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CIVIL DEFENSE BELIEF PATTERNS:

(V) Change in Beliefs

Part A

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Thomas Danbury  
Albert D. Talbott  
Robert O. Engbretson

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**Communication Research Report  
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## CIVIL DEFENSE BELIEF PATTERNS

### PREFACE

#### WHAT THIS SERIES OF REPORTS IS ABOUT

This series of reports deals with distinctive patterns of belief about fallout shelters and radiation, peace and defense, with the trusting of sources, with people's interests in various kinds of civil defense topics, and with changes in these various patterns over time.

We have taken one of two major approaches to psychological analysis. Some workers study traits, how much of a particular characteristic do how many people have. Instead, we have used type psychology, the parsimonious description of persons in terms of major patterns of belief. Readers interested in type methodology should read William Stephenson's The Study of Behavior.

Rokeach, in the Open and Closed Mind, suggests a model of beliefs which might best be described in concentric rings. At the core, we have beliefs so fundamental that their destruction would disintegrate the self. Then we have beliefs and disbeliefs in authorities. Then we have beliefs and disbeliefs in the ideas that these authorities express. Some of us are more rigid and dogmatic than others in defending our belief systems, including our beliefs in authorities.

During December, 1961, in each of five cities -- Boston, Lansing, Minneapolis, Oklahoma City, and Santa Monica-- we interviewed about 30 persons, 149 altogether. We chose them on the basis of their responses to a telephone survey directed by Dr. David K. Berlo. We maximized differences among persons in terms of their estimates of the likelihood and nearness of war, the chances it might effect them and possibilities of protecting themselves. Ours is a purposive sample of persons, not a random or representative sample.

In these interviews, we collected information about the belief patterns of people in three areas: fallout shelters and radiation, trust and distrust accorded people who might say something about them, and general orientations toward peace and defense which buttress these beliefs.

To accomplish this, we used Stephenson's Q methodology. A brief summary of the major steps in a Q study will be found at the end of this preface. Also, a separate report entitled Technical Summary is available summarizing in detail the various procedures used in collecting, processing, and analyzing the data.

In May, 1962, we sent all 149 persons who were interviewed in December a copy of the Government's pamphlet entitled "Fallout Protection."

One month later, in June, 1962, we re-interviewed all we could reach of the persons who had participated in the December phase of the study. In all, 105 of the original 149 were re-interviewed. Again, we collected information on patterns of fallout shelter and radiation beliefs and peace and defense beliefs. In addition, we investigated a new area--people's interest

## II

in various kinds of civil defense topics, ones that might appear in print. We also asked the people about exposure to civil defense information, how the world situation was changing, "Fallout Protection" bulletin readership, use of the mass media and other things of a demographic or biographic nature such as age, education income, etc.

Our purpose in re-interviewing was to get at various aspects of change and stability in the predominant belief patterns associated with fallout shelters and radiation and peace and defense over a six month period.

Our prime interest was in the relationship of such changes to exposure to information about civil defense, readership of the "Fallout Protection" bulletin, perceptions of changing world conditions, media use and other characteristics of the respondents.

In this series, Civil Defense Belief Patterns, there are included seven reports on the substantiative findings of this program of research. They are:

### Fallout Shelters and Radiation

Description and tabular summary of the four major types of persons on the basis of their patterns of belief about fallout shelters and radiation.

### Source Credibility

Description and tabular summary of the five major types of persons on the basis of their patterns of trust and distrust accorded sources of information about fallout shelters and radiation.

### Topic Appeals

Description and tabular summary of the five major types of persons on the basis of their patterns of interest in civil defense information topics.

### Peace and Defense

Description and tabular summary of the five major types of persons on the basis of their patterns of belief about peace and defense.

### Change in Belief

*was given*  
A Description and tabular summary of the changes in major types of belief patterns about fallout shelters, and radiation, and peace, and defense. *no mention* ~~includes~~ a summary of the relationships between belief pattern changes and various indices including civil defense information and media exposure, "Fallout Protection" bulletin readership, and general demographic characteristics. ( ) ←

### Summary

General and overall summary of the program of research on civil defense belief patterns.

### Technical Summary

Detailed summary of the various procedures used in collecting, processing and analyzing the data. This report primarily intended from the reader with a more technical bent who is either interested in the specific technical procedures we used or is interested in conducting a similar program of research.

## Major Steps in Q Analysis

1. Respondents are asked to sort a deck of cards which have items printed on them into a specific number of ranked piles according to a modified normal distribution. The sorting is done on the basis of some criterion, e.g., belief-disbelief, agree-disagree, etc.
2. A matrix of intercorrelations is formed by correlating every person's sort of items with every other person's sort of items.
3. This matrix of intercorrelations is submitted to factor analysis so that persons are variables and items are observations. A principal axis solution is obtained. This is submitted to a varimax rotation which produces orthogonal factors. On this basis, a factor represents a grouping of persons around a common pattern of sorting the items. Hence, a factor represents a type of person.
4. Each pattern of sorting the items associated with each factor or type of person is estimated. This is done by weighting each item response of each of the persons most highly associated with a given factor by the degree to which they are loaded on that factor. The higher a person's loading on the factor, the greater is the weight. These weighted responses are summed across each item separately. This produces an item array of weighted responses for each factor in the rotated factor analysis solution selected. The arrays of weighted responses are then converted to z-scores.
5. The arrays of item z-scores are ordered from most accepted to most rejected for each factor. This provides a hierarchy of item acceptance for each factor or type of persons.
6. The arrays of items z-scores for each factor are compared by subtraction for each pair of factors. This produces arrays of difference scores for each pair of factors. This provides the basis for differentiating one factor or type of persons from another.

CHANGE IN BELIEF PATTERNS  
A. Individual Case Analysis

In previous reports in this series, belief patterns about (a) fallout shelters and (b) peace and defense have been investigated. As explained in the preface, the data for the previous analysis was gathered in December 1961 in five cities in the United States. Six months later the same data was gathered again on most of the same subjects.

This report will deal with a group of individuals as representative of those who changed their beliefs most between December 1961 and June, 1962.

Another report will deal with an analysis of changes in all of the people who were interviewed in December, 1961 and June, 1962.

Of the 105 individuals who provided Peace and Defense data both times, twenty-one were selected for analysis. Their change patterns are reflected in four areas. First, they are more willing to have our leaders use cooperative means for settling the cold war problems. Second, they have become less fearful of the possibility of nuclear war. Third, they are more accepting of a need for military and civil defense preparedness. Fourth, they have become more passive and indifferent towards the future and possibility of war. These trends were generally consistent irrespective of their original type assignment or whether they read the booklet "Fallout Protection", or not.

Of the 105 individuals who provided Fallout Shelter and Radiation data both times, twenty-seven were selected for analysis. Their change patterns are reflected in three areas. First, in general, these changers believe more that civil defense is government's responsibility. Second, they show more pessimism on civil defense matters. Third, there is an indication they have gained information on civil defense matters. As with the Peace and Defense changers, the trends of the Fallout Shelter and Radiation Changers were consistent irrespective of original type assignment, or whether they read the booklet "Fallout Protection" or not.

This report contains three major parts with an accompanying appendix for each part:

- I. Analysis of Change in Peace and Defense Belief Patterns for Twenty-one of One Hundred Five Individuals.
- II. Analysis of Change in Fallout Shelter and Radiation Belief Patterns for Twenty-Seven of One Hundred Five Individuals.
- III. Analysis of Twelve Individuals Who Were Changers on Both the Peace and Defense and Fallout Shelter and Radiation Analysis.

## I. ANALYSIS OF CHANGE IN PEACE AND DEFENSE BELIEF PATTERNS FOR TWENTY-ONE OF ONE HUNDRED FIVE INDIVIDUALS

A set of 36 statements on peace and defense were judged by 105 individuals at two different times. These statements were judged or sorted in relation to agreeing or disagreeing with the statement. Between the first judgement or sort (called phase 1) and the second judgement or sort (called phase 2) each individual was sent the Civil Defense booklet "Fallout Protection".

Twenty-one of the 105 individuals (about one-fifth) were selected for analysis. They represented those people who changed most from phase 1 to phase 2.

These twenty-one individuals included 11 males and 10 females. Three pairs of husband-wife combinations were represented. Thirteen of the twenty-one changers came from Minneapolis, one of the five cities sampled.

In relationship to the first report in this series, on peace and defense beliefs, six subjects were classified as type "A", four as type "B", three as type "C", four as type "D", three as type "E", and one was not assigned to any type. These types are briefly described as follows: (IA, Appendix A)

Type A: Most optimistic attitude about the future of the world in the nuclear age...doesn't believe a third world war is likely...threat of surprise attack doesn't unnerve "A"...strongly in favor of military and civil preparedness...need it to back up our stand against the Russians.

Type B: pessimistic...resigned himself to the fact that he must live in a world in which there is always the threat of a nuclear attack hanging over his head...regards nuclear war as a highly distinct possibility...places his confidence in military and civil defense preparation.

Type C: fraught with pessimism but it is of a different kind than "B's"...thinks that the post-attack world would be a hell on earth...feels the American people have not been told the full story of nuclear war devastation...yearns for the "good old days"...likes to plan for the future less and is a little more willing to accept what happens...rejects the idea that someone will attack us within the next 10 years...despite extreme dread of a nuclear war, he is predisposed favorably to most any method of preventing war short of appeasement to the Russians...endorses peace and disarmament conferences and the United Nations.

Type D: highly concerned about both peace and war, and is somewhat pessimistic...professes an interest in planning for the future...admits more that the cold war gets on his nerves and thinks that something should be done about it...thinks we should pursue more peaceful means of preventing war or resolving the cold war...some of the other types would call "D" a soft internationalist.

Type E: tends to represent a strange mixture of pessimism, fatalism, and ambivalence toward the question of nuclear war...thinks the advent of nuclear war means the end of mankind...believes chances for peace look grim...likes to plan ahead...strongly in favor of a strong military defense...backs up the President's stand on international questions...seems concerned but highly confused about the question of nuclear war...doesn't know what to do about it...some suggestion that he is looking for a quick fast solution to make this "nightmare" go away.

Six of the twenty-one people read all of the booklet, seven read it in part, seven could not remember receiving it, and one did not read it.

For analysis, 35 of the 36 statements on peace and defense were grouped into nine categories\*. These categories represent beliefs or attitudes toward (1) after-effects of nuclear war (2) solving cold war problems by national and international cooperation (3) less fear of nuclear war (4) possibility of pre-emptive attack (5) passive indifference to future and possibilities of war (6) military preparedness (7) civil defense preparedness (8) having someone else solve the disturbing problems and (9) trust in civil defense and government leaders.

Analysis of all of the twenty-one changers indicates three emerging patterns. First they changed to accepting more the ideas concerning solving the cold war problems by cooperation. Second, they are less fearful of war. Third, they are more accepting of a need for military and civil defense preparedness.

To bring these trends out more clearly, we will look at three areas of change, (a) changes in specific items, (b) changes by original type assignment, and (c) changes in relation to booklet readership.

\* IC Appendix A

#### Specific Item Analysis for Twenty-One Changers on Peace and Defense

The twenty-one people made a total of 228 item changes. This averages to 10.8 changes per person. The maximum number of changes was 18 for one subject and the minimum number of changes was 7 for 5 subjects.

