1 did not identify what kind of fallout shelter the respondent had in mind when he responded to the question. In order to determine the type of fallout shelter about which the individual had expressed his general feelings, each respondent was asked: "When you answered that question (see question in Table 7.1) did you have in mind private family shelters, community shelters, or both kinds?" Tables 7.2 and 7.3 are presented herein to descriptively elaborate the findings presented in Table 7.1. Thus, no statistical analyses are presented for Tables 7.2 and 7.3. Table 7.2 shows the distribution of type of shelter responses for each stage of adoption. Over one half of the total respondents (56 percent) indicated they had in mind both family and community shelters when responding. There were little percentage differences among adoption stages as over 50 percent of the respondents in each stage said they had both types of shelters in mind. Likewise, there were little percentage differences among adoption stages in the number of individuals saying "community" shelters only and "family" shelters only although a slightly larger proportion of respondents in the first two and last adoption stages stated "community" shelters, than did respondents in the Information and Evaluation stages.

Table 7.2. When you answered that question (see question in Table 7.1) did you have in mind private family shelters, community shelters, or both kinds?

Type of fallout shelter	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Family	66	10.1	15	10.0	35	14.4	22	14.7	18	6.8	156	10.7
Community	204	31.1	44	29.3	63	25.9	34	22.7	88	33.1	433	29.6
Both family and community	350	53.4	86	57.3	137	56.4	94	62.7	154	57.9	821	56.0
Don't know	8	1.2	0	0.0	2	0.8	0	0.0	2	0.8	12	0.8
No answer	0	0.0	0	0.0	1	0.4	0	0.0	0	0.0	1	0.6
Does not apply	27	4.1	5	3.3	5	2.1	0	0.0	4	1.5	41	2.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

General feelings about other type of fallout shelter

In order to determine the respondent's general feeling toward the type of fallout shelter he did not have in mind when answering the "general feelings" question (see Table 7.1) each respondent who answered either "family" type or "community" type was asked: "How do you feel about the kind of shelters not referred to above--are you strongly in favor of them, somewhat in favor, somewhat opposed, or strongly opposed to them?". Table 7.3 shows the distribution of responses to this question for each stage of adoption. There is essentially no difference in responses by adoption stage. Approximately the same proportion of individuals in each adoption stage favor and oppose the type of fallout shelter they had in mind when answering this question.

Table 7.3. How do you feel about the kind of shelters not referred to above--are you strongly in favor of them, somewhat in favor, somewhat opposed, or strongly opposed to them.

General feelings about other type of fallout shelter	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly favor	77	11.8	18	12.0	18	7.4	16	10.7	38	14.3	167	11.4
Somewhat favor	111	16.9	24	16.0	49	20.2	28	18.7	43	16.2	255	17.4
(Favor subtotal)	(188	28.7)	(42	28.0)	(67	27.6	(44	29.3)	(81	30.5)	(422	28.8)
Somewhat opposed	48	7.3	9	6.0	22	9.1	6	4.0	18	6.8	103	7.0
Strongly opposed	23	3.5	6	4.0	7	2.9	5	3.3	4	1.5	45	3.1
(Opposed subtotal)	(71	10.8)	(15	10.0)	(29	11.9)	(11	7.3)	(22	8.3)	(148	10.1)
Don't know	9	1.4	1	0.7	1	0.4	1	0.7	2	0.8	14	1.0
No answer	2	0.3	1	0.7	1	0.4	0	0.0	1	0.4	5	0.3
Does not apply	385	58.8	91	60.7	145	59.7	94	62.7	160	60.2	875	59.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

Survival chances in fallout shelters

To determine an individual's perception of survival chances in fallout shelters each respondent was asked: "What if they (people around here) were in fallout shelters? How good would the chances be then that people in this area would survive--very good, fairly good, fairly bad, or very bad?" Table 7.4 shows the distribution of responses for each stage of adoption. The table also shows two subtotal groups: (1) those perceiving good chances of survival and (2) those perceiving bad chances of survival.

Using a median chi-square statistical test no significant relationship was found between perception of survival chances in fallout shelters and stage of adoption. There is no clear linear or curvilinear percentage trend among adoption stages. However a larger proportion of respondents in the Aware stage perceived a good chance of survival in a fallout shelter than did respondents in any other stage; while the Adoption stage had the next highest proportion perceiving a good chance of survival in a fallout shelter. The Information stage had the highest proportion of respondents who perceived a bad chance of survival.

Conclusion: Perception of survival chances in fallout shelters is not statistically related to stage of adoption. There is no clear percentage trend among adoption stages in terms of perceived survival chances when in fallout shelters.

Table 7.4. What if they (people around here) were in fallout shelters? How good would the chances be then that people in this area would survive--very good, fairly good, fairly bad, or very bad?

Survival chances in fallout shelters	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Never will happen	1	0.2	1	0.7	0	0.0	0	0.0	0	0.0	2	0.1
Very good	110	16.8	33	22.0	39	16.0	22	14.7	58	21.8	262	17.9
Fairly good	301	46.0	75	50.0	106	43.6	68	45.3	124	46.6	674	46.0*
(Good subtotal)	(412	62.9)	(109	72.7)	(145	59.7)	(90	60.0)	(182	68.4)	(338	64.0)
50-50 chance	90	13.7	14	9.3	26	10.7	25	16.7	38	14.3	193	13.2
Fairly bad	65	9.9	14	9.3	35	14.4	16	10.7	21	7.9	151	10.3
Very bad	43	6.6	10	6.7	27	11.1	16	10.7	18	6.8	114	7.8
No chance at all	13	2.0	2	1.3	6	2.5	2	1.3	3	1.1	26	1.8
(Bad subtotal)	(121	18.5)	(26	17.3)	(68	28.0)	(34	22.7)	(42	15.8)	(291	19.9)
Don't know	28	4.3	1	0.7	4	1.6	1	0.7	4	1.5	38	2.6
No answer	4	0.6	0	0.0	0	0.0	0	0.0	0	0.0	4	0.3
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 7.0162. There is no significant relationship between perception of survival chances in fallout shelters and stage of adoption.

Section Two: Fallout Shelters And Concern With War

Introduction

In this section attitudes pertaining to individuals' perceptions of the relationship between the establishment of fallout shelters and the increased (or decreased) likelihood of war are related to stage of adoption of public fallout shelters. The relationship that one might expect to find is difficult to predict. For example, one might expect to find that individuals who perceive that the establishment of fallout shelters will make war more likely will therefore perceive an increased threat and thus be farther along in the adoption process. On the other hand, one might find that individuals who perceive this unfavorable relationship of shelters to war will react unfavorably toward the adoption of fallout shelters and thus be less far along the public fallout shelter adoption process.

The relationship of the following three attitudes to adoption stage are examined in this section: (1) fallout shelters make people worry about war, (2) fallout shelters make war more likely, and (3) fallout shelters make disarmament more difficult.

Fallout shelters make people worry about war

To determine an individual's perception of the relationship between fallout shelters and worry about the possibility of war, each respondent was asked: "In your opinion, do fallout shelters make people worry more or worry less about the possibility of war, or doesn't it make any difference?" Table 7.5 shows the distribution of responses to this question for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between the perception that fallout shelters make people worry about war and stage of adoption. Slightly over one third of the respondents in each adoption stage indicated that the establishment of fallout shelters would make people worry more; i.e., there was no difference by adoption stage. Approximately 40 percent of the total respondents perceived that fallout shelters make "no difference" in making people worry about war. A larger proportion of individuals in the information stage said "no difference" than did respondents in any other stage. The information stage also had the smallest proportion of respondents indicating fallout shelters would make people "worry less" about war. These last two percentage distributions indicate a slight curvilinear relationship between worry about war and stage of adoption.

Conclusion: Perception of the relationship between fallout shelters and worry about the possibility of war is not statistically related to stage of adoption. Approximately the same proportion of respondents in each adoption stage perceived that fallout shelters would make people worry more about war.

Table 7.5. In your opinion, do fallout shelters make people worry more or worry less about the possibility of war, or doesn't it make any difference?

Fallout shelters make people worry about war	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Worry more	240	36.6	55	36.7	85	35.0	51	34.0	98	36.8	529	36.1
No difference	247	37.7	64	42.7	122	50.2	72	48.0	105	39.5	610	41.7*
Worry less	146	22.3	26	17.3	30	12.3	26	17.3	59	22.2	287	19.6
Don't know	21	3.2	5	3.3	6	2.5	1	0.7	4	1.5	37	2.5
No answer	1	0.2	0	0.0	0	0.0	0	0.0	0	0.0	1	0.06
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = .3034. There is no significant relationship between perception of the relationship between fallout shelters and worry about war, and stage of adoption.

Fallout shelters make war more likely

To determine an individual's perception of the relationship between fallout shelters and the likelihood of war each respondent was asked: "In your opinion, do fallout shelters make war more likely, or less likely, or don't they make any difference?" Table 7.6 shows the distribution of responses to this question for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of the relationship of fallout shelters and the likelihood of war and stage of adoption. Approximately three fourths of the respondents in each stage of adoption perceived that fallout shelters make "no difference" in making war more or less likely; i.e., there are no major percentage differences in "more likely" and "less likely" responses by adoption stage.

Conclusion: Perception of the relationship between fallout shelters and the likelihood of war is not statistically related to stage of adoption. There is essentially no difference in response pattern by adoption stage.

Table 7.6. In your opinion, do fallout shelters make war more likely or less likely, or don't they make any difference?

Fallout shelters make war more likely	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
More likely	61	9.3	13	8.7	22	9.1	14	9.3	17	6.4	127	8.7
No difference	481	73.4	114	76.0	197	81.1	119	79.3	204	76.7	1115	76.2*
Less likely	77	11.8	20	13.3	23	9.5	14	9.3	42	15.8	176	12.0
Don't know	34	5.2	3	2.0	1	0.4	3	2.0	3	1.1	44	3.0
No answer	2	0.3	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 1.5806. There is no significant relationship between perception of the relationship between fallout shelters and likelihood of war, and stage of adoption.

Fallout shelters make disarmament more difficult

To determine an individual's perception of the relationship between fallout shelters and disarmament each respondent was asked: "In your opinion, do fallout shelters make it more difficult or less difficult to get disarmament, or don't they make any difference?" Table 7.7 shows the distribution of responses to this question for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of the relationship between fallout shelters and disarmament and stage of adoption. Approximately three fourths of the respondents in each stage of adoption perceived that fallout shelters make no difference in getting disarmament, that is, fallout shelters do not make it more or less difficult to get disarmament. There are no major differences in response distributions by adoption stage.

Conclusion: Perception of the relationship between fallout shelters and disarmament is not statistically related to stage of adoption. There is essentially no difference in response pattern by adoption stage.

Table 7.7. In your opinion, do fallout shelters make it more difficult or less difficult to get disarmament, or don't they make any difference?

Fallout shelters make disarmament more difficult	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
More difficult	61	9.3	19	12.7	32	13.2	19	12.7	26	9.8	157	10.7
No difference	482	73.6	109	72.7	193	79.4	112	74.7	199	74.8	1095	74.8*
Less difficult	48	7.3	11	7.3	14	5.8	15	10.0	29	10.9	117	8.0
Don't know	62	9.5	10	6.7	4	1.6	4	2.7	12	4.5	92	6.3
No answer	2	0.3	1	0.7	0	0.0	0	0.0	0	0.0	3	0.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median is in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 1.0070. There is no significant relationship between perception of the relationship between fallout shelters and disarmament and stage of adoption.

Section Three: Fallout Shelters and Future Civil Defense Situations

Introduction

In this section attitudes pertaining to individuals' perceptions of several possible future United States civil defense programs or postures are related to stage of adoption of public fallout shelters. For each of the civil defense postures two different perceptions are examined: (1) the individual's perceptions of the likelihood of this particular posture occurring in the United States, and (2) the individual's perception of the desirability of this particular posture occurring in the United States. One might expect that individuals who perceive future civil defense postures which place high dependency on fallout shelters as likely and/or desirable will be farther along in the adoption process.

Attitudes about the following six possible United States fallout shelter postures are examined: (1) federal aid used to construct fallout shelters, (2) fallout shelters for all Americans, (3) fallout shelters throughout the nation and also shelters against nuclear blast, heat, and chemical and biological agents in large cities, (4) all available shelter space will be marked and stocked, (5) evacuation of target areas, and (6) anti-missile missiles will be a part of national defense.

For each of the six postures individuals were asked the likelihood of the posture occurring within the next five years and the desirability of the posture occurring in the future. The scale used to measure the likelihood of each posture ranged from zero through ten; where zero stands for a posture that is impossible or nearly impossible to happen, where ten stands for a posture that is certain or just about certain to happen, and where five means that a posture is as likely to happen as not. The scale used to measure the desirability of each posture ranged from minus three to plus three; where minus three stands for a posture that the person would dislike very much, where plus three stands for a posture that the person would very much like to happen, and where zero stands for a posture that the person doesn't care much about one way or another.

Likelihood of federal aid used to construct fallout shelters

Each respondent was asked how likely he believed the following posture would occur within the next five years: "There will be a program for the Federal government to pay part of the cost of putting fallout shelters in buildings constructed by non-profit organizations such as hospitals and schools." Table 7.8 shows the distribution of responses for each stage of adoption as well as three subtotal groups: (1) those perceiving a low likelihood of the posture occurring, (2) those perceiving a 50-50 chance of the posture occurring, and (3) those perceiving a high likelihood of the posture occurring.

Using a median chi-square statistical test a significant relationship was found between perception of the likelihood that federal aid would be used to construct fallout shelters and stage of adoption. A larger proportion of individuals in the last two stages of adoption perceived a high likelihood that federal aid would be used to construct fallout shelters, than did individuals in the first three adoption stages.

Conclusion: Perception of the likelihood of federal aid being used to construct fallout shelters is statistically related to stage of adoption. A larger proportion of individuals in the latter stages of adoption perceived a high likelihood of federal aid for fallout shelters than did individuals in the earlier adoption stages.

Table 7.8. Likelihood that there will be a program for the Federal government to pay part of the cost of putting fallout shelters in buildings constructed by non-profit organizations such as hospitals and schools.

Likelihood of federal aid used to construct fallout shelters	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Likelihood 0 (Minimum)	22	3.4	7	4.7	8	3.3	4	2.7	1	0.4	42	2.9
Likelihood 1	13	2.0	3	2.0	11	4.5	2	1.3	3	1.1	32	2.2
Likelihood 2	15	2.3	5	3.3	7	2.9	2	1.3	7	2.6	36	2.5
Likelihood 3	21	3.2	6	4.0	12	4.9	5	3.3	10	3.8	54	3.7
Likelihood 4	31	4.7	7	4.7	12	4.9	4	2.7	8	3.0	62	4.2
(Low likelihood subtotal)	(102	15.6)	(28	18.7)	(50	20.6)	(17	11.3)	(29	10.9)	(226	15.4)
Likelihood 5	129	19.7	37	24.7	50	20.6	30	20.0	45	16.9	291	19.9
Likelihood 6	68	10.4	8	5.3	17	7.0	12	8.0	26	9.8	131	8.9
Likelihood 7	57	8.7	19	12.7	36	14.8	14	9.3	25	9.4	151	10.3*
Likelihood 8	75	11.5	19	12.7	23	9.5	16	10.7	32	12.0	165	11.3
Likelihood 9	60	9.2	16	10.7	24	9.9	19	12.7	30	11.3	149	10.2
Likelihood 10 (Maximum)	142	21.7	22	14.7	37	15.2	40	26.7	76	28.6	317	21.7
(High likelihood subtotal)	(402	61.4)	(84	56.0	(137	56.4)	(101	67.3)	(189	71.1)	(913	62.4)
Don't know	5	0.8	0	0.0	1	0.4	0	0.0	0	0.0	6	0.4
No answer	17	2.6	1	0.7	5	2.1	2	1.3	3	1.1	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 13.9948. There is a significant relationship between perception of the likelihood of federal aid being used to construct fallout shelters and stage of adoption.

Desirability of federal aid used to construct fallout shelters

To determine an individual's perception of the desirability of federal aid being used to construct fallout shelters, each respondent was asked how much he personally wanted the following posture to occur: "There will be a program for the Federal government to pay part of the cost of putting fallout shelters in buildings constructed by non-profit organizations such as hospitals and schools." Table 7.9 shows the distribution of responses for each stage of adoption as well as three subtotal groups; (1) those perceiving the posture as undesirable, (2) those who don't care about the posture and (3) those who perceive the posture as desirable.

Using a median chi-square statistical test a significant relationship was found between perception of the desirability of federal aid being used to construct fallout shelters and stage of adoption. Over 80 percent of the total population perceived this posture as being desirable. However, percentages indicate a curvilinear relationship; a larger proportion of the individuals in the first two and last two adoption stages perceived the posture as desirable than did individuals in the Information stage. The Adoption stage had the largest proportion of individuals perceiving the posture as desirable.

Conclusion: Perception of the desirability of federal aid being used to construct fallout shelters is statistically related to stage of adoption. Proportionately more respondents in the first two and last two adoption stages perceived the desirability of this posture than did respondents in the Information stage.

Table 7.9. Desirability that there will be a program for the Federal government to pay part of the cost of putting fallout shelters in buildings constructed by non-profit organizations such as hospitals and schools.

Desirability of federal aid used to construct fallout shelters	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Undesirable -3 (Highly)	35	5.3	6	4.0	16	6.6	8	5.3	9	3.4	74	5.1
Undesirable -2	16	2.4	2	1.3	15	6.2	1	0.7	3	1.1	37	2.5
Undesirable -1	10	1.5	4	2.7	4	1.6	2	1.3	4	1.5	24	1.6
(Undesirable subtotal)	(61	9.3)	(12	8.0)	(35	14.4)	(11	7.3)	(16	6.0)	(135	9.2)
Don't care 0	32	4.9	8	5.3	25	10.3	11	7.3	7	2.6	83	5.7
Desirable 1	47	7.2	13	8.7	16	6.6	11	7.3	16	6.0	103	7.0
Desirable 2	82	2.5	16	10.7	33	13.6	23	15.3	27	10.2	181	12.4
Desirable 3 (Highly)	411	62.7	100	66.7	128	52.7	92	61.3	197	74.1	928	63.4*
(Desirable subtotal)	(540	82.4)	(129	86.0)	(177	72.8)	(126	84.0)	(240	90.2)	(1212	82.8)
Don't know	5	0.8	0	0.0	1	0.4	0	0.0	0	0.0	6	0.4
No answer	17	2.6	1	0.7	5	2.1	2	1.3	3	1.1	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 13.0868. There is a significant relationship between perception of the desirability of federal aid being used to construct fallout shelters and stage of adoption.

Likelihood of fallout shelters for all Americans

Each respondent was asked how likely he believed the following posture would occur within the next five years: "There will be fallout shelters available for all Americans. Existing spaces will be used; other spaces will be altered to provide protection, and as needed, new fallout shelters will be built." Table 7.10 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of the likelihood of there being fallout shelters for all Americans and stage of adoption. Percentages indicate a curvilinear relationship; a larger proportion of the respondents in the first two and last two adoption stages perceived the posture as likely than did individuals in the Information stage. The Adoption stage had the largest proportion of respondents perceiving the posture as likely.

Conclusion: Perception of the likelihood of there being fallout shelters for all Americans is statistically related to stage of adoption. Proportionately more respondents in the first two and last two stages of adoption perceived a high likelihood of fallout shelters for all Americans than did respondents in the Information stage.

Table 7.10. Likelihood that there will be fallout shelters available for all Americans. Existing spaces will be used, other spaces will be altered to provide protection, and as needed, new fallout shelters will be built.

Likelihood of fallout shelters for all Americans	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Likelihood 0 (Minimum)	86	13.1	23	15.3	40	16.5	18	12.0	17	6.4	184	12.6
Likelihood 1	42	6.4	8	5.3	16	6.6	5	3.3	22	8.3	93	6.4
Likelihood 2	37	5.6	8	5.3	17	7.0	12	8.0	15	5.6	89	6.1
Likelihood 3	41	6.3	6	4.0	20	8.2	10	6.7	21	7.9	98	6.7
Likelihood 4	43	6.6	14	9.3	24	9.9	9	6.0	21	7.9	111	7.6
(Low likelihood subtotal)	(249	38.0)	(59	39.3)	(117	48.1)	(54	36.0)	(96	36.1)	(575	39.3)
Likelihood 5	115	17.6	27	18.0	41	16.9	29	19.3	41	15.4	253	17.3*
Likelihood 6	59	9.0	13	8.7	20	8.2	12	8.0	18	6.8	122	8.3
Likelihood 7	44	6.7	12	8.0	17	7.0	16	10.7	20	7.5	109	7.4
Likelihood 8	44	6.7	14	9.3	12	4.9	5	3.3	29	10.9	104	7.1
Likelihood 9	41	6.3	9	6.0	15	6.2	11	7.3	29	10.9	105	7.2
Likelihood 10 (Maximum)	80	12.2	15	10.0	16	6.6	21	14.0	31	11.7	163	11.1
(High likelihood subtotal)	(268	40.9)	(63	42.0)	(80	32.9)	(65	43.3)	(127	47.7)	(603	41.2)
Don't know	5	0.8	0	0.0	0	0.0	0	0.0	0	0.0	5	0.3
No answer	18	2.7	1	0.7	5	2.1	2	1.3	2	0.8	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if ≥ 9.49, at .01 level if ≥ 13.28. Calculated chi-square = 13.0940. There is a significant relationship between perception of the likelihood of there being fallout shelters for all Americans and stage of adoption.

Desirability of fallout shelters for all Americans

To determine an individual's perception of the desirability of there being fallout shelters available for all Americans, each respondent was asked how much he personally wanted the following posture to occur: "There will be fallout shelters for all Americans. Existing spaces will be used, other spaces will be altered to provide protection, and as needed, new fallout shelters will be built." Table 7.11 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of the desirability of there being fallout shelters for all Americans and stage of adoption. A majority (84.7 percent) of all respondents perceived this situation as desirable. However, percentages indicate a curvilinear relationship: a larger proportion of individuals in the first two and last two adoption stages perceived the posture as desirable than did individuals in the Information stage. The Adoption stage had the largest proportion of individuals perceiving the posture as desirable.

Conclusion: Perception of the desirability of there being fallout shelters for all Americans is statistically related to stage of adoption. Proportionately more of the individuals in the first two and last two adoption stages perceived the posture as desirable than did individuals in the Information stage.

Table 7.11. Desirability that there will be fallout shelters available for all Americans. Existing spaces will be used, other spaces will be altered to provide protection, and as needed, new fallout shelters will be built.

Desirability of fallout shelters for all Americans	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	35	5.3	5	3.3	17	7.0	9	6.0	5	1.9	71	4.8
Undesirable -2	12	1.8	1	0.7	9	3.7	1	0.7	5	1.9	28	1.9
Undesirable -1	7	1.1	3	2.0	8	3.3	1	0.7	2	0.8	21	1.4
(Undesirable subtotal)	(54	8.2)	(9	6.0)	(34	14.0)	(11	7.3)	(12	4.5)	(120	8.2)
Don't care 0	33	5.0	6	4.0	23	9.5	6	4.0	3	1.1	71	4.8
Desirable 1	48	7.3	9	6.0	24	9.9	10	6.7	16	6.0	107	7.3
Desirable 2	68	10.4	16	10.7	31	12.8	18	12.0	29	10.9	162	11.1
Desirable 3 (Highly)	429	65.5	109	72.7	126	51.9	103	68.7	204	76.7	971	66.3*
(Desirable subtotal)	(545	83.2)	(134	89.3)	(181	74.5)	(131	87.3)	(249	93.6)	(1240	84.7)
Don't know	5	0.8	0	0.0	0	0.0	0	0.0	0	0.0	5	0.3
No answer	18	2.7	1	0.7	5	2.1	2	1.3	2	0.8	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 17.1906. There is a significant relationship between perception of the desirability of there being fallout shelters for all Americans and stage of adoption.

Likelihood of fallout shelters throughout the nation

Each respondent was asked how likely he believed the following posture would occur within the next five years: "There will be fallout shelters throughout the nation, and also shelters against nuclear blast, heat and chemical and biological agents in larges cities." Table 7.12 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of the likelihood of there being fallout shelters throughout the nation and stage of adoption. More than one-half of the total respondents perceived this posture as being very likely. Percentages indicate that the last two stages of adoption each contain a larger proportion of individuals perceiving high likelihood of this posture than do the earlier stages.

Conclusion: Perception of the likelihood of there being fallout shelters throughout the nation is statistically related to stage of adoption. A larger proportion of respondents in the latter two stages of adoption perceived a high likelihood of this posture than did respondents in the earlier adoption stages.

Table 7.12. Likelihood that there will be fallout shelters throughout the nation, and also shelters against nuclear blast, heat, and chemical and biological agents in large cities.

Likelihood of fallout shelters throughout the nation	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Likelihood 0 (Minimum)	44	6.7	14	9.3	21	8.6	10	6.7	7	2.6	96	6.5
Likelihood 1	29	4.4	9	6.0	12	4.9	9	6.0	12	4.5	71	4.8
Likelihood 2	31	4.7	6	4.0	17	7.0	4	2.7	14	5.3	72	4.9
Likelihood 3	37	5.6	9	6.0	24	9.9	5	3.3	14	5.3	89	6.1
Likelihood 4	36	5.5	6	4.0	15	6.2	8	5.3	10	3.8	75	5.1
(Low likelihood subtotal)	(177	27.0)	(44	29.3)	(89	36.6)	(36	24.0)	(57	21.4)	(403	27.5)
Likelihood 5	109	16.6	32	21.3	36	14.8	22	14.7	44	16.5	243	16.6
Likelihood 6	59	9.0	8	5.3	18	7.4	15	10.0	25	9.4	125	8.5*
Likelihood 7	66	10 1	13	8.7	22	9.1	11	7.3	29	10.9	141	9.6
Likelihood 8	56	8 5	10	6.7	23	9.5	16	10.7	27	10.2	132	9.0
Likelihood 9	72	11.0	20	13.3	18	7.4	14	9.3	31	11.7	155	10.6
Likelihood 10 (Maximum)	94	14.4	22	14.7	31	12.8	34	22.7	50	18.8	231	15.8
(High likelihood subtotal)	(347	53.0)	(73	48.7)	(112	46.1)	(90	60.0)	(162	60.9)	(784	53.6)
Don't know	5	0.8	0	0.0	1	0.4	0	0.0	1	0.4	7	0.5
No answer	17	2.6	1	0.7	5	2.1	2	1.3	2	0.8	27	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 12.0964. There is a significant relationship between perception of the likelihood of there being fallout shelters throughout the nation and stage of adoption.

