The Development of Values and Beliefs in Young Americans Toward Fallout Shelters and Civil Defense

(Pilot Study Report No. 1)

Bradley S. Greenberg

with the assistance of

Duane Pettersen and John Kochevar

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(An Abstract)

This report represents our initial study of a special Civil Defense audience--American youngsters. This is an audience whose entire life has been spent in the atomic era. But, in contrast with their elders, they know of atomic devastation only through history books and movies. They do not personally know of World War II, nor of the means by which Japan was brought to surrender. Korea also occurred before most of them were born.

Their views toward civil defense countermeasures are of special importance for two reasons: (1) At this age, they are forming attitudes toward many public issues, including civil defense, which may remain relatively stable for the remainder of their lives; and (2) By comparing the views they hold with those of adults, OCD ought to be able to gain insights as to the feasability and acceptance of future programs.

The eventual objective of the research is to provide suggestions on how the public may best be informed about civil defense programs. Here, it is a special public, a future public, which is the focus. Yet, it must be emphasized that these future adults represent an immense audience, growing larger each year. The young people we study today will in a few years constitute the majority of adult Americans.

* * *

Do youngsters in their pre-teens and teenage years have attitudes toward fallout shelters and toward civil defense:

How do these attitudes form?

How firm are these attitudes?

How does the background of the youngster affect these attitudes?

It is the answers to these questions which we begin to seek in this report. We ask these questions for four main reasons:

(1) Previous research has shown that youngsters develop attitudes toward a host of public issues by the time they are in their early teens. Thus, there is reason to believe that attitudes toward civil defense programs will have formed early;

(2) These early attitudes become the youngster's baseline against which he evaluates subsequent information. If the early attitude is a negative one, it will be all the more resistant to change;

(3) Social attitudes are generally a function of the individual's personal and social environment. If different attitudes form in different segments of American society, this has obvious policy implications; and

(4) These teen-age youngsters will become active citizens in a few short years. Long-term public programs must take into account the constant merging of new, young adults with older, already active ones. Such programs must be prepared to inform and obtain support from citizens at every age level. The young adult in his 20's is not far from either the 12-year-olds or the

16-year-olds described in this first report.

We asked 327 eighth graders and twelfth graders to write extemporaneous essays on 'What I Know About Fallout Shelters,' providing only minimal guidance for the nature of their discussion. The youngsters came from school districts representing high and low socio-economic conditions; from schools which were either preponderantly white or non-white; and from classes of above average or below average ability. Similar proportions of boys and girls were given this task.

Trained coders analyzed the essays without any information about the person who wrote it. The coders assessed the degree of favorability (from 'very favorable' to 'very unfavorable') expressed by the writer toward four issues: (1) his favorability toward fallout shelters in general; (2) toward private, family shelters in particular; (3) toward public, community shelters; and (4) toward civil defense in general.

Each of these attitudes was then assessed according to the age, sex, race, social class and personal ability of the youngsters.

Results

These results should be considered as tentative findings. The number of young people we studied was relatively small and confined to one geographic area. The results may not be generalized to the population of American youngsters; however, they provide significant clues as to what we may expect to find in subsequent, broader research of this special Civil Defense audience.

The attitudes themselves, without regard to the background characteristics of the young people, are all relatively favorable.

For general attitudes toward fallout shelters, two-thirds made responses which ranged from slightly favorable to very favorable. Most interesting is the fact that the attitudes cluster in the extreme categories, both in the positive and negative ends of the attitude measure. These young people do not make ambivalent or weak responses for the most part -- they are intense in the attitudes they hold, either in support of or in opposition to the fallout shelter program.

Individual attitudes toward both public and private shelter programs are also predominantly positive, 7 in 10 were positive toward public shelters and 5 in 10 for the private shelter idea.

With both these attitude areas, the respondents' attitudes also clustered in the extreme categories of both favorable and unfavorable dispositions.

Among those youngsters who expressed some attitude toward civil defense, the general concept received the largest share of favorable attitudes. More than 80 percent could be categorized as being more positive than negative toward the general notion of civil defense.

As interesting as these overall attitudes may be, it is far more enlightening to examine the sub-group differences which were obtained by cross-classifying the attitude of the respondent in terms of the social and demographic characteristics that were identified. It is here that the significance of this study lies.

Age differences. The attitudes of the 8th graders were compared with those of the 12th graders. In all comparisons, the younger set of people were far more favorable toward the attitude areas studied.

When we look at attitudes toward fallout shelters in general, 71 percent of the younger, but only 49 percent of the older group expressed favorable attitudes.

Among those respondents who spoke of private and/or public shelters in particular, rather than shelters in general, we find that 85 percent of the 8th graders, but only 48 percent of the 12th graders were positive toward public shelters; for private shelters, the comparable proportions were 79 and 40 percent.

Age was equally discriminating in identifying the supporters of civil defense. No less than 93% of the younger group, compared with 68 percent of the older, were more favorable than unfavorable toward civil defense.

Further study is required to determine why the preponderant support found among the 12 and 13-year-olds is dissipated four short years later.

Sex differences. In most comparisons, the responses of boys and girls were quite similar on the attitude measures. On the general assessment of fallout shelter attitudes, the proportions of boys and girls who were favorable were virtually identical. The same was so in terms of the boy-girl attitudes toward civil defense -- minor and insignificant differences.

What difference was found between the boys and girls came from their attitudes toward specific fallout shelter concepts. Among those who talked in particular about public and private shelters, the girls were consistently more positive than the young men. For example, 60 percent of the boys and 79 percent of the girls were favorable toward public shelters; 52 percent of the boys and 71 percent of the girls were favorable toward private shelters.

Race differences. We compared the responses of students who came from all or predominantly white schools with those who attended schools where the student body was at least 85 percent non-white. The attitudes expressed toward the shelter concepts were strikingly different -- in all instances, the non-white youngsters were far more frequent among the proponents.

The general shelter attitude measure showed that 72 percent of the non-white respondents were favorable, compared with 56 percent of the remaining respondents.

The same pattern emerges with respect to public and private shelters, but particularly so for the personally-financed shelters. 81 percent of the non-white youngsters were favorable toward both kinds; 66 percent of the white children were favorable toward public shelters, while 55 percent of them favored private ones.

When the object of discussion was civil defense in general, the non-white respondents showed substantially more support; 92 percent were favorable compared with 78 percent of the other children.

The experiences associated with membership in minority racial

groups have led to widespread acceptance of civil defense programs and goals. Or is it that experiences obtained through majority group membership have reduced an originally wider level of support?

The present data cannot trace the source of dissension; additional study is required to do that. Race is a sharp discriminant of pro-and anti-shelter beliefs among these young Americans.

Social class differences. The present study provides very little evidence that attitudes toward fallout shelters or toward civil defense are related to the social class background of these young people. However, we were able to make class comparisons only between white children from middle-class homes and those from somewhat upper-class homes; all the Negro children came from lower socio-economic backgrounds. Within these comparisons, the attitudes of the middle-class children were only slightly more favorable toward shelters and civil defense. Subsequently, it will be necessary to examine a wider variety of social class backgrounds. At present, social class is apparently of less import than is the age of the individual, and his racial group, in locating groups who do not favor the notion of shelters.

Personal ability differences. Here is a third clear distinguishing feature between those youngsters who strongly support and strongly oppose the shelter idea. The more able students, in terms of classroom ability, are less favorable than the poorer students toward fallout shelters and toward civil defense.

In terms of general shelter attitudes, there are two opponents

among the better students for each opponent found among the less able youngsters. Fully 77 percent of the weaker students favor shelters, but only 38 percent of the better students do so.

The same holds, although not to the same extent, among the students who talk about particular shelter types. For public shelters, 79 percent of the below-average students are favorable compared with 67 percent of the above average ones; for private shelters, the difference is larger -- 76 and 54 percent respectively.

The pattern repeats itself when the attitude area is civil defense. Among the weaker students, 89 percent are favorable; among the better students, 73 percent are favorable.

Personal ability is a significant correlate of fallout shelter attitudes. It remains to be determined just why the better, brighter youngsters -- those who are more likely to be active in public affairs as adults -- offer far more in the way of negative comments and opinions.

This has been an exploratory study to determine the nature of young people's attitudes toward fallout shelters and civil defense. Using essentially a non-directive approach, we have attempted to probe among varying groups of young people for the direction of their attitudes, the content of those attitudes, and some assessment of their strength.

This study has examined only a small sub-set of the social and demographic characteristics which would be examined in a more elaborate, formal study of the values of young Americans. Also, more sensitive measures of the individual's attitudes must

be developed.

Policy implications. We will conclude this abstract with some suggestions we believe these data have for OCD policy planning. These suggestions are entirely our conception, without knowledge of existing or probable or practical policies of the agency toward young people.

1. Young people constitute a significant OCD audience. Most will be working adults and parents within a few years; hence they should be the focus of almost any long-range program or set of objectives.

2. Young people form attitudes toward civil defense programs at an early age. The manner in which these attitudes have been formed will predispose the youngsters' interpretation of any OCD information they may receive later.

3. Generally, these attitudes toward civil defense programs are quite favorable ones. However, there are specific, large, identifiable pockets of discontent which become apparent at an early age.

4. It appears that too little information is directed specifically at this audience; at any rate they generally perceive receipt of very little in the way of information.

5. Within the population of young Americans, sub-audiences exist. It is not likely, for example, that the same kind of message would have the same or even similar kinds of effects on more and less able youngsters, on those who belong to racial minority and majority groups. Specific messages ought to be

tailored for specific audiences, within the young people as well as within their adult counterparts.

6. The reasons why sub-groups of youngsters develop more or less favorable perceptions of civil defense programs must be examined. Sex, race, or age are seldom causes in and of themselves. They reflect the fact that certain behaviors or experiences are associated with these sub-groupings which lead to more or less favorable perceptions. It is these behaviors and experiences, as critical aspects of the youngster's beliefs, which must be isolated, identified, and treated in order to obtain maximal understanding of the general program of civil defense.

Table of Contents

List of Tables

SECTION I

Introduction and Purpose of the Study

Why should we be concerned with these attitudes of young people? An obvious answer comes from defining a young person. Half of those we studied were seniors in high school; they are adults minus 3 years. Shortly, they will form a substantial part of the target audience of civil defense messages. They do not become adults with a blank mind on social issues and current events. Research evidence indicates quite consistently that adult attitudes form early in life. For example, political attitudes of parents are known and learned by nine and ten-year-olds; by mid-teens, these political attitudes are firmly fixed and very resistant to change.