As there were 37 items, the average is 6.1 changes per item.

For analysis we have selected only those items or ideas which showed a high number of recorded changes or where the relationship of movement in one direction or the other favored one direction highly. (IB, Appendix A)

<u>Item Number</u>	<u>Number Accepted More</u>	<u>Number Rejected More</u>	<u>Comments</u>
11. Our leaders should keep talking at the peace and disarmament conferences and in the United Nations. As long as you're talking, you're not shooting.	9	1	This item represented the greatest number of changes in the national and international cooperation category. The more acceptors included four of six type "A's" and three of four type "B's". All the type A & B changers had read the booklet in full or in part. Four of the nine more acceptance changers, changed this item from high rejection to high acceptance.



<u>Item Number</u>	<u>Number Accepted More</u>	<u>Number Rejected More</u>	<u>Comments</u>
30. The chances of a thermo-nuclear attack on the United States are very small, but the consequences of such an attack would be so disastrous that the only smart thing to do is to prepare against it now.	7	3	Acceptance of this item indicates a concern for civil defense preparedness. There was no relation between type or booklet readership and acceptance or rejection of this item.
15. We should have the strongest military defense possible and then President Kennedy should take a very firm stand whenever they try to push us.	6	1	This item concerns military preparedness. Four of the six people who accepted more represented four of the six type A people. There was no relationship between booklet readership and acceptance or rejection of this item.
4. I wish we could go back to the good old days when you didn't have to worry about hydrogen bombs and missiles and nuclear warheads.	6	2	On the Phase 1 Q-sort this item or idea was a consensus item indicating it did not sufficiently differentiate between types. There was no relationship between type or booklet readership and this item.
34. The thing I'm afraid of is that somebody will push the wrong button at the wrong time.	6	2	Most of the movement of this item was confined to movement from the extremes to the middle or neutral positions. There was no relationship between type or booklet readership and this item.
9. We have not been told the full story on the devastating effects of nuclear war.	6	2	There was no relationship between type or booklet readership in this item.
12. I just don't like to plan ahead very much. I'll let the future take care of itself.	4	0	Acceptance of this item indicates a passive indifference to the future and possibility of war. <u>No</u> type A's or B's were included in the acceptances. All four of the individuals could not remember receiving the booklet.
10. There is no defense against an atomic war. It is foolish to fool ourselves into thinking there is.	3	7	Rejection of this item indicates a concern for preparation against an atomic war. There was no relation between type or booklet readership and acceptance or rejection of this item.

<u>Item Number</u>	<u>Number Accepted More</u>	<u>Number Rejected More</u>	<u>Comments</u>
26. We should build the best defenses possible around the borders of our country and <u>stay out</u> of international politics.	0	4	Rejection of this item indicates a desire <u>to not</u> support an isolationist position. The four people who rejected it read the booklet in part or completely. There was no relationship between type and this item.
14. Every day we seem to be getting closer and closer to war with Russia.	2	12	This item represented the greatest number of changes of any of the items. There was no relationship between type or booklet readership and rejection of this item. The large number of rejections would indicate that the changers were less concerned about the possibility of war with Russia.

BOOKLET READERSHIP ANALYSIS FOR TWENTY-ONE CHANGERS  
ON PEACE AND DEFENSE

Between Phase 1 and Phase 2, each individual was sent the civil defense booklet "Fallout Protection". They were asked in Phase 2 if they remembered receiving the booklet and, if so, had they read it. Six people indicated they read it all, seven people said they read it in part, one person said he did not read it, and seven people said they did not remember receiving it.\* Most of those who read the booklet in full or in part were originally assigned to types A, B, or C. Most of those who did not read the booklet were assigned to type D, E, or N.A.

Read All of the Booklet "Fallout Protection"

These six cases accepted items more 39 times and rejected items more 25 times, a ratio of about 3 to 2. Four of the six cases accepted more the statement that "our leaders should keep talking at peace and disarmament conferences and the United Nations." More than those who read part of the booklet, they accepted more items which indicated a passive indifference to the problems of nuclear war. They also rejected more items which would favor attacking the Russians than those who read the booklet in part. This group did not significantly accept or reject more items or ideas than the group which did not read the booklet at all. This group was represented by 5 males and one female.

Read the Booklet "Fallout Protection" in Part

The seven cases included 4 women and 3 men. They accepted items or ideas more 38 times and rejected items more 37 times, a ratio of about 1 to 1. Three of the seven individuals in this group were originally classified as Type A on Phase 1. In the item categories of (a) a more cooperative attitude toward solving the cold war problems and (b) less fear of war, they accepted more, twice as many items as rejected more. They also showed a pattern of favorable attitude toward military and civil defense preparation.

Did Not Read the Booklet "Fallout Protection"

This group was composed of 8 individuals, seven of whom said they could not remember receiving the booklet and one who remembers receiving it but said he did not read it. It had 3 men and 5 women in the group. This group was not represented by any type B's or type C's. Three of the individuals were originally classified as Type D and two as Type E. Along with those who read the booklet in full or in part they show

\* Information for this analysis given in tables 1 and 2 of appendix A.

the pattern of change to a more cooperative attitude and less fear of war. Different from those who read the booklet in full or in part, they accept more items indicating a passive indifference towards the future and possibility of nuclear war. They also reject more items than those who read the booklet in full or in part concerning the category of having someone else solve the difficult problems.

#### ANALYSIS BY TYPE ASSIGNMENT ON PHASE 1 FOR TWENTY-ONE CHANGERS ON PEACE AND DEFENSE

Between Phase 1 and Phase 2 some individuals changed their type assignment.\*

The reassignment of individuals to a type after the Phase 2 Q-sort indicates that Type A which had six individuals originally has only two after reassignment. While Type B still has four individuals, three of the original individuals changed to Type D. The three individuals who were originally Type C remained assigned to that type. While three of the original four Type D individuals changed assignments, Type D picked up six other individuals to become the type with most individuals assigned after the Phase 2 Q-sort. Type E lost two of its three assignments and there were three individuals not assigned after Phase 2 where there was only one individual changer in this category from Phase 1.

After the reassignment the seven Type D individuals included five men and two women. The original Type B assignments included three men and one woman, however, after the Phase 2 Q-sort Type B's changed to three women and one man.

#### Analysis of Item Change by Type

The ratio of total items accepted more to total items rejected more was 3 to 2 or for every 3 items accepted more there would be 2 items rejected more.

#### Original Type A's - 6 Individuals

Original Type A's accepted more items at almost a 2 to 1 ratio. Type A's made an average of 10 item changes per person. Four individuals of this type accepted more the idea that "our leaders should keep talking at peace and disarmament conferences and in the United Nations." Four of them rejected more the idea that we were getting closer to war with Russia. However, this indication of less fear of war did not deter our individuals from accepting more the idea that we should have the strongest defense possible and then President Kennedy should take a very firm stand whenever they try to push us. Overall, Type A's accepted 4 1/2 times more items in the category of less fear of war and 4 1/2 times more items favoring an attitude towards civil defense

\* Information for the analysis is found in tables 3 & 4, Appendix A.

or military preparation. Five of the six Type A's read all or part of the booklet.

#### Original Type B's - Four Cases

Original Type B's accepted more than rejected items at slightly more than the 3 to 2 ratio over all groups. Type B's made an average of 9 item changes per person. Three of the original Type B's would be assigned Type D after Phase 2. Three of the four individuals accepted more that "our leaders should keep talking at the peace and disarmament conferences and in the United Nations, as long as you're talking, you're not shooting". Overall the group accepted 7 and rejected 2 items dealing with the category concerning a cooperative attitude toward solving the cold war problems. B's rejected more items dealing with the question of attacking Russia if threatened; a majority of these rejections moved from neutral to high rejection. All of the Type B's read all or part of the booklet.

#### Original Type C's - Three Cases

The original three cases of Type C did not change their types from Phase 1 to Phase 2. They accepted more than rejected items at a 2 to 1 ratio, significantly higher than the ratio of 3 to 2 over all groups. Type C's changed an average of 6 items per person. This represents a significant difference from the average of 10 items per person across all groups. All three C's rejected the item that we are getting closer to war with Russia. Two of the individuals accepted more, from neutral to high acceptance, the idea that "I think the civil defense people are doing the best job possible to help us prepare, in case we are ever attacked." A greater portion of the items accepted were moved from the neutral to high acceptance. A greater portion of the rejected more items were moved from high acceptance to neutral. Two of the three Type C's read all or part of the booklet.

#### Original Type D's - Four Cases

Original Type D's accepted and rejected items at a ratio of 1 to 1, significantly below the ratio of 3 to 2 for all groups. Type D's made an average of 12 item changes per person. Two of the Type D's changed the most and second most between Phase 1 and Phase 2. They accepted and rejected items with equal frequency. In no category is there an indication of more acceptance or rejection. Three of the four Type D's did not read any of the booklet.

#### Original Type E's - Three Cases

Original Type E's were all women. They accepted and rejected items at a ratio of slightly more than the average of 3 to 2 for all groups. They averaged 13 item changes per person, the highest average of all groups. Only one of the three E's remained an E after Phase 2.

Type E's are less disturbed about the problems of the cold war and having someone else solve them by rejecting more items in this category. Two of them did not read the booklet.

SUMMARY OF ANALYSIS OF TWENTY-ONE INDIVIDUAL CHANGERS  
FROM PHASE 1 - PHASE 2 ON PEACE AND DEFENSE Q-SORT

In Table 4 the patterns of change mentioned in the beginning of this report become apparent. Considering those items dealing with a more cooperative attitude toward solving the cold war problems, the total group accepted twice as many more items than rejected items. The changers felt also that this period saw a lessening of fear of war by accepting twice as many as rejecting items concerning this category. The changers did not, however, feel the threat was completely gone. By combining the categories of civil defense and military preparedness, the changers again accepted more twice as many items as they rejected more. They indicated a more passive indifference to the future and possibility of war by accepting more twice as many items as rejecting more.

In summary, the twenty-one changers from Phase 1 to Phase 2 can be characterized by becoming less fearful of war and having a more passive indifference to the future and possibility of war. They desire more to use cooperative methods to solve the problems of the cold war. They do, however, support more both military and civil defense preparedness.

II. - ANALYSIS OF CHANGE IN FALLOUT SHELTER AND RADIATION  
BELIEF PATTERNS FOR TWENTY-SEVEN OF ONE HUNDRED FIVE INDIVIDUALS

A set of 57 statements on fallout shelters and radiation were judged by 105 individuals at two different times. These statements were judged or sorted in relation to agreeing or disagreeing with the statement. Between the first judgement (Phase 1) and the second judgement (Phase 2) each individual was sent the booklet "Fallout Protection".

Twenty seven individuals (about one-fourth) were selected for analysis of change in belief patterns. These twenty seven individuals represent those individuals who changed most from Phase 1 to Phase 2.

These twenty-seven individuals included sixteen men and eleven women. There were three husband and wife combinations within the twenty-seven. Twelve of the twenty-seven were also represented as changers in the preceding analysis of peace and defense beliefs.

When we speak of types in this analysis we are referring to those hypothetical types developed in the third report in this series titled, "Fallout Shelters and Radiation". Briefly they are described as:

Type A--Clearly favors fallout shelter protection...feels that individuals such as himself should assume responsibility for the matter and should not leave everything up to the government...concerned about whether to build a shelter or not...appears to be better informed than others about radiation effects.