Desirability of fallout shelters throughout the nation

To determine an individual's perception of the desirability of there being fallout shelters throughout the nation each respondent was asked how much he personally wanted the following posture to occur: "There will be fallout shelters throughout the nation, and also shelters against nuclear blast, heat and chemical and biological agents in larger cities." Table 7.13 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of the desirability of there being fallout shelters throughout the nation and stage of adoption. Approximately 85 percent of the total respondents perceived this posture as desirable. However, percentages indicate a curvilinear relationship: a larger proportion of individuals in the first two and last two stages of adoption perceived the posture as desirable than did individuals in the Information stage. The Adoption stage contains the largest proportion of individuals answering desirable.

Conclusion: Perception of the desirability of there being fallout shelters throughout the nation is statistically related to stage of adoption. Proportionately more respondents in the first two and last two stages perceived the posture as desirable than did individuals in the Information stage. The Adoption stage contains a larger proportion of individuals answering desirable than any other stage.

Table 7.13. Desirability that there will be fallout shelters throughout the nation, and also shelters against nuclear blast, heat, and chemical and biological agents in large cities.

Desirability of fallout shelters throughout the nation	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	36	5.5	6	4.0	16	6.6	7	4.7	5	1.9	70	4.8
Undesirable -2	16	2.4	6	4.0	9	3.7	2	1.3	5	1.9	38	2.6
Undesirable -1	6	0.9	1	0.7	6	2.5	4	2.7	2	0.8	19	1.3
(Undesirable subtotal)	(58	8.9)	(13	8.7)	(31	12.8)	(13	8.7)	(12	4.5)	(127	8.7)
Don't care 0	27	4.1	8	5.3	16	6.6	7	4.7	2	0.8	60	4.1
Desirable 1	49	7.5	10	6.7	20	8.2	5	3.3	15	5.6	99	6.8
Desirable 2	78	11.9	16	10.7	33	13.6	20	13.3	29	10.9	176	12.0
Desirable 3 (Highly)	421	64.3	102	68.0	137	56.4	103	68.7	205	77.1	968	66.1*
(Desirable subtotal)	(548	83.7)	(128	85.3)	(190	78.2)	(128	85.3)	(249	93.6)	(1243	84.9)
Don't know	5	0.8	0	0.0	1	0.4	0	0.0	1	0.4	7	0.5
No answer	17	2.6	1	0.7	5	2.1	2	1.3	2	0.8	27	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 11.8662. There is a significant relationship between perception of the desirability of there being fallout shelters throughout the nation and stage of adoption.

Likelihood that all available shelter space will be marked and stocked

Each respondent was asked how likely he believed the following posture would occur within the next five years: "All available spaces which provide good protection against fallout will be marked as shelters and stocked with everything necessary for survival." Table 7.14 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of the likelihood that all available shelter space will be marked and stocked and stage of adoption. Over 60 percent of the total respondents perceived this posture as being very likely. Percentages indicate that the last two stages of adoption each contain a larger proportion of individuals perceiving high likelihood of this posture than any of the earlier stages.

Conclusion: Perception of the likelihood that all available shelter space will be marked and stocked is statistically related to stage of adoption. A larger proportion of the individuals in the latter two adoption stages perceived a high likelihood of this posture than did individuals in the earlier adoption stages.

Table 7.14. Likelihood that all available spaces which provide good protection against fallout will be marked as shelters and stocked with everything necessary for survival.

Likelihood that all available shelter space will be stocked and marked	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Likelihood 0 (Minimum)	36	5.5	7	4.7	15	6.2	7	4.7	2	0.8	67	4.6
Likelihood 1	20	3.1	9	6.0	3	1.2	3	2.0	5	1.9	40	2.7
Likelihood 2	29	4.4	2	1.3	10	4.1	3	2.0	9	3.4	53	3.6
Likelihood 3	27	4.1	7	4.7	11	4.5	3	2.0	16	6.0	64	4.4
Likelihood 4	28	4.3	2	1.3	12	4.9	4	2.7	7	2.6	53	3.6
(Low likelihood subtotal)	(140	21.4)	(27	18.0)	(51	21.0)	(20	13.3)	(39	14.7)	(277	18.9)
Likelihood 5	116	17.7	30	20.0	46	18.9	24	16.0	28	10.5	244	16.7
Likelihood 6	40	6.1	9	6.0	17	7.0	8	5.3	22	8.3	96	6.6
Likelihood 7	68	10.4	16	10.7	22	9.1	13	8.7	23	8.6	142	9.7*
Likelihood 8	65	9.9	12	8.0	16	6.6	21	14.0	39	14.7	153	10.5
Likelihood 9	65	9.9	14	9.3	26	10.7	23	15.3	34	12.8	162	11.1
Likelihood 10 (Maximum)	140	21.4	41	27.3	59	24.3	39	26.0	78	29.3	357	24.4
(High likelihood subtotal)	(378	57.7)	(92	61.3)	(140	57.6)	(104	69.3)	(196	73.7)	(910	62.2)
Don't know	4	0.6	0	0.0	1	0.4	0	0.0	1	0.4	6	0.4
No answer	17	2.6	1	0.7	5	2.1	2	1.3	2	0.8	27	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 19.6848. There is a significant relationship between perception of the likelihood that all available shelter space will be marked and stocked, and stage of adoption.

Desirability that all available shelter space will be marked and stocked

To determine an individual's perception of the desirability that all available shelter space will be marked and stocked each respondent was asked how much he personally wanted the following posture to occur: "All available spaces which provide good protection against fallout will be marked as shelters and stocked with everything necessary for survival." Table 7.15 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability that all available shelter space will be marked and stocked and stage of adoption. Almost 90 percent of the total respondents perceived this posture as desirable. Percentages indicate, however, that there is a slight curvilinear relationship: a larger proportion of individuals in the first two and last two stages perceived the posture as desirable than did individuals in the Information stage. The Adoption stage had proportionally more individuals perceiving the posture as desirable than any of the other stages.

Conclusion: Perception of the desirability that all available shelter space be marked and stocked is not statistically related to stage of adoption. However, proportionately more respondents in the first two and last two stages perceived the posture as desirable than did respondents in the Information stage.

Table 7.15. Desirability that all available spaces which provide good protection against fallout will be marked as shelters and stocked with everything necessary for survival.

Desirability that all available shelter space will be stocked and marked	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	37	5.6	6	4.0	14	5.8	7	4.7	6	2.3	70	4.8
Undesirable -2	7	1.1	3	2.0	5	2.1	1	0.7	3	1.1	19	1.3
Undesirable -1	5	0.8	2	1.3	5	2.1	0	0.0	1	0.4	13	0.9
(Undesirable subtotal)	(49	7.5)	(11	7.3)	(24	9.9)	(8	5.3)	(10	3.8)	(102	7.0)
Don't care 0	25	3.8	4	2.7	17	7.0	7	4.7	3	1.1	56	3.8
Desirable 1	34	5.2	6	4.0	17	7.0	5	3.3	14	5.3	76	5.2
Desirable 2	65	9.9	10	6.7	23	9.5	16	10.7	22	8.3	136	9.3
Desirable 3 (Highly)	461	70.4	118	78.7	156	64.2	112	74.7	214	80.5	1061	72.5*
(Desirable subtotal)	(560	85.5)	(134	89.3)	(196	80.7)	(133	88.7)	(250	94.0)	(1273	87.0)
Don't know	4	0.6	0	0.0	1	0.4	0	0.0	1	0.4	6	0.4
No answer	17	2.6	1	0.7	5	2.1	2	1.3	2	0.8	27	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 6.2346. There is no significant relationship between perception of the desirability that all available shelter space will be stocked and marked, and stage of adoption.

Likelihood of evacuation of target areas

Each respondent was asked how likely he believed the following posture would occur within the next five years: "In tense situations which might precede a war, communities near military bases---plus some large cities---will evacuate their people to safer areas where fallout shelters will be available." Table 7.16 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of the likelihood that target areas will be evacuated and stage of adoption, although the test does approach significance at the .05 level. Percentages indicate that the first two and last two adoption stages contain a larger proportion of individuals perceiving high likelihood of this posture than the Information stage. The Adoption stage had the largest proportion of respondents perceiving a high likelihood of the posture.

Conclusion: Perception of the likelihood that target areas will be evacuated is not statistically related to stage of adoption. However, proportionately more individuals in the first two and last two stages perceived a high likelihood of this posture than did individuals in the Information stage.

Table 7.16. Likelihood that in tense situations which might precede a war, communities near

Table 7.16. Likelihood that in tense situations which might precede a war, communities near military bases---plus some large cities--- will evacuate their people to safer areas where fallout shelters will be available.

Likelihood of evacuation of target areas	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Likelihood 0 (Minimum)	42	6.4	6	4.0	22	9.1	12	8.0	7	2.6	89	6.1
Likelihood 1	22	3.4	7	4.7	10	4.1	5	3.3	10	3.8	54	3.7
Likelihood 2	23	3.5	5	3.3	10	4.1	4	2.7	11	4.1	53	3.6
Likelihood 3	29	4.4	8	5.3	14	5.8	9	6.0	11	4.1	71	4.8
Likelihood 4	22	3.4	7	4.7	8	3.3	5	3.3	14	5.3	56	3.8
(Low likelihood subtotal)	(138	21.1)	(33	22.0)	(64	26.3)	(35	23.3)	(53	19.9)	(323	22.1)
Likelihood 5	97	14.8	28	18.7	49	20.2	23	15.3	39	14.7	236	16.1
Likelihood 6	58	8.9	13	8.7	21	8.6	14	9.3	24	9.0	130	8.9
Likelihood 7	53	8.1	16	10.7	22	9.1	5	3.3	36	13.5	132	9.0*
Likelihood 8	75	11.5	14	9.3	23	9.5	16	10.7	20	7.5	148	10.1
Likelihood 9	83	12.7	15	10.0	16	6.6	23	15.3	42	15.8	179	12.2
Likelihood 10 (Maximum)	129	19.7	30	20.0	42	17.3	31	20.7	50	18.8	282	19.3
(High likelihood subtotal)	(398	60.8)	(88	58.7)	(124	51.0)	(89	59.3)	(172	64.7)	(871	59.5)
Don't know	5	0.8	0	0.0	1	0.4	0	0.0	0	0.0	6	0.4
No answer	17	2.6	1	0.7	5	2.1	3	2.0	2	0.8	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 8.8070. There is no significant relationship between perception of the likelihood of evacuation of target areas and stage of adoption.

Desirability of evacuation of target areas

To determine an individual's perception of the desirability that target areas will be evacuated each respondent was asked how much he personally wanted the following posture to occur: "In tense situations which might precede war, communities near military bases---plus some large cities---will evacuate their people to safer areas where fallout shelters will be available." Table 7.17 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability that target areas will be evacuated and stage of adoption. More than 80 percent of the total respondents perceived this posture as desirable. Percentages indicate, however, that there is a curvilinear relationship: a larger proportion of individuals in the first two and last two stages perceived this posture as desirable than did individuals in the Information stage. The Adoption stage had the highest proportion of individuals perceiving this posture as desirable.

Conclusion: Perception of the desirability that target areas will be evacuated is not statistically related to stage of adoption. However, proportionately more individuals in the first two and last two stages perceived the posture as desirable than did respondents in the Information stage.

Table 7.17. Desirability that in tense situations which might precede a war, communities near military bases---plus some large cities---will evacuate their people to safer areas where fallout shelters will be available.

Desirability of evacuation of target areas	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	45	6.9	13	8.7	19	7.8	8	5.3	11	4.1	96	6.6
Undesirable -2	13	2.0	1	0.7	6	2.5	0	0.0	3	1.1	23	1.6
Undesirable -1	11	1.7	0	0.0	7	2.9	0	0.0	4	1.5	22	1.5
(Undesirable subtotal)	(69	10.5)	(14	9.3)	(32	13.2)	(8	5.3)	(18	6.8	(141	9.6)
Don't care 0	28	4.3	9	6.0	12	4.9	8	5.3	8	3.0	65	4.4
Desirable 1	42	6.4	10	6.7	14	5.8	18	12.0	17	6.4	101	6.9
Desirable 2	82	12.5	22	14.7	36	14.8	20	13.3	27	10.2	187	12.8
Desirable 3 (Highly)	412	62.9	94	62.7	143	58.8	93	62.0	194	72.9	936	63.9*
(Desirable subtotal)	(536	81.8)	(126	84.0)	(193	79.4)	(131	87.3)	(238	89.5)	(1224	83.6)
Don't know	5	0.8	0	0.0	1	0.4	0	0.0	0	0.0	6	0.4
No answer	17	2.6	1	0.7	5	2.1	3	2.0	2	0.8	28	1.9
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 5.7540. There is no significant relationship between perception of the desirability of evacuation of target areas and stage of adoption.

Likelihood that anti-missile missiles will be a part of the national defense

Each respondent was asked how likely he believed the following posture would occur within the next five years: "In addition to shelters and existing defense against bombers, there will be defenses against ballistic missiles around our large cities and military installations." Table 7.18 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of the likelihood of anti-missile missiles being a part of the national defense and stage of adoption. About 65 percent of the total respondents perceived this posture as being very likely. Percentages indicate that the last two adoption stages contained a larger proportion of individuals perceiving high likelihood of this posture than any other stage.

Conclusion: Perception of the likelihood of anti-missile missiles being a part of the national defense is statistically related to stage of adoption. A larger proportion of the individuals in the latter two adoption stages perceived a high likelihood of this posture than did individuals in the earlier adoption stages.

Table 7.18. Likelihood that in addition to shelters and existing defense against bombers, there will be defense against ballistic missiles around our large cities and military installations.

Likelihood that anti-missile missiles will be a part of national defense	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Likelihood 0 (Minimum)	27	4.1	6	4.0	15	6.2	4	2.7	2	0.8	54	3.7
Likelihood 1	24	3.7	2	1.3	7	2.9	5	3.3	7	2.6	45	3.1
Likelihood 2	16	2.4	3	2.0	6	2.5	6	4.0	7	2.6	38	2.6
Likelihood 3	24	3.7	10	6.7	6	2.5	2	1.3	7	2.6	49	3.3
Likelihood 4	26	4.0	6	4.0	9	3.7	7	4.7	6	2.3	54	3.7
(Low likelihood subtotal)	(117	17.9)	(27	18.0)	(43	17.7)	(24	16.0)	(29	10.9)	(240	16.4)
Likelihood 5	99	15.1	27	18.0	43	17.7	21	14.0	32	12.0	222	15.2
Likelihood 6	80	12.2	10	6.7	23	9.5	8	5.3	32	12.0	153	10.5
Likelihood 7	65	9.9	15	10.0	27	11.1	11	7.3	29	10.9	147	10.0*
Likelihood 8	79	12.1	13	8.7	26	10.7	20	13.3	36	13.5	174	11.9
Likelihood 9	68	10.4	22	14.7	25	10.3	15	10.0	30	11.3	160	10.9
Likelihood 10 (Maximum)	122	18.6	35	23.3	48	19.8	49	32.7	75	28.2	329	22.5
(High likelihood subtotal)	(414	63.2)	(95	63.3)	(149	61.3)	(103	68.7)	(202	75.9)	(963	65.8)
Don't know	7	1.1	0	0.0	2	0.8	0	0.0	1	0.4	10	0.7
No answer	18	2.7	1	0.7	6	2.5	2	1.3	2	0.8	29	2.0
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.
With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.
Calculated chi-square = 16.2806. There is a significant relationship between perception of the likelihood that anti-missile missiles will be a part of national defense and stage of adoption.

Desirability that anti-missile missiles will be a part of the national defense

To determine an individual's perception of the desirability that anti-missile missiles will be a part of the national defense each respondent was asked how much he personally wanted the following posture to occur: "In addition to shelters and existing defense against bombers, there will be defenses against ballistic missiles around our large cities and military installations." Table 7.19 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of the desirability that anti-missile missiles will be part of the national defense and stage of adoption. Over 85 percent of the total respondents perceived this posture as desirable. Percentages indicate that there is a curvilinear relationship: a larger proportion of individuals in the first two and last two adoption stages perceived the posture as desirable than did individuals in the Information stage.

Conclusion: Perception of the desirability that anti-missile missiles will be part of the national defense is statistically related to stage of adoption. Proportionately more individuals in the first two and last two adoption stages perceived the posture as desirable than did respondents in the Information stage.

Table 7.19. Desirability that in addition to shelters and existing defense against bombers, there will be defense against ballistic missiles around our large cities and military installations.

Desirability that anti-missile missiles will be a part of national defense	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	31	4.7	7	4.7	18	7.4	6	4.0	8	3.0	70	4.8
Undesirable -2	12	1.8	2	1.3	7	2.9	3	2.0	6	2.3	30	2.0
Undesirable -1	5	0.8	1	0.7	4	1.6	0	0.0	0	0.0	10	0.7
(Undesirable subtotal)	(48	7.3)	(10	6.7)	(29	11.9)	9	6.0)	(14	5.3)	(110	7.5)
Don't care 0	24	3.7	8	5.3	13	5.3	5	3.3	6	2.3	56	3.8
Desirable 1	49	7.5	11	7.3	14	5.8	9	6.0	8	3.0	91	6.2
Desirable 2	92	14.0	21	14.0	32	13.2	20	13.3	25	9.4	190	13.0
Desirable 3 (Highly)	417	63.7	99	66.0	147	60.5	105	70.0	210	78.9	978	66.8*
(Desirable subtotal)	(558	85.2)	(131	87.3)	(193	79.4)	(134	89.3)	(243	91.4	(1259	86.0)
Don't know	7	1.1	0	0.0	2	0.8	0	0.0	1	0.4	10	0.7
No answer	18	2.7	1	0.7	6	2.5	2	1.3	2	0.8	29	2.0
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.
With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.
Calculated chi-square = 9.9510. There is a significant relationship between perception of the desirability that anti-missile missiles will be a part of national defense and stage of adoption.

Section Four: Fallout Shelters and Anti-missile Missiles

Introduction

In this section attitudes pertaining to individuals' perceptions of the relationships between need for anti-missile missiles and need for fallout shelters are related to stage of adoption of public fallout shelters.[a] The DOD has publicly stated that the effectiveness of an active ballistic-missile-defense system is highly dependent upon the availability of adequate fallout shelters. To what extent do people see a relationship between an anti-missile missile defense system and fallout shelters? Do individuals in the different public fallout shelter stages of adoption have similar or different perceptions of the relationship between anti-missile missiles and fallout shelters. A perception of this relationship may influence individuals to be farther along in the adoption process. However, there may also be individuals who do not perceive this relationship but who are in the latter stages of adoption based on their perception of the utility of fallout shelters with or without anti-missile missiles. Attitudes related to these questions examined in this section are: (1) there is no need for anti-missile missiles or fallout shelters, (2) anti-missile missiles will create a greater need for fallout shelters, (3) anti-missile missiles will create a lesser need for fallout shelters, (4) fallout shelters needed because enemy weapons will penetrate missile defense anyhow and (5) anti-missile missiles meaningful only if have fallout shelters for everyone.

No need for anti-missile missiles or fallout shelters

To determine an individual's perception of the need for anti-missile missiles and fallout shelters each respondent was asked if he agreed or disagreed with the following statement: "There is no need for anti-missile missiles or fallout shelters." Table 7.20 shows the distribution of responses for each stage of adoption as well as three subtotal groups: (1) those who agree with the statement, (2) those who were undecided about the statement and (3) those who disagreed with the statement.

Using a median chi-square statistical test a significant relationship was found between perception of no need for anti-missile missiles or fallout shelters and stage of adoption. Although over three fourths of the respondents in each adoption stage disagreed that there is no need for anti-missile missiles or fallout shelters, a larger proportion of individuals in the latter two stages disagreed with the statement than did individuals in the first three adoption stages.

Conclusion: Perception of no need for anti-missile missiles or fallout shelters is statistically related to stage of adoption. A larger proportion of individuals in the latter two adoption stages disagreed with the statement that there was no need for anti-missile missiles or fallout shelters than did individuals in the earlier stages of adoption.

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[a]This section focuses on how attitudes about anti-missile missiles and fallout shelters are related to public fallout shelter stage of adoption. The next chapter (Chapter 8) focuses on how a number of attitudes only about anti-missile missiles are related to public fallout shelter stage of adoption.

stage of adoption.

Table 7.20. There is no need for anti-missile missiles <u>or</u> for fallout shelters.

No need for anti-missile missiles or fallout shelters	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	9	1.4	4	2.7	4	1.6	5	3.3	5	1.9	27	1.8
Agree	38	5.8	12	8.0	18	7.4	3	2.0	7	2.6	78	5.3
(Agree subtotal)	(47	7.2)	(16	10.7)	(22	9.1)	(8	5.3)	(12	4.5)	(105	7.2)
Undecided	73	11.1	16	10.7	31	12.8	9	6.0	8	3.0	137	9.4
Disagree	338	51.6	69	46.0	110	45.3	71	47.3	116	43.6	704	48.1*
Strongly disagree	183	27.9	49	32.7	75	30.9	62	41.3	128	48.1	497	33.9
(Disagree subtotal)	(521	79.5)	(118	78.7)	(185	76.1)	(133	88.7)	(244	91.7)	(1201	82.0)
No answer	14	2.1	0	0.0	5	2.1	0	0.0	2	0.8	21	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4.d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 26.3854. There is a significant relationship between perception of no need for anti-missile missiles and fallout shelters, and stage of adoption.

Anti-missile missiles will create a greater need for fallout shelters

To determine an individual's perception of the need for fallout shelters if anti-missile missiles are deployed each respondent was asked if he agreed or disagreed with the following statement: "If we have anti-missile missiles around our cities, we will need fallout shelters even more than we need them now." Table 7.21 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of a greater need for fallout shelters if anti-missile missiles are deployed and stage of adoption. Percentages indicate that there is a curvilinear relationship: a larger proportion of individuals in the first two and last adoption stages perceived a greater need for fallout shelters if an anti-missile missile system is implemented than did individuals in the Information and Evaluation stages. A larger proportion of individuals in the Information and Evaluation stages disagreed with the statement than did respondents in the Unaware, Aware, and Adoption stages.

Conclusion: Perception of a greater need for fallout shelters if anti-missile missiles are deployed is statistically related to stage of adoption. Proportionately more respondents in the earlier and latter adoption stages agreed that there will be a greater need for fallout shelters if an anti-missile missile system is established than did respondents in the "middle" Information and Evaluation stages.

Table 7.21. If we have anti-missile missiles around our cities, we will need fallout shelters <u>even more</u> than we need them now.

Anti-missile missiles will create a greater need for fallout shelters	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	58	8.9	23	15.3	19	7.8	10	6.7	44	16.5	154	10.5
Agree	200	30.5	46	30.7	57	23.5	43	28.7	92	34.6	438	29.9
(Agree subtotal)	(258	39.4)	(69	46.0)	(76	31.3)	(53	35.3)	(136	51.1)	(592	40.4)
Undecided	112	17.1	10	6.7	28	11.5	16	10.7	20	7.5	186	12.7*
Disagree	254	38.8	65	43.3	117	48.1	76	50.7	103	38.7	615	42.0
Strongly disagree	17	2.6	6	4.0	19	7.8	5	3.3	6	2.3	53	3.6
(Disagree subtotal)	(271	41.4)	(71	47.3)	(136	56.0)	(81	54.0)	(109	41.0)	(668	45.6)
No answer	14	2.1	0	0.0	3	1.2	0	0.0	1	0.4	18	1.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 16.9768. There is a significant relationship between perception of a greater need for fallout shelters if anti-missile missiles are deployed, and stage of adoption.

Anti-missile missiles will create a lesser need for fallout shelters

To determine an individual's perception of the need for fallout shelters if anti-missile missiles are deployed each respondent was asked if he agreed or disagreed with the following statement: "If we have anti-missile missiles around our cities, there will be less need for fallout shelters." Table 7.22 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of a lesser need for fallout shelters if anti-missile missiles are deployed and stage of adoption. Percentages indicate that a larger proportion of individuals in the Adoption stage disagreed with the statement than did individuals in the other stages. The Unaware stage had the smallest proportion of individuals disagreeing with the statement that an anti-missile missile system would lessen the need for fallout shelters.

Conclusion: Perception of a lesser need for fallout shelters if anti-missile missiles are deployed is statistically related to stage of adoption. A larger proportion of individuals in the latter two stages of adoption disagreed that there will be less need for fallout shelters if an anti-missile missile system is established than did individuals in the earlier adoption stages.

Table 7.22. If we have anti-missile missiles around our cities, there will be less need for fallout shelters.

Anti-missile missiles will create a lesser need for fallout shelters.	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	46	7.0	13	8.7	17	7.0	7	4.7	15	5.6	98	6.7
Agree	233	35.6	51	34.0	83	34.2	54	36.0	85	32.0	506	34.6
(Agree subtotal)	(279	42.6)	(64	42.7)	(100	41.2)	(61	40.7)	(100	37.6	(604	41.3)
Undecided	103	15.7	15	10.0	27	11.1	15	10.0	17	6.4	177	12.1*
Disagree	234	35.7	56	37.3	99	40.7	62	41.3	108	40.6	559	38.2
Strongly disagree	27	4.1	15	10.0	14	5.8	12	8.0	40	15.0	108	7.4
(Disagree subtotal)	(261	39.8)	(71	47.3)	(113	46.5)	(74	49.3)	(148	55.6)	(667	45.6)
No answer	12	1.8	0	0.0	3	1.2	0	0.0	1	0.4	16	1.1
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4.d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 11.5680. There is a significant relationship between perception of a lesser need for fallout shelters if anti-missile missiles are deployed, and stage of adoption.

Fallout shelters needed because enemy weapons will penetrate missile defenses anyhow

To determine an individual's perception of the need for fallout shelters because of some enemy weapons getting through a missile defense system each respondent was asked if he agreed or disagreed with the following statement: "If we have such missiles around our cities, we should have shelters to protect people against fallout because some enemy weapons will get through the defense anyway." Table 7.23 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of the need for fallout shelters because of some enemy weapons getting through our defense system and stage of adoption. However, percentages indicate that there is a curvilinear relationship; a larger proportion of individuals in the first two and last two adoption stages agreed with the need for fallout shelters for this reason than did individuals in the Information stage. The Adoption stage had the largest proportion of individuals agreeing with the statement.

Conclusion: Perception of the need for fallout shelters because of some enemy weapons getting through our defense system is not statistically related to stage of adoption. However, proportionately more respondents in the first two and last two adoption stages perceived a need for fallout shelters in this situation than did respondents in the Information stage.

Table 7.23. If we have such missiles around our cities, we should have shelters to protect people against fallout because some enemy weapons will get through the defense anyway.

