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The Impact of Atomic Energy
on Society: an Investigation
of Attitudes and their Determinants

by

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PREFACE

This is the first report in a study of some aspects of people's reactions to atomic energy. Further reports of various aspects of the analysis will appear later.

The study was financed by the Phoenix Memorial Fund of the University of Michigan. It is a study that adds a new link to a series of studies conducted during the past eight years, by the Survey Research Center, on people's reactions to atomic energy, the threat of war, and international affairs in general.

The Public Affairs Program of the Survey Research Center

Scope

The Center's three major programs of research are in the areas of human relations in organizations, economic behavior, and public affairs. The last of these programs has encompassed such research as: a series of surveys on public reactions to civil defense; a series on determinants of attitudes toward foreign affairs; studies of public use of the library, information and attitudes on cancer and its control, the presidential votes of 1948 and 1952, attitudes toward big business, and attitudes toward atomic energy.

Other programs of the Institute for Social Research are concerned with the study of small face-to-face groups and larger organizational structures. The Public Affairs Program is principally devoted to research on different sorts of populations—the nation and the community. The groups it treats are defined in terms of common attitudes, expectations, roles, social status, identifications. Its prientation is toward social problems and institutional functions affecting the wider society. In the study of the attitudes, motivations, and behaviors of groups of individuals, and the factors affecting these, it is hoped to provide illumination of these problems and some guidance to social action.

Staff

The Public Affairs Group and its research program are under the direction of Dr. Stephen B. Withey. Dr. Elizabeth Douvan, Benjamin J. Darsky, and Alan M. Walker were in charge of the study reported here. Mr. Darsky left the Center before the analysis for this report was completed, to accept a position at the School of Public Health of the University of Michigan. Other members of the program who contributed to discussions of the research are Dr. George Belknap, (now of Michigan State College), Gerald Gurin, Warren E. Miller, James C. Davies, and William A. Scott. Dr. Max L. Hutt of the University of Michigan Psychology Department made many helpful suggestions.

Lyons Howland, assistant to the head of the Center's field staff, contributed to the formulation of objectives and development of the questionnaire, and supervised the field work in Detroit. Lysle Summers and David Miller were responsible for the sampling design, and Jane Benjamin for coding supervision.

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Chapter 1

Introduction

In a period congested with new discoveries and developments, the release and control of atomic energy is unchallenged in its significance for our society. Since the first atomic bomb was detonated at Hiroshima, our era has become the "atomic age."

In light of the magnitude of the discovery, and of the precedence it has assumed in the planning of government and industry, it may seem enigmatic that surveys have consistently revealed the following facts about popular reactions to it:

- 1. There is considerable optimism and feeling of potential importance about peacetime uses of atomic energy, but
- 2. Outside of the specific phenomenon of the bomb, the public is neither very well informed nor very interested in the subject of atomic energy.

When our age is so clearly symbolized by this one outstanding discovery, we may well ask why people show so little interest in or information about it. Experts in the field have tried to answer this question.

For example, a team of social scientists, science editors, and an Atomic Energy Commission official, undertook an evaluation of the current and potential utilization of atomic energy. They expected to find nothing less than a blue-print of atomic revolution, but found to their astonishment

that no such revolution was in the making, at least in the foreseeable future. 1/

"The applications of atomic energy will remain far more limited in the foreseeable future than uninformed enthusiasts had prophesied. The atom has already become an extremely useful tool of scientific research; it is making modest contribution to industry and agriculture, and it may some day become a significant supplementary source of power. But it does not appear to presage a new kind of industrial society or open spectacular new vistas in our daily life."

Nor did these authors find evidence that we had progressed very far toward such changes in the last five years.

"The question we ought to be asking, then, is not whether the atom can revolutionize our economies but whether in fact it will do so. Put the question this way and the answers are less grandiloquent. We discover that there is strong resistance - economic and social - to any far reaching substitution of atomic power for power generated by conventional methods. And the fact is that, despite previous prediction to the contrary, the probabilities that atomic power will revolutionize either whole industries or whole economies are no greater today than they were a year ago - or five years ago.

Another contributor, Robert Campbell, the Science editor of Life, says: $\frac{3}{}$

"Journalistic ebullience to the contrary, it seems unlikely that the atom will really transform our daily lives or our landscapes. In fact, unless he should be vaporized in the blinding flash of an atomic explosion, or more hopefully, travel to the moon in an interplanetary rocket, the average man will probably never come in direct contact with an 'atomic age' at all."

Whitney, V. H. and Isard, W. (Atomic Power, Philadelphia: Blakiston, 1952.) Campbell, R. (Life), Aebersold, P. C. (USAEC) and Rabinowitch, E. (Bull of Atomic Scientists)
"Exploding the Atom Myth," United Nations World, N. Y., Jan, 1953, p. 49.

^{2/} op. cit. p. 50

^{3/} op. cit. p. 53

However, he adds:

"I do not intend to minimize the indirect effects which the atom will have on all of us: if it does not destroy us all first, it may well save our lives, and it certainly will make them healthier, fuller, and more comfortable."

It is clear from these statements that little has occurred in the field of peaceful atomic developments which would command the attention of the lay public. The bomb is the single example of an important application of atomic energy to which may be applied the term actual rather than potential. It becomes the significant focus for a study of public attitudes in this area.

The bomb is known to virtually everyone in the United States. As far back as the time of the Bikini tests less than two percent of the population had not heard of the bomb. It has also been found that about 2/3 of the adult population have heard of radioactivity, almost entirely in connection with the bomb. About the same fraction have information on some of the effects of atomic explosions and on means of protection against these effects.

Without doubt, people in general are atomic bomb oriented.

However, even in the case of the bomb considerable misinformation and vagueness exist in the public mind. It has been found repeatedly, for example, that people tend to overestimate the destructiveness of the bomb.

Public Reaction to the Atomic Bomb and World Affairs. Cornell Univ., Ithaca, N. Y., April, 1947.

The Public and Civil Defense, Survey Research Center, Univ. of Mich., Ann Arbor, 1952, p. 65.

^{6/} ibid, Chap. 4. See also Public Thinking about Atomic Warfare and Civil Defense, Survey Research Center, Univ. of Mich., Ann Arbor; Jan., 1951, Chap. 6.

Above references and Kay, L. W. and Gitlin, I. J. "Atomic Energy or the Atomic Bomb: a problem in the development of morale and opinion."

Journal of Social Psychology, 1949, 29, pp. 57-84.

The most common opinion before Bikini was that the test fleet would be virtually wiped out. Studies indicate that only one out of five people estimates the damage potential of the bomb in accordance with official Atomic Energy Commission estimates. The overestimate has not changed in three years of questioning the public.

If we shift our attention to peaceful uses of atomic energy, we find evidence of a rather broad positive evaluation of atomic energy and recognition of its potential importance. But, there is little evidence of strong interest in or information about the topic.

Almost sixty percent of the respondents in one study thought that "considering all its uses in peace and war" we will be better off for having discovered atomic energy. Many of the remaining forty percent were uncertain rather than negative about atomic energy. In addition we find that about seventy-five percent of the group indicate that they consider atomic energy of potential importance by their responses to the question: "How important do you think it will be for those young people (of high school age) to understand atomic energy?"

op. cit. Public Reaction to the Atomic Bomb and World Affairs, and
Eberhart, Sylvia, "How the American People Feel About the Atomic
Bomb." Bulletin of the Atomic Scientists, Vol. III, No. 6, 1947.

^{2/} Civil Defense in the United States 1952, Survey Research Center, Univ. of Michigan, Ann Arbor, October, 1952.

op. cit., Atomic Warfare and Civil Defense, Jan. 1951; and The Public and Civil Defense, 1952.

Fisher, B. R.; Metzner, C. A.; Darsky, B. J.; Peacetime Uses of Atomic Energy, Volume I, Survey Research Center, Univ. of Michigan, Ann Arbor, 1951. The data available on these points were not derived from a national sample, but from a sample of residents in atomic installation areas and matched non-installation communities. The nature of this sample warrants the assumption that this group should, if anything, show greater interest in and information about atomic energy than a cross-section sample of the nation.

^{12/} ibid, p. 87.

^{13/} ibid, p. 70.