Type B--Rejects fallout protection almost as much as "A" favors it...foresees a very dismal postattack world...is not fatalistic...wants action on means to prevent war...is ill-informed about the nature of radiation and its effects.

Type C--Is clearly fatalistic. Unlike "A" and "B", he feels that prayer is the answer...feels, as does no other type, that fallout shelters are immoral...is well informed on some matters and not on others.

Type D--Reveals his passive support of fallout shelters...wants fallout protection at the initiative and expense of the federal government...puts the whole matter on the government's shoulders...favors large public shelters over family shelters.

Of the twenty-seven cases under analysis, eleven were assigned to type A, five to type B, seven to type C, two to type D, and two were not assigned.

Five of the twenty-seven people read all of the booklet "Fallout Protection". Six people read it in part, eleven people did not remember receiving it and five people did not read it.

For analysis, the 57 statements on fallout shelters and radiation were grouped into nine categories. (IB - Appendix B) These categories represent beliefs or attitudes toward; (1) perceived government confusion on civil defense, (2) community vs private shelters, (3) active-passive concern on civil defense matters, (4) civil defense is governments' responsibility, (5) pessimism-optimism on civil defense matters, (6) religious fatalism, (7) shelter acceptance, (8) information gain, (9) uncategorized statements.

Analysis of all of the twenty-seven changers indicates three basic patterns emerging. First, in general, these changers believe more, that civil defense is governments' responsibility. Second, they show more pessimism in civil defense matters. Third, there is an indication they have gained information on civil defense matters.

To bring these three trends out more clearly and to indicate other more subtle trends, we will look at three areas of change, (a) changes in specific items, (b) changes by original type assignment, and (c) changes in relation to booklet readership.

#### SPECIFIC ITEM ANALYSIS FOR TWENTY-SEVEN CHANGERS ON FALLOUT SHELTERS AND RADIATION

The twenty-seven people made a total of 324 item changes. This averages to 12 item changes per person. The maximum number of changes was 24 for one subject and the minimum number of changes was 6 for one subject.

As there were 57 items, the average is 5.6 changes per item.

Items were accepted more or rejected more at almost a 1 to 1 ratio, the totals being 169 items accepted more, and 155 items rejected more.

The individual items which reflected the greatest amount of discrepancy in rejection or acceptance are listed in Table 1 in Appendix B. Due to the fact that there was not as much variance in the items on fallout shelters and radiation as there was in the items on peace and defense, we will look at the category changes only.\*

The category called civil defense is governments' responsibility, contained 5 items. These five items were accepted more, 17 times. They were rejected more only 6 times.

The category called pessimism-optimism on civil defense matters contained five items. These five items were accepted more 23 times and rejected more 16 times.

The category called information gain contained 15 items. These 15 items were accepted more 40 times and rejected more 28 times. These three categories indicate the trends previously mentioned.

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\* This information is taken from Table 5, Appendix B.



BOOKLET READERSHIP ANALYSIS FOR TWENTY-SEVEN CHANGERS ON  
FALLOUT SHELTERS AND RADIATION\*

Between Phase 1 and Phase 2 each individual was sent the civil defense booklet "Fallout Protection". The twenty-seven changers were asked in Phase 2 if they remembered receiving the booklet and if so, had they read it. Five people said they had read it all, six people said they read it in part, eleven people said they did not remember receiving it, and, five people said they remembered receiving it but did not read it. Each of the booklet readership groups accepted more and rejected more items, at about the 1 to 1 ratio for the total group.

Read All of the Booklet "Fallout Protection"

The five cases included 3 women and 2 men. They became more favorable towards shelter acceptance. They indicated high information gain by accepting more items, eleven times, and rejecting more items only four times.

Read the Booklet "Fallout Protection" in Part

These six cases were all men. Three were Type B's, two were type A's and one was a type C. There were no type D's represented. Even though they read the booklet in part they indicated information loss by rejecting more than accepting items in this category.

Did Not Read the Booklet "Fallout Protection"

This category includes sixteen individuals who did not remember receiving the booklet or remembered receiving it but did not read it. It was represented equally by men and women. There were 7 type A's, 1 type B, 5 type C's, 2 type D's and 1 not assigned. They followed the general trends towards government responsibility for civil defense, pessimistic attitude and information gain. They differed from those who read the booklet in full or in part in one particular area. They accepted more, items concerning religious fatalism than rejected more. Those who had read the booklet in full or in part did the opposite. Those who did not read the booklet also indicated slightly more favorability towards shelter acceptance than did those who read the booklet in whole or in part.

ANALYSIS BY TYPE ASSIGNMENT ON PHASE 1 FOR TWENTY-SEVEN  
CHANGERS ON FALLOUT SHELTERS AND RADIATION\*\*

Between Phase 1 and Phase 2 some individuals changed their type assignments. Concerning these changes, seven of the original type A's remained on type A, after Phase 2. Five of the original type C's remained type C. On Phase 2, type B's lost four of their five original assignments, two to type A and one each to type D and NA.....

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\* The information for this analysis is taken from Tables 2 and 3 in Appendix B.

\*\* Information for this analysis is found in Tables 4 and 5 in Appendix B.

Original Type A's - 11 Cases

Type A's became more passive on civil defense matters. Unlike the other types they rejected more, twice as many items as they accepted more, in the category of shelter acceptance. They indicated the general trends previously described. More than half of the items they accepted more moved from neutral to high acceptance. Seven of the eleven original type A's did not read the booklet.

Original Type B's - 5 Cases

Original type B's included four men and one woman. They accepted and rejected items at an exact 1 to 1 ratio. There is no apparent pattern established in this type concerning categories or movement of items. They were the only type which rejected more items concerning information gain than accepted more. Four of the five type B cases read the booklet in whole or in part.

Original Type C's - 7 Cases

Original type C's included 4 men and 3 women. Five of the type C's remained on type C after Phase 2. Their changes indicate the general trends. They also became more favorable towards shelter acceptance. Five of the type C's did not read the booklet.

Original Type D's - 2 Cases

Original type D's included one man and one woman. There is no apparent pattern of more acceptance or more rejection within categories or items. Neither of them read the booklet.

Original Type Not Assigned - 2 Cases

Both not assigned individuals were women. They accepted more, almost two times as many items as they rejected more. There is no apparent pattern in their acceptance or rejection of items outside of supporting the general trends within categories. One of them read the booklet while the other did not.

SUMMARY OF ANALYSIS OF TWENTY SEVEN CHANGERS FROM  
PHASE 1 -- PHASE 2 ON FALLOUT SHELTERS AND RADIATION.

In Table 6 of Appendix B, the patterns of change mentioned in the beginning of this section become apparent. These twenty seven changers believe more that civil defense is governments responsibility. They are more pessimistic about civil defense matters and indicate they have gained information. The slight reaction of shelter acceptance is accounted for primarily by original type A's who on Phase 1 were favorable towards shelters and on Phase 2 indicate much less favorability.

III. ANALYSIS OF TWELVE INDIVIDUALS WHO WERE CHANGERS ON BOTH THE PEACE AND DEFENSE AND FALLOUT SHELTERS AND RADIATION ANALYSIS\*

Twelve individuals were represented on both of the previous analyses. They included 5 men and 7 women. Six of them were from Minneapolis, one of five cities in the sample. The others were distributed between the other four cities.

On the peace and defense analysis, they were spread across all the types, however, three of the individuals represented the three type E's in the analysis. Their patterns of acceptance and rejection closely resemble the general patterns of all twenty-one peace and defense changers. They indicate more acceptance of an attitude towards cooperation in solving cold war problems. They show less fear of war, and are more favorable towards civil defense and military preparedness.

On the fallout shelters and radiation analysis there was no concentration of any one type. They support the general patterns of the total twenty-seven fallout shelter and radiation changers. They feel civil defense is the government's responsibility, are more pessimistic on civil defense matters, and indicate some information gain. Unlike the total of twenty-seven changers these twelve indicate a more active attitude toward civil defense matters.

Concerning booklet readership, six of these twelve read the booklet in whole or in part and six did not read it.

\* Information for this analysis is taken from the tables in Appendix C.

APPENDIX A

## APPENDIX A

### Peace and Defense

#### I. Methodology of Analysis

- A. Type Assignment
- B. Definition of Specific Item Change
- C. Item Categorization

#### II. Individual Analysis of Twenty-One Changers

#### III. Tables

Table 1 - Analysis of Item Change Within Categories by Booklet Readership for Twenty-One Peace and Defense Changers

Table 2 - Analysis of Twenty-One Changers on Peace and Defense by Booklet Readership

Table 3 - Changes in Type Assignment for Twenty-One Changers on Peace and Defense From Phase 1 to Phase 2

Table 4 - Analysis of Item Movement by Categories for Twenty-One Changers on Peace and Defense from Type Assignment on Phase 1

Table 5 - Analysis of Item Movement by Categories, of Original Item Position on Phase 1 and Item Position on Phase 2, for Twenty-One Changers on Peace and Defense

## I. Methodology of Analysis

## A. Type Assignment

An individual is assigned to a particular type by choosing the highest correlation, over .300, of that individual, with the hypothetical perfect types established by factor analysis in the first report of this series titled, "Peace and Defense". For example if we have a Subject 1:

Subject 1	Phase 1 Types	A	B	C	D	E
	Phase 1 Correlation	.678*	.313	-.106	.012	-.010
	Phase 2 Correlation	.316	.719*	.213	-.067	-.134

We would assign this subject to Type A on Phase 1 the criterion being that the correlation is above .300 and the highest correlation of those above .300 is the one chosen.

On Phase 2, subject 1 goes together most with the hypothetical perfect Type B, so we would say he has changed, to be more similar to the original Phase 1 Type B.

## B. Definition of Specific Item Change

Another aspect of the individual changer is the movement of specific items or ideas on the Phase 2 Q-sort from where he originally placed them on the Phase 1 Q-sort. For example, lets take subject A and items X, Y, and Z.

Phase 1 Q-sort

Agree	Y                      X    Z	Disagree
	<hr/> 1 2 3 4 5 6 7 8 9 10 11 12 13	
Believe		Disbelieve

Phase 2 Q-sort

Agree	X    Z                      Y	Disagree
	<hr/> 1 2 3 4 5 6 7 8 9 10 11 12 13	
Believe		Disbelieve

We would say that subject A has accepted more, item X. The criterion being an arbitrary decision that the item or idea must move four or more positions toward the accept-believe end of the continuum.

We would say that subject A rejects more, item or idea Y. The criterion being the same as for X except moving toward the disagree-disbelieve end of the continuum.

We would not say anything about item or idea Z for the item did not meet the criterion stated.

## C. Item Categorization

For purposes of analysis, 36 of the 37 items were placed into 9 categories, representing certain areas of concern towards peace and defense.

There are certain items which, by being rejected more, indicate a positive attitude toward the category concept. These are indicated by a minus sign after the item. In all following tables these items are recorded as being more accepted rather than more rejected.

## PEACE AND DEFENSE ITEMS

More acceptance (+) indicates a positive attitude toward the concept.  
More rejection (-) indicates a positive attitude toward the concept.