Fallout shelters needed because enemy weapons will penetrate missile defenses anyhow	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	105	16.0	34	22.7	27	11.1	23	15.3	67	25.2	256	17.5
Agree	443	67.6	86	57.3	159	65.4	102	68.0	163	61.3	953	65.0*
(Agree subtotal)	(548	83.7)	(120	80.0)	(186	76.5)	(125	83.3)	(230	86.5)	(1209	82.6)
Undecided	53	8.1	16	10.7	22	9.1	7	4.7	16	6.0	114	7.8
Disagree	35	5.3	12	8.0	25	10.3	16	10.7	14	5.3	102	7.0
Strongly disagree	5	0.8	1	0.7	6	2.5	1	0.7	4	1.5	17	1.2
(Disagree subtotal)	(40	6.1)	(13	8.7)	(31	12.8)	(17	11.3)	(18	6.8)	(119	8.1)
No answer	14	2.1	1	0.7	4	1.6	1	0.7	2	0.8	22	1.5
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 6.9966. There is no significant relationship between perception of the need for fallout shelters because of enemy weapons penetrating our defense system, and stage of adoption.

Anti-missile missiles meaningful only if have fallout shelters for everyone

To determine an individual's perception of whether anti-missile missiles are meaningful only if there are fallout shelters for everyone each respondent was asked if he agreed or disagreed with the following statement: "Even if cities are defended, enemy attacks on them would produce lots of fallout, so anti-missile missiles make sense only if we have fallout shelters for everyone." Table 7.24 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between the perception of whether anti-missile missiles are meaningful only if there are fallout shelters for everyone and stage of adoption, although the test approached the .05 significance level. However, percentages indicate a curvilinear relationship: a larger proportion of individuals in the first two and last two adoption stages agreed that anti-missile missiles are meaningful only if there are fallout shelters for everyone than did individuals in the Information stage. A larger proportion of individuals in the Adoption stage agreed with the statement than did respondents in any of the other stages.

Conclusion: Perception of having anti-missile missiles only if we have fallout shelters is not statistically related to stage of adoption. However, proportionately more respondents in the first two and last two adoption stages agreed that anti-missile missiles make sense only if we have fallout shelters than did individuals in the Information stage.

Table 7.24. Even if cities are defended, enemy attacks on them would produce lots of fallout, so anti-missile missiles make sense only if we have fallout shelters for everyone.

Anti-missile missiles meaningful only if have fallout shelters for everyone	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	72	11.0	22	14.7	18	7.4	16	10.7	46	17.3	174	11.9
Agree	350	53.4	76	50.7	112	46.1	75	50.0	133	50.0	746	51.0*
(Agree subtotal)	(422	64.4)	(98	65.3)	(130	53.5)	(91	60.7)	(179	67.3)	(920	62.8)
Undecided	111	16.9	22	14.7	36	14.8	18	12.0	22	8.3	209	14.3
Disagree	102	15.6	27	18.0	65	26.7	38	25.3	57	21.4	289	19.7
Strongly disagree	6	0.9	3	2.0	8	3.3	1	0.7	6	2.3	24	1.6
(Disagree subtotal)	(108	16.5)	(30	20.0)	(73	30.0)	(39	26.0)	(63	23.7)	(313	21.4)
No answer	14	2.1	0	0.0	4	1.6	2	1.3	2	0.8	22	1.5
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 9.1314. There is no significant relationship between the perception of whether anti-missile missiles are meaningful only if there are fallout shelters for everyone, and stage of adoption.

Summary of Chapter 7

In Chapter 7 twenty-two different fallout shelter attitude variables were analyzed in relation to stage of adoption of public fallout shelters. These 22 attitude variables were categorized into four attitude areas for analysis purposes. The findings are summarized in Table 7.25. Thirteen of the fallout shelter variables were found to be statistically related to stage of adoption.

The first attitude area was composed of two attitude variables related to people's general feelings about fallout shelters. One of these variables was statistically related to stage of adoption. The relationship was curvilinear: a larger proportion of individuals in the first and last stages of adoption "favored fallout shelters," than did individuals in the middle adoption stage. The other variable, "good survival chances in fallout shelters" had no apparent relationship to stage of adoption.

The second attitude area was composed of three variables related to people's perceptions about fallout shelters and concern with war. None of the three variables was statistically related to stage of adoption. The three variables "fallout shelters cause worry about war," "fallout shelters make war more likely," and "fallout shelters make disarmament more difficult," had no apparent relationship to stage of adoption.

The third attitude area was composed of twelve attitude variables related to people's perceptions about fallout shelters and future civil defense situations. Nine of the twelve variables were found to be statistically related to stage of adoption. Of these, two had a strong positive relationship to stage of adoption: a larger proportion of respondents in the latter adoption stages perceived a "high likelihood of fallout shelters throughout the nation" and "high likelihood that all available shelter space will be marked and stocked," than did respondents in the earlier adoption stages. Two of the significant variables had a slight positive percentage relationship to stage of adoption: a slightly larger proportion of individuals in the latter adoption stages perceived a "high likelihood of federal aid to construct fallout shelters" and "high likelihood that missiles will be a part of our national defense," than did individuals in the earlier adoption stages. The other five significant variables had a curvilinear relationship to stage of adoption: a larger proportion of respondents in the first and last adoption stages perceived that there was a "high likelihood of fallout shelters for all Americans," and that it was "more desirable that federal aid be used

to construct fallout shelters," "more desirable that there be fallout shelters for all Americans," "more desirable that there be fallout shelters throughout the nation," and "more desirable that missiles will be a part of national defense," than did respondents in the middle, especially the Information, adoption stages. All three of the statistically non-significant variables had a slight curvilinear percentage trend relationship with stage of adoption: a larger proportion of respondents in the first and last adoption stages perceived that there was a "high likelihood of evacuation of target areas," and that it was "more desirable that all available shelter space be marked and stocked," and "more desirable that there be evacuation of target areas," than did respondents in the middle adoption stages.

The final attitude area discussed in this chapter was composed of five attitude variables focusing upon peopl perceptions of the relationship between fallout shelters and anti-missile missiles. Three of the variables were significantly related to stage of adoption. Of these, one was a curvilinear relation: a larger proportion of respondents in the first and last stages agreed that "anti-missile missiles will create a greater need for fallout shelters" than did respondents in the middle stages. The other two statistically related variables had a negative relationship with stage of adoption: a larger proportion of respondents in the earlier stages of adoption agreed that there is "no need for anti-missile missiles or fallout shelters," and that "anti-missile missiles create a lesser need for fallout shelters," than did respondents in the latter adoption stages. The two statistically non-significant variables had a slight curvilinear percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the first and last adoption stages agreed that "fallout shelters are needed because enemy weapons will penetrate missile defenses anyhow" and "anti-missile missiles are meaningful only if there are fallout shelters for everyone," than did respondents in the middle adoption stage.

The analysis in this chapter indicates many curvilinear percentage trends. In 12 of 22 attitudes the individuals who make up the Information stage had different perceptions of fallout shelters than did respondents in the other adoption stages. In each of the 12 cases the Information stage respondents had more negative fallout shelter attitudes than did respondents in the other stages.

Table 7.25 Summary: Perception of Fallout Shelters and Stage of Adoption of Public Fallout Shelters

Attitude Variable[a]	Relationship to Stage of Adoption: Statistical at .05 level[b] Tabular Value	Calculated Value	Percentage Trend[c]
General Feelings about Fallout Shelters			
1. In favor of fallout shelters	9.49	46.72[b]	Curvilinear: P-N-P
2. Good survival chances in fallout shelters	9.49	7.02	None apparent
Fallout Shelters and Concern With War			
3. Fallout shelters make people worry about war	9.49	0.30	None apparent
4. Fallout shelters make war more likely	9.49	1.58	None apparent
5. Fallout shelters make disarmament more difficult	9.49	1.01	None apparent
Fallout Shelters and Future Civil Defense Situations			
6. High likelihood of federal aid to construct fallout shelters	9.49	13.99[b]	Positive tendency
7. Desirable that federal aid be used to construct fallout shelters	9.49	13.09[b]	Curvilinear: P-N-P
8. High likelihood of fallout shelters for all Americans	9.49	13.09[b]	Curvilinear: P-N-P
9. Desirable that there be fallout shelters for all Americans	9.49	17.19[b]	Curvilinear: P-N-P
10. High likelihood of fallout shelters throughout the nation	9.49	12.10[b]	Positive trend
11. Desirable that there be fallout shelters throughout the nation	9.49	11.87[b]	Curvilinear: P-N-P
12. High likelihood that all available shelter space will be marked and stocked	9.49	19.68[b]	Positive trend
13. Desirable that all available shelter space will be marked and stocked	9.49	6.23	Curvilinear: P-N-P
14. High likelihood of evacuation of target areas	9.49	8.81	Curvilinear: P-N-P
15. Desirable that there be evacuation of target areas	9.49	5.75	Curvilinear: P-N-P

Table 7.25 Summary: Perception of Fallout Shelters and Stage of Adoption of Public Fallout Shelters

Attitude Variable[a]	Relationship to Stage of Adoption: Statistical at .05 level[b] Tabular Value	Calculated Value	Percentage Trend[c]
16. High likelihood that missiles will be a part of national defense	9.49	16.28[b]	Positive tendency
17. Desirable that missiles will be a part of national defense	9.49	9.95[b]	Curvilinear: P-N-P
Fallout Shelters and Anti-Missile Missiles			
18. There is no need for anti-missiles or fallout shelters	9.49	26.39[b]	Negative tendency
19. Missiles create a greater need for fallout shelters	9.49	16.98[b]	Curvilinear: P-N-P
20. Anti-missiles create a lesser need for fallout shelters	9.49	11.57[b]	Negative tendency
21. Fallout shelters needed because enemy weapons will penetrate missile defenses anyhow	9.49	7.00	Curvilinear: P-N-P
22. Anti-missiles meaningful only if have fallout shelters for everyone	9.49	9.13	Curvilinear: P-N-P

[a]Attitude statements in this table are paraphrasings of actual question wordings. For actual wordings see the table headings in the body of the chapter.

[b]All statistical tests were chi-square tests. Statistical at .05 level means that a calculated value larger than the tabular value would be expected to occur only 5 times out of 100 because of the selection of the sample from the population being studied rather than because there is an actual relationship in the population. Statistically significant values are footnoted in the table.

[c]See Footnote c of Table 5.23 for an explanation of the percentage trend statements in this column.

Chapter 8

PERCEPTION OF ANTI-MISSILE MISSILES AND STAGE OF ADOPTION

Introduction

The purpose of this chapter is to explore some of the relationships between people's knowledge and attitudes about anti-missile missile defense systems and their stage of public fallout shelter adoption. There is interest in these relationships for at least two reasons.

First, one of the major decision-making problems facing the United States in the mid 1960's is whether or not to implement an anti-missile missile system. To what extent should resources be utilized to develop a given level of an anti-ICBM system? One of the factors involved in this decision is the extent to which fallout shelters are needed in conjunction with the hardware anti-missile missiles themselves. Secretary of Defense McNamara and other federal officials have emphasized the need for fallout shelters to be a key component of any overall anti-missile missile defense system should it be implemented. Thus, their conclusion is that the way in which possible anti-missile missile systems are currently designed to function, creates a built-in need for fallout shelters if the system is to achieve its purposes.

Second, there has been concern about the possible effects of the deployment of anti-missile missiles on the public's attitudes toward civil defense. On the one hand, such deployment might result in increased favorable attitudes toward civil defense. But, on the other hand, such deployment might result in increased unfavorable attitudes toward civil defense. Although the findings presented in this chapter cannot completely answer the question of how public opinion is or would be affected by the implementation of an anti-missile missile system, the data do provide insights as to what attitudes and perceptions about missiles and anti-missile missiles are held by individuals in the various public fallout shelter stages of adoption.

The anti-missile missile attitudes related to stage of public fallout shelter stage of adoption are discussed in the following four sections: (1) general perceptions of anti-missile missiles, (2) desirability of anti-missile missiles, (3) anti-missile missiles and local problems and (4) the strategic implications of missile defense.

Section One: Some General Perceptions of Anti-missile Missiles

Introduction

In this section attitudes pertaining to individuals' general perceptions of anti-missile missiles are related to stage of adoption of public fallout shelters. On the one hand, one might expect that individuals who perceive that an adequate anti-missile missile system already exists in the United States might perceive a lesser threat of nuclear fallout in the U.S. and thus be less far along in the fallout shelter adoption process. On the other hand, one might expect that individuals who perceive an adequate anti-missile missile system as already existing in the United States and also are aware of the anti-missile missile and fallout relationship are farther along in the adoption process. Attitudes related to these concerns that are examined in this section are: (1) U.S. has anti-missile missiles ready for action, (2) Russia has anti-missile missiles ready for action, (3) U.S. defense against enemy bombers is good, (4) U.S. defense against enemy submarines is good, (5) U.S. defense against enemy missiles is possible, (6) U.S. defense against enemy missiles is good, (7) future defense against enemy missiles is possible, (8) type of defense possible against enemy missiles and (9) how the anti-missile missiles will work.

U.S. has anti-missile missiles ready for action

To determine an individual's perception of whether the U.S. has anti-missile missiles ready for action each respondent was asked to read the following statement: "The kinds of weapons that could be used against enemy missiles are called anti-missile missiles," and then asked the following question: "As far as you know, does the United States already have these anti-missile missiles ready for action?" Table 8.1 shows the distribution of responses for each stage of adoption.

Using a regular chi-square statistical test a significant relationship was found between perception of whether the U.S. has anti-missile missiles ready for action and stage of adoption when those individuals who said "yes" were compared with the other respondents. Two thirds (65.7 percent) of the total respondents perceived that the U.S. does have anti-missile missiles ready for action, while almost one fourth (24.2 percent) of the total respondents answered "don't know" to the question. Approximately 10 percent more of the respondents in the latter three adoption stages perceived that the U.S. had anti-missile missiles ready for action than did respondents in the first two adoption stages.

Conclusion: Perception of whether the U.S. has anti-missile missiles ready for action is statistically related to stage of adoption. A larger proportion of respondents in the latter adoption stages perceived that the U.S. had anti-missile missiles ready for action, than did respondents in the first two adoption stages.

Table 8.1. As far as you know, does the U.S. already have anti-missile missiles ready for action?

U.S. has anti-missile missiles ready for action	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Yes	402	61.4	91	60.7	170	70.0	108	72.0	191	71.8	962	65.7
No	40	6.1	10	6.7	18	7.4	8	5.3	13	4.9	89	6.1
Not yet, but will	21	3.2	6	4.0	10	4.1	6	4.0	8	3.0	51	3.5
Don't know	189	28.9	43	28.7	44	18.1	27	18.0	51	19.2	354	24.2
No answer	3	0.5	0	0.0	1	0.4	1	0.7	3	1.1	8	0.5
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 14.1892. There is a significant relationship between the perception of whether the U.S. has anti-missile missiles ready for action and stage of adoption.

Russia has anti-missile missiles ready for action

To determine an individual's perception of whether Russia has anti-missile missiles ready for action each respondent was asked the following question: "Does Russia already have these anti-missile missiles ready for action?" Table 8.2 shows the distribution of responses for each stage of adoption.

Using a regular chi-square statistical test a significant relationship was found between perception of whether Russia has anti-missile missiles ready for action and stage of adoption, when those individuals who said "yes" were compared to the other respondents. Almost three fifths (59.0 percent) of the total respondents perceived that Russia did have anti-missile missiles ready for action, while nearly one third (30.9 percent) of the total respondents answered "don't know" to the question. Approximately 10 percent more of the respondents in the latter three adoption stages perceived that Russia had anti-missile missiles ready for action than did respondents in the first two adoption stages.

Conclusion: Perception of whether Russia has anti-missile missiles ready for action is significantly related to stage of adoption. A larger proportion of respondents in the latter stages of adoption perceived that Russia has anti-missile missiles ready for action, than did respondents in the first two adoption stages.

Table 8.2. Does Russia already have these anti-missile missiles ready for action?

Russia has anti-missile missiles ready for action	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Yes	354	54.0	79	52.7	155	63.8	100	66.7	176	66.2	864	59.0
No	52	7.9	15	10.0	13	5.3	7	4.7	17	6.4	104	7.1
Not yet, but will	15	2.3	9	6.0	5	2.1	2	1.3	6	2.3	37	2.5
Don't know	230	35.1	47	31.3	68	28.0	41	27.3	66	24.8	452	30.9
No answer	4	0.6	0	0.0	2	0.8	0	0.0	1	0.4	7	0.5
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49 at .01 level if $\geq$ 13.28. Calculated chi-square = 17.7864. There is a relationship between perception of whether Russia has anti-missile missiles ready for action and stage of adoption.

U.S. defense against enemy bombers is good

To determine an individual's perception of the effectiveness of U.S. defenses against nuclear attack by enemy bombers each respondent was asked: "How good are our defenses against enemy bombers?" Responses were chosen from a scale ranging from zero to ten, where zero stands for very bad and where ten stands for very good or almost perfect. Table 8.3 shows the distribution of responses for each stage of adoption, as well as three subtotal groups: (1) those who perceive our defenses against enemy bombers as bad, (2) those who perceive our defenses against enemy bombers as average, and (3) those who perceive our defenses against enemy bombers as good.

Using a median chi-square statistical test no significant relationship was found between perception of the effectiveness of U.S. defenses against enemy bombers and stage of adoption. Approximately 85 percent of the respondents in each adoption stage perceived U.S. defenses as being good against enemy bombers. However, percentages indicate that a larger proportion of individuals in the last two adoption stages perceived the U.S. to have good bomber defense, than did individuals in the first three adoption stages.

Conclusion: Perception of the effectiveness of U.S. defenses against enemy bombers is not statistically related to stage of adoption. However, a slightly larger proportion of respondents in the latter stages of adoption perceived that the U.S. has good bomber defense, than did respondents in the earlier adoption stages.

Table 8.3. How good are our defenses against enemy bombers?

U.S. defense against enemy bombers is....	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
0 Very bad	7	1.1	2	1.3	1	0.4	0	0.0	0	0.0	10	0.7
1	5	0.8	0	0.0	1	0.4	1	0.7	0	0.0	7	0.5
2	7	1.1	2	1.3	1	0.4	0	0.0	1	0.4	11	0.8
3	8	1.2	3	2.0	6	2.5	2	1.3	2	0.8	21	1.4
4	9	1.4	4	2.7	2	0.8	1	0.7	4	1.5	20	1.4
(Bad subtotal)	(36	5.5)	(11	7.3)	(11	4.5)	(4	2.7)	(7	2.6)	(69	4.7)
5 Average	42	6.4	13	8.7	17	7.0	11	7.3	16	6.0	99	6.8
6	33	5.0	6	4.0	12	4.9	6	4.0	15	5.6	72	4.9
7	61	9.3	8	5.3	27	11.1	14	9.3	18	6.8	128	8.7
8	116	17.7	39	26.0	49	20.2	34	22.7	63	23.7	301	20.6
9	112	17.1	25	16.7	44	18.1	28	18.7	49	18.4	258	17.6*
10 Very good	239	36.5	46	30.7	74	30.5	49	32.7	94	35.3	502	34.3
(Good subtotal)	(561	85.6)	(124	82.7)	(206	84.8)	(131	87.3)	(239	89.8)	(1261	86.1)
Don't know	3	0.5	2	1.3	4	1.6	3	2.0	0	0.0	12	2.4
No answer	13	2.0	0	0.0	5	2.1	1	0.7	4	1.5	23	1.6
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 3.1546. There is no significant relationship between perception of the effectiveness of U.S. defenses against enemy bombers and stage of adoption.

U.S. defense against enemy submarines is good

To determine an individual's perception of the effectiveness of U.S. defenses against nuclear attack by enemy submarines each respondent was asked: "How good are our defenses against enemy submarines?" Responses were chosen from a scale ranging from zero to ten, where zero stands for very bad and where ten stands for very good or almost perfect. Table 8.4 shows the distribution of responses for each stage of adoption as well as three subtotal groups: (1) those who perceive our defenses against enemy submarines as bad, (2) those who perceive our defenses against enemy submarines as average, and (3) those who perceive our defenses against enemy submarines as good.

Using a median chi-square statistical test a significant relationship was found between perception of the effectiveness of our defenses against enemy submarines and stage of adoption. Percentages indicate that individuals in the Information stage do not see U.S. defenses being as good as do respondents in the other adoption stages.

Conclusion: Perception of the effectiveness of U.S. defenses against enemy submarines is statistically related to stage of adoption. Percentages indicate a curvilinear relationship: a larger (and similar) proportion of respondents in the Unaware and Adoption stages perceived that the U.S. has good defenses against submarines, while a smaller proportion of respondents in the middle stages perceived the U.S. as having good submarine defenses.

Table 8.4. How good are our defenses against enemy submarines?

U.S. defense against enemy submarines is.....	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
0 Very bad	7	1.1	2	1.3	6	2.5	1	0.7	5	1.9	21	1.4
1	5	0.8	2	1.3	1	0.4	1	0.7	5	1.9	14	1.0
2	14	2.1	3	2.0	1	0.4	4	2.7	0	0.0	22	1.5
3	14	2.1	8	5.3	10	4.1	5	3.3	7	2.6	44	3.0
4	21	3.2	3	2.0	17	7.0	6	4.0	5	1.9	52	3.6
(Bad subtotal)	(61	9.3)	(18	12.0)	(35	14.4)	(17	11.3)	(22	8.3)	(153	10.5)
5 Average	68	10.4	22	14.7	31	12.8	23	15.3	35	13.2	179	12.2
6	40	6.1	9	6.0	22	9.1	9	6.0	23	8.6	103	7.0
7	79	12.1	17	11.3	28	11.5	19	12.7	33	12.4	176	12.0
8	118	18.0	32	21.3	50	20.6	27	18.0	49	18.4	276	18.9*
9	84	12.8	16	10.7	32	13.2	19	12.7	39	14.7	190	13.0
10 Very good	180	27.5	34	22.7	37	15.2	32	21.3	59	22.2	342	23.4
(Good subtotal)	(501	76.5)	(108	72.0)	(169	69.5)	(106	70.7)	(203	76.3)	(1087	74.2)
Don't know	13	2.0	2	1.3	3	1.2	3	2.0	1	0.4	22	1.5
No answer	12	1.8	0	0.0	5	2.1	1	0.7	5	1.9	23	1.6
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 9.5304. There is a significant relationship between perception of the effectiveness of U.S. defenses against enemy submarines and stage of adoption.

Defense against enemy missiles is possible

To determine an individual's perception of the possibility of any defense against enemy missiles each respondent was asked: "As far as you know, is there any defense possible against enemy missiles?" The distribution of responses for each stage of adoption is shown in Table 8.5.

Using a regular chi-square statistical test a significant relationship was found between the perception of the possibility of any defense against enemy missiles and stage of adoption, when individuals who said "yes" were compared to the other respondents. A larger proportion of respondents in the latter three adoption stages perceived that defense against enemy missiles is possible than did individuals in the first two stages.

Conclusion: Perception of the possibility of any defense against enemy missiles is statistically related to stage of adoption. A larger proportion of individuals in the latter stages of adoption perceived that such a defense is possible, than did individuals in the earlier adoption stages.

Table 8.5. As far as you know, is there any defense possible against enemy missiles?

Defense against enemy missiles is possible	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Yes	312	47.6	65	43.3	152	62.6	103	68.7	173	65.0	805	55.0
No	173	26.4	47	31.3	47	19.3	25	16.7	47	17.7	339	23.2
Don't know	167	25.5	37	24.7	44	18.1	22	14.7	46	17.3	316	21.6
No answer	3	0.5	1	0.7	0	0.0	0	0.0	0	0.0	4	0.3

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 49.2743. There is a significant relationship between perception of the possibility of defense against enemy missiles and stage of adoption.

U.S. defense against enemy missiles is good

To determine an individual's perception of the effectiveness of U.S. defense against nuclear attack by enemy missiles each respondent was asked: "How good are our defenses against enemy guided missiles?" Responses were chosen from a scale ranging from zero to ten, where zero stands for very bad and where ten stands for very good or almost perfect. Table 8.6 shows the distribution of responses for each stage of adoption as well as three subtotal groups: (1) those who perceive our defenses against enemy missiles as bad, (2) those who perceive our defenses against enemy missiles as average, and (3) those who perceive our defenses against enemy missiles as good.

Using a median chi-square statistical test no significant relationship was found between perception of the effectiveness of our defense against enemy missiles and stage of adoption. However, the relationship approaches significance at the .05 level. Thus, although nearly three fourths (72.3 percent) of the total respondents perceived our defenses against enemy missiles as good, a somewhat larger proportion of individuals in the last two adoption stages perceived a good defense than did the respondents in the earlier stages. The Information stage had the smallest proportion of respondents stating the U.S. had good defenses against enemy missiles.

Conclusion: Perception of the effectiveness of U.S. defenses against enemy missiles is not statistically related to stage of adoption. However, a slightly larger proportion of respondents in the last two adoption stages perceived the U.S. to have good defenses than did respondents in the earlier adoption stages.

Table 8.6. How good are our defenses against enemy guided missiles?

U.S. defense against enemy missiles.....	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
0 Very bad	20	3.1	3	2.0	9	3.7	1	0.7	1	0.4	34	2.3
1	14	2.1	0	0.0	3	1.2	2	1.3	2	0.8	21	1.4
2	17	2.6	5	3.3	9	3.7	2	1.3	8	3.0	41	2.8
3	22	3.4	5	3.3	7	2.9	9	6.0	5	1.9	48	3.3
4	17	2.6	6	4.0	9	3.7	7	4.7	10	3.8	49	3.3
(Bad subtotal)	(90	13.7)	(19	12.7)	(37	15.2)	(21	14.0)	(26	9.8)	(193	13.2)
5 Average	70	10.7	20	13.3	32	13.2	14	9.3	33	12.4	169	11.5
6	55	8.4	11	7.3	30	12.3	21	14.0	24	9.0	141	9.6
7	80	12.2	20	13.3	30	12.3	22	14.7	32	12.0	184	12.6
8	114	17.4	31	20.7	43	17.7	33	22.0	45	16.9	266	18.2*
9	80	12.2	14	9.3	32	13.2	12	8.0	46	17.3	184	12.6
10 Very good	145	22.1	31	20.7	30	12.3	23	15.3	54	20.3	283	19.3
(Good subtotal)	(474	72.4)	(107	71.3)	(165	67.9)	(111	74.0)	(201	75.6)	(1058	72.3)
Don't know	10	1.5	4	2.7	4	1.6	3	2.0	1	0.4	44	3.0
No answer	11	1.7	0	0.0	5	2.1	1	0.7	5	1.9		
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 8.9270. There is no significant relationship between perception of the effectiveness of U.S. defenses against enemy missiles and stage of adoption.