These data reflect a general recognition of the importance of atomic energy, but do they indicate that respondents have a strong personal interest in the field? Other data in the same study indicate that they do not. Only about ten percent of these respondents report discussing atomic energy with family or friends more than "once in a while." When asked whether there was anything about atomic energy they wondered about (in addition to information they already had), about half of the population was "disinterested in further data about atomic energy." 15/

This last fact is striking since this population had little information about atomic energy. About two-thirds of them had heard of atomic energy in connection with something besides the atomic bomb. But one-fifth of the respondents either "denied any impressions that there were other uses than the bomb...(or)...did not report the vaguest concept of even general areas in which atomic energy could be used in peacetime."

In answer to a question on what atomic energy was or what it was like, less than ten percent of the respondents could give an informed answer.

Over forty percent said that they did not know, and another forty percent offered descriptive analogies---"it's energy, it's force, it's electricity, it's like an explosion, it's tremendous power," etc. 18/

^{14/ &}lt;u>ibid</u>, p. 66.

^{15/} ibid, p. 69.

^{16/} ibid, p. 30.

^{17/} ibid, p. 36.

^{18/} ibid, p. 37.

In summarizing the section of their investigation dealing with information, the authors of this study concluded that:

"The field of atomic energy seemed to exist as bits of information, varying interests and reactions that related to one or another specific uses, problems, or policies. It clearly did not exist as a rather well-structured phenomenon that fitted within a relatively well-defined area of interest for the overwhelming number of ... respondents. "19/

Another question was asked which combined elements of both interest and information: "Do you think that the average person can understand enough about atomic energy to make it worthwhile for him to read things about it?" "Slightly more than a third of the total thought that this amount of understanding was not possible for the average person." People not only have meager knowledge of this new development, but a third of them think that it is not possible for the average person to understand much about it in any case.

For the present, then, the area of peacetime uses of atomic energy is not salient to the general population. Though its impact may be great on specific individuals or small groups of specialists, and though it may be part of the raw material of popular phantasy, it has little strength in determining the day to day attitudes and behaviors of the population at large.

The great impact of atomic energy on the social and political structure lies in the future. Only in one area can one fruitfully pursue the search for effects of this development on the public. This is in the area of reactions to the atomic bomb and the threat of atomic war. It was in this setting that the present study was undertaken.

^{19/} ibid, p. 26.

^{20/} ibid, p. 97.

Chapter 2

Conceptualization and Focus of the Study

The concentration of public opinion on the bomb reflects the emphasis placed by government officials, atomic scientists, and other opinion leaders on the threat aspect of atomic energy. 1/ Given a threat of atomic warfare, what can we predict about people's reactions to it? Drawing on insights derived from clinical and experimental study of anxiety and reactions to more limited or personal threats, we are in a position to predict what some of the possible reactions to war threat will be.2/ More important, perhaps, than this, is our ability to delineate some of the factors which determine these reactions.

For conceptual purposes we have found it convenient to separate two types of factors which influence the individual's attitudes and behavior toward a public event. There are: 1) factors relating to the <u>perception</u> of this particular event, and 2) intrapersonal factors of a more general nature which the person brings to this situation from his past experience.

For an interesting discussion of this point, see the article by Kay, L.W., and Gitlin, I.J., referred to above.

^{2/} One study in which clinical insights concerning anxiety and defensive reactions were applied to the study of reactions to war threat, is reported by Scott, W.S., Withey, S.B., and Miller, David in a manuscript in preparation at the Survey Research Center, University of Michigan.

Examples of the first class of factors would be the degree to which an individual perceives an event (in this case, the threat of atomic war) to be relevant to his own life, or the realism of an individual's picture of atomic war. The individual's values and attitudes toward people and property, or his general level of anxiety are examples of more stable characteristics which influence his reaction to this event as well as other events which confront him.

Clearly there is no neat dividing line between these two classes of factors. There is considerable interaction between them, so that, for example, a person's general level of anxiety will affect the realism of his perception of the threat of war. The distinction is useful, nevertheless, as an analytic tool. Also, it reminds us that some factors—those on the perceptual level—are tied more directly to the specific stimulus situation and are therefore more subject to change through manipulation of that situation than are others which are less tied to a particular event. Thus, through education about atomic warfare we may change a person's picture of this event. We cannot, however, expect on the basis of such education to change appreciably those determiners of his attitudes which derive from more general and varied experience.

The research in this area previously referred to, has concentrated heavily on the effects of perceptual factors on attitudes and behavior, Among the aspects of perception which have been investigated are the following:

- 1. Relevance of the threat of atomic warfare (measured both in terms of expectancy of atomic war and personal concern about the threat of atomic war).
- 2. Degree of information about atomic warrare.
- 3. Realism of conception of the nature of atomic warfare.

Each of these variables has shown interesting and consistent relations to attitudes and behavioral tendencies. In previous research these variables were the central concern of investigators and were therefore measured in more detail and treated at greater length than is warranted in the present report, where our interest lies in pursuing a different variable. For present purposes it suffices simply to abstract some of the conclusions from earlier studies.

A high information level about atomic war, and increased relevance of the threat, both increase the likelihood of a person's being willing to take actions aimed at reducing the threat; both increase willingness to discuss the problem of war; and both increase the number and realism of a person's ideas for alleviating the personal effects of such a threat. Realism of perception of what atomic warfare would involve relates to readiness to face and discuss the threat, and to willingness to take action to alleviate it.3/

These relationships have contributed to our understanding of individuals' reactions to the threat of atomic war. Since they deal with perceptual factors, they have been especially useful for administrators and social engineers interested in changing attitudes toward atomic war.

These results are from the series of studies done by the Survey Research Center under the auspices of the Federal Civil Defense Agency, cited in footnotes 5, 6, and 9, of Chapter 1.

However, the factors which have been studied do not explain all of the variation in people's attitudes. We know that if people perceive the threat of war as relevant, they will tend to show more differentiated thinking about it. But what accounts for those individuals whose responses do not follow this pattern—those who see the threat as relevant, yet show signs of disrupted, gross thinking about it; or those who do not feel that the threat is real and at the same time manifest a good deal of constructive thinking about solutions?

In order to extend our understanding of responses to war threat, the present analysis has fo cused on a variable of the second type described above. An investigation of the more general aspects of the individual's psychological life with which he approaches such new events should provide fruitful insights into the nature of attitudes and reactions to the threat of war.

The Focus of the Present Research

We have already suggested examples of general psychological variables which might affect an individual's evaluation of and attitudes toward atomic warfare. The individual's general level of anxiety was cited as a factor which would be expected to have an influence on these reactions. The breadth or narrowness of an individual's psychological environment, that is, the degree to which he is characteristically concerned with affairs beyond the confines of his personal or occupational environment, is another example of a general intrapersonal variable which might affect his reaction to such a threat.

Because of a programmatic research interest in the problem of citizen participation in formal and informal organizations and in government affairs, we have, in the present analysis, focused attention on a general variable which we termed "psychological effectiveness." This variable is defined as the degree to which the individual feels that he can or cannot have an influence in the field of public affairs. We have attempted to show in what manner this characteristic affects an individual's reactions to the threat of atomic war and related issues.

Other things being equal, we would anticipate that a person who feels capable of influencing public affairs would be more willing to face a threatening public problem, more likely to manifest differentiated and constructive thinking about it, and more likely to take a definite attitudinal position regarding solutions suggested for the problem.

The ineffective person, on the other hand, gains little but frustration from facing a problem which he feels unable to affect. We would therefore expect, among ineffective people, a tendency to turn away from threatening public problems. Specific predictions relating effectiveness to attitudes toward atomic energy and atomic war were developed from this general speculation, and are tested in the analysis which follows.

Among recent considerations of this or similar variables, the following include some of the most interesting discussion and insights:

Gabriel Almond, The American People and Foreign Policy, N.Y.:

Harcourt Brace and Co., 1950; David Riesman, The Lonely Crowd,

New Haven: Yale University Press, 1950; Brick Fromm, Escape

from Freedom, N.Y.: Farrar and Reinhard, 1941.

In addition to testing these predicted relationships, we have asked, and attempted to answer, one further question in this report—that is, the question of the origin of this feeling of effectiveness. Is this phenomenon specific to the area of public affairs, or is it symptomatic of a more general outlook stemming from the individual's experience in his immediate interpersonal environment? Our prediction was that the second interpretation would prove more accurate.

The Empirical Study

For our central research objective we required two kinds of data: information on respondents! feelings of effectiveness and on their attitudes toward atomic energy and the threat of atomic war. These and other data specifications of the total study are presented in Appendix A, together with the questionnaire developed to fit them.