Item No.	Statement	
1. Concern About After Effects		
9	We have not been told the full story on the devastating effects of nuclear war.	+
18	Nuclear war would mean the wiping out of mankind.	+
19	After a nuclear attack on the United States, life here would be a savage man-to-man struggle for survival	+
21	A nuclear attack would probably wipe out most of our government leaders in Washington.	+
2. Solving Cold War Problems by National and International Cooperation		
1	If our leaders would make a real effort to understand and cooperate with the leaders of Russia and Red China, we could probably prevent war.	+
11	Our leaders should keep talking at the peace and disarmament conferences and in the United Nations. As long as you're talking, you're not shooting.	+

More Acceptance (+) indicates a positive attitude toward the concept.

More rejection (-) indicates a positive attitude toward the concept.

Item No.	Statements	
22	We should give a lot more power to the United Nations to make it a true world government.	+
23	In order to settle the cold war, we should get the finest minds in the nation to work out some new solutions to the problems.	+
26	We should build the best defenses possible around the borders of our country and <u>stay out</u> of international politics.	-
28	I think we should organize a march on Washington to get our leaders and the Russian leaders to stop testing nuclear bombs.	+
3. Less Fear of Nuclear War		
3	Lately, things seem to be getting better in the world. I would say the chances for peace are much better today than they were a year or so ago.	+
6	I don't think we'll have a nuclear attack on the U.S. What would the Russians do with a radioactive wasteland.	+
14	Every day we seem to be getting closer and closer to war with Russia.	+
16	I am almost positive that Russia or some other country will attack the United States with missiles and nuclear bombs within the next 10 years.	-
27	I think Russia and Red China are going to start fighting each other so there is no use our worrying about an attack from Russia.	+



More acceptance (+) indicates a positive attitude toward the concept  
 More rejection (-) indicates a positive attitude toward the concept.

Item No.	Statement	
31	I just don't believe there will ever be a third world war.	+
33	We are strong enough today so that no sensible nation would launch an attack against us, knowing that our retaliation would be swift and terrible.	+
34	The thing I'm afraid of is that somebody will push the wrong button at the wrong time.	-
4. Favorability Toward Pre-emptive attack		
7	The best way to settle this whole thing would be for us to make a surprise nuclear attack on the Russians and get rid of their striking power.	+
24	I think our leaders should do anything to keep us out of a nuclear war -- even to the point of yielding to the Russians on important issues.	-
29	If Russia really threatens us, I think we should attack first to take advantage of the surprise.	+
5. Passive Indifference to Future and Possibility of War		
5	We are all being radiated so much now from fallout of the bomb testing that a nuclear attack probably won't make much difference.	+
12	I just don't like to plan ahead very much. I'll let the future take care of itself.	+
17	Frankly, I just don't worry about war or the possibility of a nuclear attack.	+
25	I don't know whether we'll have a nuclear war--and I don't much care, one way or another.	+

More acceptance (+) indicates  
a positive attitude toward the  
concept

More rejection (-) indicates  
a positive attitude toward the  
concept.

<u>Item No.</u>	<u>Statement</u>	
6. Military - Preparedness		
8	The stronger we make our own war power, the less likely we are to have a war, since we will probably never make the first attack on anyone.	+
13	The best way to keep out of war is not to get ready for one.	-
15	We should have the strongest military defense possible and then President Kennedy should take a very firm stand whenever they try to push us.	+
7. C. D. Preparedness		
10	There is no defense against an atomic war. It is foolish to fool ourselves into thinking there is.	-
30	The chances of a thermonuclear attack on the United States are very small, but the consequences of such an attack would be so disastrous that the only smart thing to do is to prepare against it , now.	+
8. Problems Are Disturbing and Someone Else Should Solve Them		
2	The cold war and the danger of a surprise nuclear attack get on my nerves. I wish somebody would do something about them.	+
4	I wish we could go back to the good old days when you didn't have to worry about hydrogen bombs and missiles and nuclear warheads.	+
35	I wish President Kennedy would set up a Department of Peace to get the cold war settled once and for all.	+

More acceptance (+) indicates  
a positive attitude toward the  
concept

More rejection (-) indicates a  
positive attitude toward the  
concept

<u>Item No.</u>	<u>Statement</u>	
	9. Trust in Government Leaders	
32	After the Cuban mistake and things like that, I just can't put much trust in what our government leaders say.	-
36	I think the civil defense people are doing the best job possible to help us prepare, in case we are ever attacked.	+

## II. Individual Analysis of Twenty One Changers

The analysis for each individual changer concerns the subjects sex, the correlation between the Phase 1 and Phase 2 Q-sort, the correlations between the Q-sort on Phase 1 and Phase 2 and the hypothetical types, and the type assignment given to the subject on Phase 1 and Phase 2. The comments on each individual changer involves specific item change or item change within categories.

Sub.	Sex	Corr. between Phase 1 - Phase 2 Q-sorts	Type					Assigned to Type	
			A	B	C	D	E		
1	M	-.242	Phase 1	.048	.138	-.136	.311	.298	D
			Phase 2	-.288	-.172	-.166	-.561	-.159	N.A.

Subject 1 changed half of the items at least four positions or more from his Phase 1 sort. On Phase 2, he rejects more, "Getting the finest minds in the nation to work out some new solutions to cold war problems" and "If our leaders would make a real effort to understand and cooperate with the leaders of Russia and Red China, we could probably prevent war." Where he was indifferent to the possibility of nuclear attack on Phase 1, he is now more concerned with this possibility. He accepts fully on Phase 2 that nuclear war would mean the wiping out of mankind where he completely rejected this item before. He would be classified as changing from less to more concern for the future and possibility of nuclear war and from a more to less international cooperative attitude. This subject read all of the booklet.

Sub.	Sex	Corr. between Phase 1 - Phase 2 Q-sorts	Type					Assigned to Type	
			A	B	C	D	E		
2	M	.074	Phase 1	.381	.228	.291	.522	.084	D
			Phase 2	.405	.351	.244	.653	.209	D

This subject rejects more, "Settling this whole thing by having a surprise nuclear attack on the Russians to get rid of their striking power" and accepts more that, "Our government leaders do anything to keep us out of a nuclear war--even to the point of yielding to the Russians on important issues." His changes indicate he has less fear of war. While adopting more items in the cooperative attitude category, he also asserts more individual concern by rejecting the attitude of wishing someone would do something about the cold war problems. He accepts strongly that, "We're going to have to get used to living in a world where the threat of nuclear attack is always with us." He did not remember receiving the booklet.

Sub.	Sex	Corr. between Phase 1 - Phase 2 Q-sorts	Type					Assigned to Type	
			A	B	C	D	E		
3	F	.102	Phase 1	-.177	.251	.110	-.016	.150	NA
			Phase 2	-.002	.108	.012	-.042	.067	NA

In Phase 1, subject 3 completely rejected the idea that, "Our leaders should keep talking at the peace and disarmament conferences and in the United Nations" and that "Nuclear war would mean the wiping out of mankind." In Phase 2 she completely accepted these two statements. She rejects more that "We have not been

told the full story on the devastating effects of nuclear war." She also rejects more that, "After a nuclear attack on the United States, life here would be a savage man-to-man struggle for survival." She also indicates less concern for military preparedness. This subject did not remember receiving the booklet.

Sub.	Sex	Corr. between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
4	M	.155	Phase 1	.114	.313	-.083	.217	.242	B
			Phase 2	.319	.700	.356	.275	.634	B

This subjects higher correlation on Phase 2 than on Phase 1 with type B is caused, not so much by greater acceptance of statements that type B supports, but by further rejection of statements which type B rejects. He further rejects the idea that, "If our leaders would make a real effort to understand and cooperate with the leaders of Russia and Red China, we could probably prevent war" and that, "We should give a lot more power to the United Nations to make it a true world government." He also further rejects that, "He just doesn't worry about war or the possibility of a nuclear attack." He does trust the national leadership to a greater extent by rejecting the suggestion that "He can't put much trust in what our government leaders say." This subject read the booklet in part.

Sub.	Sex	Corre. between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
5	F	.186	Phase 1	.080	.122	.102	.217	.500	E
			Phase 2	-.021	.066	.045	.143	.249	N. A.

Subject five has become more indifferent about the future and possibility of war by accepting more two statements in this category. They are, "I just don't like to plan ahead very much,--I'll let the future take care of itself" and "I think our leaders should do anything to keep us out of a nuclear war--even to the point of yielding to the Russians on important issues." These two statements are rejected by type E's. She accepts less the possibility that, "After a nuclear attack life would be a savage man-to-man struggle for survival" while accepting more the idea that, "We have not been told the complete story about the devastating effects of nuclear war." She also rejects more the idea that, "The Civil Defense people are doing the best job possible to help us prepare, in case we are ever attacked." She could not remember receiving the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
6	M	.189	Phase 1	.348	.711	.516	.602	.498	B
			Phase 2	.474	.644	.477	.650	.321	D

This subject accepts more that, "Our leaders should keep talking at peace and disarmament conferences and in the United Nations" and that, "We should have the strongest military defense possible and then President Kennedy should take a very firm stand whenever they try to push us." He also believes that things seem to be getting better in the world and that we don't seem to be getting close to war with Russia. He rejects strongly the idea that we should yield to the Russians on important issues to keep us out of nuclear war. He read the booklet in part.

Sub.	Sex	Corre. Between		Type					Assigned to type
		Phase 1 - Phase 2	Q-sorts	A	B	C	D	E	
7	M	.192	Phase 1	.586	.467	.571	.292	.349	A
			Phase 2	.548	.238	.443	.248	.074	A

Our 7th subject is less fearful of war by greater acceptance of the belief that there will never be a third world war and more rejection of the beliefs that we are getting closer to war with Russia and that some country will attack us in the next ten years. He also accepts more the idea that, "The best way to keep out of war is not to get ready for one." He does not completely reject the idea of our leaders doing anything to keep us out of nuclear war - even to the point of yielding to the Russians on important issues. He also accepts completely that, "We should have a strong military defense and then President Kennedy should take a very firm stand whenever they try to push us." He did not read the booklet.

Sub.	Sex	Corre. Between		Type					Assigned to type
		Phase 1 - Phase 2	Q-sorts	A	B	C	D	E	
8	F	.217	Phase 1	.269	.388	.286	.090	.463	E
			Phase 2	.417	.573	.290	.262	.390	B

This subject changed slightly less than half of all the statements at least four or more positions. She became less concerned about letting someone else solve the problems of the cold war. She accepted more the beliefs that we wouldn't have a nuclear attack and that things were getting better in the world although she was more concerned that somebody would push the wrong button at the wrong time. She accepts more the feeling that, "The chance is small for a thermonuclear attack on the United States, but the consequences would be so disastrous that the smart thing to do is to prepare against it now." She did not remember receiving the booklet.

Sub.	Sex	Corre. Between		Type					Assigned to type
		Phase 1 - Phase 2	Q-sorts	A	B	C	D	E	
9	F	.236	Phase 1	.143	.441	.473	.331	.343	C
			Phase 2	.395	.094	.514	.248	.014	C

Subject 9 strongly rejects more the idea that, "We should get the finest minds in the nation to work out some new solutions to the problems" and also that, "We should build the best defense possible around our borders and stay out of international politics." She feels much stronger that we are not getting closer and closer to war with Russia. She accepts more the idea of preparing against the consequences of an attack now. However, the whole idea gets on her nerves more now and she wishes someone would do something about it. She read the booklet in part and accepts more the belief that, "The Civil Defense people are doing the best job possible to help us prepare in case we are ever attacked."