Future defense against enemy missiles is possible

Each individual who responded "no" or "don't know" to the question "Is there any possible defense against enemy missiles?" (See Table 8.5 where a total of 655 individuals responded "no" or "don't know") was asked the following question in order to determine his perception of the possibility of future defenses against enemy missiles: "Do you think any defense against enemy missiles will become possible during the next five years or so?" Table 8.7 shows the distribution of responses for each stage of adoption. The percentages in the table are based on the 655 respondents who were asked the question.

Using a regular chi-square statistical test no significant relationship was found between perception of the possibility of future defense against enemy missiles and stage of adoption. There are some slight percentage differences among the stages, but there is no clear linear or curvilinear percentage trend relationship.

Conclusion: Perception of the possibility of future defense against enemy missiles is not statistically related to stage of adoption. There is no percentage trend relationship although there are some percentage differences among the stages.

Table 8.7. (If NO or DON'T KNOW to question 40--see Table 8.5). Do you think any defense against enemy missiles will become possible during the next five years or so?

Future defense against enemy missiles is possible	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 340	No.	% of 84	No.	% of 91	No.	% of 47	No.	% of 93	No.	% of 655
Yes	221	65.0	64	76.2	63	69.2	33	70.2	64	68.8	445	67.9
No	50	14.7	12	14.3	6	6.6	5	10.6	15	16.1	88	13.4
Don't know	68	20.0	8	9.5	22	24.2	9	19.2	14	15.1	121	18.5
No answer	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Number and % of Total	340	51.9	84	12.8	91	13.9	47	7.2	93	14.2	655	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 3.3422. There is no significant relationship between perception of the possibility of future defense against enemy missiles and stage of adoption.

Missiles as type of U.S. defense against enemy missiles

Each individual who responded that defense against missiles was possible now (Table 8.5) or in the future (Table 8.7) was asked the following question to determine his perception of the type of possible defense against enemy missiles: "What kind of defense (is there) (will there be) against enemy missiles?" The distribution of responses for each stage of adoption is shown in Table 8.8.

Using a regular chi-square statistical test a significant relationship was found between perception of the type of possible defense against enemy missiles and stage of adoption. A larger proportion of respondents in the last three stages of adoption stated that missiles would be the kind of defense available against enemy missiles, than did individuals in the first three stages of adoption.

Conclusion: Perception of the type of possible defense against enemy missiles is statistically related to stage of adoption. A larger proportion of respondents in the latter stages of adoption perceived that missiles would be the future U.S. defense against enemy missiles.

Table 8.8. (If YES to Question 40--see Table 8.5--or Question 40-A--see Table 8.7). What kind of defense (is there) (will there be) against enemy missiles?

Type of defense against enemy missiles	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 533	No.	% of 129	No.	% of 215	No.	% of 136	No.	% of 236	No.	% of 1249
Missiles	215	40.3	63	48.8	128	59.5	77	56.6	131	55.5	614	49.2
Other	90	16.9	21	16.3	34	15.8	26	19.1	43	18.2	214	17.1
Don't know	228	42.8	44	34.1	53	24.7	32	25.4	60	25.4	417	33.4
No answer	0	0.0	1	0.8	0	0.0	1	0.7	2	0.9	4	0.3
Number and % of Total	533	42.7	129	10.3	215	17.2	136	10.9	236	18.9	1249	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 30.6992. There is a significant relationship between perception of the type of possible defense against enemy missiles and stage of adoption.

How the anti-missile missiles will work

Each individual who perceived missiles as a possible type of defense against enemy missiles (see Table 8.8) was asked this additional question to determine his perception of how the anti-missile missiles will work: "Do you happen to know how these anti-missile missiles (would) work?" Table 8.9 shows the distribution of responses for each stage of adoption.

Using a regular chi-square statistical test a significant relationship was found between perception of how anti-missile missiles would work and stage of adoption. A larger proportion of respondents in the last two adoption stages stated that U.S. anti-missile missiles would have nuclear warheads, than did respondents in the earlier adoption stages.

Conclusion: Perception of how the anti-missile missiles will work is statistically related to stage of adoption. A larger proportion of respondents in the last two stages of adoption stated that U.S. anti-missile missiles would have nuclear warheads, than did individuals in the first three adoption stages.

Table 8.9. (If "Missiles" to question 40-B--see Table 8.8): Do you know how these anti-missile missiles (would) work?

How the anti-missile missiles will work	Stage of Adoption											
	(1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 215	No.	% of 63	No.	% of 128	No.	% of 77	No.	% of 131	No.	% of 614
Nuclear warhead	19	8.8	5	7.9	10	7.8	16	20.8	21	16.0	71	11.6
Others	74	34.4	22	34.9	61	47.7	29	37.7	57	43.5	243	39.6
Don't know	122	56.7	35	55.6	54	42.2	32	41.5	50	38.2	293	47.7
No answer	0	0.0	1	1.6	3	2.3	0	0.0	3	2.3	7	1.1
Number and % of Total	215	35.0	63	10.3	128	20.9	77	12.5	131	21.3	614	

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level is $\geq$ 13.28. Calculated chi-square = 13.1710. There is a significant relationship between perception of how the anti-missile missiles will work and stage of adoption.

Section Two: Desirability of Anti-missile Missiles

Introduction

In this section attitudes pertaining to individuals' perceptions of the desirability of anti-missile missiles are related to stage of adoption of public fallout shelters. As stated earlier, there is interest in knowing how the public's attitudes toward deployment of anti-missile missiles might affect public attitudes toward the Civil Defense program. In this section findings that relate individuals' attitudes toward some aspects of anti-missile missile deployment to their stage of adoption are presented. Such analysis may indicate some trends in the relationships between attitudes toward anti-missile missiles and adoption of a civil defense innovation.

The following attitudes are examined in this section: (1) the desirability of deploying anti-missile missiles around all larger cities in the U.S., (2) the desirability of deploying anti-missile missiles around the local city, (3) the desirability of living in a defended city, (4) personal feelings if living in a city defended by anti-missile missiles (seven statements), and (5) personal feelings if living in a city not defended by anti-missile missiles (seven statements).

Desirability of deploying anti-missile missiles around all larger cities

During the interview each respondent was asked twice his perception of the desirability of deploying anti-missile missiles around all large cities in America: once early in the interview before anti-missile missiles were discussed in detail and second at the end of the interview after considerable discussion of anti-missile missiles. Tables 8.10 and 8.11 present the responses obtained in these two situations. To determine an individual's perception of the desirability of deploying anti-missile missiles around all larger cities in America each respondent was asked the following question early in the interview: "How desirable is it to put anti-missile missiles around all larger cities in America?" Responses were chosen from a scale ranging from plus three to minus three, where plus three (+3) stands for something that is very desirable, where minus three (-3) stands for something that is extremely undesirable, and where zero stands for something that one doesn't particularly care about one way or another. Table 8.10 shows the distribution of responses for each stage of adoption, as well as three subtotal groups: (1) those perceiving the situation (anti-missile missiles deployed around all larger cities) as undesirable, (2) those who don't care, and (3) those who perceive the situation as desirable.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability of deploying anti-missile missiles around all larger cities in America and stage of adoption. Approximately 85 percent of the total respondents perceived this situation as desirable. However, percentages indicate that a larger proportion of individuals in the last two stages of adoption perceived the situation as desirable than did individuals in the first three stages of adoption.

Conclusion: Perception of the desirability of deploying anti-missile missiles around all larger cities in America is not statistically related to stage of adoption. However, a larger proportion of the individuals in the latter stages of adoption perceived the situation as desirable than did respondents in the earlier stages.

Table 8.10. How desirable is it to put anti-missile missiles around all larger cities in America?

Desirability of deploying anti-missile missiles around all larger cities	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	40	6.1	12	8.0	20	8.2	5	3.3	7	2.6	84	5.7
Undesirable -2	11	1.7	2	1.3	3	1.2	2	1.3	1	0.4	19	1.3
Undesirable -1	12	1.8	3	2.0	5	2.1	3	2.0	2	0.8	25	1.7
(Undesirable subtotal)	(63	9.6)	(17	11.3)	(28	11.5)	(10	6.7)	(10	3.8)	(128	8.7)
Don't care 0	15	2.3	3	2.0	7	2.9	2	1.3	6	2.3	33	2.3
Desirable 1	41	6.3	15	10.0	30	12.3	16	10.7	26	9.8	128	8.7
Desirable 2	108	16.5	28	18.7	45	18.5	32	21.3	41	15.4	254	17.3
Desirable 3 (Highly)	410	62.6	86	57.3	127	52.3	87	58.0	180	67.7	890	60.8*
(Desirable subtotal)	(559	85.3)	(129	86.0)	(202	83.1)	(135	90.0)	(247	92.9)	(1272	86.9)
Don't know	6	0.9	1	0.7	4	1.6	1	0.7	2	0.8	14	1.0
No answer	12	1.8	0	0.0	2	0.8	2	1.3	1	0.4	17	1.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 6.9276. There is no significant relationship between perception of the desirability of deploying anti-missile missiles around all larger cities and stage of adoption.

Desirability of deploying anti-missile missiles around all larger cities

At the end of the interview, that is, after responding to a number of questions about anti-missile missiles, each of the respondents was asked the question: "With some of the information that you now have, how desirable is it to put anti-missile missiles around our cities?" This question is, of course, a repeat of the question presented in Table 8.10. Table 8.11 shows the distribution of responses to this repeated question for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between this "new" perception of the desirability of deploying anti-missile missiles around all larger cities in America and stage of adoption. There is a slight decrease in the proportion of total respondents who perceive this situation as desirable (from 86.9 percent to 84.5 percent). Each adoption stage had a slight percentage decrease. Percentages still indicate, however, that a larger proportion of individuals in the last two stages of adoption perceived the situation as desirable than did respondents in the first three stages. There is a slight curvilinear relationship, as the Information stage had the smallest proportion of respondents perceiving this situation as desirable.

Conclusion: The "new" perception of the desirability of deploying anti-missile missiles around all larger cities in America is statistically related to stage of adoption. A larger proportion of the individuals in the latter two stages of adoption perceived the situation as desirable than did respondents in the earlier stages, and the Information stage had the smallest proportion of respondents perceiving the situation as desirable.

Table 8.11. With some of the information that you now have, how desirable is it to put anti-missile missiles around our cities?

Desirability of deploying anti-missile missiles around all larger cities	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	33	5.0	7	4.7	19	7.8	7	4.7	3	1.1	69	4.7
Undesirable -2	14	2.1	1	0.7	12	4.9	3	2.0	4	1.5	34	2.3
Undesirable -1	11	1.7	6	4.0	7	2.9	2	1.3	2	0.8	28	1.9
(Undesirable subtotal)	(58	8.9)	(14	9.3)	(38	15.6)	(12	8.0)	(9	3.4)	(131	8.9)
Don't care 0	30	4.6	6	4.0	9	3.7	3	2.0	8	3.0	56	3.8
Desirable 1	73	11.1	16	10.7	37	15.2	26	17.3	29	10.9	181	12.4
Desirable 2	122	18.6	35	23.3	57	23.5	31	20.7	56	21.1	301	20.6
Desirable 3 (Highly)	351	53.6	76	50.7	97	39.9	73	48.7	158	59.4	755	51.6*
(Desirable subtotal)	(546	83.4)	(127	84.7)	(191	78.6)	(130	86.7)	(243	91.4)	(1237	84.5)
Don't know	6	0.9	2	1.3	2	0.8	3	2.0	1	0.4	14	1.0
No answer	15	2.3	1	0.7	3	1.2	2	1.3	5	1.9	26	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 20.3260. There is a significant relationship between the "new" perception of the desirability of deploying anti-missile missiles around all larger cities and stage of adoption.

Desirability of deploying anti-missile missiles around the local city

During the interview each respondent was twice asked his perception of the desirability of deploying anti-missile missiles around his local city: once early in the interview before anti-missile missiles were discussed in detail and second at the end of the interview after considerable discussion of anti-missile missiles. Tables 8.12 and 8.13 present the responses obtained in these two situations. To determine an individual's perception of the desirability of putting anti-missile missiles around his local city each respondent was asked: "How desirable is it to put anti-missile missiles around your city (the city, or cities, nearest you)?" Responses were chosen from a scale ranging from plus three to minus three, where plus three (+3) stands for something that is very desirable, where minus three (-3) stands for something that is extremely undesirable, and where zero stands for something that one doesn't particularly care about one way or the other. Table 8.12 shows the distribution of responses for each stage of adoption as well as three subtotal groups: (1) those perceiving the situation (anti-missile missiles deployed around their city) as undesirable, (2) those who don't care, and (3) those who perceived the situation as desirable.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability of putting anti-missile missiles around the local city and stage of adoption. However, the test approached significance at the .05 level. Percentages indicate that a larger proportion of respondents in the latter two adoption stages perceived this situation as desirable than did individuals in the earlier stages.

Conclusion: Perception of the desirability of putting anti-missile missiles around the local city is not statistically related to stage of adoption. However, a larger proportion of individuals in the latter two stages of adoption perceived the situation to be desirable than did respondents in the earlier stages.

Table 8.12. How desirable is it to put anti-missile missiles around your city (the city, or cities, nearest you)?

Desirability of deploying anti-missile missiles around the local city	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	54	8.2	9	6.0	10	4.1	4	2.7	10	3.8	87	5.9
Undesirable -2	18	2.7	2	1.3	7	2.9	3	2.0	6	2.3	36	2.5
Undesirable -1	16	2.4	6	4.0	12	4.9	7	4.7	3	1.1	44	3.0
(Undesirable subtotal)	(88	13.4)	(17	11.3)	(29	11.9)	(14	9.3)	(19	7.1)	(167	11.4)
Don't care 0	30	4.6	11	7.3	14	5.8	4	2.7	9	3.4	68	4.6
Desirable 1	83	12.7	15	10.0	39	16.0	26	17.3	41	15.4	204	13.9
Desirable 2	99	15.1	22	14.7	41	16.9	26	17.3	44	16.5	232	15.8
Desirable 3 (Highly)	298	45.5	72	48.0	93	38.3	73	48.7	143	53.8	679	46.4*
(Desirable subtotal)	(480	73.3)	(109	72.7)	(173	71.2)	(125	83.3)	(228	85.7)	(1115	76.2)
Don't know	4	0.6	1	0.7	4	1.6	0	0.0	2	0.8	11	0.8
No answer	13	2.0	0	0.0	3	1.2	2	1.3	1	0.4	19	1.3
Does not apply	40	6.1	12	8.0	20	8.2	5	3.3	7	2.6	84	5.7
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 8.3734. There is no significant relationship between perception of the desirability of deploying anti-missile missiles around the local city and stage of adoption.

Desirability of deploying anti-missile missiles around the local city

At the end of the interview, that is, after having responded to a series of questions concerning anti-missile missiles, each respondent was again asked the question discussed in the previous table: "How desirable is it to put anti-missile missiles around your city (city, or cities, nearest you)?" Table 8.13 shows the distribution of responses by stage of adoption for this repeat question.

Using a median chi-square statistical test a significant relationship was found between this "new" perception of the desirability of putting anti-missile missiles around the local city and stage of adoption. There is an increase in the proportion of total respondents who perceive this situation as undesirable (from 11.4 percent to 18.9 percent). Each adoption stage had a percentage increase in the number of individuals perceiving the situation as undesirable. A larger proportion of individuals in the latter stages perceived the situation as desirable than did respondents in the earlier two stages. The largest change was in the Information stage which showed a 17 percent increase in the proportion of individuals who perceived the situation as undesirable (from 11.9 percent to 29.2 percent).

Conclusion: The "new" perception of the desirability of putting anti-missile missiles around the local city is statistically related to stage of adoption. A larger proportion of respondents in the latter two stages of adoption perceived the situation as desirable than did respondents in the three earlier stages.

Table 8.13. How desirable is it to put anti-missile missiles around your city (city, or cities, nearest you)?

Desirability of deploying anti-missile missiles around the local city	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	82	12.5	12	8.0	36	14.8	9	6.0	18	6.8	157	10.7
Undesirable -2	21	3.2	3	2.0	13	5.3	6	4.0	4	1.5	47	3.2
Undesirable -1	26	4.0	9	6.0	22	9.1	5	3.3	11	4.1	73	5.0
(Undesirable subtotal)	(129	19.7)	(24	16.0)	(71	29.2)	(20	13.3)	(33	12.4)	(277	18.9)
Don't care 0	48	7.3	11	7.3	15	6.2	11	7.3	13	4.9	98	6.7
Desirable 1	94	14.4	18	12.0	47	19.3	32	21.3	47	17.7	238	16.3
Desirable 2	94	14.4	29	19.3	43	17.7	26	17.3	45	16.9	237	16.2*
Desirable 3 (Highly)	269	41.1	66	44.0	61	25.1	58	38.7	122	45.9	576	39.3
(Desirable subtotal)	(457	69.8)	(113	75.3)	(151	62.1)	(116	77.3)	(214	80.5)	(1051	71.8)
Don't know	7	1.1	1	0.7	1	0.4	2	1.3	1	0.4	12	0.8
No answer	14	2.1	1	0.7	5	2.1	1	0.7	5	1.9	26	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1454	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49. at .01 level if $\geq$ 13.28. Calculated chi-square = 25.2348. There is a significant relationship between the new perception of the desirability of deploying anti-missile missiles around the local city and stage of adoption.

Desirability of living in a city defended by anti-missile missiles

To determine an individual's perception of the desirability of living in a city defended by anti-missile missiles each respondent was asked: "Not all cities might be defended by anti-missile missiles. Would you rather live in a city that does not have any anti-missile missiles around it?" Table 8.14 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of the desirability of living in a defended city and stage of adoption. Percentages indicate a curvilinear relationship in that a larger proportion of the individuals in the first two and last two adoption stages desired to live in a defended rather than an undefended city, than did individuals in the Information stage. The Adoption stage had the largest proportion of respondents desiring to live in a defended city.

Conclusion: Perception of the desirability of living in a defended city is statistically related to stage of adoption. A larger proportion of respondents in the first two and last two adoption stages desired to live in a defended city than did individuals in the Information stage.

Table 8.14. Not all cities might be defended by anti-missile missiles. Would you rather live in a city, or near one, that is defended by anti-missile missiles or in a city that does not have any such anti-missile missiles around it?

Desirability of living in a city defended or undefended by anti-missile missiles	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
In defended city	439	67.0	102	68.0	117	48.1	94	62.7	204	76.4	956	65.3*
No difference	86	13.1	26	17.3	67	27.6	28	18.7	28	10.5	235	16.1
In undefended city	78	11.9	15	10.0	46	18.9	18	12.0	27	10.1	184	12.6
Don't know	36	5.5	6	4.0	10	4.1	8	5.3	5	1.9	65	4.4
No answer	16	2.4	1	0.7	3	1.2	2	1.3	2	0.8	24	1.6
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 24.9874. There is a significant relationship between perception of the desirability of living in a defended city and stage of adoption.

Personal feelings if living in a city defended by anti-missile missiles

A series of seven statements was asked each respondent to determine his feeling about living in or near a city that has anti-missile missiles. These seven statements are presented and discussed in Tables 8.15 - 8.21.

Personal feelings if living in a city defended by anti-missile missiles: Feeling guilty

To determine an individual's perception of his feeling guilty if living in a city defended by anti-missile missiles each individual was asked if he agreed or disagreed with the following statement: "I would feel guilty to be in a defended city when other Americans are not defended as well." The distribution of responses for each stage of adoption, as well as three subtotal groups; (1) those who agreed they would feel guilty, (2) those undecided, and (3) those who disagreed, is shown in Table 8.15.

Using a median chi-square statistical test a significant relationship was found between an individual's perception of feeling guilty and stage of adoption. Percentages indicate that a larger proportion of individuals aware of public fallout shelters (Stages 2-5) would not feel guilty, compared to the Unaware stage.

Conclusion: An individual's perception of feeling guilty when living in a city defended by anti-missile missiles when other Americans aren't defended is statistically related to stage of adoption. Individuals aware of public fallout shelters are less likely to feel guilty about living in a defended city when other Americans are not defended well than are individuals unaware of public fallout shelters.

Table 8.15. I would feel guilty to be in a defended city when other Americans are not defended as well.

Would feel guilty	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	24	3.7	6	4.0	6	2.5	4	2.7	8	3.0	48	3.3
Agree	222	33.9	39	26.0	54	22.2	29	19.3	73	27.3	417	28.5
(Agree subtotal)	(246	37.6)	(45	30.0)	(60	24.7)	(33	22.0)	(81	30.5)	(465	31.8)
Undecided	63	9.6	7	4.7	25	10.3	7	4.7	13	4.9	115	7.9
Disagree	310	47.3	91	60.7	137	56.4	97	64.7	152	56.9	787	53.8*
Strongly disagree	23	3.5	7	4.7	16	6.6	12	8.0	19	7.1	77	5.3
(Disagree subtotal)	(333	50.8)	(98	65.3)	(153	63.0)	(109	72.7)	(171	64.3)	(864	59.0)
No answer	13	2.0	0	0.0	5	2.1	1	0.7	1	0.4	20	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 24.0354. There is a significant relationship between perception of feeling guilty if living in a city defended by anti-missile missiles and stage of adoption.

Personal feelings if living in a city defended by anti-missile missiles: Desire to move

To determine an individual's perception of his desire to move from a city defended by anti-missile missiles each individual was asked if he agreed or disagreed with the following statement: "I would feel that I want to move out of the city." Table 8.16 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of the desire to move out of the city and stage of adoption. However, the test approached significance at the .05 level. Percentage trends indicate that a larger proportion of individuals in the Adoption stage disagreed with the statement than did respondents in the four earlier stages. The latter stages of adoption have proportionally fewer individuals who are undecided. The Unaware stage had the largest proportion of respondents indicating they would desire to move out of a city defended by anti-missile missiles.

Conclusion: Perception of the desire to move out of a city defended by anti-missile missiles is not statistically related to stage of adoption. However, a larger proportion of individuals in the Adoption stage disagreed that they would want to move out of the city than did respondents in any of the earlier stages.

Table 8.16. I would feel that I want to move out of the city.

Would desire to move	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	10	1.5	1	0.7	2	0.8	2	1.3	3	1.1	18	1.2
Agree	78	11.9	11	7.3	24	9.9	13	8.7	11	4.1	137	9.4
(Agree subtotal)	(88	13.4)	(12	8.0)	(26	10.7)	(15	10.0)	(14	5.3)	(155	10.6)
Undecided	63	9.6	13	8.7	17	7.0	9	6.0	10	3.7	112	7.7
Disagree	444	67.8	109	72.7	173	71.2	109	72.7	211	79.0	1046	71.4*
Strongly disagree	47	7.2	16	10.7	22	9.1	16	10.7	30	11.2	131	8.9
(Disagree subtotal)	(491	75.0)	(125	83.3)	(195	80.2)	(125	83.3)	(241	90.6)	(1177	80.4)
No answer	13	2.0	0	0.0	5	2.1	1	0.7	1	0.4	20	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 7.8300. There is no significant relationship between perception of the desire to move out of a city defended by anti-missile missiles and stage of adoption.

Personal feelings if living in a city defended by anti-missile missiles: Feeling lucky

To determine an individual's perception of feeling lucky if living in a city defended by anti-missile missiles each individual was asked if he agreed or disagreed with the following statement: "I would feel lucky that my city is better protected than some other city." Table 8.17 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of feeling lucky if living in a city defended by anti-missile missiles and stage of adoption. However, the test approached significance at the .05 level. Percentage trends indicate a curvilinear relationship: a larger proportion of individuals in the first two and last two adoption stages agreed with the statement than did respondents in the Information stage. A larger proportion of the Adoption stage agreed with the statement than any other stage.

Conclusion: Perception of feeling lucky if living in a city defended by anti-missile missiles is not statistically related to stage of adoption. However, a larger proportion of the respondents in the first two and last two adoption stages agreed they would feel lucky, while the Information stage had the smallest proportion of respondents stating they would feel lucky.

Table 8.17. I would feel lucky that my city is better protected than some other city.

Would feel lucky	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	75	11.5	24	16.0	20	8.2	19	12.7	41	15.4	179	12.2
Agree	407	62.1	90	60.0	130	53.5	88	58.7	168	62.9	883	60.3*
(Agree subtotal)	(482	73.6)	(114	76.0)	(150	61.7)	(107	71.3)	(209	78.6)	(1062	72.5)
Undecided	49	7.5	10	6.7	22	9.1	12	8.0	21	7.9	114	7.8
Disagree	106	16.2	25	16.7	64	26.3	26	17.3	33	12.4	254	17.3
Strongly disagree	6	0.9	1	0.7	2	0.8	4	2.7	2	0.7	15	1.0
(Disagree subtotal)	(112	17.1)	(26	17.3)	(66	27.2)	(30	20.0)	(35	13.2)	(269	18.4)
No answer	12	1.8	0	0.0	5	2.1	1	0.7	1	0.4	19	1.3
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 8.7764. There is no significant relationship between perception of feeling lucky if living in a city defended by anti-missile missiles and stage of adoption.

Personal feelings if living in a city defended by anti-missile missiles: Feeling worried

To determine an individual's perception of feeling worried if living in a city defended by anti-missile missiles each individual was asked if he agreed or disagreed with the following statement: "I would feel worried living in a defended city when other cities are not defended by missiles, because this would mean that my city will surely be attacked in the event of war." Table 8.18 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of feeling worried if living in a city defended by anti-missile missiles and stage of adoption. Percentages indicate a negative relationship: A larger proportion of individuals in the latter stages of adoption indicated they would not feel worried, while a larger proportion of respondents in the earlier stages indicated they would worry about their city being attacked in time of war.

Conclusion: Perception of feeling worried if living in a city defended by anti-missile missiles is statistically related to stage of adoption. A larger proportion of individuals in the latter stages of adoption indicated they would not worry about their city being attacked in time of war than did individuals in the earlier stages.

Table 8.18. I would feel worried living in a defended city when other cities are not defended by missiles, because this will mean that my city will surely be attacked in the event of a war.