Since a problem like the threat of war—or for that matter, any national problem—is not directly soluble by an individual citizen, feeling effective in such a situation means feeling that one can have some influence on the thinking and actions of people who do deal with such problems. In the case of war threat, the average citizen will feel effective if he believes that he can influence the leaders who are negotiating the cause of the United States with foreign nations—that is, his government leaders.

The measure of effectiveness developed for this study consisted of questions concerning the possibility of an average citizen's influencing government decisions. These questions were asked about decisions in general, and were posed after problems at the national level had been discussed, in order to supply a meaningful context for the influence questions. The influence questions and distributions of our population's responses to them appear in Appendix C.

A final note should be added about the design of the study. The sample for the present study (316 persons) was drawn from the city of Detroit. The findings of the study are not, therefore, representative for the whole nation; nor are they representative of the city of Detroit, since only the labor force was sampled. Statements of proportions of the sample holding any particular attitude should be viewed with this limitation in mind.

For a description of the sample design, see Appendix B.

Chapter 3

Measurement Procedures

The central purpose of this analysis is to test hypotheses about the influence of effectiveness on reactions to threat. To perform such an analysis it is apparent that we must first confirm the fact that the respondents perceive the threat. The prediction is that given a perceived threat, people's reactions to it will differ depending on the degree of effectiveness which they feel.

Control for Perception of Threat

To control for perception of threat, we inspected responses to two questions—one asking whether the respondent felt personally concerned about the possibility of an atomic war, and one asking for his reasons for concern or lack of concern. If in these two responses there was an indication that the respondent did not perceive atomic warfare as a relevant threat, he was excluded from the analysis of effectiveness which followed.

There was a sizable group of respondents (46 cases) who were unconcerned about atomic war and gave reasons which indicated that they did not perceive it as a real danger. Some individuals stated that they were unconcerned because no nation would start such a holocaust. Others felt that we (the United States) are so strong that no nation would invite reprisals by starting an open conflict. Still others were unconcerned

because they felt that the threat of atomic war is a propaganda fiction created to maintain public support for the armament program. In all of these cases, and others, the respondents were either explicitly or implicitly saying that they were unconcerned about war because there is no danger of war. 1/ These cases were maintained as a separate group and were not included in the analysis of effectiveness.

Measure of Effectiveness

Among the questions concerning the citizen's role in government decisions, one queried whether or not the respondent thought the average citizen could have much influence on such decisions. This formed the initial basis for distributing respondents on the effectiveness variable. Those respondents who stated that the average citizen could have "a great deal" or "quite a bit" of influence were considered to feel relatively effective in public affairs. Those who answered that the average citizen could have "very little" or "no" influence were assigned a relatively low position on feeling of effectiveness, since they do not see the channels for affecting public affairs as open and meaningful.2

In addition to this sub-grouping, a further split was made in our population; another step was added to our scale at the "ineffective" end. In coding the section of the interview dealing with public affairs, a rather impressive fact had emerged. Some respondents, when asked the questions dealing with personal concern about war, did not state that war

In some cases, such statements may serve as a defense against a threat which is recognized but cannot be handled adequately. When it was possible to detect such a denial reaction in the verbal response, the person was not excluded from the analysis on the basis of not perceiving the threat.

^{2/} It will be noted that responses concerning influence available to the average citizen are interpreted as reflecting the respondent's feeling about his own influence.

is unlikely to occur or in other manner indicate that they did not perceive the threat as relevant; rather, they spontaneously raised their own ineffectiveness as a reason for their lack of concern about war.

The war concern questions were asked before any question of citizen influence had been introduced. Thus, when certain respondents, in answering this early question, state that they are not concerned about the threat of war because they can have no influence on such an event, it seems legitimate to conclude that for these respondents personal ineffectiveness is an important and salient part of their view of public affairs. Such a response placed its author in the third and lesst effective category.

It is apparent that the inclusion, among our criteria, of the question on personal concern about the threat of war served two functions. First, it provided a control on perception of threat by identifying respondents who are unconcerned with the possibility of war because they do not believe it will occur. And second, it permitted detection of individuals who mention their lack of effectiveness spontaneously, and in advance of direct questioning, thus indicating the salience of this factor.

To summarize, the questions used in defining effectineness are: 3/

- 1) a question on personal concern about the possibility of atomic war.
- 2) a question on the reasons for personal concern or lack of concern.
- 3) a question on the degree of influence the average citizen can have on government decisions.

For exact wording of these questions, see the Questionnaire, Appendix A, questions 23, 23a, and 30.

The major groups which emerged from this analysis are:

- a) High effectiveness. Respondents who are personally concerned about the threat of atomic war and believe that the average citizen (interpreted as the respondent) can have some measure of influence on decisions made by his government.
- b) Medium effectiveness. Respondents who are concerned about the war threat, but do not believe that the average citizen can have any significant influence on government decisions.
- c) Low effectiveness. Respondents who interject into the interview their own feelings of ineffectiveness as a reason for stating that they are not concerned about the threat of atomic war.

In addition to these three patterns which vary on the central variable of effectiveness, there is the group of respondents who do not perceive the threat as relevant (War Not Likely). There is a small group of respondents who are not concerned about war because they feel that, war or no war, their leaders can handle all eventualities. Finally, there were a few respondents who failed to give codable responses to one or another of our criterion questions and were therefore not classifiable.

The distribution of our sample in these various categories is presented in Table 1.

Table 1
Response Patterns to the Problem of War

Pattern		Number of Cases	Percent of Total Sample
ı.	High Effectiveness		
	Concerned with problem and believe citizen can have an influence on government decisions	91	29%
2.	Medium Effectiveness		
	Concerned with problem, but don't believe citizen can have influence	93	29
3.	Low Effectiveness		
•	Verbally unconcerned because they feel they can have no influence on outcome	63	20
4.	Not concerned because they feel war unlikely	47	15
5.	Not concerned, believe leaders will take care of problem	12	4
6.	Not concerned, no answer why	7	2
7.	Aware, concerned, no answer influence	3	1
	Total	316	100%

Of these groups, only the first four are used in any of the following analysis. The fourth group is excluded from analysis of questions on citizen influence, since members of this group are not alkke with respect to effectiveness. The differentiating characteristic of this group is a lack of perception of the threat of war.

The Meaning of the Effectiveness Index.

We have assumed that when an individual answers a question about the influence an average citizen can have on government decisions, he is, in virtually all cases, answering on the basis of the degree of influence he feels he personally can have. Granted this assumption, we may say that our first two response groups (High and Medium Effectiveness) differ by definition with respect to effectiveness. High effectiveness indicates that the respondent feels able to have some influence on decisions relating to public affairs. Medium effectiveness designates respondents who feel that their power to affect such decisions is negligible or non-existent.

There remains, however, the task of justifying the placement of the low group. How do we know that this group should be placed lower in our "scale" than the medium pattern. Since respondents in the medium group feel that they (as average citizens) can have little or no effect on decisions affecting public affairs, they would seem to be the extreme group on ineffectiveness. However, on two bases the low group seems less effective.

First, while members of the medium group must be directly questioned before they indicate that they feel there is little chance of affecting public issues, members of the low group mention their own lack of effectiveness before any direct questioning occurs. In this way, as we pointed out earlier, they indicate that ineffectiveness is a strongly salient feature of their outlook.

Second, they state that they are unconcerned about war because they can have no effect. We interpreted this as an indication of withdrawal from a problem which they recognize but cannot cope with. Since this withdrawal is a more extreme behavior than that of the medium pattern (maintaining concern in a problem although recognizing that one cannot influence such issues), more extreme ineffectiveness should be required to arouse such a reaction.

The following chapter will present a rather extended validation of the effectiveness index against other questions about the citizen's role in government decisions. We can, however, make a preliminary test of our ordering procedure.

In assigning individuals to the <u>low</u> effectiveness group, only the question of war concern and reasons for these responses were considered. Since our original sample was small, it was decided to place a respondent in the low group if he gave a fatalistic, ineffective response to these questions, regardless of his response to the direct question on influence.

It is therefore permissible to ask how members of this group distribute on the direct question. If their responses to the questions on war concern are not indicative of ineffectiveness, we would expect these respondents to distribute in much the same fashion on the direct question as does the total population. Actually, the data, presented in Appendix Table D-1, show that with very few exceptions, members of this group do not believe the average citizen can have any influence in government affairs. The distribution for this group differs significantly from the total population.

Interesting in contrast are the results of the same type of analysis for those who are unconcerned because they feel that war is unlikely. (Appendix Table D-2). This group does not deviate significantly from the distribution for the total population on the question about citizen influence. This is as we would expect from the fact that it was not characterized in terms of the effectiveness criteria.