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
10	F	.236	Phase 1	.284	.477	.201	.290	.680	E
			Phase 2	.162	.476	.239	.527	.631	E

This subject accepts more the recognition of the devastating after effects of nuclear war; however, she rejects more the notion that it would mean the wiping out of mankind. She accepts more the idea that things seem to be getting better in the world and rejects more the idea of a third world war and fearing less that someone will push the wrong button at the wrong time. She accepts more strongly the idea that if threatened we should attack first and we should prepare now in case of nuclear attack. She also rejects more the idea that, "The best way to stay out of war is not to get ready for one" indicating a military preparedness attitude. She read the booklet in part.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
11	M	.242	Phase 1	.847	.436	.282	.413	.313	A
			Phase 2	.464	.402	.540	.403	.432	C

This gentleman was the most representative person of type A on Phase 1. He accepts more that after an attack life would be a savage struggle for survival and that, "We have not been told the full story of the devastating effects of nuclear war." The latter belief was originally rejected most by type A's on Phase 1. He accepts much more that, "Our leaders should keep talking at the peace and disarmament conferences and in the United Nations for as long as you're talking, you're not shooting." He rejects more the idea that things are getting better in the world but he also rejects more the ideas that we are getting closer to war with Russia and that we will have a nuclear attack in the next ten years. This could be viewed as an inconsistency.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
12	M	.282	Phase 1	-.054	-.002	.562	.329	.098	C
			Phase 2	-.229	.087	.379	.343	.074	C

This subject must think that the government leaders are well prepared for nuclear attack because he rejects more the idea that, "Most of our government leaders in Washington would be wiped out in the event of nuclear attack." He accepts more the idea of having the finest minds in our nation work out some new solutions to the cold war problems and also accepts more the idea that, "The Civil Defense people are doing the best job possible to keep us prepared in case we are ever attacked." He read part of the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
13	M		Phase 1	.642	.348	.406	.288	.308	A
			Phase 2	.616	.623	.374	.596	.468	B

Subject 13 accepts more the ideas that, "Our leaders should keep talking at peace and disarmament conferences and in the United Nations" and putting our finest minds to work to find new solutions to the problems of the cold war;

however, he rejects more the idea that, "If our leaders would make a real effort to understand and cooperate with the leaders of Russia and Red China, we could probably prevent war." He rejects more strongly the idea that, "The cold war and the danger of a surprise nuclear attack gets on my nerves, I wish somebody would do something about them," but accepting much more strongly the wish that President Kennedy would set up a Department of Peace to get the cold war settled once and for all. He read all of the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
14	F	.338	Phase 1	.672	.626	.435	.411	.446	A
			Phase 2	.672	.604	.532	.685	.475	D

This woman changed from high rejection to high acceptance the idea that, "Our leaders should keep talking at peace and disarmament conferences and in the United Nations." She also rejected more the idea that we should stay out of international politics. She is slightly more concerned about the after-effects of a nuclear war although she rejects more the notion that nuclear war would mean the wiping of mankind. She rejects more the idea that there is no defense against atomic war and accepts more the idea of preparing for the consequences now. She read part of the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
15	F	.360	Phase 1	.439	.789	.382	.658	.539	B
			Phase 2	.396	.418	.239	.494	.313	D

This woman changed from complete acceptance to complete rejection the idea that, "Our leaders should keep talking at peace and disarmament conferences and in the United Nations." However, she accepted more strongly the idea that, "We should give the United Nations a lot more power to make it a true world government." She rejects more the idea that we may be attacked with nuclear bombs in the next ten years yet also rejects more the idea that lately things seem to be getting better in the world. This would appear to be inconsistent. She read all of the bulletin.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
16	F	.372	Phase 1	.568	.559	.321	.647	.323	D
			Phase 2	.626	.675	.399	.600	.374	B

Subject 16's major change represented a complete reversal from complete rejection to complete acceptance that, "Our leaders should keep talking at peace and disarmament conferences and in the United Nations." She also accepted more the idea of getting back to the good old days when we didn't have to worry about nuclear warfare. While accepting the idea of continued talking, she rejected more the idea that, "Our leaders should do anything to keep us out of nuclear war, even to the extent of yielding to the Russians on important points." She could not remember receiving the booklet.



Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
17	M	.385	Phase 1	.494	.609	.294	.887	.351	D
			Phase 2	.559	.546	.336	.719	.232	D

This subject was considered the most representative case of type D on the Phase 1 sort. He made two complete reversals of acceptance and rejection. From complete acceptance to complete rejection was the idea that, "Our leaders should keep talking at peace and disarmament conferences and in the United Nations." From complete rejection to complete acceptance was the idea that, "There is no defense against an atomic war and it is foolish to fool ourselves into thinking there is." He rejects completely now the idea that, "I don't know whether we'll have a nuclear war--and I don't much care, one way or the other." This rejection is representative of a type D. He cannot remember receiving the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
18	F	.389	Phase 1	.389	.389	.182	.136	.362	A B
			Phase 2	.512	.668	.494	.469	.456	B

This subject was somewhat representative of the mixed A and B types on Phase 1. Most of her changes were of minimum nature. She did accept more completely the idea that, "We should have the strongest military defense possible and then President Kennedy should take a very firm stand whenever they try to push us" and "The chances of a thermonuclear attack on the United States are very small, but the consequences of such an attack would be so disastrous that the only smart thing to do is to prepare against it, now." She rejected more the idea that we seem to be getting closer to war with Russia, and her concern is evident by more acceptance of the idea that someone may push the wrong button at the wrong time. She read the booklet in part.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
19	M	.409	Phase 1	.652	.680	.305	.652	.415	B
			Phase 2	.596	.412	.263	.702	.237	D

This gentleman accepts more the idea of understanding and cooperating with the leaders of Russia and Red China and that, "Our leaders should keep talking at disarmament conferences and in the United Nations." Both ideas are representative of type D. He rejects more the idea that, "We should make a surprise attack on the Russians to get rid of their striking power" and accepts more the idea that, "Our leaders should do anything to keep us out of a nuclear war--even to the point of yielding to the Russians on important issues." He read all of the booklet which may account for his greater rejection of the idea that there is no defense against atomic attack.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
20	M	.422	Phase 1	.434	.318	.205	.200	.405	A
			Phase 2	.371	.335	.261	.378	.148	D

Most of this subject's changes involved minimum movement. He did accept more completely the idea that, "Our leaders should keep talking at disarmament conferences and in the United Nations". He rejected more completely the negative idea that, "After the Cuban mistake and things like that he can't put much trust in what our government leaders say." He read all of the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type					Assigned to type	
			A	B	C	D	E		
21	F	.431	Phase 1	.399	.587	.644	.299	.619	C
			Phase 2	.096	.122	.478	-.108	.239	C

This subject makes a change from complete rejection to complete acceptance of the idea that, "I just don't like to plan ahead very much, I will let the future take care of itself." All of her other changes are minimum changes. She could not remember receiving the booklet.

TABLE 1

ANALYSIS OF ITEM CHANGE WITHIN CATEGORIES BY BOOKLET READERSHIP  
FOR TWENTY-ONE PEACE AND DEFENSE CHANGERS

General Categories	Booklet Readership					
	Read All		Read in Part		Did Not Read	
	No. of items MA*	MR**	No of items MA	MR	No. of Items MA	MR
Concern about after effects	4	3	8	3	5	8
Cooperative attitude	7	4	12	6	7	3
Less fear of nuclear war	8	6	10	5	12	6
Pre-emptive attack attitude	4	6	2	1	4	4
Passive indifference to war possibilities	4	1	1	2	7	3
Desire for military preparedness	1	1	6	1	4	5
Desire for C. D. preparedness	3	2	7	3	4	1
Problems are disturbing, someone else should solve them	4	2	4	0	3	7
Trust in government leadership	1	3	2	0	2	3
<b>TOTAL</b>	<b>36</b>	<b>28</b>	<b>52</b>	<b>21</b>	<b>48</b>	<b>40</b>

\*MA - More Accepted

\*\*MR - More Rejected

TABLE 2

ANALYSIS OF TWENTY-ONE CHANGERS ON PEACE AND DEFENSE  
BY BOOKLET READERSHIP

Booklet Readership	No. of Cases	Sex		Type Assignment of Phase 1					
		M	F	A	B	C	D	E	NA
Read All	6	5	1	2	2	1	1	0	0
Read in part	7	3	4	3	2	1	0	1	0
Did not read	8	3	5	1	0	1	3	2	1

TABLE 3

CHANGES IN TYPE ASSIGNMENT FOR TWENTY-ONE CHANGERS  
ON PEACE AND DEFENSE FROM PHASE 1 TO PHASE 2

Type assignment on Phase 1 Q-sort for 21 Changers				Changes assignment to -- or retained original type assignment						Total number of type after Phase 2 Q-sort			
Type	No. of Cases	Sex		TYPE						Type	No. of Cases	Sex	
		M	F	A	B	C	D	E	NA			M	F
A	6	4	2	2	1	1	2	-	-	A	2	2	0
B	4	3	1	-	1	-	3	-	-	B	4	1	3
C	3	1	2	-	-	3	-	-	-	C	4	2	2
D	4	3	1	-	1	-	2	-	1	D	7	5	2
E	3	-	3	-	1	-	1	1	1	E	1	-	1
NA	1	-	1	-	-	-	-	-	1	NA	3	1	2

A-17

TABLE 4

ANALYSIS OF ITEM MOVEMENT BY CATEGORIES FOR TWENTY ONE CHANGERS ON PEACE AND DEFENSE FROM TYPE ASSIGNMENT ON PHASE 1

General Category	Concern about effects of cold war problems	Cooperative attitude toward solving war	Less fear of nuclear war	Pre-emptive attack attitude	Passive indifference to future war possibilities	Desire for military preparedness	Desire for C. D. preparadness	Problems are disturbing someone else should solve them	Trust in Gov't leader-ship	Total
------------------	--	---	--------------------------	-----------------------------	--	----------------------------------	-------------------------------	--	----------------------------	-------

No. of Items	4	6	7	3	3	3	2	3	2	
Type A 6 Cases	4	7	9	2	1	5	5	5	0	38
Type B 4 Cases	3	4	4	4	0	2	1	1	2	19
Type C 3 Cases	2	7	6	1	2	1	3	2	1	25
Type D 4 Cases	1	2	3	4	1	0	2	0	0	13
Type E 3 Cases	1	3	3	2	1	0	1	1	2	14
Type F 4 Cases	2	1	0	0	1	0	0	1	1	6
Type G 4 Cases	5	3	6	2	4	1	2	2	1	26
Type H 3 Cases	4	4	6	2	2	2	2	3	1	26
Type I 3 Cases	4	6	5	3	3	3	2	1	0	26
Type J 3 Cases	2	2	3	0	2	0	1	3	2	15
Type K 1 Case	1	1	1	0	1	1	1	0	1	7
Type L 1 Case	2	0	1	1	0	2	0	2	0	8
Total	17	26	30	10	12	11	14	11	5	136
	14	13	17	11	6	7	6	9	6	89