Would feel worried	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	27	4.1	8	5.3	4	1.6	5	3.3	6	2.2	50	3.4
Agree	192	29.3	39	26.0	63	25.9	35	23.3	51	19.1	380	26.0
(Agree subtotal)	(219	33.4)	(47	31.3)	(67	27.6)	(40	26.7)	(57	21.4)	(430	29.4)
Undecided	75	11.5	11	7.3	24	9.9	9	6.0	19	7.1	138	9.4
Disagree	322	49.2	83	55.3	139	57.2	89	59.3	167	62.5	800	54.6*
Strongly disagree	27	4.1	9	6.0	8	3.3	11	7.3	22	8.2	77	5.3
(Disagree subtotal)	(349	53.3)	(92	61.3)	(147	60.5)	(100	66.7)	(189	71.1)	(877	59.9)
No answer	12	1.8	0	0.0	5	2.1	1	0.7	1	0.4	19	1.3
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 19.2092. There is a significant relationship between perception of feeling worried if living in a city defended by anti-missile missiles and stage of adoption.

Personal feelings if living in a city defended by anti-missile missiles: Feeling angry

To determine an individual's perception of feeling angry if living in a city defended by anti-missile missiles each individual was asked if he agreed or disagreed with the following statement: "I would feel angry because I am opposed to having anti-missile missiles around here." Table 8.19 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of feeling angry if living in a city defended by anti-missile missiles and stage of adoption. Percentages indicate, however, that a larger proportion of individuals in the adoption stage would not feel angry than any of the other stages, whereas the Unaware stage had the smallest proportion of respondents stating they would not feel angry.

Conclusion: Perception of feeling angry if living in a city defended by anti-missile missiles is not statistically related to stage of adoption. However, a larger proportion of individuals in the last two stages of adoption indicated they would not feel angry than did individuals in the first three adoption stages.

Table 8.19. I would feel angry, because I am opposed to having anti-missile missiles around here.

Would feel angry	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	4	0.6	1	0.7	0	0.0	1	0.7	0	0.0	6	0.4
Agree	39	6.0	7	4.7	13	5.3	7	4.7	5	1.9	71	4.8
(Agree subtotal)	(43	6.6)	(8	5.3)	(13	5.3)	(8	5.3)	(5	1.9)	(77	5.3)
Undecided	52	7.9	9	6.0	18	7.4	6	4.0	8	3.0	93	6.4
Disagree	468	71.5	112	74.7	170	70.0	118	78.7	198	74.4	1066	72.8*
Strongly disagree	80	12.2	21	14.0	37	15.2	17	11.3	53	19.9	208	14.2
(Disagree subtotal)	(548	83.7)	(133	88.7)	(207	85.2)	(135	90.0)	(251	94.4)	(1274	87.0)
No answer	12	1.8	0	0.0	5	2.1	1	0.7	2	0.8	20	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 5.3800. There is no significant relationship between perception of feeling angry if in a city defended by anti-missile missiles and stage of adoption.

Personal feelings if living in a city defended by anti-missile missiles: Feeling I can do nothing about the missiles

To determine an individual's perception that he can or can't do anything about the missiles if living in a city defended by anti-missile missiles each individual was asked if he agreed or disagreed with the following statement: "I would feel that I can do nothing about the missiles." Table 8.20 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception that a person can do nothing about the missiles and stage of adoption. Percentages indicate, however, that a larger proportion of respondents in the Adoption stage perceive that they can personally do something about the missiles, whereas the Unaware stage has the smallest proportion of respondents indicating they can do something about the missiles.

Conclusion: Perception that a person can do nothing about the missiles is not statistically related to stage of adoption. However, a slightly larger proportion of individuals in the Adoption stage perceived they could do something about missiles than did individuals in the earlier adoption stages.

Table 8.20. I would feel that I can do nothing about the missiles.

Would feel I can do nothing about missiles	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	35	5.3	10	6.7	11	4.5	8	5.3	14	5.3	78	5.3
Agree	433	66.1	98	65.3	157	64.6	95	63.3	155	58.3	938	64.0*
(Agree subtotal)	(468	71.5)	(108	72.0)	(168	69.1)	(103	68.7)	(169	63.5)	(1016	69.4)
Undecided	63	9.6	11	7.3	16	6.6	13	8.7	19	7.1	122	8.3
Disagree	109	16.6	26	17.3	49	20.2	30	20.0	71	26.7	235	16.5
Strongly disagree	3	0.5	5	3.3	5	2.1	3	2.0	6	2.3	22	1.5
(Disagree subtotal)	(112	17.1)	(31	20.7)	(54	22.2)	(33	22.0)	(77	28.9)	(307	21.0)
No answer	12	1.8	0	0.0	5	2.1	1	0.7	1	0.4	19	1.3
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 2.9860. There is no significant relationship between perception of feeling that a person can do nothing about missiles and stage of adoption.

Personal feelings if living in a city defended by anti-missile missiles: Feeling more secure

To determine an individual's perception of feeling more secure if living in a city defended by anti-missile missiles each individual was asked to agree or disagree with the following statement: "I would feel more secure than if I were living in a city that is not protected with anti-missile missiles." Table 8.21 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of feeling more secure if living in a city defended by anti-missile missiles and stage of adoption. Percentages indicate a curvilinear relationship: a larger proportion of individuals in the first two and last two adoption stages said they would feel secure than did individuals in the Information stage. The Adoption stage had the largest percentage of respondents indicating they would feel more secure if they were living in a city protected by anti-missile missiles.

Conclusion: Perception of feeling more secure if living in a city defended by anti-missile missiles is statistically related to stage of adoption. The first two and last two adoption stages contain a larger proportion of individuals who agree that they would feel more secure if living in a defended city rather than an undefended city, than did individuals in the Information stage.

Table 8.21. I would feel more secure than if I were living in a city that is not protected with anti-missile missiles.

Would feel more secure	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	53	8.1	20	13.3	12	4.9	9	6.0	17	6.4	111	7.6
Agree	329	50.2	68	45.3	93	38.3	76	50.7	162	60.9	728	49.7*
(Agree subtotal)	(382	58.3)	(88	58.7)	(105	43.2)	(85	56.7)	(179	67.3)	(839	57.3)
Undecided	65	9.9	15	10.0	30	12.3	17	11.3	20	7.5	147	10.0
Disagree	181	27.6	44	29.3	95	39.1	40	26.7	56	21.1	416	28.4
Strongly disagree	15	2.3	3	2.0	8	3.3	7	4.7	9	3.4	42	2.9
(Disagree subtotal)	(196	29.9)	(47	31.3)	(103	42.4)	(47	31.3)	(65	24.4)	(458	31.3)
No answer	12	1.8	0	0.0	5	2.1	1	0.7	2	0.8	20	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 21.3332. There is a significant relationship between perception of feeling more secure if in a city defended by anti-missile missiles and stage of adoption.

Personal feelings if living in a city not defended by anti-missile missiles

A series of seven statements was asked each respondent to determine his feelings about living in a city that does not have anti-missile missile defenses when some other cities have them. These seven statements are presented and discussed in Tables 8.22 - 8.28.

Personal feelings if living in an undefended city: Feeling it is unfair

To determine an individual's perception of the unfairness of living in a city that does not have anti-missile missiles when some other cities have them each individual was asked if he agreed or disagreed with the following statement: "I would feel that is unfair that some cities are defended when my city is not." Table 8.22 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of the unfairness of living in an undefended city and stage of adoption. Percentages indicate that a larger proportion of individuals not aware of public fallout shelters (stage 1) feel it is unfair to defend other cities with anti-missile missiles when their city was not so defended than do individuals aware of public fallout shelters (stages 2-5). Respondents in the Information and Evaluation stages more frequently disagreed with the statement than did respondents in any other stage.

Conclusion: Perception of the unfairness of living in an undefended city is statistically related to stage of adoption. Individuals aware of public fallout shelters are less likely to feel that it is unfair to defend some cities with anti-missile missiles when their own city is not defended, than are individuals unaware of public fallout shelters.

Table 8.22. I would feel that it is unfair that some cities are defended when my city is not.

Would feel it is unfair	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	34	5.2	14	9.3	8	3.3	4	2.7	16	6.0	76	5.2
Agree	302	46.1	52	34.7	61	25.1	39	26.0	93	35.0	547	37.4
(Agree subtotal)	(336	51.3)	(66	44.0)	(69	28.4)	(43	28.7)	(109	41.0)	(623	42.6)
Undecided	46	7.0	8	5.3	18	7.4	12	8.0	16	6.0	100	6.8*
Disagree	253	38.6	71	47.3	144	59.3	91	60.7	132	49.6	691	47.2*
Strongly disagree	8	1.2	5	3.3	8	3.3	3	2.0	8	3.0	32	2.2
(Disagree subtotal)	(261	39.8)	(76	50.7)	(152	62.6)	(94	62.7)	(140	52.6)	(723	49.4)
No answer	12	1.8	0	0.0	4	1.6	1	0.7	1	0.4	18	1.2
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median falls between the "undecided" and "disagree" categories.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, .01 level if $\geq$ 13.28. Calculated chi-square = 51.5316. There is a significant relationship between perception of feeling it is unfair if living in an undefended city and stage of adoption.

Personal feelings if living in an undefended city: Desire to move to a defended city

To determine an individual's perception of the desirability of moving to a defended city if living in a city that does not have anti-missile missiles each individual was asked if he agreed or disagreed with the following statement: "I would feel that I want to move to a defended city." Table 8.23 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of moving to a defended city and stage of adoption. Percentages indicate a curvilinear relationship: a larger proportion of individuals in the first two and last two stages of adoption stated they would want to move to a defended city, than did individuals in the Information stage. Also, a larger proportion of individuals in the first two adoption stages stated they would want to move to a defended city than did the individuals in the last two adoption stages.

Conclusion: Perception of the desirability of moving to a defended city if living in an undefended city is statistically related to stage of adoption. A larger proportion of individuals in the first two and last two stages of adoption stated they would want to move to a defended city than did individuals in the Information stage.

Table 8.23. I would feel that I want to move to a defended city.

Would desire to move to a defended city	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	32	4.9	10	6.7	2	0.8	2	1.3	18	6.8	64	4.4
Agree	248	37.9	49	32.7	40	16.5	35	23.3	75	28.2	447	30.5
(Agree subtotal)	(280	42.7)	(59	39.3)	(42	17.3)	(37	24.7)	(93	35.0)	(511	34.9)
Undecided	80	12.2	20	13.3	23	9.5	24	16.0	33	12.4	180	12.3
Disagree	273	41.7	68	45.3	166	68.3	80	53.3	135	50.8	722	49.3*
Strongly disagree	9	1.4	3	2.0	7	2.9	8	5.3	4	1.5	31	2.1
(Disagree subtotal)	(282	43.1)	(71	47.3)	(173	71.2)	(88	58.7)	(139	52.3)	(753	51.4)
No answer	13	2.0	0	0.0	5	2.1	1	0.7	1	0.4	20	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 57.6020. There is a significant relationship between perception of the desire to move to a defended city if living in an undefended city and stage of adoption.

Personal feelings if living in an undefended city: Feeling worried

To determine an individual's perception of whether or not he would feel more worried living in an undefended city than a defended city each individual was asked if he agreed or disagreed with the following statement: "I would feel more worried than if I were in a city that is protected by anti-missile missiles." Table 8.24 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of feeling worried and stage of adoption. Percentages indicate a curvilinear relationship: a larger proportion of individuals in the first two and last two adoption stages would feel worried than individuals in the Information stage. The Unaware and Adoption stages, and the Aware and Evaluation stages had similar proportions of individuals agreeing and disagreeing with the statement.

Conclusion: Perception of feeling worried if living in an undefended city is statistically related to stage of adoption. Percentages indicate that a larger proportion of individuals in the first two and last two adoption stages would feel worried than did individuals in the Information stage.

Table 8.24. I would feel more worried than if I were in a city that is protected by anti-missile missiles.

Would feel worried if living in an undefended city	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	23	3.5	8	5.3	5	2.1	3	2.0	10	3.8	49	3.3
Agree	268	40.9	45	30.0	62	25.5	49	32.7	105	39.5	529	36.1
(Agree subtotal)	(291	44.4)	(53	35.3)	(67	27.6)	(52	34.7)	(115	43.2)	(578	39.5)
Undecided	59	9.0	12	8.0	17	7.0	14	9.3	21	7.9	123	8.4
Disagree	285	43.5	76	50.7	147	60.5	79	52.7	118	44.4	705	48.2*
Strongly disagree	8	1.2	9	6.0	7	2.9	4	2.7	10	3.8	38	2.6
(Disagree subtotal)	(293	44.7)	(85	56.7)	(154	63.4)	(83	55.3)	(128	48.1)	(743	50.8)
No answer	12	1.8	0	0.0	5	2.1	1	0.7	2	0.8	20	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 28.7100. There is a significant relationship between perception of feeling worried if living in an undefended city rather than a defended city and stage of adoption.

Personal feelings if living in an undefended city: Feeling more secure

To determine an individual's perception of whether or not he would feel more secure if living in an undefended city than a city defended by anti-missile missiles each individual was asked if he agreed or disagreed with the following statement: "I would feel more secure living in an undefended city because this would mean that my city might not be attacked in the event of war." Table 8.25 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of feeling more secure and stage of adoption. Percentages indicate that there is no difference in response pattern among the first four stages of adoption. However, a larger proportion of individuals in the Adoption stage disagreed that they would feel more secure in an undefended city than did respondents in the other four stages.

Conclusion: Perception of feeling more secure if living in an undefended city is not statistically related to stage of adoption. However, a larger proportion of individuals who had adopted the idea of using fallout shelters (stage 5) disagreed that they would feel more secure in a defended city than did respondents who had not adopted the idea of using public fallout shelters (stages 1-4).

Table 8.25. I would feel more secure living in an undefended city because this would mean that my city might not be attacked in the event of a war.

Would feel more secure if living in an undefended city	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	13	2.0	2	1.3	4	1.6	2	1.3	3	1.1	24	1.6
Agree	146	22.3	35	23.3	55	22.6	34	22.7	46	17.3	316	21.6
(Agree subtotal)	(159	24.3)	(37	24.7)	(59	24.3)	(36	24.0)	(49	18.4)	(340	23.2)
Undecided	70	10.7	16	10.7	28	11.5	21	14.0	17	6.4	152	10.4
Disagree	383	58.5	79	52.7	138	56.8	82	54.7	179	67.3	861	58.8
Strongly disagree	30	4.6	18	12.0	13	5.3	10	6.7	20	7.5	91	6.2
(Disagree subtotal)	(413	63.1)	(97	64.7)	(151	62.1)	(92	61.3)	(199	74.8)	(952	65.0)
No answer	13	2.0	0	0.0	5	2.1	1	0.7	1	0.4	20	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 6.7796. There is no significant relationship between perception of feeling more secure if in an undefended city and stage of adoption.

Personal feelings if living in an undefended city: Feeling I can do nothing about the missiles

To determine an individual's perception that he can or can't do anything about the missiles if living in an undefended city each individual was asked if he agreed or disagreed with the following statement: "I would feel that I can do nothing about the missiles." Table 8.26 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception that a person can do nothing about the missiles and stage of adoption. However, percentages indicate that a larger proportion of individuals in the Adoption stage perceive that they can personally do something about the missiles, than individuals in the other four stages.

Conclusion: Perception that a person can do nothing about the missiles if living in an undefended city is not statistically related to stage of adoption. However, a larger proportion of respondents in the Adoption stage perceived that they could personally do something about the missiles than did individuals in any of the earlier stages.

Table 8.26. I would feel that I can do nothing about the missiles.

Would feel that I can do nothing if in an undefended city	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	29	4.4	9	6.0	11	4.5	8	5.3	12	4.5	69	4.7
Agree	446	68.1	98	65.3	169	69.5	103	68.7	166	62.4	982	67.0
(Agree subtotal)	(475	72.5)	(107	71.3)	(180	74.1)	(111	74.0)	(178	66.9)	(1051	71.8)
Undecided	65	9.9	11	7.3	11	4.5	9	6.0	19	7.1	115	7.9
Disagree	100	15.3	26	17.3	45	18.5	27	18.0	63	23.7	261	17.8
Strongly disagree	2	0.3	6	4.0	2	0.8	2	1.3	5	1.9	17	1.2
(Disagree subtotal)	(102	15.6)	(32	21.3)	(47	19.3)	(29	19.3)	(68	25.6)	(278	19.0)
No answer	13	2.0	0	0.0	5	2.1	1	0.7	1	0.4	20	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 2.2832. There is no significant relationship between perception of feeling that a person can do nothing about missiles when living in an undefended city and stage of adoption.

Personal feelings if living in an undefended city: Feeling lucky

To determine an individual's perception of feeling lucky if living in a city not defended by anti-missile missiles each individual was asked if he agreed or disagreed with the following statement: "I would feel lucky that I don't have to put up with missiles around here." Table 8.27 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of feeling lucky if living in a city not protected by anti-missile missiles and stage of adoption. Percentage trends show that the early stages of adoption have proportionally more individuals who agree that they would feel lucky to live in an undefended city while the latter stages have proportionally more individuals who indicate they would not feel lucky if living in a defended city.

Conclusion: Perception of feeling lucky if living in a city not defended by anti-missile missiles is statistically related to stage of adoption. A larger proportion of individuals in the latter adoption stages, especially the Adoption stage, disagreed that they would feel lucky if living in an undefended city, than did individuals in the earlier adoption stages.

Table 8.27. I would feel lucky that I don't have to put up with missiles around here.

Would feel lucky if living in an undefended city	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	8	1.2	1	0.7	2	0.8	0	0.0	0	0.0	11	0.8
Agree	135	20.6	29	19.3	44	18.1	24	16.0	34	12.8	266	18.2
(Agree subtotal)	(143	21.8)	(30	20.0)	(46	18.9)	(24	16.0)	(34	12.8)	(277	18.9)
Undecided	91	13.9	19	12.7	33	13.6	23	15.3	23	8.6	189	12.9
Disagree	380	58.0	86	57.3	148	60.9	94	62.7	183	68.8	891	60.9*
Strongly disagree	28	4.3	14	9.3	11	4.5	8	5.3	25	9.4	86	5.9
(Disagree subtotal)	(408	62.3)	(100	66.7)	(159	65.4)	(102	68.0)	(208	78.2)	(977	66.7)
No answer	13	2.0	1	0.0	5	2.1	1	0.7	1	0.4	21	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 10.7378. There is a significant relationship between perception of feeling lucky if living in a city not defended by anti-missile missiles and stage of adoption.

Personal feelings if living in an undefended city: Feel I ought to do something

To determine an individual's perception of the feeling that he ought to do something to make sure his city gets missiles like other cities each individual was asked if he agreed or disagreed with the following statement: "I would feel that I ought to do something to make sure that my city also gets missiles like other cities." Table 8.28 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of feeling one ought to do something to help get missiles and stage of adoption. The percentage trend relationship is curvilinear: a larger proportion of individuals in the first two and last two stages agree they ought to do something, than do individuals in the Information stage. The Information stage has the smallest proportion of respondents agreeing that they ought to do something to help get missiles in their city.

Conclusion: Perception of the feeling that I ought to do something about getting missiles for my city is statistically related to stage of adoption. A larger proportion of respondents in the first two and last two stages agree they should do something to help their city get missiles, while fewer of the respondents in the Information stage agree they should do something.

Table 8.28. I would feel that I ought to do something to make sure that my city also gets missiles like other cities.

I would feel I ought to do something if living in an undefended city	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% or 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	48	7.3	17	11.3	8	3.3	6	4.0	25	9.4	104	7.1
Agree	322	49.2	66	44.0	87	35.8	69	46.0	130	48.9	674	46.0*
(Agree subtotal)	(370	56.5)	(83	55.3)	(95	39.1)	(75	50.0)	(155	58.3)	(778	53.1)
Undecided	110	16.8	23	15.3	33	13.6	25	16.7	48	18.0	239	16.3
Disagree	158	24.1	43	28.7	106	43.6	46	30.7	59	22.2	412	28.1
Strongly disagree	5	0.8	1	0.7	3	1.2	3	2.0	3	1.1	15	1.0
(Disagree subtotal)	(163	24.9)	(44	29.3)	(109	44.9)	(49	32.7)	(62	23.3)	(427	29.2)
No answer	12	1.8	0	0.0	6	2.5	1	0.7	1	0.4	20	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 21.6244. There is a significant relationship between perception of the feeling that I ought to do something about getting missiles for my city if living in an undefended city and stage of adoption.

Section Three: Anti-missile Missiles and Possible Local Problems

Introduction

In this section, attitudes pertaining to individuals' perceptions of the desirability of putting anti-missile missiles around his city (or the city, or cities, nearest him), even though particular local problems may arise due to such an anti-missile missile deployment, are related to stage of public fallout shelter adoption. The findings in this section analyze the number of individuals in each adoption stage who perceive anti-missile missiles to be desirable, even though the anti-missile missiles may create certain local problems; as well as analyzing the number of individuals in each adoption stage who perceive anti-missile missiles to be undesirable because they create certain local problems.

The relationship of the following local problem attitudes are compared to stage of public fallout shelter adoption in this section: (1) desirability of anti-missile missiles even if real estate values go down a little; (2) desirability of anti-missile missiles even if they take up a lot of acres; (3) desirability of anti-missile missiles even if there is a risk they might be fired accidentally; (4) desirability of anti-missile missiles even if they cause poorer television reception; (5) desirability of anti-missile missiles even if there is some local opposition; (6) desirability of anti-missile missiles even if must set up shelters for everyone; (7) desirability of anti-missile missiles if they shoot down 9 of 10 enemy missiles; and (8) desirability of anti-missile missiles if they shoot down 1 of 3 enemy missiles.

Desirability of anti-missile missiles even if real estate values go down a little

To determine an individual's perception of the desirability of anti-missile missiles around his city (or city nearest him) even if real estate values go down a little each respondent was asked: "How desirable is it (putting anti-missile missiles around the city) even if real estate values went down a little because of it?" Table 8.29 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of this possible local problem and stage of adoption.[a] However, percentages indicate that a larger proportion of individuals in the last two adoption stages perceived the desirability of anti-missile missiles even if real estate values go down a little, than did individuals in the three earlier adoption stages.

Conclusion: Perception of the desirability of anti-missile missiles even if real estate values went down a little is not statistically related to stage of adoption. However, a larger proportion of respondents in the Evaluation and Adoption stages perceived the desirability of anti-missile missiles even if real estate values went down a little, than did respondents in the Unaware, Aware, and Information stages.

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[a]For Tables 8.29-8.36 it should be noted that the "Does not apply" row means that individuals said anti-missile missiles were highly undesirable around all larger cities in America (see Table 8.10) or were highly undesirable around their local city (see Table 8.12). Thus, the statistical comparisons in Tables 8.29-8.36 do not include the 171 respondents who said highly undesirable in Tables 8.10 and 8.12. If these 171 highly undesirable responses were included in the statistical analysis in Tables 8.29-8.36, i.e., tabulated as highly undesirable (code -3), the positive relationships between each attitude and stage of adoption would be greater than that indicated by the percentage trends and the calculated chi-square values presented in each of the tables. Even without including these 171 respondents a significant (or almost significant) statistical relationship is found between each attitude and stage of adoption.

Table 8.29. How desirable is it (putting anti-missile missiles around nearest city) even if real estate values went down a little because of it?

Desirability of anti-missile missiles even if real estate values go down a little	Stage of Adoption: (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	13	2.0	3	2.0	2	0.8	4	2.7	2	0.8	24	1.6
Undesirable -2	18	2.7	4	2.7	10	4.1	2	1.3	4	1.5	38	2.6
Undesirable -1	22	3.4	8	5.3	10	4.1	6	4.0	6	2.3	52	3.6
(Undesirable subtotal)	(53	8.1)	(15	10.0)	(22	9.1)	(12	8.0)	(12	4.5)	(114	7.8)
Don't care 0	54	8.2	15	10.0	20	8.2	12	8.0	18	6.8	119	8.1
Desirable 1	81	12.4	14	9.3	32	13.2	27	18.0	40	15.0	194	13.3
Desirable 2	110	16.8	25	16.7	47	19.3	27	18.0	46	17.3	255	17.4*
Desirable 3 (Highly)	243	37.1	59	39.3	86	35.4	60	40.0	130	48.9	578	39.5
(Desirable subtotal)	(434	66.3)	(98	65.3)	(165	67.9)	(114	76.0)	(216	81.2)	(1027	70.2)
Don't know	6	0.9	1	0.7	3	1.2	1	0.7	1	0.4	12	0.8
No answer	14	2.1	0	0.0	3	1.2	2	1.3	2	0.8	21	1.4
Does not apply, said anti-missile missiles highly undesirable in Table 8.10 or 8.12	94	14.4	21	14.0	30	12.3	9	6.0	17	6.4	171	11.7
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 5.7340. There is no significant relationship between perception of the desirability of anti-missile missiles even if real estate values go down a little and stage of adoption.

Desirability of anti-missile missiles even if they take up a lot of acres

To determine an individual's perception of the desirability of anti-missile missiles around his city (or city nearest him) even if they take up a lot of acres each respondent was asked: "Even if they take up a lot of acres that could be used differently, how desirable is it to put anti-missile missiles around our cities?" Table 8.30 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of this possible local problem and stage of adoption. Percentages indicate a larger proportion of individuals in the last two stages of adoption perceived the desirability of anti-missile missiles even if they take up a lot of acres that could be used differently, than did individuals in the first three adoption stages.

Conclusion: Perception of the desirability of anti-missile missiles even if they take up a lot of acres is statistically related to stage of adoption. A larger proportion of respondents in the latter two stages of adoption perceived the desirability of anti-missile missiles even if they take up a lot of acres, than did respondents in the earlier adoption stages.

Table 8.30. Even if they take up a lot of acres that could be used differently, how desirable is it to put anti-missile missiles around our cities?

Desirability of anti-missile missiles even if they take up a lot of acres	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Undesirable -3 (Highly)	16	2.4	9	6.0	6	2.5	4	2.7	2	0.8	37	2.5
Undesirable -2	19	2.9	2	1.3	11	4.5	2	1.3	3	1.1	37	2.5
Undesirable -1	23	3.5	6	4.0	10	4.1	5	3.3	4	1.5	48	3.3
(Undesirable subtotal)	(58	8.9)	(17	11.3)	(27	11.1)	(11	7.3)	(9	3.4)	(122	8.3)
Don't care 0	28	4.3	11	7.3	11	4.5	7	4.7	10	3.8	67	4.6
Desirable 1	78	11.9	18	12.0	39	16.0	33	22.0	37	13.9	205	14.0
Desirable 2	112	17.1	26	17.3	48	19.8	30	20.0	62	23.3	278	19.0*
Desirable 3 (Highly)	262	40.0	55	36.7	81	33.3	57	38.0	127	47.7	582	39.8
(Desirable subtotal)	(452	69.0)	(99	66.0)	(168	69.1)	(120	80.0)	(226	85.0)	(1065	72.7)
Don't know	5	0.8	2	1.3	4	1.6	0	0.0	1	0.4	12	0.8
No answer	18	2.7	0	0.0	3	1.2	3	2.0	3	1.1	27	1.8
Does not apply, said anti-missile missiles highly undesirable in Table 8.10 or Table 8.12	94	14.4	21	14.0	30	12.3	9	6.0	17	6.4	171	11.7
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 10.1962. There is a significant relationship between perception of the desirability of anti-missile missiles even if they take up a lot of acres and stage of adoption.