It seems reasonable that attitudes toward such concepts as civil defense and fallout shelters also develop and become stable during a child's formative years. It is then that children are most susceptible to information from credible government sources and her sources, some less credible. It is then that communication would most likely be successful.

Waiting until these young people are in their 20's before focusing intensive communication efforts on them completely neglects their earlier learning experiences. Waiting until then to present information and ideas requires a communication strategy that must focus on converting negative attitudes or on overcoming ignorance and apathy.

Disseminating information to young people during their teens, in

and outside of the formal classroom, through teachers, religious leaders, and parents seemingly would yield a long-term basis of support for civil defense programs. This support would not become apparent right away. But with a background of information and ideas, not now possessed by any substantial body of adult Americans, the future adults would require less intensive efforts to give them more understanding of civil defense goals.

The other half of the youngsters we studied were all eighth graders. They were another four years away from an active role as citizens and as key receivers of civil defense information. Yet, these children also have some notions and information about shelters in particular and civil defense in general. They too have begun to develop social attitudes, to take stands, to believe in something, and to be socially aware. They also may be led to support, or at least be informed about civil defense matters.

It seems reasonable that the sooner such youngsters can be given the information and ideas appropriate to progressive civil defense programs: (a) the wider will be the base of public knowledge about civil defense protective measures; (b) the less effort will be needed to educate people who may have ideas; and (c) the higher will be the level of public support for civil defense. Understanding the attitudes of young and very young Americans appears to be critical for the conduct of an effective and comprehensive information program. As we shall see by comparing the eighth graders with the 12th graders, sharp differences in attitude occur in that four-year span.

Therefore, we wish to know how young Americans acquire their attitudes toward fallout shelters and toward civil defense in general. This first

report will be descriptive for the most part. We wish the reader to better understand the temperament of these young people, to regain some empathy with them. Lack of sensitivity to their nature and their beliefs would hinder Civil Defense in informing them of civil defense measures by all available means.

To give you some feeling at this point for the kinds of responses we dealt with, the following essays have been extracted:

An 8th grade Negro girl says:

"I think fallout shelters are a great necessity to the American way of life. For no one knows when there could be an atomic war. And I think we should have fallout shelters in every home, every building, and in every public place. I think the government should play an even more active part in this. And I think they should try and enforce that every place should have a fallout shelter."

A 12th grade student of middle-class parents writes:

"...if it (a bomb) hits the ground where a shelter is under you would be buried alive. I myself would rather be hit by a bomb than be buried alive by one. These shelters seem useless to me. I can see only the expense and cost they would run someone. We are all taught what to do and how to do it in the case of nuclear attack. But do you mean to tell me that if the time should arise when you would need to use this knowledge that you could remember what to do. I doubt it. If such a case would arise, the whole of the people would be in a pandemonium. They would panic and forget everything they were taught about what to do in order to survive. In other words, I feel that (1.) fallout shelters are useless and (2.) Civil Defense in general is useless."

A youngster whose parents are economically weak says:

"I think every family should have a fallout shelter because it is a wonderful means of staying alive."

Two classmates in an accelerated class believe:

"Fallout shelter is man's answer to a plush grave...I believe that I would rather die suddenly in a nuclear attack than starve to death in a very expensive grave."

"A fallout shelter is man's way of saving himself from his own gross stupidity. It is the direct result of a brainstorm that has reaped mass hysteria and fear over the entire world. Man has carried a dream of super-energy too far and instead of admitting his mistake, he has cowardly burrowed underground to escape a possible holocaust that would devastate the highly sophisticated culture that exists."

Another student in the same school, but in a slow-learner class says:

"The fallout shelter in my own opinion is safer than anything else ...No place can be proven to be entirely safe, everything has its faults and failures..I feel there isn't a safer place than a fallout shelter. At least none have been invented as of today."

A 12th grade white boy comments:

"The fallout shelter has these characteristics which make it useless. It most likely could not survive a direct nuclear attack, but if it could, it would only provide temporary shelter until the survivors starved. The fallout shelters are a wasteful exercise in futility, a failing attempt to appease man's need for a crutch in the face of danger."

A bright young lady replies:

"The disaster of nuclear attack need not be a total disaster. Proper shelter in areas not hit directly by bombs can save lives. Knowledge of shelter provision is a major personal step toward preventing disaster...every family can provide adequate protection for its members within the home. Location of public shelters and knowledge of self-protective procedures in any situation are also vital... Shelters can provide adequate protection against illness and death if procedures are followed carefully and calmly. The concept of not wanting to survive an enemy attack is ridiculous; disaster can be avoided."

These are excerpts from the responses of young people to questions about fallout shelters and civil defense. They indicate that youngsters have attitudes about these issues. The youngsters express them willingly and capably. But, their attitudes are not uniform. They differ in <u>direction</u>. Some favor the construction and use of fallout shelters and some oppose them. They differ in <u>intensity</u>. Some very strongly advocate and some very strongly detest the idea of shelters. They differ in <u>substance</u>. Some focus on the physical characteristics of shelters and others speak of the spiritual or

political significance of shelters. They differ in their depth of argument. Some have long, discursive ideas and others make rather brief comments. They differ in quality. Some are well-expressed, organized commentaries, and some are virtually unintelligible. Still others express no information or no opinion on the subject at all.

Here we have focused on the following questions:

1. Do young people have attitudes toward fallout shelters which they can express?
2. What is the direction and intensity of these attitudes?
3. Do young people differentiate between public fallout shelters and private fallout shelters? What are their attitudes toward each kind?
4. What attitudes do young people have about civil defense in general?

One more question: what kind of young person has what kinds of attitudes? That is, what are the background factors that may predispose a young person to like or dislike civil defense, to favor or oppose fallout shelters? If we are to suggest how a program may reach these youngsters with more information or certain kinds of information, then we must know and understand the differences in attitudes within the younger set. How do the attitudes of boys compare with those of girls? What of younger and older teen-agers? Or children from poor backgrounds in contrast with those from well-to-do families? Are there differences between the attitudes of white and Negro children? Do able young people express the same or different ideas than less able ones? In other words: what kinds of audiences exist for civil defense messages among young people? This report will describe the nature of some differences within the audience

of young Americans.

This first study has been specifically designed to articulate the nature of attitudes which are spontaneously expressed by young people toward fallout shelters and toward civil defense. This is an analysis of a special Civil Defense audience. It is an audience whose entire life has been spent in an atomic era, but who were unborn during World War II and still unborn during Korea. In a few years, they will constitute the majority of adult Americans. By analyzing and understanding their current attitudes, we hope to suggest improved methods of informing them about civil defense countermeasures.

SECTION II

Method and Procedures

We chose methods which permitted us to explore the full range of shelter attitudes among some groups of young people. We believed that a structured questionnaire would not be as valuable as a more flexible procedure for obtaining information. Given the paucity of social attitude research among children and the specific lack of research among youngsters with regard to fallout shelters and civil defense practices, it was difficult to conceive what a structured questionnaire should contain. In other words, had we prepared a formal questionnaire, it would have consisted of questions imposing an adult frame of reference. Such a frame of reference would not only have been unfair; it would also seem to lack validity. We wanted to find out how young people thought about this subject -- not how they responded to our own frame of reference. Normal pre-testing procedures to develop a useful instrument also would have been inadequate. The questions devised by the research team might bear little resemblance to the cognitive set of the respondents. This is especially so when the respondents are markedly different kinds of people from the investigators. In essence, we wished to develop some means of obtaining attitudinal information from young Americans without biasing their own response set. To permit the youngsters to develop their thoughts in as free and as varied a manner as possible, we asked them to spontaneously create written essays about fallout shelters. They were given some guidelines about the kinds of things to discuss but no specific instruction about length, content, or attitudinal direction. They also were given no forewarning about this task, no opportunity to bone up on information or to decide what the

investigators would like to hear.

Then, we did two things with the material obtained by this procedure. First, youngsters' attitudes toward fallout shelters and civil defense were coded. An analysis of these attitudes is the major focus of this first report. Second, we extracted from the essays common subject matter areas and some uncommon ones. For example, several students talked about the relationships between their religious beliefs and the concept of fallout shelters. In subsequent study of young people's attitudes, we shall wish to explore this relationship more thoroughly. These second-order analyses gave us unanticipated items and topic areas. They constitute a set of questionnaire items, as spontaneously generated by this study population, for use in later studies. The items represent the frames of reference or response sets actually used by young people and not artificially created by the research team.

Sample. The young people were all 8th and 12th graders. Interviewing was done in six junior and senior high schools in the Denver, Colorado, public school district. The schools were chosen in order to maximize differences in school composition. Then, within each school used, differences in student ability was the criterion in choice of classes. All students were in English classes when the study was conducted so that the essay writing would be a reasonable assignment. In all, 14 different classes were used. They ranged in size from 12 to 35 students; a total of 327 young people were interviewed.

Heterogeneity among the schools was obtained by identifying the school's socio-economic composition and racial mixture. We chose:

a. 1 senior and 1 junior high in an all-white neighborhood of upper-middle-class homes.

b. 1 senior and 1 junior high in a predominantly white neighbor-

hood of middle-class and lower middle-class homes. The racial composition was approximately 90-93 percent white, with the remainder primarily Spanish-American.

c. 1 senior and 1 junior high in a predominantly non-white neighborhood of lower class homes. Here, the racial composition was approximately 65-75 percent Negro, 10-20 percent Spanish-American, and the remainder were Caucasian.

Heterogeneity within the schools was obtained by systematically choosing classes of different student ability groupings. In each school, students were already grouped into Modified (Below average), Regular (Average) and Accelerated (Above average) classes. In each of the six junior and senior high schools, we conducted our study with at least one of the Modified and one of the Accelerated classes; in two schools, these were supplemented with the Regular grouping. Table 1 summarizes the basic composition of the study sample.

Background Variables. Table 1 also specifies four of the five background or independent variables -- (1) age; (2) race; (3) social class of neighborhood; and (4) individual ability. We also determined the student's sex.

In summary of that table, the sample contained:

1. 187 eighth graders and 140 twelfth graders in seven classes of each;

2. 105 students examined in five predominantly non-white classes and 212 students in nine all-white classes;

3. 124 students of upper-class parents in five classes, 98 students of middle-class background in four classes, and 105 students of lower-class

backgrounds in five classes;

4. 138 students of above-average ability in six classes, 43 students of average ability in two classes, and 146 students of below-average ability in six classes.