\* - More Accepted  
 \*\* - More Rejected

TABLE 5

ANALYSIS OF ITEM MOVEMENT BY CATEGORIES, OF ORIGINAL ITEM POSITION ON PHASE 1 AND ITEM POSITION ON PHASE 2, FOR TWENTY ONE CHANGERS ON PEACE AND DEFENSE

Number of Items Accepted More	Concern about after effects	Cooperative attitude toward solving cold war problems	Less fear of nuclear war	Pre-emptive attack attitude	Passive indiffer- ence to future and war possi- bilities	Desire for military prepared- ness	Desire for C.D. prepared- ness	Problems are dis- turbing & someone else should solve them	Trust in Gov't leader- ship	Total
From high rejection to neutral	9	6	16	3	6	1	1	3	4	49
From neutral to high acceptance	1	10	5	5	2	3	7	4	0	37
From high rejection to high acceptance	2	4	3	0	2	2	1	1	0	15
Accepted more within neutral region	5	6	6	2	2	5	5	3	1	35
Totals	17	26	30	10	12	11	14	11	5	136
Number of Items Rejected More										
From high acceptance to neutral	4	3	7	6	5	4	4	4	4	41
From neutral to high rejection	4	6	5	5	0	2	0	3	0	25
From high acceptance to high rejection	0	2	0	0	0	0	1	0	0	3
Rejected more within neutral region	6	2	5	0	1	1	1	2	2	20
Totals	14	13	17	11	6	7	6	9	6	89

APPENDIX B

## APPENDIX B

### Fallout Shelters and Radiation

#### I. Methodology of Analysis

- A. Type Assignment and Definition of Specific Item Change
- B. Item Categorization

#### II. Individual Analysis of Twenty Seven Changers

#### III. Tables

Table 1 - Analysis of Specific Items For  
Twenty-Seven Changers on Fallout  
Shelters and Radiation.

Table 2 - Analysis of Twenty Seven Changers  
on Fallout Shelters and Radiation  
by Booklet Readership

Table 3 - Analysis of Item Change Within Categories  
by Booklet Readership for Twenty Seven  
Fallout Shelter and Radiation Changers

Table 4 - Changes in Type Assignment for  
Twenty Seven Changers on Fallout  
Shelters and Radiation from Phase 1  
to Phase 2.

Table 5 - Analysis of Item Movement by Categories  
for Twenty Seven Changers on Fallout  
Shelters and Radiation from Type  
Assignment on Phase 1.

Table 6 - Analysis of Item Movement by Categories  
of Original Item Position on Phase 1  
and Item Position on Phase 2, for Twenty  
Seven Changers on Fallout Shelters and  
Radiation.



## I. Methodology of Analysis

## A. Type Assignment and Definition of Specific Item Change.

The same methodology was used in this analysis as was used in the analysis of peace and defense changers. A detailed description is found in section I of Appendix A.

## B. Item Categorization.

For purposes of analysis 57 items were placed into 9 categories.

There are certain items which by being rejected more indicate a positive attitude toward the category concept. These are indicated by a minus sign after the item. In all following tables, these items are recorded as being more accepted rather than more rejected.

## FALLOUT SHELTER AND RADIATION ITEMS

Item No.	Statement	More acceptance (+) indicates a <u>positive</u> attitude toward the concept. More rejection (-) indicates a <u>positive</u> attitude toward the concept.
	1. Perceived Government Confusion on Civil Defense	
42	There seems to be an awful lot of confusion about the need for fallout shelters. The leaders in government don't seem to be able to make up their <u>own</u> minds on whether we ought to build them or not.	+
	2. Community vs. Private Shelters	
8	It would be better for communities to build large public shelters rather than to have each family build one of its own.	+
	3. Active-Passive Concern on CD Matters	
31	I'm interested in finding out more about fallout shelters to see whether we really should build one or not.	+
32	I think everyone should find out as much as he can about fallout shelters and other civil defense matters so that he can be prepared in case of attack.	+
35	I worry a lot about whether to build a fallout shelter or not.	+

More acceptance (+) indicates a positive attitude toward the concept.

More rejection (-) indicates a positive attitude toward the concept.

Item No.	Statement	
41	I have so many problems of my own, I can't spend my time worrying about the Russians and fallout shelters.	-
46	I don't like to talk about war and would rather not read anything about fallout shelters or things like that.	-
4. CD is Government's Responsibility		
4	On this fallout shelter business, I'll do whatever the government thinks is best to do.	+
1	The government should lend money to communities so community shelters can be built.	+
14	It is the federal government's responsibility to protect all citizens by supplying them, rich and poor, with shelters.	+
15	It seems to me that, if the government wants us to have fallout shelters, it ought to start a program for building shelters.	+
38	I wish the people in government would stop talking so much about fallout shelters and <u>do</u> something about them.	+
5. Pessimism-Optimism on CD Matters		
20	I think I'd go crazy if there was a terrible nuclear attack and I had to stay in a shelter for two or three weeks.	+
40	What's the use of trying to save my life in a fallout shelter. Our country will be in such a mess after the attack, it just won't be worth living.	+
43	If I had a shelter in my basement, it would just make me worry all the more about the danger of war.	+

More acceptance (+) indicates a positive attitude toward the concept.  
 More rejection (-) indicates a positive attitude toward the concept.

Item No.	Statement	
49	I wouldn't use a fallout shelter in case of attack. So many of my friends would be dead that it wouldn't be worth living anyway.	+
51	I don't think there is really anything an ordinary citizen like me can do to protect himself in case of a nuclear war.	+
6. Religious Fatalism		
21	In the eyes of God, things like fallout shelters are immoral.	+
45	My fate is in the hands of God. There is no use building fallout shelters or anything like that, since what God wills will be done.	+
52	A person dies when his time is up. There's nothing anyone can do about it.	+
53	I think that if all of us prayed for peace there would be nothing to worry about.	+
7. Shelter Acceptance		
3	I am convinced that my family and I should have a fallout shelter--either one of our own or a community shelter we could go to.	+
6	We must try harder to prevent war and not give so much attention to shelters.	-
12	I see building a shelter as something like buying insurance. Better to spend a little now even if we never use it, so we'll have it <u>just in case</u> .	+
13	Everyone in this country should have a fallout shelter he can get into if and when we are attacked.	+
16	Fallout shelters just won't do the job. All shelters do is make people think they are safe when they really aren't.	-

More acceptance (+) indicates a positive attitude toward the concept.  
 More rejection (-) indicates a positive attitude toward the concept.

Item No.	Statement	
17	I don't see what all this fallout shelter fuss is about. I think it's just a lot of nonsense.	-
30	I think if everybody in the U.S. had a fallout shelter, the Russians would be less likely to start a war against us.	+
37	I am interested in reading and talking about civil defense and shelters, but I doubt if I'll ever do anything about it.	-
39	If I had the money, I'd get a fallout shelter built for my family right away.	+
47	I suppose they need fallout shelters in some parts of the U.S., but we don't really need them around here.	-
48	On this business of fallout shelters, I think I'll wait and see what other people around here do before I decide whether to build one or not.	-
57	We ought to do all we can to prevent war -- and at the same time keep ourselves prepared in case it comes.	+
8. Information Gain		
5	While blast and heat damage from a nuclear explosion is limited to several miles around the point where it explodes, fallout from it may cover thousands of square miles.	+
9	After a nuclear attack, if you filter the dust out of the air, the air will be perfectly safe to breathe.	+
10	There <u>are</u> ways of reducing the harmful effects of fallout.	+
11	Most fallout rapidly loses its power to harm.	+

More acceptance (+) indicates a positive attitude toward the concept.

More rejection (-) indicates a positive attitude toward the concept.

Item No.	Statement	
23	Every shelter, in order to protect you from fallout radiation, should have an air tight door.	-
24	The radioactivity after an attack would make the earth, or some areas of it, impossible to live in for years or even centuries.	-
25	If we are attacked, great storms developed by the nuclear explosions will sweep across our country.	-
26	If you get exposed to radiation at all, you are likely to die.	-
27	People, food, water and other things become radioactive if they are exposed to fallout radiation and should be avoided by those who have not been exposed.	-
28	A plastic suit with a filtering mask is good protection against most fallout.	-
29	To be really safe, a fallout shelter should be built of lead.	-
33	Any shelter that would provide adequate protection for a family would cost more than \$300.	-
50	There is no real protection against radioactive fallout -- not even a concrete shelter. The stuff is like a gas that can get at you wherever you are.	-
55	Even though radiation is invisible, it is simple to detect fallout.	+
56	Radiation sickness is <u>not</u> contagious. There is no harm in getting close to somebody who has it.	+

#### 9. Other Items Not Categorized

- 2 I wouldn't mind so much building a family shelter or helping to build a community shelter, if the thing was designed to serve peacetime purposes as well.

<u>Item No.</u>	<u>Statement</u>
7	I don't want to have the only shelter around here. I just couldn't face keeping my neighbors out of my shelter in case of attack.
18	It seems to me that the Russians are more likely to use germ warfare than they are to attack us with nuclear weapons.
19	I don't think I'll build a shelter because there wouldn't be time to get to it.
34	I guess that I would build a family shelter, except that most of our friends would think we were crazy if we did.
36	I think a community shelter would be a good idea, but you can't get people around here interested in building a thing like that.
44	I don't need a fallout shelter. If there is an attack, I'm going to head for the hills or the woods or somewhere away from things.
54	If a nuclear attack comes, our area here will probably get a heavy dose of fallout radio-active materials.

## II. Individual Analysis of Twenty Seven Changers

The analysis for each individual changer concerns these things: The subject's sex and the correlation between the Phase 1 and Phase 2. Fall-out Shelter and Radiation Q-Sorts. The correlations between the Phase 1 and Phase 2 Q-sorts and the hypothetical types. The type assignments given to each subject on Phase 1 and Phase 2. The comments on each individual changer concern specific item change or item changes by categories.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
1	F	-.337	Phase 1	-.337	-.362	-.235	-.305	N.A.
			Phase 2	.315	.199	.371	.466	D

This subject had the highest number of item changes, twenty four, of any of the subjects. She changed from complete rejection to complete acceptance the idea that, "I wouldn't mind so much building a family shelter, if the thing was designed to serve peacetime purposes as well". She also accepted more the ideas that, "It would be better for communities to build large public shelters rather than to have each family build one of its own" and "If the government wants us to have fallout shelters, it ought to start a program for building shelters". Inconsistently, she rejects more the ideas that, "In the eyes of God, things like fallout shelters are immoral" and, "If all of us prayed for peace there would be nothing to worry about", however, she accepts more the idea that, "My fate is in the hands of God, there is no use building fallout shelters or anything like that, since what God wills will be done." Each of these items involves an attitude toward religious fatalism. Even though she read all of the booklet she again shows inconsistency by accepting more the ideas that, "While blast and heat damage from a nuclear explosion is limited to several miles around the point where it explodes, fallout from it may cover thousands of square miles" and "After a nuclear attack, if you filter the dust out of the air, the air will be perfectly safe to breathe" yet rejects more the ideas that, "Even though radiation is invisible, it is simple to detect fallout" and "Radiation sickness is not contagious, there is no harm in getting close to somebody who has it". She may be characterized as establishing enough pattern to assign her to type D, that passive, let the federal government, public over private shelters, group.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
2	F	-.044	Phase 1	.089	.065	-.148	.624	D
			Phase 2	.157	.075	.058	.185	N.A.