With this preliminary indication that the effectiveness groups are meaningfully different, we will proceed in the next chapter to the question of validation.

Chapter 4

Effectiveness and Attitudes Toward the Citizen's Role in Government Decisions

Since the index of effectiveness depended in part on a question referring to the threat of war, one might question our use of the index as a measure of a more general psychological characteristic---effectiveness with respect to public affairs. The threat of atomic war is certainly a unique public issue. It is further removed from the individual citizen than many problems in the sense that it is an extremely technical problem and an international issue involving leaders of other nations as well as our own.

Not all individuals who say they are ineffective with reference to this problem would necessarily give this same response were the issue a different one. Our assumption was simply that there would be a tendency in this direction. Respondents who have feelings of ineffectiveness in the case of a more limited or psychologically closer public problem should be among those who feel ineffective when the issue is war. In any case, individuals who mention their sense of ineffectiveness spontaneously, when questioned about war, should feel more ineffective with respect to general public affairs than those who do not refer to their lack of power when questioned about the same threat.

To test this assumption we have analyzed the index of effectiveness with reference to a series of questions about the influence an ordinary citizen can have on the government decision-making process in general.

Responses to these questions do not refer specifically to the issue of war.

Special precautions were taken to insure against such a reference.

Following the questions on war concern a series of questions were asked about the problem of inflation. Influence questions followed discussion of the two problems and were phrased in general terms. Under these circumstances, if the effectiveness index shows consistent relationships to citizen influence responses, this fact will serve as a validation of a more general interpretation of the index.

The questions on citizen influence deal primarily with the respondent's perception and evaluation of democratic controls. Our general prediction is that effective people will be more satisfied with the degree of popular control over government, will be more familiar with the mechanisms of popular control, and will have greater faith in their operation.

Satisfaction with Democratic Controls

If we have interpreted the effectiveness categories correctly, members of the <u>High</u> group, who feel that they can have some influence in public affairs, should be most satisfied with the degree of influence they and others like them currently hold over government decisions. The <u>Medium</u> group should show somewhat more dissatisfaction, and the <u>Low</u> pattern even more dissatisfaction.

If any specific problem referent was used by the respondent in answering these questions, it was more likely to be the price issue which immediately preceded them, rather than the war problem.

Two questions were asked about satisfaction with popular control. The respondent was asked about: $\frac{2}{}$

- 1. his satisfaction with his own influence
- 2. his satisfaction with the average citizen's influence

The first of these questions is the most direct validation of the effectiveness categories. If the <u>Low</u> group feels most ineffective, we would expect this group to be least satisfied with the power it currently has. Results of this analysis appear in Table 2.

Table 2
Satisfaction with Personal Influence on Government Decisions*

Satisfaction/Dissatisfaction with own influence	Effectiveness		
	Hìgh	Medium	Low
Satisfied	52%	41%	27%
Pro-con		1	5
Dissatisfied	40	53	60
Don't know, Not ascertained	8	5	6
			
	100%	100%	100%
Number of cases	(91)	(93)	(63)

^{*}The X² for a 2 x 3 table is 10.5. This value would be expected by chance less than one in a hundred times (P < .01). in the predicted direction. Because of the small member of "pro-con" responses, the satisfaction variable was dichotomized "pro-con" and "dissatisfied" against "satisfied."

^{2/} For the exact wording of these questions, see Questions 32b and 31 in the Questionnaire presented in Appendix A.

The index of effectiveness is significantly related to satisfaction with one's own influence. Respondents in the <u>High Effectiveness</u> group are most satisfied with their power to affect government decisions, with the next two groups showing increasing dissatisfaction.

We expected that the same relation would appear between effectiveness and satisfaction with the average citizen's influence, since the latter response was interpreted as a projection of the individual's attitude about his own power. The data in Table 3 bear out our prediction, presenting the analysis of responses to the question:

"Would you say the amount of influence the average citizen has now is just about right, or would you like to see him have more, or less, or what?

Table 3

Satisfaction with Average Citizen's Role in Government Decisions*

Satisfaction	isfaction <u>Effectivene</u>		
	High	Medium	Low
Citizen's influence satisfactory	49%	30%	28%
Citizen's influence unsatisfactory	بلبا	62	55
Don't know	-	1	7
Not ascertained	7	7	10
			
	100%	100%	100%
Number of cases**	(70)	(70)	(46)

^{*}The X^2 for a 2 x 3 table is 5.3. (P < .05).

^{**}The number of cases in this table is reduced because 73 of the respondents in our categories were given Form II of the questionnaire which did not include this question.

The additional hypotheses made about effectiveness and attitudes toward the government decision making process were:

- Greater effectiveness will be associated with more sophistication about mechanisms of influence available to the average citizen.
- 2. Greater effectiveness will be associated with more faith in these mechanisms.

Mechanisms for Citizen Influence

Information about mechanisms was measured by asking respondents "What are some of the things ordinary citizens can do to have an influence. on government decisions?" "Anything else?" Because voting is such a popular and obvious response to this question, and because the vote is a relatively indirect means of influencing policy decisions, respondents who gave this answer with no additional mechanism were kept in a separate category. Those who mentioned a less obvious method of citizen control, such as writing letters to Congressmen, either alone or in combination with voting, were considered more sophisticated in the ways of citizen participation. Responses to these questions for each of the effectiveness groups are presented in Table 4.

Table 4

Mechanisms for Citizen Influence*

Mechanisms		Effecti	veness
	High	Medium	Low
Mention a mechanism other than voting*	77%	68%	56 %
Mention only voting	15	14	21
Know of no mechanisms	8	18	23
	100%	100%	100%
Number of cases	(91)	(93)	(63)

^{*}The X^2 for a 2 x 3 table is 6.0 (P < .05). "Voting" alone and "no mechanism" formed one category for test purposes.

There is a consistent relationship between feelings of effectiveness and knowledge of means of influence. One might, however, suspect that this relationship is largely a function of education. Consequently a further analysis of these responses was made, holding education constant. Because of the reduction of numbers in any cell which such an analysis involves, the sign test was used for testing the significance of relationship. Appendix Table D-3 presents the relevant data. They indicate that effectiveness is significantly related to knowledge of mechanisms (p \langle .01) when the effect of education is removed.

These results indicate that the ineffective respondents are relatively unaware of means other than voting by which the citizen can wield an influence on government decisions. It also suggests that felt ineffectiveness results in less overt participation in public affairs, since people who know of fewer action channels lack the necessary implementation for action, should the desire to act arise.

Faith in Mechanisms

All respondents who mentioned some means, other than voting, by which the citizen can make his wishes known to government leaders, were asked if they thought the government paid much attention to these kinds of actions. Our prediction was that those people who feel ineffective

^{2/}Those respondents who mentioned voting only were not asked this question because interviewers felt that the answer was so obvious as to make the question appear foolish.

would evince less faith in these mechanisms than effective people. The prediction is borne out in the results presented in Table 5.

Table 5

"Do you think the people who make decisions in our government pay much attention to this kind (these kinds) of thing(s) or not?"*

Faith in Mechanisms	Effectiveness		
	<u> High</u>	Medium	Low
Yes	63%	141%	31%
Pro-con	14	13	17
No	4	22	22
Don't know	3	5	8
Not ascertained	16	16	22
			
	100%	100%	100%
Number of cases**	(69)	(63)	(46)

^{*}The X^2 for a 2 x 3 table is 10.0 (p < .01). "Pro-con and "No" formed one category.

^{**}See footnote **, Table 3.

One other question that was asked can be interpreted as reflecting faith in government leaders' representation of the average citizen. Respondents were asked whether they thought the government, in making decisions, paid more attention to the average citizen or to special interest groups. The majority of respondents in all groups answered "special groups." But this was especially true of the low effectiveness group, as Table 6 indicates.

"Do you think the government pays more attention to what the average person wants, or to what special groups want, like businessmen or labor unions?"*

Location of Power		Effectivenes	35
	High	Medium	Low
Average Person	19%	11%	1.5%
Special Groups	69	70 ·	86
Other**	7	9	5
Don't know	1	8 ·	6
Not ascertained	4	2	1.5
	مستسور ون		
	100%	100%	100%
Number of cases	(91)	(93)	(63)

^{*}The X² for a 2 x 3 table is 7.2 (p < .02). "Average Person" responses were compared to "Special Groups."

^{**}This category includes the following responses:
"They pay attention to both," "They pay attention to neither," and "Sometimes one, sometimes the other."