Desirability of anti-missile missiles even if there is a risk they might be fired accidentally

To determine an individual's perception of the desirability of anti-missile missiles around his city (or city nearest him) even though there is some risk of their misfiring each respondent was asked: "(How desirable is it to put anti-missile missiles around our cities), even if it involves a risk that these anti-missile missiles might be fired accidentally?" Table 8.31 shows the distribution of responses for each stage of adoption.

Using a meuian chi-square statistical test a significant relationship was found between perception of this possible local problem and stage of adoption. Percentages indicate that a larger proportion of individuals in the Evaluation and Adoption stages perceived the desirability of anti-missile missiles even though there is a risk they might be fired accidentally, than did individuals in the first three adoption stages.

Conclusion: Perception of the desirability of anti-missile missiles even if there is a risk that they might be fired accidentally is statistically related to stage of adoption. A larger proportion of individuals in the latter stages of adoption perceived anti-missile missiles as more desirable even though they might be fired accidentally, than did individuals in the earlier stages.

Table 8.31. Even if it (putting anti-missile missiles around nearest city) involves some risk that these missiles could be fired by accident?

Desirability of anti-missile missiles even if there is a risk they might be fired accidentally	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	65	9.9	18	12.0	24	9.9	11	7.3	16	6.0	134	9.2
Undesirable -2	36	5.5	7	4.7	17	7.0	10	6.7	14	5.3	84	5.7
Undesirable -1	49	7.5	14	9.3	13	5.3	10	6.7	12	4.5	98	6.7
(Undesirable subtotal)	(150	22.9)	(39	26.0)	(54	22.2)	(31	20.7)	(42	15.8)	(316	21.6)
Don't care 0	30	4.6	6	4.0	12	4.9	6	4.0	7	2.6	61	4.2
Desirable 1	105	16.0	18	12.0	26	10.7	28	18.7	45	16.9	222	15.2
Desirable 2	77	11.8	23	15.3	47	19.3	29	19.3	50	18.8	226	15.4*
Desirable 3 (Highly)	177	27.0	41	27.3	67	27.6	45	30.0	101	38.0	431	29.4
(Desirable subtotal)	(359	54.8)	(82	54.7)	(140	57.6)	(102	68.0)	(196	73.7)	(879	60.0)
Don't know	7	1.1	2	1.3	4	1.6	0	0.0	2	0.8	15	1.0
No answer	15	2.3	0	0.0	3	1.2	2	1.3	2	0.8	22	1.5
Does not apply, said anti-missile missiles highly undesirable in Table 8.10 or Table 8.12	94	14.4	21	14.0	30	12.3	9	6.0	17	6.4	171	11.7
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 13.3796. There is a significant relationship between perception of the desirability of anti-missile missiles even if there is risk of accidental firing and stage of adoption.

Desirability of anti-missile missiles even if they cause poorer television reception

To determine an individual's perception of the desirability of anti-missile missiles around his city (or city nearest him) even if there may be some effect on television reception each respondent was asked: "How desirable is it to put anti-missile missiles around our cities even though the radar to go with these missiles may cause poorer television reception around here?" Table 8.32 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of this possible local problem and stage of adoption. Percentages indicate that the last two stages of adoption contain a larger proportion of individuals perceiving the desirability of anti-missile missiles even if television reception is poorer, than do the three earlier adoption stages.

Conclusion: Perception of the desirability of anti-missile missiles even though television reception may be poorer is statistically related to stage of adoption. A larger proportion of respondents in the Evaluation and Adoption stages perceived the desirability of anti-missile missiles even if television reception is poorer, than did respondents in the earlier stages.

Table 8.32. How desirable is it to put anti-missile missiles around our cities even though the radar to go with these missiles may cause poorer television reception around here?

Desirability of anti-missile missiles even if they cause poorer television reception	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	24	3.7	7	4.7	6	2.5	4	2.7	4	1.5	45	3.1
Undesirable -2	20	3.1	4	2.7	9	3.7	6	4.0	7	2.6	46	3.1
Undesirable -1	20	3.1	7	4.7	8	3.3	6	4.0	4	1.5	45	3.1
(Undesirable subtotal)	(64	9.8)	(18	12.0)	(23	9.5)	(16	10.7)	(15	5.6)	(136	9.3)
Don't care 0	43	6.6	11	7.3	19	7.8	14	9.3	12	4.5	99	6.8
Desirable 1	83	12.7	13	8.7	30	12.3	25	16.7	38	14.3	189	12.9
Desirable 2	82	12.5	27	18.0	44	18.1	25	16.7	41	15.4	219	15.0*
Desirable 3 (Highly)	271	41.4	58	38.7	90	37.0	59	39.3	140	52.6	618	42.2
(Desirable subtotal)	(436	66.6)	(98	65.3)	(164	67.5)	(109	72.7)	(219	82.3)	(1026	70.0)
Don't know	4	0.6	2	1.3	4	1.6	0	0.0	1	0.4	11	0.8
No answer	14	2.1	0	0.0	3	1.2	2	1.3	2	0.8	21	1.4
Does not apply, said anti-missile missiles highly undesirable in Table 8.10 or Table 8.12	94	14.4	21	14.0	30	12.3	9	6.0	17	6.4	171	11.7
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 10.2448. There is a significant relationship between perception of the desirability of missiles even if television reception is poorer and stage of adoption.

Desirability of anti-missile missiles even if there is some local opposition

To determine an individual's perception of the desirability of anti-missile missiles around his city (or city nearest him) even if there might be some local opposition each respondent was asked: "How desirable is it to go ahead (with putting anti-missile missiles around city) even though there might be some local opposition to putting anti-missile missiles around some cities?" Table 8.33 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of this possible local problem and stage of adoption. Percentage trends indicate that the latter two stages of adoption each contain a larger proportion of individuals perceiving the desirability of anti-missile missiles even if there is local opposition than do the earlier stages.

Conclusion: Perception of the desirability of anti-missile missiles even if there is some local opposition is statistically related to stage of adoption. The latter two stages, especially the Adoption stage, each contains a larger proportion of respondents perceiving the desirability of anti-missile missiles even if there is some local opposition, than do the first three adoption stages.

Table 8.33. How desirable is it to go ahead even though there might be some local opposition to putting anti-missile missiles around some cities?

Desirability of anti-missile missiles even if there is some local opposition	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Undesirable -3 (Highly)	12	1.8	3	2.0	4	1.6	3	2.0	1	0.4	23	1.6
Undesirable -2	18	2.7	5	3.3	10	4.1	2	1.3	3	1.1	38	2.6
Undesirable -1	16	2.4	4	2.7	8	3.3	3	2.0	10	3.8	41	2.8
(Undesirable subtotal)	(46	7.0)	(12	8.0)	(22	9.1)	(8	5.3)	(14	5.3)	(102	7.0)
Don't care 0	45	6.9	13	8.7	15	6.2	12	8.0	10	3.8	95	6.5
Desirable 1	73	11.1	20	13.3	39	16.0	28	18.7	35	13.2	195	13.3
Desirable 2	119	18.2	30	20.0	43	17.7	35	23.3	56	21.1	283	19.3*
Desirable 3 (Highly)	257	39.2	52	34.7	86	35.4	56	37.3	130	48.9	581	39.7
(Desirable subtotal)	(449	68.5)	(102	68.0)	(168	69.1)	(119	72.7)	(221	83.1)	(1059	72.3)
Don't know	5	0.8	2	1.3	5	2.1	0	0.0	2	0.8	14	1.0
No answer	16	2.4	0	0.0	3	1.2	2	1.3	2	0.8	23	1.6
Does not apply, said anti-missile missiles highly undesirable in Table 8.10 or Table 8.12	94	14.4	21	14.0	30	12.3	9	6.0	17	6.4	171	11.7
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 9.5182. There is a significant relationship between perception of the desirability of missiles even though there may be some local opposition and stage of adoption.

Desirability of anti-missile missiles even if must set up shelters for everyone

To determine an individual's perception o. the desirability of anti-missile missiles around his city (or city nearest him) even if it means setting up shelters for everyone each respondent was asked: "How about shelters? How desirable is it to put anti-missile missiles around our cities if it means that we must set up shelters for everyone?" Table 8.34 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of this possible local problem and stage of adoption. Percentages indicate that the Evaluation and Adoption stages each contain a larger proportion of individuals perceiving the desirability of anti-missile missiles even if it requires shelters for everyone, than the three earlier stages.

Conclusion: Perception of the desirability of anti-missile missiles even if it means setting up shelters for everyone is statistically related to stage of adoption. The last two stages of adoption, especially the Adoption stage, each contain a larger proportion of individuals perceiving the desirability of anti-missile missiles even if it means shelters for everyone, than do the first three adoption stages.

Table 8.34. How about shelters? How desirable is it to put anti-missile missiles around our cities if it means that we must set up shelters for everyone?

Desirability of anti-missile missiles even if must set up shelters for everyone	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	20	3.1	6	4.0	13	5.3	5	3.3	7	2.6	51	3.5
Undesirable -2	22	3.4	3	2.0	12	4.9	5	3.3	7	2.6	49	3.3
Undesirable -1	25	3.8	6	4.0	10	4.1	3	2.0	10	3.8	54	3.7
(Undesirable subtotal)	(67	10.2)	(15	10.0)	(35	14.4)	(13	8.7)	(24	9.0)	(154	10.5)
Don't care 0	30	4.6	11	7.3	18	7.4	14	9.3	9	3.4	82	5.6
Desirable 1	77	11.8	20	13.3	37	15.2	23	15.3	39	14.7	196	13.4
Desirable 2	107	16.3	17	11.3	38	15.6	26	17.3	41	15.4	229	15.6*
Desirable 3 (Highly)	258	39.4	64	42.7	78	32.1	60	40.0	131	49.2	591	40.4
(Desirable subtotal)	(442	67.5)	(101	67.3)	(153	63.0)	(109	72.7)	(211	79.3)	(1016	69.4)
Don't know	7	1.1	2	1.3	4	1.6	3	2.0	2	0.8	18	1.2
No answer	15	2.3	0	0.0	3	1.2	2	1.3	3	1.1	23	1.6
Does not apply, said anti-missile missiles highly undesirable in Table 8.10 or 8.12	94	14.4	21	14.0	30	12.3	9	6.0	17	6.4	171	11.7
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	13.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 11.7050. There is a significant relationship between perception of the desirability of missiles even though shelters would be needed for everyone and stage of adoption.

Desirability of anti-missile missiles if they shoot down 9 of 10 enemy missiles

To determine an individual's perception of the desirability of anti-missile missiles around his city (or city nearest him) if the anti-missile missiles have high efficiency, i.e., shoot down 9 or 10 enemy missiles, each respondent was asked: "If you knew that these anti-missile missiles could shoot down just about all enemy missiles attacking a city, maybe nine out of ten, how desirable is it to put such weapons around cities?" Table 8.35 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability of this level of anti-missile missile efficiency and stage of adoption. However, percentages indicate that the Evaluation and Adoption stages each contain a larger proportion of individuals perceiving anti-missile missiles with this level of efficiency as desirable than the three earlier stages.

Conclusion: Perception of the desirability of anti-missile missiles that can shoot down 9 of 10 enemy missiles is not statistically related to stage of adoption. The last two stages of adoption contain a larger proportion of respondents perceiving anti-missile missiles of this level of efficiency as desirable than do the earlier adoption stages.

Table 8.35. If you knew that these anti-missile missiles could shoot down just about all enemy missiles attacking a city, maybe nine out of ten, how desirable is it to put such weapons around cities?

Desirability of anti-missile missiles if they shoot down 9 out of 10 enemy missiles	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	31	4.7	10	6.7	16	6.6	6	4.0	3	1.1	66	4.5
Undesirable -2	6	0.9	2	1.3	3	1.2	1	0.7	5	1.9	17	1.2
Undesirable -1	3	0.5	3	2.0	3	1.2	3	2.0	2	0.8	14	1.0
(Undesirable subtotal)	(40	6.1)	(15	10.0)	(22	9.1)	(10	6.7)	(10	3.8)	(97	6.6)
Don't care 0	12	1.8	4	2.7	6	2.5	2	1.3	3	1.1	27	1.8
Desirable 1	43	6.6	12	8.0	27	11.1	13	8.7	14	5.3	109	7.4
Desirable 2	94	14.4	19	12.7	39	16.0	15	10.0	30	11.3	197	13.5
Desirable 3 (Highly)	439	67.0	97	64.7	142	58.4	107	71.3	203	76.3	988	67.5*
(Desirable subtotal)	(576	87.9)	(128	85.3)	(208	85.6)	(135	90.0)	(247	92.9)	(1294	88.4)
Don't know	6	0.9	2	1.3	5	2.1	0	0.0	2	0.8	15	1.0
No answer	21	3.2	1	0.7	2	0.8	3	2.0	4	1.5	31	2.1
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 8.9090. There is no significant relationship between perception of the desirability of missiles with high efficiency and stage of adoption.

Desirability of anti-missile missiles if they shoot down 1 of 3 enemy missiles

To determine an individual's perception of the desirability of anti-missile missiles around his city (or city nearest him) if the anti-missile missiles shoot down 1 of 3 enemy missiles each respondent was asked: "And suppose you knew that they (anti-missile missiles) could shoot down about one out of three enemy missiles?" Table 8.36 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of the desirability of this level of anti-missile missile efficiency and stage of adoption. Percentages indicate that the Adoption stage contains a larger proportion of individuals perceiving anti-missile missiles with this efficiency as desirable than any other stage.

Conclusion: Perception of the desirability of anti-missile missiles that can shoot down 1 of 3 enemy missiles is not statistically related to stage of adoption. The Adoption stage contains the largest proportion of respondents perceiving anti-missile missiles of this level of efficiency as desirable.

Table 8.36. And suppose you knew that they could shoot down about one out of three enemy missiles?

Desirability of anti-missile missiles if they shoot down only 1 of 3 enemy missiles	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Undesirable -3 (Highly)	29	4.4	8	5.3	10	4.1	7	4.7	3	1.1	57	3.9
Undesirable -2	18	2.7	8	5.3	9	3.7	3	2.0	8	3.0	46	3.1
Undesirable -1	20	3.1	5	3.3	16	6.6	8	5.3	6	2.3	55	3.8
(Undesirable subtotal)	(67	10.2)	(21	14.0)	(35	14.4)	(18	12.0)	(17	6.4)	(158	10.8)
Don't care 0	23	3.5	7	4.7	13	5.3	7	4.7	6	2.3	56	3.8
Desirable 1	115	17.6	23	15.3	39	16.0	24	16.0	45	16.9	246	16.8
Desirable 2	116	17.7	29	19.3	39	16.0	33	22.0	55	20.7	272	18.6*
Desirable 3 (Highly)	278	42.4	55	36.7	93	38.3	59	39.3	133	50.0	618	42.2
(Desirable subtotal)	(509	77.7)	(107	71.3)	(171	70.4)	(116	77.3)	(233	87.6)	(1136	77.6)
Don't know	7	1.1	3	2.0	4	1.6	0	0.0	1	0.4	15	1.0
No answer	18	2.7	2	1.3	4	1.6	3	2.0	6	2.3	33	2.3
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.

Calculated chi-square = 7.7032. There is no significant relationship between perception of the desirability of missiles with high efficiency and stage of adoption.

Section Four: Strategic Implications of Anti-missile Missile Defense

Introduction

In this section attitudes pertaining to individuals' perceptions of the implications that anti-missile missile deployment might have on U.S. defense strategy are related to people's stages of public fallout shelter adoption; that is, findings will be presented that relate individuals' perceptions of possible strategic effects of anti-missile missile deployment to their stage of public fallout shelter adoption. These findings will add additional data to the analysis of the relationship between attitudes toward anti-missile missiles and adoption of a civil defense innovation -- public fallout shelters.

The following anti-missile missile attitudes are compared to stage of public fallout shelter adoption in this section: (1) putting anti-missile missiles around our cities will make people think that war is more likely, (2) anti-missile missiles will make the Russians think that we are going to start a war, (3) anti-missile missiles will give Americans a false sense of security, (4) anti-missile missiles will make Americans more anxious, (5) anti-missile missiles will lead to a stepping up of the arms race, (6) anti-missile missiles will cost too much money to be worthwhile, (7) new offensive weapons will soon put anti-missile missiles out of date, (8) putting in anti-missile missiles makes it more difficult to reach agreements on arms control and disarmament, (9) anti-missile missiles will make America stronger and an enemy will be less likely to attack, and (10) anti-missile missiles will make an enemy less likely to try and push us around.

Putting anti-missile missiles around our cities will make people think that war is more likely

To determine an individual's perception of whether or not putting anti-missile missiles around our cities will make people think war is more likely each person was asked if he agreed or disagreed with the following statement: "Putting anti-missile missiles around our cities will make people think that war is more likely." Table 8.37 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of anti-missile missiles making war more likely and stage of adoption. However, the test approached the significance level. A larger proportion of individuals in the Adoption stage disagreed that anti-missile missiles would make war more likely than did individuals in the first four adoption stages.

Conclusion: Perception that anti-missile missile deployment will make people think that war is more likely is not statistically related to stage of adoption. However, a larger proportion of Adoption stage respondents disagreed that anti-missile missiles would make people think war is more likely than did respondents in the earlier adoption stages.

Table 8.37. Putting anti-missile missiles around our cities will make people think that war is more likely.

Anti-missile missiles will make people think war is more likely	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	39	6.0	8	5.3	18	7.4	7	4.7	17	6.4	89	6.1
Agree	278	42.4	63	42.0	99	40.7	62	41.3	91	34.2	593	40.5
(Agree subtotal)	(317	48.4)	(71	47.3)	(117	48.1)	(69	46.0)	(108	40.6)	(682	46.6)
Undecided	61	9.3	13	8.7	20	8.2	12	8.0	10	3.8	116	7.9*
Disagree	240	36.6	55	36.7	89	36.6	64	42.7	132	49.6	580	39.6
Strongly disagree	22	3.4	11	7.3	13	5.3	4	2.7	15	5.6	65	4.4
(Disagree subtotal)	(262	40.0)	(66	44.0)	(102	42.0)	(68	45.3)	(147	55.3)	(645	44.1)
No answer	15	2.3	0	0.0	4	1.6	1	0.7	1	0.4	21	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 9.4016. There is no significant relationship between perception that anti-missile missiles will make people think war is more likely and stage of adoption.

Anti-missile missiles will make Russians think we are going to start a war

To determine an individual's perception of whether or not putting anti-missile missiles around our cities will make the Russians think we are going to start a war each person was asked if he agreed or disagreed with the following statement: "Such missiles will make the Russians think that we are going to start a war; therefore, they might start one first." Table 8.38 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of anti-missile missiles making the Russians think we are going to start a war and stage of adoption. A larger proportion of individuals in the last two adoption stages disagreed with the statement, than did individuals in the first three adoption stages.

Conclusion: Perception that anti-missile missile deployment will make the Russians think that we are going to start a war is statistically related to stage of adoption. A larger proportion of respondents in the latter adoption stages disagreed that anti-missile missiles would make the Russians think that we are going to start a war than did respondents in the earlier stages.

Table 8.38. Such missiles will make the Russians think that we are going to start a war; therefore, they might start one.

Anti-missile missiles will make Russians think we are going to start war	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	22	3.4	3	2.0	5	2.1	2	1.3	6	2.3	38	2.6
Agree	163	24.9	34	22.7	55	22.6	28	18.7	33	12.4	313	21.4
(Agree subtotal)	(185	28.2)	(37	24.7)	(60	24.7)	(30	20.0)	(39	14.7)	(351	24.0)
Undecided	90	13.7	20	13.3	33	13.6	17	11.3	31	11.7	191	13.0
Disagree	334	51.0	75	50.0	121	49.8	87	58.0	164	61.7	781	53.3*
Strongly disagree	32	4.9	17	11.3	25	10.3	15	10.0	31	11.7	120	8.2
(Disagree subtotal)	(366	55.9)	(92	61.3)	(146	60.1)	(102	68.0)	(195	73.3)	(901	61.5)
No answer	14	2.1	1	0.7	4	1.6	1	0.7	1	0.4	21	1.4
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 16.8094. There is a significant relationship between perception that anti-missile missile deployment will make the Russians think that we are going to start a war and stage of adoption.

Anti-missile missiles will give Americans a false sense of security

To determine an individual's perception of whether or not putting anti-missile missiles around our cities will give Americans a false sense of security each person was asked if he agreed or disagreed with the following statement: "These missiles will give Americans a false sense of security." Table 8.39 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of anti-missile missiles giving Americans a false sense of security and stage of adoption. A larger proportion of individuals in the last two stages of adoption disagreed with the statement than did individuals in the first three adoption stages.

Conclusion: Perception that anti-missile missile deployment will give Americans a false sense of security is statistically related to stage of adoption. A larger proportion of Evaluation and Adoption stage respondents disagreed that anti-missile missiles would give Americans a false sense of security than did respondents in the first three stages.

Table 8.39. These missiles will give Americans a false sense of security.

Anti-missile missiles will give Americans a false sense of security	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	15	2.3	4	2.7	5	2.1	6	4.0	8	3.0	38	2.6
Agree	198	30.2	45	30.0	72	29.6	36	24.0	54	20.3	405	27.7
(Agree subtotal)	(213	32.5)	(49	32.7)	(77	31.7)	(42	28.0)	(62	23.3)	(443	30.3)
Undecided	85	13.0	17	11.3	33	13.6	18	12.0	25	9.4	178	12.2
Disagree	329	50.2	71	47.3	113	46.5	87	58.0	162	60.9	762	52.0*
Strongly disagree	13	2.0	13	8.7	16	6.6	2	1.3	15	5.6	59	4.0
(Disagree subtotal)	(342	52.2)	(84	56.0)	(129	53.1)	(89	59.3)	(177	66.5)	(821	56.0)
No answer	15	2.3	0	0.0	4	1.6	1	0.7	2	0.8	22	1.5
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 12.1576. There is a significant relationship between perception that anti-missile missile deployment will give Americans a false sense of security and stage of adoption.

Anti-missile missiles will make Americans more anxious

To determine an individual's perception of whether or not putting anti-missile missiles around our cities will make Americans more anxious each person was asked if he agreed or disagreed with the following statement: "Anti-missile missiles will make Americans more anxious." Table 8.40 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of anti-missile missiles making Americans more anxious and stage of adoption. A larger proportion of individuals in the last two stages of adoption disagreed that anti-missile missiles will make Americans more anxious than did individuals in the first three adoption stages.

Conclusion: Perception that anti-missile missile deployment will make Americans more anxious is statistically related to stage of adoption. A larger proportion of Evaluation and Adoption stage respondents disagreed that anti-missile missiles would make Americans more anxious than did respondents in the first three stages of adoption.

Table 8.40. Anti-missile missiles will make Americans more anxious.

Anti-missile missiles will make Americans more anxious	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	16	2.4	3	2.0	4	1.6	4	2.7	8	3.0	35	2.4
Agree	221	33.7	42	28.0	71	29.2	44	29.3	76	28.6	454	31.0
(Agree subtotal)	(237	36.2)	(45	30.0)	(75	30.9)	(48	32.0)	(84	31.6)	(489	33.4)
Undecided	94	14.4	21	14.0	35	14.4	12	8.0	21	7.9	183	12.5
Disagree	292	44.6	73	48.7	120	49.4	86	57.3	148	55.6	719	49.1*
Strongly disagree	16	2.4	10	6.7	8	3.3	2	1.3	11	4.1	47	3.2
(Disagree subtotal)	(308	47.0)	(83	55.3)	(128	52.7)	(88	58.7)	(159	59.8)	(766	52.3)
No answer	16	2.4	1	0.7	5	2.1	2	1.3	2	0.8	26	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 12.7368. There is a significant relationship between perception that anti-missile missile deployment will make Americans more anxious and stage of adoption.

Anti-missile missiles will lead to stepping up the arms race

To determine an individual's perception of whether or not putting anti-missile missiles around our cities will lead to stepping up the arms race each person was asked if he agreed or disagreed with the following statement: "Anti-missile missiles will lead to a stepping up of the arms race." Table 8.41 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test no significant relationship was found between perception of anti-missile missiles leading to stepping up the arms race and stage of adoption. However, percentages indicate that a larger proportion of individuals in the Adoption stage disagreed with the statement, than did individuals in the first four adoption stages.

Conclusion: Perception that anti-missile missile deployment will lead to stepping up the arms race is not statistically related to stage of adoption. However, a larger proportion of Adoption stage respondents disagreed that anti-missile missi es would lead to stepping up the arms race than did respondents in the earlier stages.

Table 8.41. Anti-missile missiles will lead to a stepping up of the arms race.

Anti-missile missiles will lead to stepping up the arms race	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	16	2.4	6	4.0	10	4.1	4	2.7	15	5.6	51	3.5
Agree	312	47.6	71	47.3	100	41.2	67	44.7	99	37.2	649	44.3
(Agree subtotal)	(328	50.1)	(77	51.3)	(110	45.3)	(71	47.3)	(114	42.9)	(700	47.8)
Undecided	111	16.9	28	18.7	38	15.6	22	14.7	34	12.8	233	15.9*
Disagree	188	28.7	42	28.0	87	35.8	51	34.0	112	42.1	480	32.8
Strongly disagree	10	1.5	3	2.0	2	0.8	5	3.3	4	1.5	24	1.6
(Disagree subtotal)	(198	30.2)	(45	30.0)	(89	36.6)	(56	37.3)	(116	43.6)	(504	34.4)
No answer	18	2.7	0	0.0	6	2.5	1	0.7	2	0.8	27	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 6.5558. There is no significant relationship between perception that anti-missile missile deployment will lead to stepping up the arms race and stage of adoption.

Anti-missile missiles cost too much

To determine an individual's perception of whether or not putting anti-missile missiles around our cities will cost too much each person was asked if he agreed or disagreed with the following statement: "Such missiles will cost too much to be worthwhile." Table 8.42 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of anti-missile missiles costing too much to be worthwhile and stage of adoption. A larger proportion of individuals in the last two stages of adoption disagreed with the statement than did individuals in the first three stages of adoption.