The sex composition of the 14 classes divided equally between boys and girls.

The table also shows that it was not possible in this community -- nor perhaps in any community -- to obtain a large number of middle or upper middle-class young, non-whites in one school. When we compare the attitudes among different social class groupings, the principal comparison will be between class groupings of white youngsters.

Testing procedures. In each class, students were asked to cooperate in a study being done to determine what young Americans thought about various social matters. They were told that they would be asked to write an essay using as much of the 50-minute class period as they wished. They were told to express themselves as completely as possible and to express their honest reactions. Three-page booklets were then distributed. The top of the first page contained the following information:

"You are to write an essay on this topic:

WHAT I KNOW ABOUT FALLOUT SHELTERS

(Here are some of the things you might write about:

What do you think fallout shelters are?
What do you know about them?
What do you think of fallout shelters?
Why do you think the way you do?
How do you feel about civil defense in general?

Write the essay the way you want to and discuss the things you want to. You should discuss the topic as much and as well as you can.)"

The remainder of that page was blank as were the other two pages.

Table I

COMPOSITION OF STUDY SAMPLE*

			SOCIAL CLASS					
			High		Middle		Low	
		Grade:	8th	12th	8th	12th	8th	12th
		RACE						
		White:	✓	✓	✓	✓		
STUDENT ABILITY	High:	Non-White:					✓	✓
	Medium:	White:			✓			
		Non-White:					✓	
	Low:	White:	✓	✓	✓	✓		
		Non-White:					✓	✓

* Cellentries (✓) describe the classes studied in terms of grade, race, social class and student ability.

The students were asked if they understood their task and any questions were answered. 316 usable essays were obtained from the 327 students. Eleven were discarded for reasons of illegibility, non-cooperation, or failure to understand the assignment.

Attitude variables. Two trained coders analyzed the essays. They evaluated the writer's overall attitude toward fallout shelters, his attitude toward private family shelters, his attitude toward public community shelters, and his overall attitude toward civil defense. The coder training continued until agreement between them and the principal investigator exceeded 80 percent of the codings. Then, the coders continued their analysis on separate samples of the essays. Coders had no information about the age, race, social class or ability of the respondents as they worked with the essays.

From these codings, we constructed five attitude measures as dependent variables:

1. In those essays where the writer did not distinguish public from private shelters, his overall attitude toward shelters was rated on a seven-point scale, ranging from very favorable (7) to very unfavorable (1). This is the General Attitude toward Fallout Shelters variable.

2,3. If the writer did distinguish public from private shelters, the above measure was inapplicable. In that case, the writer's attitudes toward public and toward private shelters were rated separately from very favorable to very unfavorable. The former will be referred to as Attitude toward Public Shelters, and the latter as Attitude toward Private Shelters.

4. The coders also determined whether the respondent expressed his attitude toward civil defense in general -- statements without specific reference to fallout shelters. If the writer did this, his attitude toward civil defense was also rated from very favorable to very unfavorable. This is labeled the

General Attitude toward Civil Defense.

5. We also constructed a composite index of attitudes toward fallout shelters. This index was identical to the general attitude index for those who did not differentiate public from private shelters; for those who did differentiate, this index was an average of their attitudes toward those two different kinds of shelters. The justification for taking the average of those two separate attitudinal measures stems from the substantial correlation between them (.70). This index is cited as the Composite Attitude toward Fallout Shelters.

In addition to these five primary attitude measures, the coders examined 26 other content categories, as empirically derived from the essays. These categories will provide questionnaire items in subsequent studies. As examples, some dealt with government involvement in shelter construction, aggressor perceptions of active U.S. shelter programs, the anticipated existence inside a shelter, sources of shelter information, and the perceived utility of surviving a nuclear war.

In this report, we shall look at the relationships between five independent variables -- sex, age, race, social class, and mental ability -- and the five dependent attitude measures -- general and composite attitudes toward fallout shelters, attitudes toward public and private shelters, and general attitudes toward civil defense.

SECTION III

Results: Overall Distribution of Attitudes

First, let us look at the overall distribution of attitudes found in this group of youngsters. As we discuss these, bear in mind that the data do not come from a random sample of American youth; they come from a purposive sampling procedure in one school system. The findings may not be interpreted as the distribution of attitudes among American youth in general. This group obviously includes more non-white youngsters than would fall into a random sample; it also purposely uses extreme social class and mental ability groupings. The significance of these data lies in our later comparisons among these extreme groupings, and not in any significance attached to the overall distribution of attitudes.

General Attitude toward Fallout Shelters. The distribution of this attitude is in Table 2. Two-thirds of the young people who did not distinguish public from private shelters expressed favorable attitudes toward shelters in their essays. Even more intriguing than this high degree of favorability is the relative intensity of the attitudes. Their attitudes are not mildly favorable nor mildly unfavorable; they are strongly positive and strongly negative expressions. A majority of the youngsters have fairly intense attitudes. This is quite different from a normal curve distribution of attitudes. This type of distribution would show a hump in the middle of the attitudinal scale, with most individuals being only slightly favorable or slightly unfavorable in their feelings. This is not the case here and we shall see that it is not the general pattern found on any of the measures. The

general pattern is as in Table 2, a distribution that peaks at the intense ends of the attitude scale -- on both the favorable and unfavorable ends.

Attitude toward Public Shelters. In examining attitudes toward public shelters, we are now dealing with a different group of young people than are found in Table 2. These individuals indicate separate attitudes toward public or private shelters or toward both. Some talked only about one of the two kinds of shelters, and they specifically indicated the type to which they referred. The distribution of attitudes toward public shelters is in Table 3. Seven in ten expressed a favorable stance about the use and need for public or community shelters. There is the same distributional pattern of attitudes as in Table 2: 34 percent are intensely positive about the benefits of public shelters and 14 percent are intensely negative. These are the two largest proportions on each side of the scale's midpoint.

Attitudes toward Private Shelters. The distribution of attitudes toward private shelters is still heavily weighted on the favorable side -- 6 of 10 are favorable. There is also considerably more opposition as a comparison between Tables 3 and 4 shows. Overall, there is 8 percent less favorability toward private shelters, all of which is found on the unfavorable side of the scale. Although these youngsters perceive private shelters favorably, they fare less well than do public shelters.

The youngsters' attitudes toward private shelters are correlated with their attitudes toward public shelters. However, there are many young people who maintain very different attitudes toward the two.

The distribution of private shelter attitudes is virtually identical to the distribution of general shelter attitudes we saw in Table 2. The

Table 2

GENERAL ATTITUDE TOWARD FALLOUT SHELTERS

Attitude Rating	Percentage
Very Favorable	31%
Quite Favorable	22
Slightly Favorable	9
Total Favorable	62%
Total Neutral	2%
Slightly Unfavorable	7
Quite Unfavorable	10
Very Unfavorable	19
Total Unfavorable	36%
	100%

(n=171)

Table 3

ATTITUDE TOWARD PUBLIC SHELTERS

Attitude Rating	Percentage
Very Favorable	34%
Quite Favorable	26
Slightly Favorable	10
Total Favorable	70%
Total Neutral	2%
Slightly Unfavorable	6
Quite Unfavorable	8
Very Unfavorable	14
Total Unfavorable	28%
	100%
	(n=100)

Table 4

ATTITUDE TOWARD PRIVATE SHELTERS

Attitude Rating	Percentage
Very Favorable	30%
Quite Favorable	23
Slightly Favorable	9
Total Favorable	62%
Total Neutral	2%
Slightly Unfavorable	7
Quite Unfavorable	9
Very Unfavorable	20
Total Unfavorable	36%
	100%

(n=122)

percentage differences between the two never exceeds one percent. Yet, the data were obtained from different sets of respondents. One is inclined to infer from the comparisons among the three tables that attitudes toward private shelters are a reflection of attitudes toward shelters in general; attitudes toward public shelters may exist on a somewhat different and higher plane.

Composite Attitude toward Fallout Shelters. With this measure, we can examine the attitudes of all the youngsters, without regard to whether they differentiated public from private shelters. We obtain results in Table 5 which could be anticipated from the previous data. Attitudes are heavily positive and distribute themselves in what can be called a J-shaped curve. Most of the individuals are on one or the other end of the scale, rather than near the middle. Throughout, only trivial proportions express no attitude at all.

General Attitudes toward Civil Defense. Attitudes toward civil defense were assessed independently of the respondent's attitudes toward fallout shelters. Coders looked for specific statements about civil defense before rating the respondent's opinion on that topic. One-half expressed codable attitudes toward civil defense. The distribution of these attitudes is in Table 6. The youngsters are significantly more favorable toward civil defense in general than toward shelters. More than 4 in 5 are favorable to civil defense, compared with 2 in 3 toward shelters. Over 40 percent are located in the 'very favorable' category with respect to civil defense. Also, civil defen attitudes distribute themselves into one intensity group, not two. Very small percentages are found in the three unfavorable categories or in the neutral category. On the positive side of the scale, there are increasing percentages of young people -- 13 percent are slightly favorable, 28 percent are quite

Table 5

COMPOSITE ATTITUDE TOWARD FALLOUT SHELTERS

Attitude Rating	Percentage
Very Favorable	30%
Quite Favorable	23
Slightly Favorable	9
Total Favorable	62%
Total Neutral	5%
Slightly Unfavorable	6
Quite Unfavorable	10
Very Unfavorable	17
Total Unfavorable	33%
	100%

(n=316)

Table 6

GENERAL ATTITUDE TOWARD CIVIL DEFENSE

Attitude Ratings	Percentage
Very Favorable	41%
Quite Favorable	28
Slightly Favorable	13
Total Favorable	82%
Total Neutral	2%
Slightly Unfavorable	4
Quite Unfavorable	4
Very Unfavorable	8
Total Unfavorable	16%
	100%

(n=161)

favorable, and 41 percent are extremely favorable. In essence, attitudes toward civil defense are very favorable, more so than toward fallout shelters in particular.

Summary. In summary of this section, we have found within this particular group of young people:

a. Quite favorable attitudes toward fallout shelters, where no distinction is made between public and private shelters;

b. Quite favorable attitudes toward public, community shelters, among those who do specifically talk about that kind of shelter;

c. Quite favorable attitudes toward private shelters, but somewhat less favorable than toward public ones;

d. Very favorable attitudes toward civil defense.