In a certain respect, the differential responses to these two questions are the best possible validation of the effectiveness groupings. If effectiveness means a feeling of ability to influence government decisions, the ultimate block to citizen control would reside in the disregarding of citizens' actions by decision-makers. Their ability to disregard the wishes of citizens, if accepted, can only increase the feeling of impotence in these matters which is presumed to characterize the low effectiveness group, and thus discourage the very action which is necessary to overcome the block.

Throughout this report, the relationships of two variables have been presented only in terms of co-variation. Without experimental or other verification, only logical deduction can be used to ascertain the major direction of causality. It may be, for example, that lack of faith in the efficacy of known mechanisms is an important determiner of feelings of ineffectiveness, and/or that feelings of ineffectiveness determine the responses to this particular question. Since we have no way of knowing whether one or both of these statements is true from our data, we can only report that the high degree of consistency strengthens the belief that the three effectiveness categories form meaningful steps in felt effectiveness, and have a rather general basis on the public affairs level. A later chapter will investigate some relationships of the index to different levels of experience.

Summary

Effective respondents are more satisfied with the state of democratic functioning in our society than are those who feel ineffective. They are

also more likely to feel that the role of the individual citizen in government is a significant one; they have greater knowledge of means of implementing this role in action, and a greater belief in the usefulness of
these means.

The purpose of this chapter was to establish the generality of the effectiveness index measure. We attempted to do this by predicting differential responses of the three effectiveness groups to questions on the citizen's role in government decisions. We may ask at this point how successful our efforts in this direction have been. Five predictions of differences were made, all of which proved significant at the .05 or .01 level of confidence in the predicted direction. With this indication that the index serves as a meaningful measure of a rather general characteristic of the individual's view of public affairs, we will continue with an analysis of the effect of this variable on attitudes toward atomic energy and atomic warfare.

Chapter 5

Attitudes toward War and Atomic Energy

Our definition of effectiveness included, as a criterion for the most extreme group, whether or not the respondent denies concern about the war threat issue because he feels ineffective. Inclusion of this pattern in the definition indicates a good deal about our theory on the relationship between effectiveness and attitudes toward a threatening public problem like war.

Our speculation was as follows: If an individual recognizes (either explicitly or by implication) the threatening public problem, and feels able to have an influence on such phenomena, he is in a relatively good position for problem solving. We would expect him to manifest the constructive, attentive, differentiated thought about the problem which such behavior implies.

The individual who, on the other hand, recognizes the threat, but feels that such affairs are beyond his reach of influence, is in a difficult position. While he cannot proceed toward problem solving, since he sees his efforts as ineffective before begun; the threat does not disappear. It remains a dangerous area and is, in addition, conflict laden since it is a representation of his inability to solve problems of this nature. We would expect, then, that such a respondent would defend himself against the conflict—anxiety associated with the problem by some mechanism of denial. If such is the case, these respondents should tend consistently to avoid

thinking about the area and as a consequence should show gross, undifferentiated thinking and indecisiveness of attitudes when the issue is raised.

By definition, our effectiveness groups differ in their willingness to face the threat of war, since the question of personal concern was used as a criterion in defining our groups. The two highest effectiveness groups admit concern, while members of the <u>low</u> group do not.

One independent check on willingness to confront the problem can be made. Respondents were asked the question: "One problem we hear about is the possibility of an atomic war. Do you think this is very important for the nation, quite important, not too important, or not at all important?" The analysis of responses to this question is presented in Table 7.

Table 7

Relation Between Effectiveness and Importance Attributed to War as a National Problem*

War Threat is:	Eff	ectiveness	****	
	High	Medium	Low	War Not Likely
Very important	60%	59%	35%	6%
Quite important	37	40	30	23
Not too important	1.5	1	28	<i>5</i> 9
Not at all important	-	-		12
Don't know	-	-	7	-
Not ascertained	1.5	-	-	-
•	100%	100%	100%	100%
Number of cases	(70)	(70)	(46)	(34)

^{*} The X^2 for a 3 x 3 table is 37.3 (p <.001)

^{**}See footnote **, Table 3.

The <u>low</u> effectiveness group does not accord the problem of war as much importance as the more effective respondents do. This group, on the other hand, does not reveal the disregard for war threat that we would expect if members of this group were truly unconcerned about the possibility of war, as they claim to be. They recognize the importance of the problem significantly more often than those respondents who think war unlikely. The difference between these groups would be expected by chance less than one time in a thousand cases (Chi square test). This finding adds weight to our interpretation of the low effectiveness response as a withdrawal from a recognized but conflictful problem rather than a lack of recognition of the threat. 1/

We reported earlier that in general there is little popular attention given to the non-destructive applications of atomic energy. The distinction between atomic energy—with its constructive as well as destructive potential—is an important one for our society. To the extent that the two are identified or confounded, we can expect people to react negatively to further innovations in the atomic energy field.

We predicted that less effective respondents would tend to overweight the threat aspect of atomic energy in their evaluation of it and to react negatively to the whole field because of this primary reaction to danger.

The "War Not Likely" group is included in the subsequent tables of the report. This group, by contrast, provides insight into the "low" effectiveness pattern which is similar to it in stated unconcern about war.

Their greater psychological vulnerability to the threat leads to a grosser reaction to all stimuli associated with it. They should, then, be more negative in their evaluation of atomic energy than respondents who can make the distinction between the discovery itself and one destructive use to which it has been put. The results presented in Table 8 are consistent with this hypothesis.

Table 8
"Considering all its uses in peace and war, do you think we are better off for having discovered atomic energy or would we be better off if no one had discovered it?"*

Evaluation of Worth of Atomic Energy	Effectiveness			
	High	Medium	Low	War Not Likely
Better off for having atomic energy	58%	44%	33%	76%
Pro-con	7	13	6	3
Worse off	31	35	55	18
Don't know	4	Ц	2	-
Not ascertained		4	<u>1</u> 4	3
	100%	100%	1.00%	100%
Number of cases	(70)	(70)	(46)	(34)

^{*} The X² for a 2 x 3 table is 8.1 (p < .01). "Pro-con" and "Worse off" were grouped.

^{**}See footnote**, Table 3.

Members of the "War Not Likely" group, it will be noted, are most thoroughly acceptant of atomic energy and most convinced of its positive. value. (The difference between this group and the high effectiveness group is significant beyond the five percent level of confidence in the predicted direction by the Chi-square technique.) Since these people do not think war is imminent, they are free to appreciate the positive potential of the discovery unimpeded by fear.

An indication of the degree of differentiation in thinking about the threat element itself was derived from respondents' notions for solving the problem of war threat. Here, degree of differentiation was gauged by the presence or absence of a solution suggestion. We predicted that ineffective respondents would offer a clearly formulated suggestion less frequently than those who feel effective, and that, in addition, they would more frequently feel that the problem is insoluble. The results of this analysis appear in Table 9 below.

Table 9
Suggested Solutions to War (Incidence)*

Solutions to War	Ef	117.		
	High	Medium	Low	War <u>Not Likely</u>
Suggest some solution	76%	65%	1414%	80%
Cannot suggest anything***	20	31	40	14
State that nothing can be de	one 4	4	16	6
	100%	100%	100%	100%
Number of cases**	(70)	(70)	(46)	(34)

^{*} The X² for a 2 x 3 table is 1.7 (p < .001). The last two categories in the table were combined.

^{**} See footnote **, Table 3.

^{***}This category includes those cases where respondent said he didn't know what could be done to cut down on the chances of war and those cases of "Not ascertained" responses where the question was asked but the response was so vague as to be uncodable as a solution.

Our hypothesis is bormout in the number of respondents giving solutions, and in the number failing to do so. The number stating that there is no solution possible also varies in the predicted direction, with the "low" group giving this response more often than the other groups—although the "high" and "medium" groups do not differ in this respect.

It is worth noting that the respondents who think war unlikely give about the same percentage of solution suggestions as the highly effective group. While these respondents are not concerned about any immediate danger of war, they are willing to discuss solutions. The nature of the solutions offered by this group will charify the meaning of this apparent paradox, and will be presented below. Initially we may explain the phenomenon, at least superficially, by recognizing that a person who does not believe war an immediate threat may still be dissatisfied with the state of international relations. When asked, then, for his suggestions concerning the solution of war threat, he may answer with suggestions for reducing international tension on a more general or long range basis.