Conclusion: Perception that anti-missile missile deployment will cost too much to be worthwhile is statistically related to stage of adoption. A larger proportion of Evaluation and Adoption stage respondents disagreed that anti-missile missiles would cost too much to be worthwhile than did respondents in the first three adoption stages.

Table 8.42. Such missiles will cost too much money to be worthwhile.

Anti-missile missiles cost too much	Stage of Adoption (1) UNAWARE No.	% of 655	(2) AWARE No.	% of 150	(3) INFORMATION No.	% of 243	(4) EVALUATION No.	% of 150	(5) ADOPTION No.	% of 266	TOTAL No.	% of 1464
Strongly agree	18	2.7	3	2.0	9	3.7	1	0.7	5	1.9	36	2.5
Agree	76	11.6	18	12.0	35	14.4	15	10.0	20	7.5	164	11.2
(Agree subtotal)	(94	14.4)	(21	14.0)	(44	18.1)	(16	10.7)	(25	9.4)	(200	13.7)
Undecided	123	18.8	30	20.0	42	17.3	24	16.0	27	10.2	246	16.8
Disagree	363	55.4	84	56.0	132	54.3	91	60.7	178	66.9	(848	57.9*
Strongly disagree	61	9.3	14	9.3	21	8.6	17	11.3	35	13.2	148	10.1
(Disagree subtotal)	(424	64.7)	(98	65.3)	(153	63.0)	(108	72.0)	(213	80.1)	(996	68.0)
No answer	14	2.1	1	0.7	4	1.6	2	1.3	1	0.4	22	1.5
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 11.0642. There is a significant relationship between perception that anti-missile missile deployment will cost too much and stage of adoption.

Anti-missile missiles will soon be out of date

To determine an individual's perception of whether or not putting anti-missile missiles around our cities will soon be an outdated defense each person was asked if he agreed or disagreed with the following statement: "New offensive weapons will soon put anti-missile missiles out of date, so it really is not worth having them." Table 8.43 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of anti-missile missiles soon being outdated and stage of adoption. A larger proportion of individuals in the Adoption stage disagreed with this statement than did individuals in the first four adoption stages.

Conclusion: Perception that anti-missile missile deployment will soon be an outdated defense is statistically related to stage of adoption. A larger proportion of Adoption stage respondents disagreed that anti-missile missiles will soon be outdated than did respondents in any of the earlier stages of adoption.

Table 8.43. New offensive weapons will soon put anti-missile missiles out of date, so it is really not worth having them.

Anti-missile missiles will soon be out of date	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	5	0.8	2	1.3	6	2.5	2	1.3	2	0.8	17	1.2
Agree	84	12.8	18	12.0	34	14.0	22	14.7	19	7.1	177	12.1
(Agree subtotal)	(89	13.6)	(20	13.3)	(40	16.5)	(24	16.0)	(21	7.9)	(194	13.3)
Undecided	176	26.9	45	30.0	59	24.3	37	24.7	55	20.7	372	25.4
Disagree	339	51.8	76	50.7	121	49.8	77	51.3	162	60.9	775	52.9*
Strongly disagree	35	5.3	9	6.0	19	7.8	10	6.7	25	9.4	98	6.7
(Disagree subtotal)	(374	57.1)	(85	56.7)	(140	57.6)	(87	58.0)	(187	70.3)	(873	59.6)
No answer	16	2.4	0	0.0	4	1.6	2	1.3	3	1.1	25	1.7
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 10.3572. There is a significant relationship between perception that anti-missile missiles will soon be out of date and stage of adoption.

Anti-missile missiles make disarmament agreements more difficult

To determine an individual's perception of whether or not putting anti-missile missiles around our cities will make disarmament agreements more difficult each person was asked if he agreed or disagreed with the following statement: "Putting in anti-missile missiles makes it more difficult to reach agreement on arms control and disarmament." Table 8.44 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of anti-missile missiles making disarmament agreements more difficult and stage of adoption. A larger proportion of individuals in the last two adoption stages disagreed that anti-missile missiles would make disarmament agreements more difficult than did individuals in the first three adoption stages.

Conclusion: Perception that anti-missile missile deployment will make disarmament agreements more difficult is statistically related to stage of adoption. A larger proportion of Evaluation and Adoption stage respondents disagreed that anti-missile missiles would make disarmament agreements more difficult than did respondents in the earlier stages.

Table 8.44. Putting in anti-missile missiles makes it more difficult to reach agreement on arms control and disarmament.

Anti-missile missiles make disarmament agreements more difficult	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	12	1.8	5	3.3	4	1.6	5	3.3	4	1.5	30	2.0
Agree	193	29.5	41	27.3	78	32.1	38	25.3	63	23.7	413	28.2
(Agree subtotal)	(205	31.3)	(46	30.7)	(82	33.7)	(43	28.7)	(67	25.2)	(443	30.3)
Undecided	142	21.7	25	16.7	30	12.3	20	13.3	42	15.8	259	17.7
Disagree	278	42.4	72	48.0	116	47.7	78	52.0	138	51.9	682	46.6*
Strongly disagree	15	2.3	7	4.7	9	3.7	7	4.7	16	6.0	54	3.7
(Disagree subtotal)	(293	44.7)	(79	52.7)	(125	51.4)	(85	56.7)	(154	57.9)	(736	50.3)
No answer	15	2.3	0	0.0	6	2.5	2	1.3	3	1.1	26	1.8
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 15.5110. There is a significant relationship between perception that anti-missile missile deployment will make disarmament agreements more difficult and stage of adoption.

Anti-missile missiles will make America stronger

To determine an individual's perception of whether or not putting anti-missile missiles around our cities will make America stronger each person was asked if he agreed or disagreed with the following statement: "Anti-missile missiles will make America stronger, and an enemy will be even less likely to attack us than without these missiles." Table 8.45 shows the distribution of responses for each stage of adoption.

Using a median chi-square statistical test a significant relationship was found between perception of anti-missile missiles making America stronger and stage of adoption. Percentages indicate a curvilinear trend: a smaller proportion of individuals in the Unaware stage and the Adoption stage disagreed with the statement than did individuals in the middle three stages.

Conclusion: Perception that anti-missile missile deployment will make America stronger is statistically related to stage of adoption. A smaller proportion of Unaware and Adoption stage respondents disagreed that anti-missile missiles will make America stronger than did respondents in the "middle" stages.

Table 8.45. Anti-missile missiles will make America stronger, and an enemy will be even less likely to attack us than without these missiles.

Anti-missile missiles will make America stronger	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
Strongly agree	92	14.0	20	13.3	32	13.2	18	12.0	57	21.4	219	15.0
Agree	408	62.3	94	62.7	139	57.2	93	62.0	158	59.4	892	60.9*
(Agree subtotal)	(500	76.3)	(114	76.0)	(171	70.4)	(111	74.0)	(215	80.8)	(1111	75.9)
Undecided	57	8.7	11	7.3	29	11.9	10	6.7	14	5.3	121	8.3
Disagree	77	11.8	22	14.7	36	14.8	25	16.7	32	12.0	192	13.1
Strongly disagree	7	1.1	3	2.0	3	1.2	3	2.0	2	0.8	18	1.2
(Disagree subtotal)	(84	12.8)	(25	16.7)	(39	16.0)	(28	18.7)	(34	12.8)	(210	14.3)
No answer	14	2.1	0	0.0	4	1.6	1	0.7	3	1.1	22	1.5
Number and % of Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

*Median in this response category.

With 4 d.f., chi-square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28. Calculated chi-square = 12.0554. There is a significant relationship between perception that anti-missile missile deployment will make America stronger and stage of adoption.

.es make the enemy less likely to push us around

an individual's perception of whether or not putting anti-missile missiles around .e the enemy less likely to push us around each person was asked if he agreed or following statement: "With such missiles around our cities, an enemy will be less ısh us around than he might otherwise be." Table 8.46 shows the distribution of stage of adoption.

ı chi-square statistical test no significant relationship was found between percep- 'e missiles making the enemy less likely to push us around and stage of adoption. te a curvilinear trend: a larger proportion of individuals in the first two stages e Adoption stage agreed with the statement than did individuals in the other two

/erception that anti-missile missile deployment will make the enemy less likely 'is not statistically related to stage of adoption. However, a larger proportion re, and Adoption stage respondents agreed that anti-missile missiles would make ɔly to push us around than did respondents in the other two stages.

such missiles around our cities, an enemy will be less likely to try to push round than he might otherwise be.

ssiles make likely to	Stage of Adoption (1) UNAWARE		(2) AWARE		(3) INFORMATION		(4) EVALUATION		(5) ADOPTION		TOTAL	
	No.	% of 655	No.	% of 150	No.	% of 243	No.	% of 150	No.	% of 266	No.	% of 1464
	88	13.4	26	17.3	22	9.1	17	11.3	55	20.7	208	14.2
	422	64.4	91	60.7	147	60.5	92	61.3	158	59.4	910	62.2*
otal)	(510	77.9)	(117	78.0)	(169	69.5)	(109	72.7)	(213	80.1)	(1118	76.4)
	46	7.0	10	6.7	23	9.5	11	7.3	22	8.3	112	7.7
	80	12.2	23	15.3	42	17.3	26	17.3	25	9.4	196	13.4
ee	5	0.8	0	0.0	4	1.6	3	2.0	3	1.1	15	1.0
ubtotal)	(85	13.0)	(23	15.3)	(46	18.9)	(29	19.3)	(28	10.5)	(211	14.4)
	14	2.1	0	0.0	5	2.1	1	0.7	3	1.1	23	1.6
Total	655	44.7	150	10.2	243	16.6	150	10.2	266	18.2	1464	

esponse category.

square significant at .05 level if $\geq$ 9.49, at .01 level if $\geq$ 13.28.
quare = 6.7780. There is no significant relationship between perception that
sile deployment will make the enemy less likely to push us around and stage of adoption.

Summary of Chapter 8

In Chapter 8 a total of 46 perception of anti-missile missile attitude variables were compared to stage of adoption of public fallout shelters. The 46 variables were categorized into four attitude areas for discussion purposes. The findings are summarized in Table 8.47. More than half of the 46 variables were statistically related to stage of adoption.

The first attitude area was composed of nine attitude variables related to people's general perceptions of anti-missile missiles. Six of these variables were statistically related to stage of adoption.

Five of the significant variables had a positive relationship to stage of adoption: a slightly larger proportion of respondents in the latter adoption stages perceived that "the U.S. has anti-missile missiles ready for action," "Russia has anti-missile missiles ready for action," "defense against enemy missiles is possible," "anti-missile missiles are a type of defense against enemy missiles," and "anti-missile missiles will use nuclear warheads" than did respondents in the earlier stages of adoption. One of the significant variables had a curvilinear relationship to stage of adoption: a larger proportion of individuals in the first and last adoption stages perceived "U.S. defense against enemy submarines is good" than did individuals in the "middle" adoption stages.

Two of the non-significant variables had a slight positive relationship to stage of adoption: a slightly larger proportion of respondents in the latter adoption stages perceived that "U.S. defense against enemy bombers is good" than did respondents in the earlier stages of adoption. The other non-significant variable showed no apparent relationship to stage of adoption: perception that "future defense against enemy missiles is possible".

The second attitude area was composed of nineteen attitude variables related to individuals' perceptions of the desirability of anti-missile missiles. Eleven of these variables were statistically related to stage of adoption.

One of the significant variables had a strong positive relationship to stage of adoption: a larger proportion of respondents in the latter adoption stages perceived that "anti-missile missiles around the local city is desirable (second time asked)" than did respondents in the earlier stages of adoption.

Six of the significant variables had a curvilinear relationship to stage of adoption: a larger proportion of individuals in the first and last adoption stages desired anti-missile missiles in the stated situation than did individuals in the "middle," especially the Information, adoption stages. Thus, proportionately more respondents in the first and last stages perceived that "anti-missile missiles around all larger cities is desirable (second time asked)," "living in a city defended by anti-missile missiles is desirable," and said they "would feel more secure if living in a city defended by anti-missile missiles," "would desire to move to a defended city if lived in a city not defended by anti-missile missiles," "would feel worried if lived in an undefended city," and "would feel something ought to be done if lived in an undefended city" than did respondents in the middle adoption stages.

Two of the significant variables had a strong negative relationship to stage of adoption: a larger proportion of respondents in the earlier adoption stages perceived that they "would feel worried if they lived in a city defended by anti-missile missiles" and that they "would feel lucky if they lived in a city not defended by anti-missile missiles," than did respondents in the latter adoption stages.

The remaining two significant variables also had a negative relationship to stage of adoption, but not as strong a relationship as the above two variables: a slightly larger proportion of individuals in the earlier adoption stages perceived that they "would feel guilty if living in a city defended by anti-missile missiles" and that they "would feel it is unfair living in a city not defended by anti-missile missiles," than did respondents in the latter stages of adoption.

Of the eight statistically non-significant variables, five had a slight negative percentage trend relationship with stage of adoption. A slightly larger proportion of respondents in the earlier adoption stages perceived that they, "would desire to move to an undefended city rather than live in a city defended by anti-missile missiles," "would feel angry if living in a city defended by anti-missile missiles," "would feel they could do nothing about the missiles if living in a city defended by anti-missile missiles," "would feel more secure if living in a city not defended by anti-missile missiles" and "would feel they could do nothing about the missiles if living in a city not defended by anti-missile missiles," than did individuals in the

latter stages of adoption.

Two of the statistically non-significant variables had a slight positive percentage trend relationship with stage of adoption. A slightly larger proportion of respondents in the latter adoption stages perceived that "anti-missile missiles around all larger cities is desirable" (first time asked), and "anti-missile missiles around the local city is desirable" (first time asked), than did respondents in the earlier stages of adoption.

The other non-significant variable had a slight curvilinear percentage relationship to stage of adoption: proportionately more respondents in the first and last adoption stages perceived they "would feel lucky if living in a city defended by anti-missile missiles," than did individuals in the middle adoption stages.

The third attitude area was composed of eight attitude variables related to individuals' perceptions of the desirability of anti-missile missiles even if they cause some local problems. Five of the variables were statistically related to stage of adoption. Of these five variables one had a strong positive relationship to stage of adoption: a larger proportion of respondents in the latter stages of adoption perceived that "anti-missile missiles are desirable even if they might be fired accidentally," than did respondents in the earlier stages of adoption. The other four significant variables had a somewhat less positive relationship with stage of adoption than the above variable. A slightly larger proportion of individuals in the latter stages of adoption perceived anti-missile missiles as desirable even if: "they take up a lot of acres that could have been used for other purposes," "there is poor television reception," "there is some local opposition to anti-missile missiles," and "they have to set up shelters for everyone," than did respondents in the earlier adoption stages.

The three statistically non-significant variables in this attitude area also had a slight positive relationship to stage of adoption. A slightly larger proportion of individuals in the latter stages of adoption perceived anti-missile missiles as desirable even if "local real estate values go down a little when anti-missile missiles are installed," "the efficiency of the missiles is high, but not completely effective, i.e., 9 of 10 enemy missiles shot down," and " the efficiency of the missiles is low, i.e., only shooting down 1 of 3 enem, missiles," than did individuals in the earlier stages of adoption.

The fourth attitude area was composed of ten variables related to people's perceptions of some strategic implications of missile defense. Seven of the variables were statistically related to stage of adoption. Of these seven variables, one had a strong negative relationship to stage of adoption: a larger proportion of the respondents in the earlier adoption stages perceived that "U.S. anti-missile missiles will make Russians think we are going to start war," than did individuals in the latter adoption stages. Five of the significant variables had a somewhat less negative relationship to stage of adoption than the above variable. A slightly larger proportion of individuals in the earlier stages of adoption perceived that anti-missile missiles will "give Americans a false sense of security," "will make Americans more anxious," "cost too much," "will soon be out of date," and "make disarmament agreements more difficult," than did individuals in the latter adoption stages.

The other significant variable had a curvilinear relationship to stage of adoption: a larger proportion of respondents in the first and last adoption stages perceived that anti-missile missiles will "make America stronger" than did respondents in the middle, especially the Information, adoption stages.

Two of the statistically non-significant variables had a slight negative percentage trend relationship with stage of adoption. A slightly larger proportion of respondents in the earlier adoption stages perceived that anti-missile missiles will "make people think war is more likely" and "lead to stepping up the arms race," than did respondents in the latter stages of adoption.

The other statistically non-significant variable had a slight curvilinear percentage relationship to stage of adoption: proportionately more respondents in the first and last adoption stages perceived that anti-missile missiles will, "make the enemy less likely to push us around," than did individuals in the middle, especially the Information, adoption stages.

Table 8.47. Summary: Perception of Anti-Missile Missiles and Stage of Adoption of Public Fallout Shelters

Attitude Variables[a]	Relationship to Stage of Adoption: Statistical at .05 level[b] Tabular Value	Calculated Value	Percentage Trend[c]
General perceptions of anti-missile missiles			
1. U.S. has anti-missile missiles ready for action	9.49	14.19[b]	Positive tendency
2. Russia has anti-missile missiles ready for action	9.49	17.79[b]	Positive tendency
3. U.S. defense against enemy bombers is good	9.49	3.15	Positive tendency
4. U.S. defense against enemy submarines is good	9.49	9.53[b]	Curvilinear: P-N-P
5. Defense against enemy missiles is possible	9.49	49.27[b]	Positive tendency
6. U.S. defense against enemy missiles is good	9.49	8.93	Positive tendency
7. Future defense against enemy missiles is possible	9.49	3.34	None apparent
8. Knowledge of missiles as type of defense possible against enemy missiles	9.49	30.70[b]	Positive tendency
9. Knowledge of how anti-missile missiles will work	9.49	13.17[b]	Positive tendency
Desirability of anti-missile missiles			
10. Anti-missile missiles around all larger cities is desirable	9.49	6.93	Positive tendency
11. Anti-missile missiles around all larger cities is desirable (2nd time)	9.49	20.33[b]	Curvilinear: P-N-P
12. Anti-missile missiles around the local city is desirable	9.49	8.37	Positive tendency
13. Anti-missile missiles around the local city is desirable (2nd time)	9.49	25.23[b]	Positive trend
14. Living in a city defended by anti-missile missiles is desirable	9.49	24.99[b]	Curvilinear: P-N-P

Table 8.47. Summary: Perception of Anti-Missile Missiles and Stage of Adoption of Public Fallout Shelters (Continued)

Attitude Variables[a]	Relationship to Stage of Adoption: Statistical at .05 level[b] Tabular Value	Calculated Value	Percentage Trend[c]
Personal feelings if living in a city defended by anti-missile missiles			
15. Would feel guilty	9.49	24.04[b]	Negative tendency
16. Would desire to move	9.49	7.83	Negative tendency
17. Would feel lucky	9.49	8.78	Curvilinear: P-N-P
18. Would feel worried	9.49	19.21[b]	Negative trend
19. Would feel angry	9.49	5.38	Negative tendency
20. Would feel I can do nothing about the missiles	9.49	2.99	Negative tendency
21. Would feel more secure	9.49	21.33[b]	Curvilinear: P-N-P
Personal feelings if living in a city not defended by anti-missile missiles when some other cities have them:			
22. Would feel it is unfair	9.49	51.53[b]	Negative tendency
23. Would desire to move to a defended city	9.49	57.60[b]	Curvilinear: P-N-P
24. Would feel worried in an undefended city	9.49	28.71[b]	Curvilinear: P-N-P
25. Would feel more secure	9.49	6.78	Negative tendency
26. Would feel I can do nothing about the missiles	9.49	2.28	Negative tendency
27. Would feel lucky	9.49	10.74[b]	Negative trend
28. Would feel something ought to be done	9.49	21.62[b]	Curvilinear: P-N-P
Anti-missile missiles and local proble - anti-missile missiles are desirable even if:			
29. Real estate values go down	9.49	5.73	Positive tendency
30. Take up a lot of acres	9.49	10.20[b]	Positive tendency
31. There is a risk they might be fired accidentally	9.49	13.88[b]	Positive trend
32. There is poorer television reception	9.49	10.24[b]	Positive tendency
33. Have some local opposition to missiles	9.49	9.52[b]	Positive tendency

Table 8.47. Summary: Perception of Anti-Missile Missiles and Stage of Adoption of Public Fallout Shelters (Continued)

Attitude Variables[a]	Relationship to Stage of Adoption: Statistical at .05 level[b] Tabular Value	Calculated Value	Percentage Trend[c]
34. Have to set up shelters for everyone	9.49	11.71[b]	Positive tendency
35. Only 9 of 10 enemy missiles shot down	9.49	8.91	Positive tendency
36. Only 1 of 3 enemy missiles shot down	9.49	7.70	Positive tendency
Strategic Implications of Missile Defense. Anti-missile missiles will:			
37. Make people think war is more likely	9.49	9.40	Negative tendency
38. Make Russians think we are going to start a war	9.49	16.81[b]	Negative trend
39. Give Americans a false sense of security	9.49	12.16[b]	Negative tendency
40. Make Americans more anxious	9.49	12.74[b]	Negative tendency
41. Lead to stepping up the arms race	9.49	6.56	Negative tendency
42. Cost too much	9.49	11.06[b]	Negative tendency
43. Soon be out of date	9.49	10.36[b]	Negative tendency
44. Make disarmament agreements more difficult	9.49	15.51[b]	Negative tendency
45. Make Americans stronger	9.49	12.06[b]	Curvilinear: P-N-P
46. Make the enemy less likely to push us around	9.49	6.78	Curvilinear: P-N-P

[a]Attitude statements in this table are paraphrasings of actual wordings. For actual wordings see the table headings in the body of the chapter.

[b]All statistical tests were chi-square tests. Statistical at .05 level means that a calculated value larger than the tabular value would be expected to occur only 5 times out of 100 because of the selection of the sample from the population being studied rather than because there is an actual relationship in the population. Statistically significant values are footnoted in the table.

[c]See Footnote-c of Table 5.23 for an explanation of the percentage trend statements in this column.

Chapter 9

SUMMARY

Introduction

The Office of Civil Defense is conceptualized as a change agent whose goal is to have specified target audiences adopt new civil defense ideas, innovations, and programs. It is assumed that OCD as a change agent is interested in understanding and predicting how people will adopt new civil defense ideas. This involves a clear and detailed understanding of the factors related to the acceptance or rejection of these new ideas. The change agent may find insights about such factors to be important tools in planning, implementing, and evaluating present and future civil defense adoption programs.

Framework for Analysis

An analytical frame of reference which can be used for planning, implementing, and evaluating civil defense programs, which have as their primary objective the obtaining of the adoption of new ideas, innovations, or programs by individuals in target audiences, was presented. The major concepts of the frame of reference are as follows: The Office of Civil Defense is perceived as a change agent. As a change agent one of its goals is to obtain adoption of its innovations. By innovation is meant an idea, practice, or product perceived as new by the individual or group for whom it is intended. The civil defense innovation which is of central concern to this report is the idea of using public fallout shelters if there is a nuclear attack. Adoption in this study is defined as the adoption of the idea of using a public fallout shelter if there is a nuclear attack. Thus, adoption in this study is symbolic adoption, i.e., the adoption of an idea, rather than behavior adoption. Almost all previous adoption research studies have focused on behavior adoption. Thus, the civil defense innovation and adoption being studied in this report are different from most previous adoption studies. The adoption unit is the individual or group who has to make the decision to adopt an innovation. The adoption unit in this report is the individual. The adoption process is the mental process through which an individual passes from first hearing about an

innovation to its final adoption. Conceptually, the adoption process is usually referred to as an adoption model. The adoption process may be conceptually divided into five stages:

1. Awareness stage. At this stage the individual is initially exposed to the innovation. The individual knows of the innovation but lacks complete information about it. The individual may or may not be motivated to seek additional information about the innovation at this stage.

2. Information stage. The individual becomes interested in the innovation and seeks more information about it. In this stage the individual mainly increases his information about the innovation. The individual is interested in getting both general and more specific information about the intrinsic qualities of the innovation and relating this information to his past experiences and knowledge. At this stage he is building up a data base which will help him to decide whether or not he wishes to become further involved with the innovation.

3. Evaluation stage. The individual is concerned with applying the innovation to his own situation at this stage. The relative advantages and disadvantages of the innovation to other alternatives are considered. The individual makes a mental application of the innovation to his present and future situation and makes the decision either to try it or not. He is concerned with determining if adoption of this innovation will help him to maximize his goals to a greater degree than will any of the other alternatives which are perceived to be available to him.

4. Trial stage. At this stage the individual is motivated to use the innovation on a small scale in order to determine its utility in his own situation. When possible, most potential adopters use an innovation on a small experimental scale to test its applicability and compatability to their situations.

5. Adoption stage. The individual adopts and decides to continue the full use of the innovation. At this stage and point in time the individual is satisfied that the course of action being pursued is best for him.

It is obvious that if the change agent wants to account for all the people in a social system there is another category of people, those unaware of the idea.

The adoption period is the time required for an individual to pass through the adoption process from awareness to adoption. The rate of adoption is the relative speed with which an innovation is adopted by adoption units in the target audience. One of the goals of the change agent is to

increase the rate of adoption of his innovation. One way to attempt this is to shorten the adoption period. Four categories of factors whose relationship to adoption have been studied are: demographic, knowledge, attitude, and sources of information. Knowledge of these four factors may be used by a change agent to more effectively and efficiently shorten the adoption period and increase the rate of adoption of his innovation.

Objective 1: Adoption of Public Fallout Shelters

The first objective of the report was to determine the extent to which a national sample of people had adopted the idea of using public fallout shelters if there is a nuclear attack. This innovation was selected for study because one of the major goals of civil defense during the past four years has been to develop a fallout shelter capability for all the people in the United States. The major activity to accomplish this goal has been the National Fallout Shelter Survey, Marking, and Stocking Program. This program was designed to locate, mark, and stock existing facilities which would be used as public fallout shelters if needed. Logically flowing from these activities is the desire to have people make plans to use the shelters if there is a nuclear attack.

The five stage adoption process (awareness, information, evaluation, trial and adoption) was used as the basis for developing a series of questions which could be used to determine an individual or family's stage in the adoption of the idea of using public fallout shelters if there is a nuclear attack.

The 1964 Research Study

The 1964 National Study was sponsored jointly by the Office of Civil Defense (OCD) in the Office of the Secretary of the Army and the Advanced Research Projects Agency (ARPA) in the Office of the Director of Defense Research and Engineering, Department of Defense. Major portions of the questionnaire used in the study were developed by members of the Sociology department at the University of Pittsburgh, by members of Tempo, the General Electric Company, and by members of the Sociology Department at Iowa State University. The study was designed to interview a probability sample of 1500 adult respondents. People 21 years of age or older, or married

people under 21 were included in the sample. The survey field work was conducted by the National Opinion Research Center (NORC) of the University of Chicago. Field interviewing began early in June and was completed in September. A total of 1464 respondents completed questionnaires in 78 sampling locations throughout the United States.