SECTION IV

Results: General Attitude Toward Fallout Shelters Among Young Peoply by Social and Demographic Characteristics

In this and the next three sections, we shall examine the distribution on each of the five attitude measures in terms of certain of the respondents' social and demographic characteristics. For each measure of attitude toward fallout shelters and civil defense, we shall find whether any differences exist between age groups, sexes, races, social classes and personal ability groupings. First, we shall examine the youngsters' general attitudes toward fallout shelters, their attitudes toward public and private shelters, and then the composite attitude toward shelters. Finally we shall determine whether attitudes toward civil defense are affected by the sub-group characteristics of the respondents.

Age Differences in General Attitude Toward Fallout Shelters. The attitudes of our different age groups -- the eighth and twelfth graders - are compared in Table 7. Major differences are apparent. The mean attitude of all eighth graders is 4.97; the mean attitude of the older youngsters is 4.09.

From the means alone we would infer that the younger children are somewhat favorable toward fallout shelters, and the older ones are essentially ambivalent. The means mask the pattern of the attitudes in each age sub-group. There is a J-shaped distribution in each, with very few people falling near the middle of the distribution. The attitudes cluster at the extremes for both groups. Among the older ones, the attitudes cluster more so at the negative pole; fully 38 percent of the 12th graders are quite or very negative toward fallout shelters in general. This contrasts with 23 percent of the 8th graders. At the positive end of the scale, 60 percent of the

ounger grouping are quite or very favorable, compared to 42 percent of the lder ones.

Among very young Americans, a base of shelter support is found which ends to deteriorate as these youngsters mature. In only four years, there s a sharp line in that support. This re-emphasizes the need to determine ust what happens to this initial good will -- what internal and external nfluences lead to this drop in favorability. An alternative explanation would e that this particular group of 12th graders underwent some fairly common xperience with respect to fallout shelters, in their extra four years, that esulted in less favorable perceptions. There is no hint of what such xperiences might have been. This explanation too would require research eyond the scope of the present report.

In summary, three-fourths of the eighth graders have favorable attitudes oward shelters. The same may be said for only one-half of the older ones.

Sex Differences in General Attitude Toward Fallout Shelters. Next, we xamined whether young men had the same or different attitudes as young women. In erms of general attitudes toward fallout shelters, no differences were obtained in he overall average of the attitudes, or in the distributional pattern. Sixty ercent of the boys and 62 percent of the girls expressed favorable attitudes; 8 percent of the boys and 35 percent of the girls expressed unfavorable ones. ex did not distinguish among general perceptions of fallout shelters.

Race Differences in General Attitude Toward Fallout Shelters. In any oderately-sized random sample, too few minority group members would appear or a meaningful analysis. Inasmuch as we felt that the attitudes of minority roup members would be particularly useful information for OCD planning, we

Table 7

GENERAL ATTITUDE TOWARD FALLOUT SHELTERS BY AGE

	GRADE:	
Attitude Rating	8th	12th
Very Favorable	34%	26%
Quite Favorable	26	16
Slightly Favorable	11	7
Total Favorable.....	71%	49%
Total Neutral.....	1%	4%
Slightly Unfavorable	5	9
Quite Unfavorable	5	16
Very Unfavorable	18	22
Total Unfavorable.....	28%	47%
	100%	100%
	(n=97)	(n=74)

obtained sufficient representation from Negro groups in particular, and Spanish-American groups as well.

Striking differences exist in the general attitudes between the non-white and white respondent groups. The minority group members are far less negatively inclined toward fallout shelters than the white sub-group. This is in Table 8. One-third of the white students are at least quite negative toward fallout shelters; this is so for only 20 percent of the non-white respondents. At the extreme favorable end of the scale, the frequencies are identical for both groups. In each of the other two favorable categories, the non-white proportion is the larger, 12 percent larger in terms of mildly favorable attitudes.

In working with young people and subsequently with them as adults some years later OCD may anticipate more support or less opposition from racial minority group members than from majority ones.

Social Class Differences in General Attitude toward Fallout Shelters. The variable of social class is partly confounded with that of race because the low social class backgrounds were obtained exclusively from the non-white respondents. Comparisons of low class respondents with middle and upper class respondents would merely be a replication of the findings in Table 8. Therefore, meaningful social class comparisons may be made only between the youngsters with middle class and upper class backgrounds.

Social class differences in general attitude toward fallout shelters are in Table 9. There is a linear progression in attitudes from low class through middle class youngsters to those of high social class background. As one goes up in social class, one goes down in favorability of attitudes.

Table 8

GENERAL ATTITUDE TOWARD FALLOUT SHELTERS BY RACE

Attitude Rating	RACE	
	Non-White	White
Very Favorable	30%	31%
Quite Favorable	25	20
Slightly Favorable	17	5
Total Favorable	72%	56%
Total Neutral	3%	2%
Slightly Unfavorable	4	9
Quite Unfavorable	8	11
Very Unfavorable	13	22
Total Unfavorable	25%	42%
	100%	100%
	(n=60)	(n=111)

Barely one-half in the highest calss grouping have favorable attitudes; in the middle class grouping, we find 60 percent with favorable attitudes.

The differences between upper and middle class respondents are not so large as we found between age and race categories. In part, the smaller number of cases may account for this. Subsequently, it will be necessary to obtain attitude responses from lower class respondents of majority racial groups.

We wish to point out the continuing consistency with which attitudes are distributed at the extremes of the measure and not around the middle. Even when breaking the entire sample into three social classes, there are no exceptions to the trend for neutral attitudes to be least frequent, and for departures in each direction from neutrality to increase in frequency as intensity increases.

Personal Ability Differences in General Attitude toward Fallout Shelters.

The original sample included two groups of students of average ability but they provide too few cases for analysis. Hence, this comparison will be between those students in accelerated or above average classes and those in modified or below average ones.

This comparison yields the most marked discrepancies of all the subgroup comparisons. The mean attitude toward fallout shelters among the very able students is 3.41. This falls on the negative side of the attitude scale. Among the less able students, the average is 5.42 -- a quite favorable perception of fallout shelters.

These data are in Table 10. Although the means reflect the large difference between the two groups, the distributions themselves are even more telling. Sixty percent of the abler students are somewhat negative toward fallout shelters, three times as many as among the less able students. Further-

Table 9

GENERAL ATTITUDE TOWARD FALLOUT SHELTERS BY SOCIAL CLASS

Attitude Rating	SOCIAL CLASS: High	Middle	Low
Very Favorable	32%	29%	30%
Quite Favorable	16	26	25
Slightly Favorable	6	5	17
Total Favorable.....	54%	60%	72%
Total Neutral.....	1%	2%	3%
Slightly Unfavorable	10	7	4
Quite Unfavorable	12	10	8
Very Unfavorable	23	21	13
Total Unfavorable.....	45%	38%	25%
	100%	100%	100%
	(n=69)	(n=42)	(n=60)

Table 10

GENERAL ATTITUDE TOWARD FALLOUT SHELTERS BY ABILITY

	ABILITY:	
Attitude Rating	High	Low
Very Favorable	17%	41%
Quite Favorable	12	26
Slightly Favorable	9	10
Total Favorable	38%	77%
Total Neutral	2%	3%
Slightly Unfavorable	10	5
Quite Unfavorable	17	5
Very Unfavorable	33	10
Total Unfavorable	60%	20%
	100%	100%
	(n=58)	(n=103)

more, one-third of the brighter youngsters are 'very unfavorable,' and only 17 percent are 'very favorable.' Fully 41 percent of the less able students express 'very favorable' attitudes.

Here is further cause for more sensitive study of the reasons why the brighter students turn against fallout shelters or why they originally form negative perceptions. It seems reasonable to assume that from among this group will come the greater share of adults who are active in public affairs. Continuance of this base of opposition can only lead to future difficulties in gaining public acceptance of such programs.

Summary. The concept of general attitudes toward fallout shelters was assessed among those young people who made no distinction between public and private shelters and talked only of shelters, per se. From an analysis of sub-groups in this audience, we found that:

1. Young Americans in their pre and early teens are more favorable toward fallout shelters than those in the mid or late teens.

2. The attitudes of young men are essentially no different than the attitudes of young women.

3. Members of racial minority groups are significantly more favorable toward fallout shelters in general than members of racial majority groups.

4. Small, but consistent, differences appear between youngsters with different socio-economic background; the stronger the background, the weaker the attitudes toward fallout shelters.

5. The student's individual school ability is a significant correlate of his attitude toward shelters. The less able students offer significantly more support for fallout shelters

Again, we caution against over-generalizing these findings, or those in any subsequent sections, from this one relatively small grouping of youngsters. Nevertheless, the magnitude of the obtained relationships provides significant implications for subsequent work with his special Civil Defense audience.

SECTION V

Results: Attitudes toward Public and Private Shelters Among Young People By Social and Demographic Characteristics

Here, we turn to another group of youngsters -- those who did differentiat between public and private shelters. They are not the same people as in Section IV, and we shall determine whether there exist similar or different relationships with the same set of social and demographic characteristics. Because the obtained relationships with attitudes toward public and private shelters are very similar, we shall examine the results with both attitude measures at the same time. First, let us give some of the flavor of these distinctions between public and private shelters with the following:

A senior boy writes:

> "...you will not always be close enough to your shelter to use it in case disaster strikes. If some enemy ever dropped a bomb or exploded one close enough so a shelter was necessary, the user of the shelter would have to be close enough to his shelter to get to it in a few seconds. True enough, there are public fallout shelters in buildings, but how many people know where the closest one is? How many people live close enough to reach it in time?"

A senior girl adds:

> "It now seems to me that family fallout shelters are not the best type of civil defense. The cost and the specifications make home shelters almost prohibitive for most families. I feel community or block shelters are the best plan. Americans should have equal chances for survival. Communities should meet and discuss civil defense in plural terms. Finances for these shelters should come from both the government and the individual."

A very able 12th grader says:

> "There remains the fundamental fact that if there is a war, people must have some means of survival. I feel that the best and most logical method of supplying this shelter is the construction, stocking maintenance of public shelters... The public shelter, while

not supplying as universal protection as if each family had its own shelter, would overcome the problems inherent in a family shelter program."