Not being confronted with an immediate unmanageable threat, these respondents are able to turn to the task of suggesting solutions for international conflict with relatively high energy and clarity, unimpeded by a need to a world the situation. By contrast, the lack of concern expressed by our low effectiveness group appears again to be motivated by conflict rather than reality factors. Their paucity of constructive thinking seems less a reflection of unconcern than of withdrawal.

It was difficult to predict in advance any differences in the kinds of solutions our groups would give, especially because of the great variety of possible responses. Table 10 provides us, however, with some interesting bases for speculation.

Table 10
Suggested Solutions for War*

Solutions to War	Eff			
	High	Medium	Low	War <u>Not Likely</u>
Power-oriented solutions	37%	26%	17%	21,%
Solutions based on negotiation	16·	19	17	18
Solution of underlying causes of war	13	10	2	18
Solutions based on religion	2	4	4	11
Other	8	6	4	12
Nothing can be done	4	L ₄	16	6
No solution given	20	31	40	14 .
	100%	100%	100%	100%
Number of cases**	(70)	(70)	(46)	(34)

^{*} The X^2 for a 2 x 3 table is 5.5 (p <.10 >.05, no prediction of direction). Power solutions were compared to all others combined.

^{**}See footnote **, Table 3.

This table reveals several provocative findings. The first is that there is a consistent tendency (although it does not quite reach the required level of significance) for effective people to mention power-oriented solutions more often than do ineffective people. The low effectiveness group and those respondents who think war unlikely give power-oriented solutions quite infrequently.

Since a power orientation is strong in present governmental policy ("total diplomacy," "building situations of strength"), these two groups both might be said to be less in agreement with current government policy than the two groups who verbalize concern about war (high and medium effectiveness groups). Unlike the low effectiveness group (who, it will be recalled, appear to be denying concern because of their ineffectiveness), the "Not Likely" group has alternative solution suggestions to offer in place of the power policy they reject. The ineffective respondents are not in agreement with present policy, but have no other suggestions.

When respondents are presented with one current idea of how to cut down the chances of war—building the hydrogen bomb—respondents <u>low</u> on effective—ness again show a lack of differentiation and indecisiveness in their reactions. We see in Table 11 that this group more than any of the others is unable to state a definite opinion about the H-bomb development as a means of solving the threat of war.

Table 11

Responses to the question "Our government is now spending about a billion dollars to build a super atom bomb (hydrogen bomb). Do you think this is the best way to spend this money to cut down the chances of war, or should we do other things with it?"*

Position on H-bomb	Effecti veness			War
	High	Medium	Low	Not Likely
Best solution	62%	51%	39%	50%
Other solutions better	24	29	30	1,1,
No opinion on this solution compared with others	10	16	29	-
Number of cases**	(70)	(70)	(46)	(34)

^{*} The X² for a 2 x 3 table is 7.25 (p. .02). "Best solution" was compared to "Other solutions better" and "No opinion on this solution" combined.

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Among our three main patterns there is a tendency for the more effective groups to be more acceptant of the hydrogen bomb policy as a solution for the threat of war. It will be noted that the least effective group does not strongly prefer alternative solutions. Rather, they say they don't know if this is a good solution or not, or give vague, undefined responses. The "Not Likely" group shows the greatest preference for alternative solutions. These data are consistent with those in the previous table on solutions for the war threat.

^{**}See footnote **, Table 3.

Summary

The degree to which an individual feels effective in dealing with public affairs is consistently related to his perception of and reaction to the war issue and atomic energy. The <u>low</u> effectiveness group, which is characterized by a denial of concern about war, manifests a tendency to handle the problem by a wishful undoing of atomic developments. Their reaction to atomic energy is undifferentiated and rejecting. Their inability to deal effectively with the threat leads them to overemphasize this element in their evaluation of atomic energy. People who feel more effective or do not encounter the negative side of the development (think war unlikely) are able to differentiate the bomb from the scientific discovery, and evaluate the latter more positively as a consequence.

Differences in clarity and constructiveness of thought about the problem of war threat bear out the prediction that the person who feels able to have an effect on public issues will be motivated to work on solutions of national problems and will show the clarity and decisiveness which are signs of such motivation. Respondents who feel, in a sense, defeated before they attempt such efforts, will manifest the gross, unclear thinking which characterizes avoidant responses.

Chapter 6

Effectiveness and Personal Competence

Having investigated some relationships between feeling of effectiveness and attitudes toward atomic warfare and atomic energy, a major question remains to be probed. This is the question of the origin of feelings of effectiveness and ineffectiveness. Are such feelings unique to the area of public affairs, or do they reflect a more general characteristic of the individual, which marks his response to the narrow environment of his personal life as well as to situations national in scope?

We hypothesized that an individual's response to a national problem like war would be, at least in part, a projection on a broader level of his response to problems in his personal environment. That is, an individual who feels competent in situations arising in his own affairs would be more likely to feel effective in regard to problems at the national level, and an individual who feels thwarted and ineffective in his own affairs would react in corresponding manner to affairs in the larger environment of the nation when they are raised for him in the interview situation.

Before we test this hypothesis, it would be worthwhile to show that variation in response to national affairs is not entirely due to some demographic variable like age or income, reflecting differences in the environment.

Education

The most obvious kind of explanation of differences in reaction to national problems and in conception of the citizen's role in these problems is one which relies heavily on education as a determinant. According to this kind of explanation, more highly educated people know more about world a ffairs are more interested in such affairs, and are therefore more likely to take a more active, effective attitudinal position. In such an explanation, education is viewed as a catalyst to interest rather than a direct explanation of activity or attitudinal strength and position.

However, the results presented in Table 12 indicate that degree of effectiveness is not significantly related to education.

Table 12

Relation between Education and Effectiveness*

Education Level	Effectiveness			War
	<u>High</u>	Medium	Low	Not Likely
Grammar School	6%	11%	10%	2%
Junior High School	14	24	22	20
High School	59	47	52	61
Some College	21	18	16	٦?
	100%	100%	100%	100%
Number of cases	(91)	(93)	(63)	(46)

^{*} The X^2 for a 3 x 3 table is 6.05 (p < .20).

It will be noted that the general trend is for the respondents who feel less effective to be in lower educational categories, but this trend is neither consistent nor strong.

Income

Income is another frequently employed demographic variable. If a strong relationship appeared between income and effectiveness in the face of national affairs, we would expect that this occurred because people of higher income, having greater economic power, come to feel more effective in other areas of activity as well.

Actually, no significant relationship appeared between our response patterns and respondent's annual income, as is seen in Table 13.

Table 13

Relationship between Income and Effectiveness*

Income	Effectiveness			War
	<u>High</u>	Medium	Low	Not Likely
Under \$3,000	16%	13%	13%	13%
\$3,000 - \$4,999	57	58	57	39
\$5,000 - \$6,999	23	18	19	38
\$7,000 and above	12	9	8	8
Not ascertained	2	2	3	2
	100%	100%	100%	100%
Number of cases	(91)	(93)	(63)	

^{*} The X^2 for a 4 x 3 table is 2.9 (p < .90).

Nor did we find that variation in feeling of effectiveness could be accounted for by age, sex, occupation, or dwelling unit income (See Tables 4 through 7 in Appendix D).

The fact that these measures were not significantly related to our attitudinal patterns was not interpreted as an indication that external environmental factors do not play a role in determining the felt-effectiveness of individuals. Rather we felt that this reflected the crudeness of the present demographic measures as indices of the person's life situation. A single factor such as income as measured in this study gives a very inadequate index of the person's environmental circumstances. Possibly more extensive and refined measures or some kind of a combination of demographic variables might prove a successful predictor of effectiveness.

In addition, however, we felt that other factors such as the respondent's perceptions, aspirations, and values intervene between the objective life condition and attitudes toward public issues and serve to diminish the first order relationship between attitudes and demography. Part of the analysis of the whole chain of events leading to feelings of effectiveness or ineffectiveness consists of attempting to relate effectiveness to these intervening psychological factors. It is this segment of the analytical problem on which the remaining pages of this report center.

Effectiveness and Personal Competence

In order to test our central hypothesis—that feeling of effectiveness with respect to national affairs will be related to feeling of competence in the personal environment—we included in our questionnaire a number of

questions designed to measure the respondent's feeling of satisfaction with his life, optimism about his future prospects, and feeling of control in the future outcome of his life.

Three such items were combined to form a more stable measure of security or self-confidence. The following items were used:

- A. "Some people feel that their lives have worked out just the way they wanted. Others feel they've really had bad breaks.