Public fallout shelter adoption stages

Using the questions based on the adoption model, respondents were classified into analytical "stages" of adoption. The analytical stages and the number and percent of respondents in each stage were as follows:

1. Unaware stage: Six hundred fifty-five (655) respondents, or approximately 45 percent of the total respondents, indicated they were not aware of the public fallout shelter program. (This stage has been included in the analysis to account for all individuals in the study sample.)
2. Aware stage: One hundred fifty (150), or approximately 10 percent of the total respondents, indicated that they were at least aware of the public fallout shelter program, but had not obtained additional information about shelters.
3. Information stage: Two hundred forty-three (243), or approximately 17 percent of the total respondents, indicated that they were aware of the public fallout shelter program and had additional information about it, but had not thought about using a public fallout shelter in case of nuclear attack.
4. Evaluation stage: One hundred fifty (150), or approximately 10 percent of the total respondents, indicated that they were aware of the public fallout shelter program, had additional information about it, and had thought about using a public fallout shelter in case of nuclear attack, but had not made a decision to definitely try to use a public fallout shelter if there was a nuclear attack.
5. Adoption stage: Two hundred sixty-six (266), or approximately 18 percent of the total respondents, indicated they were aware of the public fallout shelter program, had additional information about it, had thought about using a public fallout shelter, and would definitely try to use a public fallout shelter in case of nuclear attack.

Thus by the summer of 1964 the sample respondents were almost equally divided between those who were aware of the public fallout shelter program and those who were not aware of the public fallout shelter program. Nearly one fifth (18 percent) of the sample respondents indicated they had adopted the idea of using a public fallout shelter if there is a nuclear attack.

Objectives 2 and 3: Relation of Factors to Stage of Adoption

The second and third general objectives of the research presented in this report were to determine the relationships between selected demographic and attitude variables and the adoption of the innovation of using public fallout shelters if there is a nuclear attack. These objectives attempted to provide answers to such questions as: What are the characteristics of people in each stage of adoption? Do people who are in the later stages of adoption have different demographic and attitudinal characteristics than individuals in the earlier stages of adoption? The individuals in the analytical stages of adoption delineated above were compared on selected demographic and attitude variables to determine relationships, if any, by stage of adoption. This research is one of the early attempts to determine variables which are related to the adoption of this type of civil defense innovation. Because of its exploratory nature, a large number of variables are used to determine which ones are related to stage of adoption of public fallout shelters. A statement of relationship does not necessarily mean a causal relationship and the reader should exercise caution in attributing causal effects when a relationship is stated.

Demographic variables and stage of adoption

A knowledge of the relationships or lack of relationships between demographic variables and stage of adoption of public fallout shelters should be helpful to civil defense change agents. Such an analysis makes it possible for the change agent to develop a profile of the people who have been motivated to adopt a civil defense innovation and also to compare these people with those who have not yet been motivated to adopt a civil defense idea. These data can be used in planning and implementing future civil defense programs. Eleven of the 14 demographic variables were related to stage of adoption of public fallout shelters when formal statistical tests were used as

the decision criteria of relationship. The findings are summarized in Table 4.14.

One of the significant variables had a strong positive relationship to stage of adoption: a larger proportion of individuals in the latter stages of adoption had more years of formal education than did individuals in the earlier stages of adoption. Four of the other significant variables also had a positive relationship to stage of adoption, but not quite as strong a relationship as the above variable: a larger proportion of the individuals in the latter adoption stages (when compared to individuals in the early adoption stages) were in higher occupations (professional-managerial), had higher family incomes, perceived themselves to be in "higher" social classes, and had had more active military service. A larger proportion of individuals in the last four adoption stages, i.e., those who were aware of public fallout shelters, had children under 12 years of age in their home than did individuals in the Unaware stage. The Adoption stage had proportionately more Jews than did the other adoption stages. (Protestants and Catholics were equally distributed among the adoption stages.)

Three of the significant variables had a curvilinear relationship to stage of adoption: a larger proportion of individuals in the first two and last two adoption stages were women, while the information stage had proportionately more men. Similarly, a larger proportion of individuals in the first two and last two adoption stages rent their homes than do respondents in the Information stage. Likewise, a larger percentage of individuals in the first (Unaware) and last (Adoption) stages had stronger religious beliefs than did individuals in the three middle adoption stages.

One significant variable (age) had a slight negative relationship to stage of adoption: the latter two adoption stages had more younger people (under 50 years of age) than did the Unaware and Information stages, although the Aware stage had a similar proportion of people under 50 years of age as did the last two adoption stages.

None of the three statistically non-significant variables had an apparent relationship to stage of adoption: marital status, political orientation, and military combat duty.

When one analyzes the 266 respondents in the Adoption stage the following "profile" of the "adopter" is obtained. Approximately four out of the

ten "adopters" will have at least one child 12 years of age or less. Three out of four "adopters" are currently married. The "adopter" is somewhat younger than the rest of the adult population. One out of three "adopters" will have had some type of formal training beyond high school. Approximately one third of the adopters have professional or managerial occupations, one fourth clerical, sales, or service occupations; the remaining blue collar occupations. Four out of ten adopters had a family income above $7,500. Over one half of the "adopters" perceived themselves to be in the upper and middle social classes. Approximately six of every ten "adopters" are home owners. In one of every two "adopter" homes the husband has been in active military service. Approximately one of these husbands in five has been in combat. About two of three "adopters" are Protestant. Seven of ten "adopters" have strong or very strong religious beliefs. Politically, one "adopter" in ten is an Independent, three are Republican oriented and five are Democratic oriented.

Perception of threat variables and stage of adoption

In Chapter 5 twenty-two different perception of threat (situation) attitude variables were analyzed in relation to stage of adoption of public fallout shelters. These 22 attitude variables were categorized into three general attitude areas for discussion purposes. The findings are summarized in Table 5.23. Seven of the specific perception of threat attitude variables were found to be statistically related to stage of adoption.

The first attitude area was composed of individuals' perceptions of the level of world tension at four different time periods. None of the four variables in this attitude area was found to be statistically related to stage of adoption. However, two of the variables had a slight positive percentage trend relationship to stage of public fallout shelter adoption. A slightly larger proportion of respondents in the latter adoption stages perceived that there was a "high current world tension level in 1964" and that there had been a "high prior world tension level in 1962," than did individuals in the earlier adoption stages. The other two variables had no apparent relationship to stage of adoption: "high future world tension level in 1966" and "high future world tension level in 1969."

The second attitude area consisted of fourteen attitude variables focusing on people's perceptions of the possibility of a future world war. Six of

these variables were found to be statistically related to stage of adoption.

One of the significant variables had a strong positive relationship to stage of adoption: a larger proportion of individuals in the latter adoption stages perceived that there was a "high likelihood of their local community being a target in a future war," than did individuals in the earlier adoption stages.

Two of the significant variables had a positive relationship to stage of adoption, but not as strong a relationship as the above variable: a larger proportion of the respondents in the latter adoption stages perceived that there was a "high likelihood of a long Cold War" and a "high likelihood of fallout danger to their local community in a future war," than did respondents in the earlier adoption stages.

Two of the significant variables had a curvilinear relationship to stage of adoption: a larger proportion of respondents in the first and last stages (than in the "middle" stages) perceived a "high likelihood of the use of nuclear weapons in a future war" and were "more highly concerned about the possibility of a nuclear attack."

The remaining significant variable had a strong negative relationship to stage of adoption: a larger proportion of respondents in the earlier stages of adoption perceived that there was a "high likelihood of nuclear war in the future," than did respondents in the latter adoption stages.

Of the eight variables found not to be significantly related to stage of adoption when using the statistical criterion, one of the variables had a slight positive percentage trend relationship to stage of adoption: a larger proportion of individuals in the latter stages of adoption perceived that "military bases are the most important enemy target--more important than factories and transportation centers, and people and cities," than did respondents in the earlier adoption stages.

Three of the statistically non-significant variables had a slight negative percentage trend relationship to stage of adoption: a larger proportion of individuals in the earlier stages of adoption perceived that "war will occur sooner," that "there is a shorter present warning time of war," and that "people are the most important enemy target," than did individuals in the latter stages of adoption. The other four non-significant variables, had no apparent relationship to stage of adoption: "less future warning time of war," "likelihood

of local community survival," "factories and transportation centers as the most important enemy target," and "cities as the most important enemy target."

The third attitude area consisted of four attitude variables focusing upon the possibility of future disarmament. Only one of the variables, "Russia desired disarmament, but without controls," was statistically related to stage of adoption. The relationship was a positive one: a larger proportion of respondents in the latter adoption stages perceived that "Russia wanted disarmament but with no controls," than did respondents in the earlier adoption stages. One of the statistically non-significant variables had a slight positive percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the latter stages of adoption perceived that the U.S. desired "nuclear disarmament with control," than did respondents in the earlier stages. One of the statistically non-significant variables had a curvilinear percentage relationship to stage of adoption: a larger proportion of the respondents in the "middle" adoption stage (Information stage) perceived the "armament race to continue," than did respondents in either the earlier or later adoption stages. The other variable showed no apparent relationship to stage of adoption: approximately the same proportion of respondents in each adoption stage "personally desired a well controlled disarmament situation."

Final Cold War outcomes and stage of adoption

In Chapter 6 twenty different final Cold War outcome attitude variables were compared to public fallout shelter stage of adoption. Two additional aspects of each of 10 possible final outcome situations were examined: (1) the individual's perception of the likelihood of the outcome and (2) the individual's perception of the desirability of the outcome. For analysis purposes the 10 possible outcome situations were categorized into three attitude areas. The findings are summarized in Table 6.21. Only one of the 20 variables was found to be statistically related to stage of adoption.

The first attitude area was composed of people's general perceptions of the end of the Cold War. Eight attitude variables were included in this area, i.e., four likelihood and four desirability statements. None of these

eight variables was statistically related to stage of public fallout shelter adoption. However, four of the variables had a slight positive percentage trend relationship with stage of adoption: a slightly larger proportion of respondents in the latter stages of adoption perceived a "high likelihood that the Cold War will continue indefinitely," as well as a "high likelihood Cold War will end through disarmament," and that it was "more desirable that the Cold War will end through disarmament" and "more desirable that a Third World Force will emerge," than respondents in the earlier adoption stages. One variable had a slight curvilinear percentage trend relationship to stage of adoption: a larger proportion of respondents in the first two and last two stages perceived a "high likelihood of the Cold War ending in World War III," than did the middle adoption stages. Three of the variables showed a slight negative percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the earlier adoption stages perceived that it was more "desirable that the Cold War will continue indefinitely," and "desirable that the Cold War will end in World War III," and perceived a "low likelihood that a Third World Force will emerge," than did respondents in the latter stages of adoption.

The second attitude area consisted of six attitude variables focusing on individuals' perceptions of final Cold War outcomes in which the Communists will lose the Cold War. One of these variables was found to be statistically related to stage of adoption: "high likelihood that the Communists will surrender without war," had a negative relationship to stage of adoption, that is, a larger proportion of individuals in the latter stages of adoption perceived a low likelihood that "the Communists will surrender without war," than did individuals in the earlier adoption stages.

Two of the statistically non-significant variables showed a slight positive percentage trend relationship to stage of adoption: a slightly larger proportion of individuals in the latter stages of adoption perceived that it was "more desirable that the Communists will lose due to small wars within the Communist nations," and also "more desirable that the Communists will accept the Western way of life," than did respondents in the earlier stages of adoption. Two of the statistically non-significant variables had a slight curvilinear percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the first and last adoption stages per-

ceived a high likelihood that "Communists will lose due to small wars," and that it was "more desirable that the Communists will surrender without war," than did respondents in the middle adoption stages. The remaining variable had a slight negative percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the earlier adoption stages perceived there was a "high likelihood Communists will accept the Western way of life," than did respondents in the latter stages.

The third attitude area consisted of six attitude variables composed of individuals' perceptions of final Cold War outcomes in which the Communists will win the Cold War. None of the six variables were found to be statistically related to stage of adoption. However, five of the variables had a slight negative percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the latter adoption stages perceived a low likelihood that "the Communists will win due to small wars," that "the U.S. will surrender without war," and perceived a low desirability that "the Communists will win due to small wars," that "the U.S. will surrender without war," and that "the world will accept Communism." One variable had no apparent relationship to stage of adoption, "high likelihood that the world will accept Communism."

The analyses in this chapter indicate that there is essentially no relationship between people's perceptions of Cold War outcomes and stage of public fallout shelter adoption.

Perception of fallout shelters and stage of adoption

In Chapter 7 twenty-two different fallout shelter attitude variables were analyzed in relation to stage of adoption of public fallout shelters. These 22 attitude variables were categorized into four attitude areas for analysis purposes. The findings are summarized in Table 7.25. Thirteen of the fallout shelter variables were found to be statistically related to stage of adoption.

The first attitude area was composed of two attitude variables related to people's general feelings about fallout shelters. One of these variables was statistically related to stage of adoption. The relationship was curvilinear: a larger proportion of individuals in the first and last stages of

adoption "favored fallout shelters," than did individuals in the middle adoption stages. The other variable, "good survival chances in fallout shelters" had no apparent relationship to stage of adoption.

The second attitude area was composed of three variables related to people's perceptions about fallout shelters and concern with war. None of the three variables was statistically related to stage of adoption. The three variables "fallout shelters cause worry about war," "fallout shelters make war more likely," and "fallout shelters make disarmament more difficult," had no apparent relationship to stage of adoption.

The third attitude area was composed of twelve attitude variables related to people's perceptions about fallout shelters and future civil defense situations. Nine of the twelve variables were found to be statistically related to stage of adoption. Of these, two had a strong positive relationship to stage of adoption: a larger proportion of respondents in the latter adoption stages perceived a "high likelihood of fallout shelters throughout the nation" and "high likelihood that all available shelter space will be marked and stocked," than did respondents in the earlier adoption stages. Two of the significant variables had a slight positive percentage relationship to stage of adoption: a slightly larger proportion of individuals in the latter adoption stages perceived a "high likelihood of federal aid to construct fallout shelters" and "high likelihood that missiles will be a part of our national defense," than did individuals in the earlier adoption stages. The other five significant variables had a curvilinear relationship to stage of adoption: a larger proportion of respondents in the first and last adoption stages perceived that there was a "high likelihood of fallout shelters for all Americans" and that it was "more desirable that federal aid be used to construct fallout shelters," "more desirable that there be fallout shelters for all Americans," "more desirable that there be fallout shelters throughout the nation," and "more desirable that missiles will be a part of national defense" than did respondents in the middle, especially the information, adoption stages. All three of the statistically non-significant variables had a slight curvilinear percentage trend relationship with stage of adoption: a larger proportion of respondents in the first and last adoption stages perceived that there was a "high likelihood of evacuation of target areas," and that it was "more desirable that all available shelter space be marked and stocked," and "more desirable that there be evacuation of target

areas," than did respondents in the middle adoption stages.

The final attitude area discussed in this chapter was composed of five attitude variables focusing upon people's perceptions of the relationship between fallout shelters and anti-missile missiles. Three of the variables were significantly related to stage of adoption. Of these, one was a curvilinear relation: a larger proportion of respondents in the first and last stages agreed that "anti-missile missiles will create a greater need for fallout shelters" than did respondents in the middle stages. The other two statistically related variables had a negative relationship with stage of adoption: a larger proportion of respondents in the earlier stages of adoption agreed that there is "no need for anti-missile missiles or fallout shelters," and that "anti-missile missiles create a lesser need for fallout shelters," than did respondents in the latter adoption stages. The two statistically non-significant variables had a slight curvilinear percentage trend relationship to stage of adoption: a slightly larger proportion of respondents in the first and last adoption stages agreed that "fallout shelters are needed because enemy weapons will penetrate missile defenses anyhow" and "anti-missile missiles are meaningful only if there are fallout shelters for everyone," than did respondents in the middle adoption stage.

Perception of anti-missile missiles and stage of adoption

In Chapter 8 a total of 46 perception of anti-missile missile attitude variables were compared to stage of adoption of public fallout shelters. The 46 variables were categorized into four attitude areas for discussion purposes. The findings are summarized in Table 8.47. More than half of the 46 variables were statistically related to stage of adoption.

The first attitude area was composed of nine attitude variables related to people's general perceptions of anti-missile missiles. Six of these variables were statistically related to stage of adoption.

Five of the significant variables had a positive relationship to stage of adoption: a slightly larger proportion of respondents in the latter adoption stages perceived that "the U.S. had anti-missile missiles ready for action," "Russia has anti-missile missiles ready for action," "defense against enemy missiles is possible," "anti-missile missiles are a type of defense against enemy missiles" and "anti-missile missiles will use nuclear warheads,"

than did respondents in the earlier stages of adoption. One of the significant variables had a curvilinear relationship to stage of adoption: a larger proportion of individuals in the first and last adoption stages perceived "U.S. defense against enemy submarines is good," than did individuals in the "middle" adoption stages.

Two of the non-significant variables had a slight positive relationship to stage of adoption: a slightly larger proportion of respondents in the latter adoption stages perceived that "U.S. defense against enemy bombers is good" and "U.S. defense against enemy missiles is good," than did respondents in the earlier stages of adoption. The other non-significant variable showed no apparent relationship to stage of adoption: perception that "future defense against enemy missiles is possible."

The second attitude area was composed of nineteen attitude variables related to individuals' perceptions of the desirability of anti-missile missiles. Eleven of these variables were statistically related to stage of adoption.

One of the significant variables had a strong positive relationship to stage of adoption: a larger proportion of respondents in the latter adoption stages perceived that "anti-missile missiles around the local city is desirable (second time asked)" than did respondents in the earlier stages of adoption.

Six of the significant variables had a curvilinear relationship to stage of adoption: a larger proportion of individuals in the first and last adoption stages desired anti-missile missiles in the stated situation than did individuals in the "middle," especially the information, adoption stages. Thus, proportionately more respondents in the first and last stages perceived that "anti-missile missiles around all larger cities is desirable (second time asked)," "living in a city defended by anti-missile missiles is desirable," and said they "would feel more secure if living in a city defended by anti-missile missiles," "would desire to move to a defended city if lived in a city not defended by anti-missile missiles," "would feel worried if lived in an undefended city," and "would feel something ought to be done if lived in an undefended city," than did respondents in the middle adoption stages.

Two of the significant variables had a strong negative relationship to stage of adoption: a larger proportion of respondents in the earlier adoption stages perceived that they "would feel worried if they lived in a city defended by anti-missile missiles" and that they "would feel lucky if they lived in a city not defended by anti-missile missiles," than did respondents

in the latter adoption stages.

The remaining two significant variables also had a negative relationship to stage of adoption, but not as strong a relationship as the above two variables: a slightly larger proportion of individuals in the earlier adoption stages perceived that they "would feel guilty if living in a city defended by anti-missile missiles" and that they "would feel it is unfair living in a city not defended by anti-missile missiles," than did respondents in the latter stages of adoption.

Of the eight statistically non-significant variables, five had a slight negative percentage trend relationship with stage of adoption. A slightly larger proportion of respondents in the earlier adoption stages perceived that they "would desire to move to an undefended city rather than live in a city defended by anti-missile missiles," "would feel angry if living in a city defended by anti-missile missiles," "would feel they could do nothing about the missiles if living in a city defended by anti-missile missiles," "would feel more secure if living in a city not defended by anti-missile missiles" and "would feel they could do nothing about the missiles if living in a city not defended by anti-missile missiles," than did individuals in the latter stages of adoption.

Two of the statistically non-significant variables had a slight positive percentage trend relationship with stage of adoption. A slightly larger proportion of respondents in the latter adoption stages perceived that "anti-missile missiles around all larger cities is desirable (first time asked)," and "anti-missile missiles around the local city is desirable (first time asked)," than did respondents in the earlier stages of adoption.

The other non-significant variable had a slight curvilinear percentage relationship to stage of adoption: proportionately more respondents in the first and last adoption stages perceived they "would feel lucky if living in a city defended by anti-missile missiles," than individuals in the "middle" adoption stages.

The third attitude area was composed of eight attitude variables related to individuals' perceptions of the <u>desirability of anti-missile missiles even if they cause some local problems</u>. Five of the variables were statistically related to stage of adoption. Of these five variables one had a strong positive relationship to stage of adoption: a larger proportion of respondents

in the latter stages of adoption perceived that "anti-missile missiles are desirable even if they might be fired accidently," than did respondents in the earlier stages of adoption. The other four significant variables had a somewhat less positive relationship with stage of adoption than the above variable. A slightly larger proportion of individuals in the latter stages of adoption perceived anti-missile missiles as desirable even if: "they take up a lot of acres that could have been used for other purposes," "there is poor television reception," "there is some local opposition to anti-missile missiles," and "they have to set up shelters for everyone," than did respondents in the earlier adoption stages.

The three statistically non-significant variables in this attitude area also had a slight positive relationship to stage of adoption. A slightly larger proportion of individuals in the latter stages of adoption perceived anti-missile missiles as desirable even if "local real estate values go down a little when anti-missile missiles are installed," "the efficiency of the missiles is high, but not completely effective, i.e., 9 of 10 enemy missiles shot down," and "the efficiency of the missiles is low, i.e., only shooting down 1 of 3 enemy missiles," than did individuals in the earlier stages of adoption.

The fourth attitude area was composed of ten variables related to people's perceptions of some strategic implications of missile defense. Seven of the variables were statistically related to stage of adoption. Of these seven variables, one had a strong negative relationship to stage of adoption: a larger proportion of the respondents in the earlier adoption stages perceived that "U.S. anti-missile missiles will make Russians think we are going to start war," than did individuals in the latter adoption stages. Five of the significant variables had a somewhat less negative relationship to stage of adoption than the above variable. A slightly larger proportion of individuals in the earlier stages of adoption perceived that anti-missile missiles will "give Americans a false sense of security," "make Americans more anxious," "cost too much," "soon be out of date," and "make disarmament agreements more difficult," than did individuals in the latter adoption stages.

The other significant variable had a curvilinear relationship to stage of adoption: a larger proportion of respondents in the first and last adoption stages perceived that anti-missile missiles will "make America stronger,"

than did respondents in the middle, especially the Information, adoption stages.

Two of the statistically non-significant variables had a slight negative percentage trend relationship with stage of adoption. A slightly larger proportion of respondents in the earlier adoption stages perceived that anti-missile missiles will "make people think war is more likely" and "lead to stepping up the arms race," than did respondents in the latter stages of adoption.

The other statistically non-significant variable had a slight curvilinear percentage relationship to stage of adoption: proportionately more respondents in the first and last adoption stages perceived that anti-missile missiles will, "make the enemy less likely to push us around," than did individuals in the middle, especially the Information, adoption stages.

The data in this report provide a profile of the individuals in the public fallout shelter adoption stages. These data may be used by OCD in planning and implementing future civil defense programs. One concern of OCD is to have people who have not yet adopted the idea of using public fallout shelters adopt the idea of using them. At what rate may individuals in the early adoption stages be expected, if at all, to adopt the idea of using public fallout shelters? Another concern of OCD may be the extent to which the adoption of this idea will persist in the mind of an individual over time. As was stated above the adoption of the idea of using public fallout shelters may be perceived as symbolic adoption. Will some people who are adopters at this point in time become nonadopters at a future point in time? What will the adoption stage profiles be if this occurs? There is a need for a periodic assessment of people's idea adoption so trends and patterns of symbolic adoption may be delineated and analyzed.

Unclassified
Security Classification

DOCUMENT CONTROL DATA - R&D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author)
Department of Sociology and Anthropology
Iowa State University, Ames, Iowa

2a. REPORT SECURITY CLASSIFICATION
Unclassified

2b. GROUP

3. REPORT TITLE
ADOPTION OF PUBLIC FALLOUT SHELTERS
A 1964 National Study

4. DESCRIPTIVE NOTES (Type of report and inclusive dates)

5. AUTHOR(S) (Last name, first name, initial)
Klonglan, Gerald E., Beal, George M., and Bohlen, Joe M.

6. REPORT DATE
1966

7a. TOTAL NO. OF PAGES
139

7b. NO. OF REFS
1

8a. CONTRACT OR GRANT NO.
OCD-PS-65-9

b. PROJECT NO.
(Subtask) 4811-E

c. Systems Evaluation Division

d. OCD Research Directorate

9a. ORIGINATOR'S REPORT NUMBER(S)
Rural Sociology Report Number 49

9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)

10. AVAILABILITY/LIMITATION NOTICES
Distribution of this report is unlimited.

11. SUPPLEMENTARY NOTES

12. SPONSORING MILITARY ACTIVITY
Office of Civil Defense
Department of the Army
Washington, D. C. 20310

13. ABSTRACT A model of the adoption process is used to analyze the public's progress in adopting the idea of using public fallout shelters in the event of nuclear attack. The analysis is based on findings from the 1964 OCD National Survey of 1464 respondents. Respondents are assigned to one of five adoption stages; 44.7% of the respondents were unaware of the existence of public fallout shelters (Unaware Stage); 10.2% were aware of public fallout shelters but had no additional information about them (Aware Stage); 16.6% were aware of and had additional information about public fallout shelters but had not thought about using them (Information Stage); 10.2% were aware of, had additional information, and had thought about using public fallout shelters but had not decided to go to a public fallout shelter (Evaluation Stage); 18.2% were aware of, had additional information, had thought about using and had decided to go to a public fallout shelter in the event of nuclear attack (Adoption Stage). The relationships between selected demographic and attitude variables and stage of adoption of public fallout shelters are analyzed. Fourteen demographic variables were compared to the adoption stages; 11 were statistically related to stage of adoption. The attitude variables were divided into four major sectors: 22 perception of threat variables were analyzed, 7 were statistically related to stage of adoption; 20 final Cold War outcome variables were analyzed, only one was statistically related to stage of adoption; 22 fallout shelter variables were analyzed, 13 were statistically related to stage of adoption; 46 perception of anti-missile missile variables were analyzed, 29 were statistically related to stage of adoption.

DD FORM 1 JAN 64 1473

Unclassified
Security Classification

Unclassified

Security Classification

14 KEY WORDS		LINK A ROLE	LINK A WT	LINK B ROLE	LINK B WT	LINK C ROLE	LINK C WT
Innovation	Anti-missile missiles						
Adoption unit	Public fallout shelters						
Adoption process	Perception of threat						
Stage of adoption	Final Cold War outcomes						
Unaware Stage							
Aware Stage							
Information Stage							
Evaluation Stage							
Trial Stage							
Adoption Stage							
Rate of adoption							
Demographic variables							
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