An eighth grader with weak school ability comments:

"Fallout shelters are good and bad. I don't care much for private fallout shelters because if we had a nuclear war, we wouldn't be able to survive for more than two weeks in them. We would be separated from our parents and we can't afford one. I like public fallout shelters. I think a mass of people could survive better than one and I think there would be more of a chance for the whole family to be safe and be together again."

A classmate of the student above writes:

"I think they (fallout shelters) are OK but I think we should improve our fallout shelter system. I think the way I do because the ones we have, have everything they need, but they're no good to the people who live on the outskirts and suburbs of the city because by the time they get there they would be killed."

A white student from middle-class parents says:

"I think that shelters are good, but I think they're impractical for private uses. I think that the government should provide more public shelters not only in the cities, but in the suburbs, along with warning systems."

Now, a high ability student from middle-class parents comments:

"Personally, I feel the establishment of public shelters is one of the best defensive plans ever begun by the government and man. Trained personnel are continuously devising better ways to react to and overcome disasters through these shelters. The question arises next as to whether or not private shelters in one's own backyard are necessary. Debate has been going on constantly concerning this topic, but no resolution has been reached. On the average, I can see no need for private shelters."

An eighth grader at the same level of ability adds:

"I myself am for the large shelters downtown, perhaps for a small raid. But I think small ones at home are useless. You may be able to use them at some time, but for the money you spend to build it, it would be worthless."

These comments capture the differences expressed by some of the students.

The present analysis examines relationships between attitudes toward each concept

and each of the social and demographic characteristics. For example, what is the relationship between age and attitudes toward public shelters, and subsequently between age and attitudes toward private shelters? Further, does age relate to the attitudes toward one concept to the same extent as it relates to attitudes toward the other concept?

Age Differences in Attitudes toward Public and Private Shelters. The younger group consistently exhibits more favorable perceptions of both public, community shelters and private, family shelters than the older group. These data are in Table 11. In terms of public shelters, an overwhelming 85 percent of the eighth graders express positive notions. This compares with 48 percent of the high school seniors. The corresponding proportions for favorable private shelter attitudes are 79 percent among the younger respondents and 40 percent among the older ones.

The strength of the relationship between age and attitude toward each concept is also the same. This is evident by noting that the proportionate difference in unfavorable attitudes toward public shelters between the younger (50%) and older groups (13%) is 37 percent. The proportionate difference in unfavorable attitudes toward private shelters is an identical 37 percent (56%-19%).

Thus, age is significant in determining attitudinal differences toward both public and private shelters. It is equally sensitive to both attitudinal objects. As with general attitudes toward fallout shelters, so with attitudes toward public and private shelters: Our hypothesis is that as the youngster matures, influences bear on him which undermine his earlier, highly positive stance toward shelters. It may also be that the lack of sufficient reinforce-

Table 11

ATTITUDES TOWARD PUBLIC AND PRIVATE SHELTERS BY AGE

Attitude Rating	Public Shelters: 8th	Public Shelters: 12th	Private Shelters: 8th	Private Shelters: 12th
Very Favorable	35%	32%	35%	22%
Quite Favorable	38	9	34	11
Slightly Favorable	12	7	10	7
Total Favorable.....	85%	48%	79%	40%
Total Neutral.....	2%	2%	2%	4%
Slightly Unfavorable	2	14	6	8
Quite Unfavorable	4	13	3	17
Very Unfavorable	7	23	10	31
Total Unfavorable.....	13%	50%	19%	56%
	100%	100%	100%	100%
	(n=66)	(n=44)	(n=68)	(n=54)

ments for his earlier position destroy the tenability of that position in the face of counter-arguments. Both hypotheses warrant further study.

Sex Differences in Attitudes toward Public and Private Shelters. Among youngsters who failed to differentiate public from private shelters in Section III, we found no attitude differences between young men and women. Here, the attitudes are more segmented, and more focused: More apparent sex-ralated differences in attitude emerge. Young men tend to have consistently less favorable opinions of both private and public shelters than do young women. These data are summarized in Table 12.

Nine percent more girls than boys are 'very favorable', and 7 percent more are 'quite favorable' toward public shelters. At the opposite end of the attitude continuum, 5 percent more boys than girls are 'very unfavorable' toward public shelters and 11 percent more boys than girls are 'quite unfavorable.' Overall, four in five young ladies are favorable in comparison with three in five boys.

With regard to private shelters, similar differences exist. Half the boys are at least slightly favorable toward private shelters, whereas 70 percent of the girls are so disposed.

Again, the strength of the relationship of sex with the two kinds of shelters is identical. For public shelters, there are 15 percent more boys than girls who have unfavorable predispositions; for private shelters, there are 14 percent more boys than girls with that inclination. On the favorable side, there are 19 percent more girls than boys on both the public shelter and private shelter items.

Race Differences in Attitudes toward Public and Private Shelters. Race

Table 12

ATTITUDES TOWARD PUBLIC AND PRIVATE SHELTERS BY SEX

Attitude Rating	Public Shelters: Boys	Public Shelters: Girls	Private Shelters: Boys	Private Shelters: Girls
Very Favorable	29%	38%	25%	33%
Quite Favorable	23	30	20	27
Slightly Favorable	8	11	7	11
Total Favorable.....	60%	79%	52%	71%
Total Neutral	4%	0%	5%	0%
Slightly Unfavorable	6	7	6	8
Quite Unfavorable	14	3	14	5
Very Unfavorable	16	11	23	16
Total Unfavorable.....	36%	21%	43%	29%
	100%	100%	100%	100%
	(n=49)	(n=61)	(n=56)	(n=66)

was a critical determinant of general attitudes toward fallout shelters. In Table 13, we observe that it is equally critical in determining the locus of favorability about both public and private shelters. Non-whites are more favorable toward both kinds. Also enlightening are the distributions in the two halves of the table. Among non-whites, we find the same overall distribution of attitudes toward both kinds of shelters; 18 percent of the non-whites are unfavorable and 81 percent are favorable.

This is also the only instance throughout this comparison of public and private shelter attitudes that more members of a sub-group are intensely favorable toward private than toward public shelters; 32 percent of the non-whites are 'very favorable' toward public shelters, and 42 percent of the same group are 'very favorable' toward private ones.

It is differences among the white respondents which account for the overall difference in favorability toward public and private shelters. Ten percent more of the white respondents favor public than private shelters.

Race differentiates well with regard to both public and private shelter attitudes. It is superior as a discriminant among private shelter attitudes.

Social Class Differences in Attitudes toward Public and Private Shelters. The social class background of these respondents does not relate to the attitudes they expressed toward public and private shelters. All obtained differences are minor and insignificant. Here, class was determined in terms of the general socio-economic composition of the neighborhood. Subsequently, we should prefer to identify the social background of the individual respondent or his family.

Personal Ability Differences in Attitudes toward Public and Private Shelters. The individual aptitude of the youngsters is a sensitive determinant

Table 13

ATTITUDES TOWARD PUBLIC AND PRIVATE SHELTERS BY RACE

Attitude Rating	Public Shelters: Non-white	Public Shelters: White	Private Shelters: Non-White	Private Shelters: White
Very Favorable	32%	34%	42%	25%
Quite Favorable	39	22	36	20
Slightly Favorable	10	10	3	11
Total Favorable	81%	66%	81%	56%
Neutral Favorable	3%	1%	3%	2%
Slightly Unfavorable	3	8	0	9
Quite Unfavorable	13	6	13	8
Very Unfavorable	0	19	3	25
Total Unfavorable	16%	33%	16%	42%
	100%	100%	100%	100%
	(n=31)	(n=79)	(n=31)	(n=91)

of their attitude toward shelters -- but more so with respect to private than public shelters. The more able youngsters consistently are less favorable toward any kind of shelter than less able ones. This is most evident when the topic is private, family shelters.

Our data on personal ability and attitudes toward shelters are summarized in Table 14. On public shelters, the mean attitude of the more able students is 4.83; for the less able, it is 5.40. With respect to private shelters, the mean attitude of the better students is 4.24; for the poorer ones, it is 5.24.

On the public shelter concept, there is a 9 percent difference between the high and low ability groups in terms of unfavorability, and a 12 percent difference between them in terms of favorability. On the private shelter concept, these differences exist in the same direction, but in even greater magnitude. There, the average difference between the high and low ability respondents is 22 percent. One-fifth more of the low ability than high ability students are more favorable toward private shelters. Further, this difference cannot be a function of the earlier differences between racial groups. The same proportion of non-whites is in the high ability group as in the low ability group, and the same is true for the white respondents. Personal ability is related to fallout shelter attitudes, particularly to attitudes toward private, family-style shelters. Able, bright youngsters seriously doubt the usefulness of that kind of protection.

Summary. These analyses of attitudes toward public and private fallout shelters, and the relationship of certain socio-demographic characteristics with those attitudes have disclosed that:

Table 14

ATTITUDES TOWARD PUBLIC AND PRIVATE SHELTERS BY ABILITY

Attitude Rating	Public Shelters: High	Public Shelters: Low	Private Shelters: High	Private Shelters: Low
Very Favorable	30%	38%	25%	35%
Quite Favorable	27	29	21	29
Slightly Favorable	10	12	8	12
Total Favorable	67%	79%	54%	76%
Total Neutral	3%	0%	4%	0%
Slightly Unfavorable	5	7	6	6
Quite Unfavorable	9	7	12	6
Very Unfavorable	16	7	24	12
Total Unfavorable	30%	21%	42%	24%
	100%	100%	100%	100%
	(n=63)	(n=42)	(n=67)	(n=51)

1. Younger Americans in junior high school are more favorably inclined toward all kinds of shelter, both public and private, than are youngsters four years older.

2. Young men are somewhat more negative toward both kinds of shelters than are young women.

3. Non-whites are favorably inclined toward both public and private shelters to the same extent. Furthermore, non-whites are more favorably inclined than are white respondents. The difference between the two groups is particularly evident with respect to private shelters.

4. Social class is unrelated to public and private shelter attitudes.

5. More able students are more likely than less able students to react negatively toward both public and private shelters, but especially so with regard to private shelters.

SECTION VI

Results: Composite Attitude toward Fallout Shelters Among Young People by Social and Demographic Characteristics

For each youngster we constructed a composite index of his shelter attitudes as described in Section II. From previous findings, the reader may well anticipate what relationships exist between social characteristics and this index. The index itself is a means for examining the attitudes of all the young people at one time, rather than segmenting them as in Section IV and V. We shall supplement the data with what we think are illustrative passages from the essays. Statistical results will be presented here parenthetically to inform readers as to the reliability of the areas discussed.