 How do you feel about the way your life is turning out?"
- B. "Now, what do you think your chances are of living the kind of life you'd like to have? Do you think they are pretty good, not so good, or what?"
- C. "Some people feel they can make pretty definite plans for their lives for the next few years. Others feel they aren't in a position to plan ahead. How about you--do you feel able to plan ahead or not?"

The combination of these particular questions was made on both theoretical and methodological grounds. The questions represented three aspects of security—satisfaction with one's life, expectation of future satisfaction, and perception of oneself as an effective element in the determination of one's future.

In addition, the items scaled significantly better than would be expected by chance. This indication that the three items had a relatively high degree of internal consistency provided a methodological justification for considering the combined items a single index. Non-scalar groups were collapsed into the scale patterns having the same number of positive responses.

The major scale patterns are as follows:

- 1. <u>High</u>. These are the people who give confident answers to all three questions.
- 2. Moderately High. Individuals who are satisfied, feel optimistic about the future, but do not feel that they are in a position to affect their own futures.
- 3. Moderately Low. Individuals who are satisfied with their lives, but feel their chances for attaining their aspirations are poor and that they are not in control of their futures.
- 4. Low. Those who are dissatisfied, feel their chances are poor, and that they have no control over the future.

Our prediction was that the less effective groups in response to a national problem would show a lower degree of personal competence. The results of the appropriate analysis are presented in Table 14.

See Appendix E for details of the development and validation of the security index.

Table 11:
Relation between Effectiveness and Personal Competence*

Competence	Effectiveness			Wo
	<u>High</u>	Medium	I.ow	War <u>Not Likely</u>
High	45%	30%	22%	46%
Moderately High	35	31	26	39
Moderately Low	17	24	2 6	13
Low	2	15	27	2
Not ascertained	1		1	. -
	100%	100%	100%	100%
Number of cases	(91)	(93)	(63)	(46)

^{*} The X^2 for a 4 x 3 table is 24.6 (p (.001)).

The results for our effectiveness groups bear out the prediction. The highly effective group scores significantly higher on the competence index than does the low group, with the medium group about in the middle.

Those respondents who have a consistent belief that war is not likely are high on feelings of personal competence. We have already seen that they are like the ineffective respondents in that they are not in agreement with current policy toward the problem of war. It may be that their feeling of personal security is what operates to keep them from becoming fatalistic and feeling helpless in their opposition position.

Results of similar analyses of each of the component questions of the competence index are presented in Appendix D, Tables 8-10.

In addition to the questions included in the index, there were other questions asked which could be interpreted under one or another of the three elements included in the index. Results for these separate items follow under the aspect of competence to which they are appropriate.

Current Satisfaction or Feeling of Thwart

A number of comparisons of our effectiveness groups were made in order to test the hypothesis that ineffectiveness is related to feelings of frustration in one's own life.

Respondents were asked "How does your life compare with what you wanted it to be like?" Results on this question are in the direction predicted and are consistent with the other findings of this section. They appear in Table 15.

Table 15

How Life Compares with Life Plans*

Comparison	Effectiveness			Ma.
	<u>High</u>	Medium	Low	War Not Likely
About as planned	51%	54%	35 %	58 \$
Pro-con	Ļ	Į.,	3	Į,
Different from plans	2lب	26	32	22
No plans	9	9	13	2
Don't linow	-	1	-	2
Not ascertained	11	6	17	11
	100%	100%	100%	100%
Number of cases	(91)	(93)	(63)	(46)

^{*} The X2 for a 2 x 3 table is 3.65 (p(.10).05). "Pro-con," "Different," and "No plans" were combined for test purposes.

Respondents who are <u>low</u> on effectiveness are least likely to think their lives are similar to what they had anticipated. There is, however, no substantial difference between the other two groups on this response, and the small difference which does appear is not in the direction predicted.

It was possible, of course, that a person could feel his life had turned out quite differently from what he had expected or planned on, yet be satisfied with the outcome. Coders were therefore asked to rate respondents, where possible, as satisfied or dissatisfied with the comparison described above between their plans and life situation. Results of these ratings are presented in Table 16.

Relation between Effectiveness and Coders' Ratings on Satisfaction with the Comparison of Plans to Life Situation*

Comparison results in:	Eff	_		
•	High	Medium	Low	War Not Likely
Satisfaction	82%	73%	59%	83%
Pro-con	5	7	3	7
Dissatisfaction	13	20	38	10
	100%	100%	100%	100%
Number of cases	(55)	(55)	(34)	(28)

^{*} The X^2 for a 2 x 3 table is 6.6 (p < .05). "Pro-con" was combined with "Dissatisfaction."

^{**} The number of cases is reduced since it was not always possible to tell whether the respondent was satisfied or dissatisfied with the comparison. Therefore, not all respondents could be rated.

Although we have seen that there is no significant relationship between income and feeling of effectiveness, we had predicted that the less effective groups would report feeling economically thwarted more often that the effective group. In table 17 we see that this was, in fact, the case.

Table 17
"Some people feel quite secure financially; others have many worries about how they will get along. How is it in your case?"*

Feel:	Effectiveness			We
	High	Medium	Low	War Not Likely
Financially secure	68%	65%	41%	79%
Pro-con	14	2	9	6
Financially insecure	18	28	45	12
Not ascertained	-	5	5	3
	100%	100%	100%	100%
Number of cases**	(66)	(61)	(PP)	(32)

^{*} The X^2 for a 2 x 3 table is 8.6 (p<.01). "Pro-con" and "Insecure" were combined in the test.

The fact that the ineffective groups feel thwarted in their occupational roles can be seen in responses to the questions, "If you had a choice, would you like to see a son of yours do the same kind of work you do, or some other kind of work?" (if different) "What kind?"

The number of cases was reduced because Form II of the questionnaire did not include the question on financial security, and unemployed respondents were not asked the question.

Table 18
Preferred Occupation for Son

Would like son to do	Effectiveness			
	High	Medium	Low	War Not Likely
Same kind of work	23%	11%	6%	17%
Different work, specifically named	56	59	51	. 514
Different work, not specific	7	12	23	11
Up to son	13	17	20	18
Not ascertained	ı	ı	-	-
	100%	100%	100%	100%
Number of cases	(91)	(93)	(63)	(46)

^{*} The X^2 for a 2 x 3 table is 9.8 (p < .01). "Same kind of work" was compared to all other responses combined.

Respondents in the least effective group are characterized most by wanting their sons not to do the same work, and being non-specific about what they would prefer to have their sons do. It is as though they were saying "Let him do something else. I don't know what, but not what I'm doing."

Anticipation of Future Satisfaction

Included in the competence index was the item: "What do you think your chances are of living the kind of life you'd like to have?" (Appendix D, Table 9), and we observed that less effective people thought their chances poorer.

Other questions concerning anticipation of future success or failure were asked, and yielded similar results. These related to occupational achievement. It should be kept in mind that our effectiveness groups did not differ significantly in occupational classification.

Results of these two occupational future questions are presented in Tables 19 and 20. The second question produced results which did not meet our test of significance, but are in the predicted direction.

Table 19
"What do you think your chances are of being promoted in the job you now have?"

Chances are:	Effectiveness			War
	High	Medium	Low	Not Likely
Good	43%	30%	7%	30%
Pro-con	5	4	10	3
Poor	42	57	63	55
Don't know	2	5	5	6
Not ascertained	8	4	15	6
	100%	100%	100%	100%
Number of cases**	(60)	(56)	(41)	(31)

^{*} The X² for a 2 x 3 table is 14.1 (p < .001). "Pro-con" and "Poor" were combined and compared to "Good."

The number of cases is reduced by the exclusion of the unemployed, self-employed, and those given Form II of the questionmaire.

Table 20
"On the whole what would you say your future looks like at the place you work - pretty bright, not much to look forward to, or what?"*

Job Future Looks:	Effectiveness			War
	<u> High</u>	Medium	Low	Not Likely
Good	73%	65.5%	52%	59%
Pro-con	8	11	17	16
Poor	16	21.5	29	19
Don't know	-	-	-	-
Not ascertained	3	2	-	6
	100%	100%	100%	100%
Number of cases**	(60)	(56)	(41)	(31)
	•			

^{*} The X^2 for a 2 x 3 table is 4.1 (p<.10 >.05). "Pro-con" and "Poor" were combined.

The final question on occupational future was: "Would you say your job is a steady and secure one, or one that could easily fold up?" Results of this question, seen in Table 21 were not significant, but were in the predicted direction. Apparently such reality factors as seniority are operating here to reduce the relationship between outlook toward one's occupational future and personal effectiveness. There was so little distribution in responses to this question (nearly everyone feels his job is secure) that it would be difficult to get a high degree of association.