This subject's change is reflected in two ways. She changes from complete acceptance to complete rejection the belief that, "On this fallout shelter business, I'll do whatever the government thinks is best to do". This belief was the most accepted belief of type D's. She also rejects more the idea that, "It would be better for communities to build large public shelters rather than to have each family build one of its own" a belief that also stands high in beliefs of type D's. She shows inconsistency in accepting more the idea that,

"I don't like to talk about war and would rather not read anything about fallout shelters or things like that " yet rejecting more the idea that, "I have so many problems of my own, I can't spend my time worrying about the Russians and fallout shelters". Both of these items involve an active-passive concern on civil defense matters. She could not remember receiving the booklet and made only one change in 15 ideas concerning information gain in the area of fallout shelters and radiation.

Sub	Sex	Corre. Between		Type				Assigned to type
		Phase 1 - Phase 2	Q-sorts	A	B	C	D	
3	M	.101	Phase 1	.581	.022	.271	.275	A
			Phase 2	.400	.066	.086	.312	A

Subject 3 changed from complete acceptance to complete rejection the idea that, "It would be better for communities to build large public shelters rather than to have each family build one of its own." Generally type A's do not feel that civil defense is the complete responsibility of the government. This subject accepts more the ideas that, "The government should lend money to communities so community shelters can be built." and "It seems to me that, if the government wants us to have fallout shelters, it ought to start a program for building shelters." This accounts in part for his weaker representativeness of type A. He changes from complete rejection to complete acceptance the idea that, "Fallout shelters just won't do the job, all shelters do is make people think they are safe when they really aren't." He could not remember receiving the booklet.

Sub.	Sex	Corre. Between		Type				Assigned to type
		Phase 1 - Phase 2	Q-sorts	A	B	C	D	
4	M	.143	Phase 1	.105	.467	.058	.155	B
			Phase 2	.310	.297	-.011	.117	A

This subject's changes are in his rejection more of the idea that, "It would be better for communities to build large public shelters rather than to have each family build one of its own." He rejects more ideas that, "If I had a shelter in my basement, it would just make me worry all the more about the danger of war" and "I don't think there is really anything an ordinary citizen like me can do to protect himself in case of a nuclear war", which indicates a more optimistic attitude on civil defense matters. He accepts more the ideas that "I am convinced that my family and I should have a fallout shelter -- either one of our own or a community shelter we could go to" and "I see building a shelter as something like buying insurance, better to spend a little now even if we never use it, so we'll have it just in case". These two ideas are slightly rejected by type B's and highly accepted by type A's. He said he read the booklet in part yet accepts more the ideas that, "The radioactivity after an attack would make the earth, or some areas of it, impossible to live in for years or even centuries" and "People, food, water and other things become radioactive if they are exposed to fallout radiation and should be avoided by those who have not been exposed." and rejects more, "Radiation sickness is not contagious, there is no harm in getting close to somebody who has it." this would seem inconsistent with the idea of information gain on fallout shelters and radiation.



Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
5	M	.191	Phase 1	.197	-.107	.592	.146	C
			Phase 2	.011	.068	.454	-.066	C

This subject changed from strongly rejected to strongly accepted, the idea that, "In the eyes of God, things like fallout shelters are immoral." He indicates more pessimism on civil defense matters by accepting more, three items in that category. He also accepts more strongly the idea that, "Even though radiation is invisible, it is simple to detect fallout." He did not remember receiving the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
6	M	.219	Phase 1	.610	.422	.306	.539	A
			Phase 2	.388	.265	.043	.325	A

This subject rejects more the idea that, "I think everyone should find out as much as he can about fallout shelters and other civil defense matters so that he can be prepared in case of attack." He accepts more, "On this fallout shelter business, I'll do whatever the government thinks is best to do" and "It seems to me that, if the government wants us to have fallout shelters, it ought to start a program for building shelters." These two items indicate a shift toward letting the government have responsibility for civil defense. In the area of shelter acceptance, he rejected more three of the items. He said he did not remember receiving the booklet and there was not one change registered in the information gain category.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
7	M	.219	Phase 1	.227	.521	-.234	.162	B
			Phase 2	.415	.433	.006	.461	D

Half of this subject's changes were made within the neutral area. He accepts more the ideas that, "We must try harder to prevent war and not give so much attention to shelters." and "I wouldn't mind so much building a family shelter or helping to build a community shelter, if the thing was designed to serve peacetime purposes as well." Both of these ideas are representative of type D's. He read the booklet in part. Concerning information gain he accepts more the ideas that, "After a nuclear attack, if you filter the dust out of the air, the air will be perfectly safe to breathe." and "Most fallout rapidly loses its power to harm." He rejects more the ideas that, "Even though radiation is invisible, it is simple to detect fallout." and "Radiation sickness is not contagious, there is no harm in getting close to somebody who has it."

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
8	F	.235	Phase 1	.260	.220	.190	.218	N.A.
			Phase 2	.307	.272	.121	.244	A

Most of this subject's changes involved item movement from the extremes to the middle positions. She indicates a somewhat more pessimistic attitude on civil defense matters by accepting more two items in this category. She rejects more the ideas that, "If we are attacked, great storms developed by the nuclear explosions will sweep across our country" and "If you get exposed to radiation at all, you are likely to die," indicating a greater knowledge of the effects of nuclear attack. She indicated that she did not read the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
9	F	.272	Phase 1	.519	-.010	.484	.278	A
			Phase 2	.319	.201	.341	.218	C

This subject changed most in the category of shelter acceptance. In this category she rejected more, five of the twelve items. She became more passive by rejecting more the idea that, "I'm interested in finding out more about fallout shelters to see whether we really should build one or not." and accepting more the idea that, "I don't like to talk about war and would rather not read anything about fallout shelters or things like that". She read all of the booklet and this is indicated by her increased acceptance of items in the category of information gain.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
10	M	.280	Phase 1	.524	.260	.000	.291	A
			Phase 2	.083	.091	.249	.137	N.A.

This subject changed a total of 16 items in Phase 2. His changes are reflected in three of the categories. He shows more pessimism on civil defense matters and also accepts more items concerning religious fatalism. He could not remember receiving the booklet, however, he rejects more four items in the information gain category which are untrue indicating more knowledge about fallout shelters and radiation.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
11	F	.297	Phase 1	.197	-.151	.682	.036	C
			Phase 2	-.133	-.270	.337	-.192	C

This subject's changes center on three categories. She indicates a more passive and pessimistic attitude toward civil defense matters. She could not remember receiving the booklet. She rejects four items in the information gain category which are considered true indicating less knowledge about fallout shelters and radiation.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts		Type				Assigned to type
				A	B	C	D	
12	M	.308	Phase 1	.415	.222	.289	.799	D
			Phase 2	.591	.361	.056	.449	A

This subject was the most representative person of type D on the Phase 1 Q-sort. He rejects more the idea of having the government accept the whole responsibility for fallout shelters. He accepts more the idea that if he had the money, he would build a fallout shelter for his family now. His changes indicate more of a willingness to accept individual responsibility for himself and his family. He could not remember receiving the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts		Type				Assigned to type
				A	B	C	D	
13	F	.320	Phase 1	.676	.317	.175	.539	A
			Phase 2	.546	.106	.375	.588	D

This subject changed only seven items on Phase 2. This was considerably below the mean of 12 items for all changers. She did not remember receiving the booklet although she rejected two items which are untrue, indicating an information gain. She is ambiguous concerning changes in the shelter acceptance category.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts		Type				Assigned to type
				A	B	C	D	
14	M	.323	Phase 1	.341	.168	.368	.199	C
			Phase 2	.322	.221	.256	.487	D

This subject accepts more the idea that civil defense is the government responsibility. He indicates less acceptance of fallout shelters and greater pessimism on civil defense matters. He read the booklet in part although this is not reflected in his changes in the information gain category.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts		Type				Assigned to type
				A	B	C	D	
15	M	.337	Phase 1	.369	.098	-.035	.335	A
			Phase 2	.812	.247	.098	.349	A

This subject would be considered the most representative individual of type A on the Phase 2 Q-sort. He became more active in civil defense matters by accepting more two items in that category. He rejects more the ideas that, "The government should lend money to communities so community shelters can be built." and "A person dies when his time is up, there's nothing anyone can do about it.". He read the booklet in part.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts		Type				Assigned to type
				A	B	C	D	
16	M	.354	Phase 1	.422	.512	-.207	.215	B
			Phase 2	.210	.430	-.005	-.001	B

This subject's change in representing type B less is reflected in his greater acceptance of two items in the category of religious fatalism. He also accepts more the idea that, "We must try harder to prevent war and not give so much attention to shelters.". This subject rejects more, two items which involve the threat of nuclear attack in his area. He read all of the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts		Type				Assigned to type
				A	B	C	D	
17	F	.362	Phase 1	-.056	.168	.538	.008	C
			Phase 2	-.118	-.054	.561	.119	C

Most of this subject's changes are centered in two categories. First, she changed to more acceptance of fallout shelters. Second, she reflected positive change in the information gain area. She was one of the people who remembered receiving the booklet but did not read it.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts		Type				Assigned to type
				A	B	C	D	
18	M	.370	Phase 1	.175	.001	.487	-.044	C
			Phase 2	.465	.178	.416	.217	A

This subject changed only seven items from Phase 1 to Phase 2. In spite of the small number of item shifts, they concentrate in two categories. He indicates a more active concern toward civil defense matters. He read all of the booklet and in the category of information gain indicated increased knowledge about fallout shelters and radiation.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts		Type				Assigned to type
				A	B	C	D	
19	M	.379	Phase 1	.362	.120	.284	.163	A
			Phase 2	.669	.445	.398	.520	A

All of the 10 items this subject changed from Phase 1 to Phase 2 were rejected more. The changes indicate less pessimism on civil defense matters and less religious fatalism. He also rejects more some items indicating lack of concern for fallout shelters. He could be characterized as becoming more active, optimistic and favorable toward fallout shelters. He did not read the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
20	F	.393	Phase 1	.107	.388	.033	.148	B
			Phase 2	-.265	.199	.050	-.076	N.A.