Age Differences in Composite Attitude Toward Fallout Shelters. Without exception, all previous analyses have demonstrated marked differences in the favorability of shelter attitudes between the younger and older groups studied. These differences take the following form:

A white student in a 12th grade, accelerated class says:

> "Personally, I think fallout shelters are fairly useless, unless one merely wants to preserve his life for another two weeks and then gradually starve to death. On coming out of the shelter, everything would be dead and nothing new would grow soon enough to be of help. I would hate to see my family and friends die of ... agonizing starvation, so I'd rather, although it sounds heartless, have us all die at the first blast...Fallout shelters sound nice for children's clubhouses, but their real purpose doesn't achieve a worthwhile end."

A white student in an 8th grade, accelerated class counter with:

> "The need for a fallout shelter has become greater as each year rolls on. With our knowledge of science and world affiars, we know that some kind of shelter is a necessity. With the atom bomb becoming more of a threat to man every day, I feel it only fair to try to preserve humanity with something that may seem small, but would be great indeed -- the fallout shelter!"

Similar differences occur between younger and older non-white students at the same ability level. The 12th grader writes:

> "I believe that man should not decide that fallout shelters are a reliable means of survival or place any importance whatsoever upon the necessity of such protection. With the ever increasing magnitude of man's destructive power....such inspirations as fallout shelters would probably be useless. Man is merely attempting to assure himself that there is a chance for his preservation when the possibility is unlikely."

The 8th grader answers:

> "I think that the fallout shelters are wonderful. I think this because they save lives that couldn't be saved without the shelters. Although some people do not survive in the shelters, I would say that a great deal of people do survive...
>
> "People are developing these shelters to fit our needs today. They are also making them more comfortable for us. I think that we should thank God every day because we are blessed with these fallout shelters."

Among lower ability levels, similar differences appear. A member of the younger group says:

> "My opinion on fallout shelters is a good one. I think they should have more because if we didn't have fallout shelters, our lives could really be in danger anytime we have a war. Today we are getting real close to a world war III, and we would be helpless if we didn't have any fallout shelters because they take care of you....and I will feel safe if a war ever does come cause I will know where I can go for help if I ever need it."

Another 8th grader writes merely:

> "Fallout shelters are O.K."

A high school senior in the remedial class says:

> "My opinion of fallout shelters is that they are unpractical as far as having your own and in my eyes are useless for protection. I feel that when the time comes to start throwing 'megatons' at each other, there would be no sense in trying to survive. The impact of the blast would be enough to kill every living thing, animal or man over the face of the earth. We would either die by the mere blast of the bomb, the radioactivity or be crushed to death by our fellow man."

These reflect the results obtained by cross-classifying the composite attitude toward shelter by the grade level of the respondents. These results are in Table 15. Individuals cluster toward the extremes of the attitude scale in both age groups, but in significantly different patterns. Three-fourths of the 8th graders expressed favorable perceptions of fallout shelters, whereas less than one-half of the 12th graders were on the favorable side of the attitude measure at all. Neutral respondents are infrequent and those rated as neutral tend to have no opinion at all, rather than stipulating a neutral attitude on the basis of reasoned arguments.[1]

The attitudes of the high school seniors form almost a symmetric distribution. Twenty-four percent of them are 'very favorable' and 'very unfavorable'; 13 percent are 'quite favorable' and 18 percent are 'quite unfavorable' and so on.

Age consistently differentiates among those who hold favorable and unfavorable fallout shelter attitudes.

Sex Differences in Composite Attitude toward Fallout Shelters. Thus far, we have located only minor differences between boys and girls in their attitudes toward fallout shelters. Among those who did not distinguish public shelters from private ones, no differences were obtained. Then, among those who did differentiate among the kinds of shelters, we found that young women

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[1]Statistical analysis: The frequency distribution in Table 15 was submitted to a Chi-Square analysis. Chi-Square = 37.511, degrees of freedom = 6, $p < .001$.

Table 15

COMPOSITE ATTITUDE TOWARD FALLOUT SHELTERS BY AGE

Attitude Rating	GRADE: 8th	12th
Very Favorable	34%	24%
Quite Favorable	30	13
Slightly Favorable	11	7
Total Favorable	75%	44%
Total Neutral	4%	6%
Slightly Unfavorable	4	8
Quite Unfavorable	4	18
Very Unfavorable	13	24
Total Unfavorable	21%	50%
	100%	100%
	(n=181)	(n=135)

were slightly more favorably disposed to the notion of shelters than the young men. Let us illustrate this difference among two eighth graders from upper class backgrounds:

The boy writes:

> "In summary, I wish to stress my feeling that fallout shelters are a senseless hindrance to society. It seems quite obvious to me that this so-called defense is truly an offense to society. For it also seems to follow that civil defense is a direct byproduct of the threat of nuclear war, and I can see no good in the byproduct of such an evil thing."

The girl says:

> "I feel a fallout shelter is necessary for complete family protection. Although I hope we won't have to use one for its specific means, it's always good to be on the safe side... I treasure my life and intend to live as long as I can. Since there is a chance of a nuclear war, I intend to be safe and sound when it comes."

These extreme comments were not the prevalent trend in the comparison of attitudes by sex. Table 16 summarizes the relationship of sex with the composite shelter attitudes. Eleven percent more of the girls than boys hold favorable attitudes; 8 percent more of the boys than girls describe unfavorable ones. These differences are minor.[2]

The analysis indicates that the slight difference between the responses of boys and girls is not a very reliable one. Sex is not likely to be a critical determinant of the attitudes of young persons toward fallout shelters.

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[2]Statistical analysis: The frequency distribution in Table 16 was submitted to a Chi-Square analysis. Chi-Square = 6.713, degrees of freedom = 6, $.50 > p > .30$. The frequency distribution in the summary figures was also analyzed by the Chi-Square procedure, deleting the low frequencies in the neutral cells. Chi-Square = 3.72, degrees of freedom = 1, $.10 > p > .05$.

Table 16

COMPOSITE ATTITUDE TOWARD FALLOUT SHELTERS BY SEX

Attitude Rating	SEX: Boys	Girls
Very Favorable	29%	30%
Quite Favorable	20	26
Slightly Favorable	8	12
Total Favorable.....	57%	68%
Total Neutral.....	6%	3%
Slightly Unfavorable	5	6
Quite Unfavorable	12	8
Very Unfavorable	20	15
Total Unfavorable.....	37%	29%
	100%	100%
	(n=158)	(n=158)

Race Differences in Composite Attitude toward Fallout Shelters. We have seen previously that non-whites consistently are more favorable to fallout shelters in general and to both public and private shelters than are their white counterparts. Unusual support for the fallout shelter program stems from these minority group members. Let us first look at the responses of two twelfth graders.

The non-white student writes:

> "Fallout shelters are necessary in the preservation of life in this age of nuclear warfare. Just as stone walls were used centuries age to protect cities against armed forces, the fallout shelter today is an excellent wall of defense....Where there is faith in the preservation of mankind, there will always be a defense against the threat of destroying mankind. The fallout shelter is the answer to one such threat."

The white student says:

> "I am not convinced that fallout shelters are worthy of the money spent on them. They represent a pessimistic approach to the problem of war....The fallout shelter has these characteristics which make it useless. It most likely could not survive a direct nuclear attack, but if it could, it would only provide temporary shelter until the survivors starved. The fallout shelters are a wasteful exercise in futility, a failing attempt to appease man's need for a crutch in the face of danger."

Two eighth graders provide similar contrasts in attitude toward shelters.

The non-white student believes:

> "I think fallout shelters are a good thing to have because in case of war, they will protect us against air raid attacks. I think there should be something more said about how important fallout shelters are."

The white student responds:

> "In my opinion, formed from my present knowledge, I think fallout shelters are perfectly useless! The expense to own one is not exactly cheap, but more important than that, they have no purpose. True, they may be able to protect a family from harm during a war. But what about after the war? At this day and age, if a war occurred, what good would survival do, anyway.... I think fallout shelters are useless and just something to waste money on. If we are going to be involved in a

> war, let's all die for our country together. Besides God could save us from a nuclear war anyway, if only we would have half as much faith in him as we have in those cursed shelters.

These are representative examples of the discrepancy between white and non-white youngsters. The bases for these differences have yet to be uncovered: What is it about racial experiences and backgrounds that predispose one group to be so substantially different in its beliefs about shelters?

Table 17 contains the cross-classification of composite shelter attitudes by race. It is clear that the differences in essay composition are prevalent throughout the two sub-groups. Fully three-fourths of the non-white group have favorable attitudes toward shelters, while the same position is maintained by barely half the white students; 22 percent of the whites express 'very unfavorable' attitudes in comparison with 8 percent of the non-whites. The mean attitude of the non-whites is 5.23, and the mean attitude of the white students is 4.42.[3]

For the planning of fallout shelter information programs, OCD must be mindful of the potential differences in attitude between minority and majority racial groups.

Social Class Differences in Composite Attitude toward Fallout Shelters. The distinction we were able to make with regard to social class background was

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[3]Statistical analysis: The frequency distribution in Table 17 was submitted to a Chi-Square analysis. Chi-Square = 17.949, degrees of freedom = 6, $p < .01$.

Table 17

COMPOSITE ATTITUDE TOWARD FALLOUT SHELTERS BY RACE

Attitude Rating	RACE: Non-White	White
Very Favorable	33%	28%
Quite Favorable	29	20
Slightly Favorable	14	7
Total Favorable	76%	55%
Total Neutral	3%	6%
Slightly Unfavorable	2%	8%
Quite Unfavorable	11	9
Very Unfavorable	8	22
Total Unfavorable	21%	39%
	100%	100%
	(n=100)	(n=216)

found to be unrelated to composite fallout shelter attitudes. No consistent or reliable differences were obtained between young people from the upper class and middle class groups. We believe that this may be attributed partly to the lack of sufficient differentiation between the upper and middle class groups in this study. At best, we obtained groups from lower-upper-class backgrounds for comparison with groups from upper-middle-class or middle-middle-class backgrounds. Subsequently, we would wish to make sharper distinctions in social class composition among both white and non-white groups of young Americans. At this point, we have no consistent evidence of a relationship between the social class background of young Americans and their attitudes toward fallout shelters.