This subject accepted more the ideas that, "I wouldn't use a fallout shelter in case of attack, so many of my friends would be dead that it wouldn't be worth living anyway." and "A person dies when his time is up, there's nothing anyone can do about it" indicating more of a pessimistic, fatalistic orientation. Generally her tendency was to change to less shelter acceptance. She could not remember receiving the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
21	F	.398	Phase 1	.254	.114	.384	.247	C
			Phase 2	.616	.013	.238	.305	A

This subject became more favorable to shelter acceptance by accepting more, three items in that category. She also rejected more the ideas that, "In the eyes of God, things like fallout shelters are immoral" and "What's the use of trying to save my life in a fallout shelter, our country will be in such a mess after the attack, it just won't be worth living." She did not read the booklet although she indicated some small information gain.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
22	M	.420	Phase 1	.693	.440	.110	.527	A
			Phase 2	.550	.238	.276	.519	A

This subject has become more neutral concerning religious fatalism. He tends toward less acceptance of fallout shelters preferring and "I'll wait and see" attitude. He did not change any items in the information gain category. He could not remember receiving the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
23	F	.420	Phase 1	.630	-.004	.215	.289	A
			Phase 2	.352	.067	.362	.247	C

This subject changed only 8 items from Phase 1 to Phase 2. She indicated more pessimism on civil defense matters. She changed from complete rejection to complete acceptance the idea that, "My fate is in the hands of God, there is no use building fallout shelters or anything like that, since what God wills will be done". She also accepted more the idea that, "On this fallout shelter business, I'll do whatever the government thinks is best to do." She could not remember receiving the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
24	F	.421	Phase 1	.657	-.136	-.008	.439	A
			Phase 2	.610	.088	.253	.474	A

This subject rejected more three items in the shelter acceptance group. Her other changes do not indicate any consistent pattern. She read all of the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
25	M	.429	Phase 1	-.317	.283	.310	-.065	C
			Phase 2	.112	.135	.500	.207	C

This subject's changes are reflected in two categories. He accepts more the idea that civil defense is government's responsibility. He became more optimistic on civil defense matters. Each of these changes are representative of type C. He did not read the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
26	M	.429	Phase 1	.647	.650	.223	.454	B
			Phase 2	.643	.555	-.044	.476	A

This subject changed only 6 items from Phase 1 to Phase 2. There is no apparent pattern in his item changes. He does accept more the idea of community shelters over private shelters. He read part of the booklet.

Sub.	Sex	Corre. Between Phase 1 - Phase 2 Q-sorts	Type				Assigned to type	
			A	B	C	D		
27	M	.432	Phase 1	.653	.051	.037	.355	A
			Phase 2	.587	.340	.079	.544	A

This subject accepted more the idea that, "There seems to be an awful lot of confusion about the need for fallout shelters, the leaders in government don't seem to be able to make up their own minds on whether we ought to build them or not". He became more passive on civil defense matters by rejecting more two items in this category. He read the booklet in part.

TABLE I

Analysis of Specific Items For Twenty Seven Changers  
On Fallout Shelters And Radiation

<u>Item Number</u>	No. Accepted More	No. Rejected More	<u>Comments</u>
49. I wouldn't use a fallout shelter in case of attack. So many of my friends would be dead that it wouldn't be worth living anyway.	8	3	This item indicates a pessimistic attitude toward civil defense matters. Seven of the eight people who accepted the item more did not read the booklet. There was no relationship to type.
17. I don't see what all this fallout shelter fuss is about. I think it's just a lot of nonsense.	7	3	Acceptance of this item indicates a negative attitude toward shelter acceptance. Five of the seven people who accepted this item more were type A.
40. What's the use of trying to save life in a fallout shelter. Our country will be in such a mess after the attack, it just won't be worth living.	7	2	This item also reflects a pessimistic attitude. There was no relationship to booklet readership or type.
57. We ought to do all we can to prevent war--and at the same time keep ourselves prepared in case it comes.	6	2	This item was placed in the category of shelter acceptance. There was no relationship to booklet readership or type.
15. It seems to me that, if the government wants us to have fallout shelters, it ought to start a program for building shelters.	5	0	This item was categorized in the civil defense is government's responsibility category. Four of the five people did not read the booklet. Four of the five people moved this item from a neutral position to a high acceptance position.
45. My fate is in the hands of God. There is no use building fallout shelters or anything like that, since what God wills will be done.	5	0	This item indicates religious fatalism. Three of these people were type A's.
18. It seems to me that the Russians are more likely to use germ warfare than they are to attack us with nuclear weapons.	5	1	This item was not categorized, all of the individuals were type A's (3) or type C's (3). Most of the changes involving this item involved movement so the item ended up in the neutral position.
9. After a nuclear attack, if you filter the dust out of the air, the air will be perfectly safe to breathe.	4	0	This item indicates information gain. There was no relationship between type or booklet readership.

TABLE I (Cont.)

<u>Item Number</u>	<u>No. Accepted More</u>	<u>No. Rejected More</u>	<u>Comments</u>
11. Most fallout rapidly loses its power to harm.	4	0	This item also indicates information gain. There was no relationship between type or booklet readership.
51. I don't think there is really anything an ordinary citizen like me can do to protect himself in case of a nuclear war.	3	6	This item was categorized in the pessimism-optimism category. By rejecting this item a more optimistic attitude is indicated. Three type B's, all males rejected this item.
48. On this business of fallout shelters, I think I'll wait and see what other people around here do before I decide whether to build one or not.	1	5	By rejecting more this item, an indication is made towards more favorable shelter acceptance. There was no relationship between type or booklet readership.
28. A plastic suit with a filtering mask is good protection against most fallout.	1	5	Rejection of this item indicates information gain. There was no relationship between type or booklet readership.
7. I don't want to have the only shelter around here. I just couldn't face keeping my neighbors out of my shelter in case of attack.	1	5	This item was not categorized. Three type C's rejected this item. There was no relationship between booklet readership and this item.



TABLE II

Analysis of Twenty Seven Changers on Fallout Shelters  
And Radiation by Booklet Readership

Booklet Readership	No. of Cases	Sex		Type Assignment on Phase 1				
		M	F	A	B	C	D	N.A.
Read All	5	2	3	2	1	1	0	1
Read in Part	6	6	0	2	3	1	0	0
Did Not Remember Receiving the Booklet	11	6	5	6	1	2	2	0
Did Not Read The Booklet	5	2	3	1	0	3	0	1

TABLE III

Analysis of Item Change Within Categories by Booklet Readership  
For Twenty Seven Fallout Shelter And Radiation Changers

General Categories	Booklet Readership							
	Read All		Read in Part		Did Not Remember Receiving		Did Not Read	
	No. of Items		No. of Items		No. of Items		No. of Items	
	MA*	MR**	MA	MR	MA	MR	MA	MR
Perceived Gov't Confusion	0	0	1	1	2	0	0	1
Community VS Private Shelters	1	0	1	1	0	3	0	1
Active-Passive Concern	4	4	4	5	3	6	4	1
C.D. is Gov't Responsibility	1	1	5	1	8	3	3	1
Pessimism - Optimism	4	3	4	4	13	4	2	5
Religious Fatalism	3	3	1	4	11	6	1	3
Shelter Acceptance	7	12	7	7	16	21	8	2
Information Gain	11	4	8	10	13	11	8	3
Not Categorized	4	5	6	4	3	7	2	8

\* More Accepted

\*\* More Rejected

TABLE IV

Changes in Type Assignment For Twenty Seven Changers On Fallout Shelters  
And Radiation From Phase 1 To Phase 2

Type Assignment On Phase 1 Q-sort			Changes in Assignment To-- Or Retained Original Type Assignment					Total Number Of Type After Phase 2 Q-sort			
Type	No. of Cases	Sex M F	Type					Type	No. of Cases	Sex M F	
			A	B	C	D	N.A.				
A	11	7 4	7	-	2	1	1	A	13	10 3	
B	5	4 1	2	1	-	1	1	B	1	1 0	
C	7	4 3	2	-	5	-	-	C	7	3 4	
D	2	1 1	1	-	-	-	1	D	3	1 2	
N.A.	2	0 2	1	-	-	-	1	N.A.	3	1 2	

TABLE V

Analysis of Item Movement By Categories For Twenty Seven Changers on Fallout  
Shelters and Radiation Type Assignment On Phase 1

General Categories	Types											
	Type A 11 Cases		Type B 5 Cases		Type C 7 Cases		Type D 2 Cases		Not Assign. 2 Cases		Total	
	No. of Items in Category	No. of Items MA* MR**	No. of Items MA MR	No. of Items MA MR	No. of Items MA MR	No. of Items MA MR	No. of Items MA MR	No. of Items MA MR	No. of Items MA MR	No. of Items MA MR	No. of Items MA MR	No. of Items MA MR
Perceived Gov't Con- fusion	1	1 0	0 1	1 1	1 1	1 0	0 1	3 2				
Community VS Private Shelters	1	0 2	1 1	0 1	0 1	1 1	0 2	5				
Active-Passive Con- cern	5	3 7	3 3	5 3	2 1	2 2	15 16					
C.D. Is Gov't Re- sponsibility	5	7 1	3 0	5 2	0 2	2 1	17 6					
Pessimism-Optimism	5	10 5	4 5	6 4	0 1	3 1	23 16					
Religious Fatalism	4	7 9	4 1	1 3	2 1	2 2	16 16					
Shelter Acceptance	12	12 23	6 6	11 6	4 4	5 3	38 42					
Information Gain	15	16 7	6 8	10 8	3 2	5 3	40 28					
Not Categorized	9	6 11	2 4	4 7	1 2	2 0	15 24					
<b>TOTALS</b>		62 65	29 29	43 35	13 14	22 12	169 155					

\* More Accepted

\*\* More Rejected

TABLE VI

Analysis of Item Movement by Categories of Original Item Position on Phase 1 and Item Position on Phase 2, for Twenty Seven Changers on Fallout Shelters And Radiation.

	Perceived Gov't Confusion	Community Private Shelters	Active-Passive Concern	C.D. is Gov't Responsibility	Pessimism - Optimism	Religious Fat-alism	Shelter Accept-ance	Informa-tion Gain	Not Cate-gorized	TOTALS
Number of Items Accepted More From High Rejection to Neutral	0	0	1	6	12	11	9	10	5	54
From neutral to High Acceptance	2	2	8	7	0	2	18	20	4	63
From High Rejection to High Acceptance	0	0	0	0	0	2	1	0	2	4
Accepted More Within Neutral Region	1	0	6	4	11	1	10	10	5	48
TOTALS	3	2	15	17	23	16	38	40	15	169
Number of Items Rejected More From High Acceptance To Neutral	0	3	9	3	4	4	23	12	9	67
From Neutral To High Rejection	0	0	0	1	7	9	6	12	9	44
From High Acceptance To High Rejection	0	1	1	1	1	0	1	0	0	5
Rejected More Within Neutral Region	2	1	6	1	4	3	12	4	6	39
TOTALS	2	5	16	6	16	16	42	28	24	155

**APPENDIX C**

## APPENDIX C

### I. Tables

Table 1 - Patterns of Acceptance and Rejection for Twelve  
Changers on Peace and Defense by Categories

Table 2 - Patterns of Acceptance and Rejection for Twelve  
Changers on Fallout Shelters and Radiation by  
Categories

TABLE I

Patterns of Acceptance and Rejection For 12 Changers on Peace  
and Defense by Categories

General Categories	Number of Items Accepted More	Number of Items Rejected More
Concern about after effects	8	7
Cooperative attitude toward solving cold war problems	14	6
Less fear of nuclear war	17	10
Aggressive attack attitude	9	5
Passive indifference to war possibilities	6	3
Desire for Military Preparedness	8	5
Desire for C. D. Preparedness	8	3
Problems are disturbing, someone else should solve them	8	6
Trust in Government Leadership	3	5
TOTALS	81	50

TABLE II

Patterns of Acceptance and Rejection for 12 Changers on Fallout Shelters  
and Radiation by Categories

General Categories	Number of Items Accepted More	Number of Items Rejected More
Concern about after effects	1	2
Cooperative attitude toward solving cold war problems	1	2
Less fear of nuclear war	9	5
Aggressive attack attitude	7	4
Passive indifference to war possibilities	9	6
Desire for Military Preparedness	8	6
Desire for Civil Defense Preparedness	17	20
Problems are disturbing, someone else should solve them	17	14
Trust in Government Leadership	5	11
TOTALS	74	70