Personal Ability Differences in Composite Attitude Toward Fallout Shelters. These differences can also be emphasized well by example. A weak eighth grade student writes:

> "I think a fallout shelter is good. It should be underground air tight. Strong and big. Have enough in it to last a family a month. It is good to have one."

A 12th grader in the modified class says:

> "We as Americans go about our daily lives, eating, sleeping, talking and have very little worries. What if all of a sudden all the above was cut off....Being in a fallout shelter you can feel safe."

Two other weak eighth graders offer:

> "A fallout shelter is a place where you stay in case of an attack. I know that a fallout shelter is a safe place to stay...I think a fallout shelter is a good thing, and a safe place in case of an attack."

> "A fallout shelter is like a big house underground. They are only used when we are in war. They keep us safe from getting hurt."

The better students provide these kinds of comments:

> "To me, fallout shelters are completely worthless. I would rather be sitting on the bomb when it explodes instead of being in a fallout shelter. If people want to buy fallout shelters I think they're being gyped. I think buying a fallout shelter in a war is like buying a

wheat mill in a drough....Even if you survived the blast, life wouldn't be worth living if you knew you would be certain to die in a year or less."

"If there were to be a nuclear war, it would destroy and contaminate everything, such as the air. If the people who were in one of these fallout shelters ever came out, where would they get food, clothing and how could they get air to breathe? There would be nothing. I think I'd rather die quick than come out of a fallout shelter and find everything destroyed and what once was America the beautiful is now a mass of nothing. By nothing I mean where could man start to build another world similar to the one previous? Fallout shelters aren't and won't be any good in a nuclear war."

These large verbal discrepancies accurately reflect the magnitude of the differences in the study findings. The data in Table 18 compare the composite attitudes of the high ability and low ability groups.

Two-thirds of the less able students are favorable toward shelters, with a preponderant proportion at rather intense levels of favorability. Less than half the more able young people are favorable toward the shelter program, although those that are favorable are strongly favorable. On the other hand, nearly half the able ones are negative toward shelters, whereas less than one-third of the less able youngsters are negative. These are large, consistent, and reliable differences.[4]

The brighter youngsters in junior and senior high school have developed a set of dispositions toward shelters that would seem to require new and/or better information. They provide as much in the way of opposition to protective shelters as they do of support. The less able youngsters are among the strongest

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[4]Statistical analysis: The frequency distribution in Table 19 was submitted to a Chi-Square analysis. Chi-Square = 28.093, degrees of freedom = 6, $p < .001$.

Table 18

COMPOSITE ATTITUDE TOWARD FALLOUT SHELTERS BY ABILITY

Attitude Rating	ABILITY: High	Low
Very Favorable	21%	39%
Quite Favorable	19	27
Slightly Favorable	8	11
Total Favorable.....	48%	77%
Total Neutral.....	6%	4%
Slightly Unfavorable	8	4
Quite Unfavorable	14	6
Very Unfavorable	24	19
Total Unfavorable.....	46%	9%
	100%	100%
	(n=136)	(n=164)

supporters of the shelter program.

Summary. In this analysis of the relationship between composite attitudes toward fallout shelters and the set of social and demographic characteristics, we found that:

1. Young Americans in the 12- and 13-year-old age category are decidedly more favorable toward fallout shelters than are young people four to five years older.

2. The attitudes of young men and young women are not particularly different with regard to fallout shelters. There is a tendency, which is not statistically significant, for young women to be more favorable than the young men.

3. Racial differences in attitudes are large: Minority group members display far more positive notions, with greater frequency, than do members of predominantly white groups.

4. There is no evidence that social class is a significant factor in fallout shelter attitudes.

5. Youngsters with superior classroom ability are pockets of discontent toward shelters; the less able youngsters are preponderantly favorable toward shelters.

SECTION VII

Results: General Attitude Toward Civil Defense Among Young People By Social and Demographic Characteristics

In the original distributions of attitudes in Section III, civil defense was perceived much more favorably than any of the fallout shelter concepts. Of the respondents, 161 or 51 percent included statements about civil defense which could be coded in terms of attitude. Here, we shall examine the favorability of attitudes toward civil defense in terms of age, sex, race, social class and personal ability.

First, it seems worthwhile to exemplify the comments of the respondents. The following passages convey some of their ideas:

A 12th grade girl says:

> "Civil defense to me should be practiced more in the schools. I do not think people really know the full meaning of civil defense. Adults should realize what it really is. They should explain it to their children. The generation of today should know what we are in for if we have a war."

A low ability 8th grade girl writes:

> "I feel that the civil defense is a very good organization and I believe it should go on for years of service to the United States or any other place it is needed."

A boy from upper class background is equivocal:

> "As for Civil Defense, I think that the people involved are dedicated to their work and are very serious in their attempts to save lives. I also think that much money has been spent on Civil Defense measures and that not enough good will come out of it in a time of need to make it worthwhile. Civil Defense is a wonderful organization but it gives more psychological assurance to society right now than it will when disaster strikes.

An able 8th grade boy says:

> "I think that civil defense in general is a good plan. It helps people that have been made homeless by a disaster. It informs the

people of what and how to do in an emergency. They send out pamphlets to tell people what their services are and how to use them. Civil defense has fine, trained people who know what's going on. When there is an emergency, the civil defense is there. In case of an attack, the civil defense can be many places at once, to help. Civil defense works with the government to guard the nation and the people. They have workers in every part of the country. CD helps teach the young people of the nation to help their country in time of disaster. The country needs civil defense."

An able 12th grade girl says much the same thing:

"...this (civil defense) is, in my opinion, one of the greatest and most beneficial steps undertaken by society. In today's day and age, there is a constant threat from foreign and opposing factors -- and nature is still as unpredictable as she was during the glory of Rome. What better way is there to fight these elements than to have man unite under trained men and women in insuring for his life -- or at least dying after fighting with his brains, knowledge and skills."

The opponents have their beliefs also:

"...when I know that there is no practical system of civil defense drills at my own school nor has there been any well-publicized plan for the protection of my city which I know to be surrounded by several militarily important sites, I become apt to consider civil defense in general a rather sickly hope for survival. Thus I find upon reflection that my personal relation to civil defense is only slightly more perilous than that of the cartoon character hoping to catch a willow sappling to his plunge down a 5,000 foot cliff. Wanting rather fervently to live, I will gladly clutch, and scramble, but somehow the cause seems a trifle hopeless."

An 8th grade girl writes:

"I don't think civil defense is as hot as most people play it up to be, either."

A senior girl believes:

"Civil defense...has seemed illogical to me. At school, we meticulously return cards filled out by our parents, instructing the school where to send us if an attack should occur. Yet the red tape is so entangled at this institution of learning that it takes 45 minutes to take attendance -- if we should receive a 15 minute warning on impending attack, how would they know what to do with each of us."

Another adds:

> "I feel that civil defense is ludicrous -- as is its consideration in modern society or ancient culture. Rome was destroyed -- despite the Ciceros, and the society that can propose destruction cannot thwart its threats through concrete walls or lonely existence in a virtual coffin -- often, of course, known as shelters. I think civil defense is ridiculous."

One final example:

> "Since the Soviet Union obtained a nuclear weapons-system, various propagandists in Washington have attempted to assure the American people that 'there is no danger.' They have emphatically stated that 'there will never be a war' -- and they have established the Civil Defense program which, apart from providing for some, if any, eventualities, appears to be at least a contradiction in terms, if not worse...The entire civil defense program is based upon the myth that there is some sort of protection attempt made in the event of nuclear war."

Let us now look at civil defense attitudes in our sub-groups.

Age Differences in General Attitude toward Civil Defense. Attitudes toward civil defense are more favorable among the younger respondents than the older ones. Table 19 summarizes the data.[5]

There are only a negligible number of youngsters in the eighth grade category who have anything negative to say about civil defense at all -- 93 percent of them make primarily favorable comments; fully half of them make only 'very favorable' depictions of civil defense.

In the older grouping, two in three are favorable, and as the scale moves to greater favorability, the percentages in each category increase

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[5]Statistical analysis: The frequency distribution in Table 19 was submitted to a Chi-Square analysis. Chi-Square = 23.564, degrees of freedom = 6, $p < .001$.

substantially. Among 12th graders with negative perceptions of civil defense, the largest cluster is in the 'very unfavorable' category. The mean attitude of the eighth graders is 6.05; the mean attitude of the high school seniors is 4.91 -- both well along the favorable side of the continuum.

Much as with attitudes toward fallout shelters, we find that the younger respondents contribute more to the preponderance of favorable attitudes than the older ones.

Sex Differences In General Attitude Toward Civil Defense. The differences in attitudes between boys and girls are minor and insignificant.

Although 10 percent more of the girls than boys express favorable perceptions, this difference is not a reliable one. This 10 percent difference is distributed along the attitude continuum, rather than being found in any one category. For example, 42 percent of the girls and 40 percent of the boys are 'very favorable'; 31 percent of the girls and 25 percent of the boys are 'quite favorable'; and 14 percent of the girls and 12 percent of the boys are 'slightly favorable'.

We suspect that sex is a weak, perhaps insignificant correlate of attitudes toward both fallout shelters or civil defense, as we have assessed those attitudes.

Race Differences In General Attitude Toward Civil Defense. Table 20 presents the distribution of civil defense attitudes among the white and non-white sub-groups.

Race distinguishes here in the same manner as with attitudes toward fallout shelters. Non-whites are more favorable -- in fact, 92 percent of them are favorable -- toward civil defense programs. Both groups are predominantly

Table 19

GENERAL ATTITUDE TOWARD CIVIL DEFENSE BY AGE

Attitude Rating	GRADE: 8th	12th
Very Favorable	47%	33%
Quite Favorable	31	25
Slightly Favorable	15	10
Total Favorable.....	93%	.... 68%
Total Neutral.....	0%	.... 4%
Slightly Unfavorable	4	5
Quite Unfavorable	3	6
Very Unfavorable	0	17
Total Unfavorable.....	7%	.... 28%
	100%	100%
	(n=92)	(n=69)

favorable, but the variable of race continues to differentiate the level of favorability.

In the extreme categories of favorability, there are similar proportions from both racial groups. However, 23 percent of the non-whites express attitudes which are 'slightly favorable' whereas only 9 percent of the white respondents are in that category. Further, 10 percent of the whites are extremely unfavorable, in contrast with 2 percent of the non-whites.[6]

Attitudes toward civil defense are almost unanimously positive among members of these minority groups, i.e., Negroes and Spanish-Americans. They are largely favorable among members of the majority group, i.e., young white Americans, but less so than among the former.

Social Class Differences In General Attitude toward Civil Defense. There are no differences between the high-class and the middle-class groups in attitudes toward civil defense, although we note an earlier tendency: 75 percent of the high-class youngsters have favorable attitudes, and 82 percent of the middle-class youngsters are in these positive attitude categories. This difference is not statistically significant.

However, we are as yet uncertain whether our measure of social class is inadequate, or whether there is no particularly important relationship between that variable and the attitudes we are attempting to assess.

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[6]Statistical analysis: The frequency distribution in Table 20 was submitted to a Chi-Square analysis. Chi-Square = 10.158, degrees of freedom = 6, $p < .10$.

Table 20

GENERAL ATTITUDE TOWARD CIVIL DEFENSE BY RACE

Attitude Rating	RACE: Non-White	White
Very Favorable	43%	40%
Quite Favorable	26	29
Slightly Favorable	23	9
Total Favorable.....	92%	78%
Total Neutral.....	0%	3%
Slightly Unfavorable	4	4
Quite Unfavorable	2	5
Very Unfavorable	2	10
Total Unfavorable.....	8%	19%
	100%	100%
	(n=47)	(n=114)

Personal Ability Differences In General Attitude toward Civil Defense. The final analysis compared the attitudes of the accelerated students with those in modified classes. This analysis is in Table 21.[7]

There is a considerable distinction between the attitudes of these two clusters of young people. The less able have more favorable inclinations toward civil defense; it may also be that they have fewer negative perceptions. Whichever interpretation is given the data, the brighter students do present a less favorable posture toward civil defense, as they did toward fallout shelters.

Summary. In this section, we examined civil defense attitudes in terms of the social and demographic characteristics used in examining attitudes toward fallout shelters. The present results indicate:

1. Eighth graders have more favorable perceptions of civil defense than twelfth graders.

2. Although boys are slightly less favorable toward civil defense than girls, the differences are minor.

3. Negroes and Spanish-Americans are more favorable toward civil defense than are white Americans.

4. Social class differences in general attitudes toward civil defense are insignificant.

5. The less able students are more receptive to civil defense ideas.

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[7]Statistical analysis: The frequency distribution in the summary portion of Table 21 was submitted to a Chi-Square analysis, deleting the low frequency neutral cells. Chi-Square = 6.40, degrees of freedom = 1, $p < .02$.

TABLE 21

GENERAL ATTITUDE TOWARD CIVIL DEFENSE BY ABILITY

Attitude Rating	ABILITY: High	Low
Very Favorable	39%	42%
Quite Favorable	24	31
Slightly Favorable	10	16
Total Favorable	73%	89%
Total Neutral	2%	2%
Slightly Unfavorable	8	1
Quite Unfavorable	8	2
Very Unfavorable	9	6
Total Unfavorable	25%	9%
	100%	100%
	(n=66)	(n=88)

SECTION VIII

Summary and Discussion

We have explored the parameters and boundaries of young people's attitudes toward fallout shelters and civil defense. With a non-directive approach, we have probed into different groups of young people for the direction of their attitudes, the content of those attitudes, and some assessment of their strength. More than 300 students were asked to write essays about these topics. The youngsters were deliberately chosen for their heterogeneous composition. They included approximately equal size groups of boys and girls, 8th and 12th graders, accelerated and below-average students, from different social class backgrounds, and from different racial and ethnic groups. Trained coders rated the attitudes expressed in the essays.

This was not a random sample of young people; it was selected because of the sub-group comparisons we wished to make. We found quite favorable attitudes toward all the topics assessed across the entire group. The youngsters made quite positive statements about fallout shelters, about public shelters in particular, and about civil defense in general. They were somewhat more reticent in their favorability to private shelters, but a majority were positve.

We related each of the attitude measures to the social and demographic data. These included the individual's sex, school grade, race, personal ability, and the social class composition of the school he attended. In previous sections, we summarized the findings for each in the attitude measures in terms of the relationships obtained in the sub-group comparisons. Here,

it would seem most useful to summarize the data in terms of the findings obtained with each social and demographic characteristic:

1. By age, we found --
    a. the younger group (the eighth graders) more favorable to fallout shelters than the older group (the twelfth graders), among those youngsters who wrote only about shelters in general.
    b. the younger group more favorable to public shelters and to private shelters, among the youngsters who differentiated between those two kinds of shelters.
    c. the eighth graders more favorable to shelters than the older respondents, on the composite assessment of shelter attitudes.
    d. the eighth graders more favorable to civil defense as an attitudinal object than the twelfth graders.
2. By sex, we found --
    a. the young men to have essentially the same attitudes as young women toward fallout shelters in general, where no distinction was made between public and private shelters.
    b. the boys to be less favorable toward both public and private shelters than the young women, among those youngsters who talked about specific kinds of shelters.
    c. the young men tended to express more negative comments than the young women in terms of the composite assessment of shelter attitudes. This was a minor difference.

d. minor differences between the sexes in terms of civil defense attitudes, although again the slight tendency was as with shelter attitudes -- the girls were more positive.

3. By race, we found --

a. that members of racial minority groups were significantly more favorable toward fallout shelters in general than the white students.

b. that the primarily non-white group of respondents reacted more favorably to both public and private shelters. Further, the non-whites were equally favorable toward both public and private shelters, whereas the white group tended to favor the public shelters more than the private ones.

c. the same discrepancy between the racial groups on the composite shelter index -- non-whites were far more favorable.

d. that the same race difference existed in judging civil defense; the non-white group was more favorable.

4. By social class, we found --

a. no substantial evidence that social class was related to any of the shelter attitudes examined.

b. insignificant differences among the social classes with regard to attitudes toward civil defense.

5. By the youngster's individual ability level, we found --

a. that the more able the student, the more he deprecated fallout shelters in general.

b. that the more able the student, the less he favored either

public or private shelters, but this was particularly evident with respect to private shelters.

c. that the more able the student, the less he favored fallout shelters on the composite shelter attitude index.

d. that the more able the student, the less he reacted favorably to the general notion of civil defense.

Much of the substance of these results was discussed in the sections where the results were originally presented. Now an attempt will be made to provide an overview for the results, the manner in which they were obtained, and what they are likely to lead to.

We uncovered many relationships between single social attributes and the various attitudes studied. This report has focused only on those single relationships. In this kind of correlational approach, however, there remains the serious problem of determining whether any one of these relationships may be partly or entirely attributed to one of the other relationships. That is, what is the relationship between age and attitudes toward fallout shelters, when we hold race constant? Or between personal ability and attitudes toward civil defense, when we hold sex constant? This more complex type of analysis is needed so that we may see whether each of the variables we labeled as independent is indeed independent, or one which intervenes between some other independent variable and shelter attitudes, or one which interacts with another of the independent variables. We anticipate that there are several relationships of an interactive nature; e.g., the white youngster of extremely high ability may be even more unfavorably disposed than white youngsters or able ones. Such information would

be most useful for planning information strategies. This type of analysis will be accommodated in our second report.

We examined only a small sub-set of those social and demographic characteristics which would be included in a more elaborate study of the socialization of young Americans. Sensitive indices of the relationships of background characteristics with fallout shelter attitudes and attitudes toward civil defense will be obtained when we can include measures of such additional variables as:

religion, church membership, and church attendance

place of residence, e.g., metropolis, large city, small city, towns and villages, and farm areas

family income

wider age dispersion

school activities, club memberships, offices held

number and life-cycle of siblings

family discussion of public issues

mass media activity, time spent with newspapers, news magazines, television, radio

use of library facilities, or time spent reading books

peer group activity

personality characteristics, e.g., open- and closed-mindedness, low and high self-esteem,

By including a far broader set of personal and social characteristics, we may better determine which are of major, which of minor and which are of no import in the development and formation of the relevant attitudes.

Just as we must develop more sensitive indices of background characteristics, so must we develop more sensitive measures of the individual's attitudes. In the present study, we focused on the global or macro aspects of attitudes toward shelters. The only distinction we could make was between private and public shelter attitudes. More efficient information will come from some of these sub-attitudinal areas:

General attitude themes:

- the protective nature of shelters
- the amount of effort, energy or cost that the shelter program merits
- the futility or utility of survival in the aftermath of a nuclear war
- the desire to avoid any discussion of shelters, or the possibility of nuclear war

Specific attitude themes:

- government involvement in providing shelters
- the likelihood of a nuclear conflict
- the distinction between rural and urban shelter benefits
- how some aggressor would perceive an active U.S. shelter program

General information topics:

- the ability to use shelters in natural disaster situations or general peace-time use
- conditions that will prevail within shelters
- the youngster's perceived level of information about shelters
- physical properties of shelter protection

Specific information topics:

shelter expenses or costs

the various effects of nuclear war

sources of information about shelters and civil defense

civil defense drills

shelter stocking

These tap a few of the areas found in young people's essays. On a spontaneous basis, some of the areas in the above listing appeared on one to a dozen essays. They specify interest areas of the youngsters which require more extensive probing in our subsequent research effort.

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ABSTRACT

What kinds of beliefs and opinions do youngsters in their pre-teen and teenage ars have toward fallout shelters and civil defense? 327 eighth and twelfth grade ote extemporaneous essays on 'What I Know About Fallout Shelters'. Attitudes ward this topic were assessed by trained coders on the basis of their degree of vorability towards fallout shelters in general, private shelters, public shelters d civil defense. Each of the attitudes was related to age, sex, race, social ass and personal ability of the youngsters.

Generally, youngsters hold favorable attitudes toward both fallout shelters d civil defense, and these expressed attitudes are strongly held. In terms of e, the younger students are more favorable toward both types of shelters and vil defense in general. Sex differences were insignificant; however, boys ndad to be somewhat less favorable. Attitudes of white and non-white youngsters re strikingly different with non-white students consistently expressing more vorable attitudes toward both shelters and civil defense. Social class appeared be unrelated to attitudes expressed on this topic. A third significant correlat attitudes was personal ability. The more able students withhold support from th shelters and civil defense, while the less able on highly favorable.

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Civil Defense Systems						
Attitudes						
Psychology						
Public Opinion						
Audiences						
Fallout Shelters						
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