^{**} See footnote **, table 19.

Table 21
Security of Present Job*

Job is:	<u>Effectiveness</u>			War
	High	Medium	Low	Not Likely
Secure	85%	84%	74%	86%
Pro-con	4	3	2	-
Insecure	9	12	20	12
Not ascertained	2	1	4	2
	100%	100%	100%	100%
Number of cases**	(77)	(74)	(56)	(43)

^{*} The X^2 for a 2 x 3 table is 1.7 (p < .30 \uparrow .20). "Pro-con" and "Insecure" were combined.

The population chosen for the present study comprised members of the labor force. Since the occupational life of an individual is so important - simply on a time basis, it occupies a central position in adult life - we wanted to derive the best possible measure of the occupational outlook to relate to effectiveness.

The three items on occupational future just presented were therefore combined into a single measure. As we would expect from the unity of content, they scaled significantly better than could be expected by chance. Non-scalar groups were collapsed into the scale patterns

^{***} The number of cases is reduced because unemployed and self-employed people were not asked this question.

^{2/} See Appendix F for details on the occupational future index.

having the same number of positive responses, and the two lowest scale groups were combined because of the small numbers. Anticipation of positive outcomes in one's job should certainly be a good indication and perhaps determiner of a feeling of competence. We predicted a positive relationship between positive job outlook and effectiveness. The results presented in Table 22 bore out this prediction.

Table 22

Relation between Effectiveness and
Index of Job Outlook*

Job Outlook is:	Effectiveness			West
	High	Medium	Low	War Not Likely
Very good	30%	21%	5%	26%
Good	48	50	37	35
Poor	22	29	58	39
	100%	100%	100%	100%
Number of cases**	(60)	(56)	(41)	(31)

^{*} The X^2 for a 3 x 3 table is 16.2 (p (.001).

Control over Future

In addition to the question on planning included in the index and quoted above, respondents were asked, "When you do make plans, do you usually feel they're almost certain to work out, or that you can't count on them working out, or what?" Again the prediction was that those people who feel ineffective with respect to national affairs would feel least

^{**} See footnote **, Table 19.

able to count on personal plans working out. This, it seemed to us, would represent a general apprehension about the future and a feeling that the future was determined more by external events than by events or actions subject to the respondent's own control. In table 23 we see that the results correspond to the prediction.

Table 23
Security about Plans*

Feel Plans:	Effectiveness			W
	High	Medium	Low	War Not Likely
Will work out	85%	68 %	54%	80%
Doubtful or won't work out	15	32	46	20
	100%	100%	100%	100%
Number of cases**	(83)	(84)	(52)	(40)

^{*} The X^2 for a 2 x 3 table is 24.8 (p < .001).

Following the question "What are your chances of living the kind of life you'd like to have?", respondents were asked why they thought their chances were good or poor. Factors mentioned were categorized according to whether they were personal (intelligence, hard work, skill) or environmental (financial situation, family situation, job situation). We

The number of cases in this table is reduced for the following reason. During the early stage of the interviewing there was some confusion on the part of a few interviewers about the question on plans working out, with the result that they were using it as though it were contingent on the person's saying in the previous question that he felt in a position to plan ahead. Actually the question was meant to be asked of all respondents. Those cases where it was not asked were eliminated from the table.

predicted that less effective people, when they say their chances are poor, would attribute their poor chances more to external factors not subject to their own control. Tables 24 and 25 show the proportions of both types of factors given by our groups in cases where they say their chances are good and where they are said to be poor.

Table 24
Proportion of Responses Attributing Good Prospects
to Personal and Environmental Factors

Good ProspectsDue to:	Effectiveness			Yar
	High	Medium	Low	Not Likely
Personal factors	47%	59%	64%	53%
Environmental factors	49	39	36	43
Not ascertained	4	2	-	4
	100%	100%	100%	100%
Number of cases	(79)	(61)	(36)	(45)

Table 25

Proportion of Responses Attributing Poor Prospects to Personal and Environmental Factors

Poor Prospects Due to:	Effectiveness			War
240 001	High	Medium	Low	Not Likely
Personal factors	47%	33%	20%	**
Environmental factors	48	64	68	•
Not ascertained	5	3	12	
	100%	100%	100%	
Number of responses	(15)	(31)	(22)	

^{**} The total here was so small (4 responses) that percentages are meaningless and therefore not given.

It is interesting to note that the effective group attributed their chances, whether good or poor, about equally to personal and environmental factors. (The variation in proportions does not differ from chance expectancy. On the other hand, the low effectiveness group stresses personal factors when success is anticipated and environmental factors when they anticipate failure. The shift in proportions of personal and environmental factors cited by this group would be expected by chance less than one time in a hundred.

Summary:

The feeling of effectiveness in response to public affairs has been shown to be related to a feeling of competence in a variety of areas in the more immediate environment of personal affairs. We interpret this to mean that this aspect of the person's response to public affairs is a reflection of a more general psychological characteristic – a projection onto the screen of public affairs of his general way of responding to events in the narrower world of his everyday environment.

Chapter 7

Summary and Interpretation

On the basis of previous research on attitudes toward atomic energy, we concluded that the single relevant aspect of this development, for the general public, is the atomic bomb. For most people the significance of the release of atomic energy is enmeshed in a context of the threat of war and bombing.

Beginning with this base, we have tried in the present analysis to demonstrate that attitudes toward the threat of atomic war are influenced not only by the nature of perception of this issue, but also by relevant attitudes of a more stable kind with which the respondent approaches this and other events.

Initially the minority who perceived no threat of war were analytically excluded. The remaining population was divided into three categories representing different degrees of a variable termed "psychological effectiveness." This variable was interpreted as the individual's feeling that he can or cannot have an influence on public affairs. The index was validated against a number of questions concerning the average citizen's power to influence governmental decision-makers.

The major findings of the study may be summarized as follows:

- Knowledge of a person's position on the effectiveness index aids in predicting how he will respond to the threat of atomic war.
 - a. Effective people are more willing to face the threat than are ineffective respondents

- b. Effective respondents evaluate atomic energy

 more positively than do those who feel ineffective
 indicating an ability to distinguish the construc
 tive from the destructive aspects of the discovery.
- c. Effectiveness is positively related to the extent of constructive thinking about solutions for the threat of war.
- d. Effective respondents are more likely than ineffective people to take a definite attitudinal position toward a standard solution posed in the interview.
- 2) Psychological effectiveness in public affairs is related to a complex of psychological competencies in the more personal environment. Thus, "less effective" respondents are more dissatisfied with their present life situations, more pessimistic about their chances of realizing future goals, and have less feeling of self-determination in their personal affairs than do people "high" in effectiveness.

The fruitfulness of this approach which considers attitudes toward a specific issue in relation to a more general characteristic of the individual's outlook toward public affairs suggests several directions for future research.

First, we will want to test the "effectiveness" variable as a factor in attitudes toward other kinds of public issues. Will it influence attitudes in response to other threats and to non-threatening events? We would predict, for example, that the individual's response toward particular

policy positions of our government would be influenced by this variable. It seems plausible that the extent and richness of interest shown by people toward foreign and domestic policy would be affected by their conviction that they do or do not exercise an effect in the public affairs sphere.

In this study we have controlled subjects roughly on perception of the threat, while permitting effectiveness to vary. Further analysis, with a larger sample, might consider the combined effect of degree of relevance of the threat and feelings of effectiveness. Will high effectiveness influence the attitudes of respondents for whom the threat has low relevance in the same manner as those of persons who are very concerned about the threat?

Finally there is the question of the determination of the "competence" factor established in this study as a general characteristic. Our view is that personal competence—which reflects itself in many attitudinal areas, including public affairs—is the result of both the individual's current situation (social variables) and expectations and outlooks resulting from earlier learning experiences (personality variables). The task remaining for further analysis of data from this study and for future studies is to explore the weight of these factors and the nature of their interaction in determining psychological competence.

Interpretation

The analysis discussed in this report has implications for those engaged in efforts to change popular attitudes and behavior toward threatening public problems. It might be subtitled "A Cautionary Tale."

The successful introduction of a new technological development--like atomic power plants--probably depends at least in part on its acceptance by the general public. We have seen in the introductory chapter that for most people the bomb is the most outstanding feature of atomic developments. Our best prediction is that people who identify atomic energy with the bomb will tend to reject the development. Education to develop receptivity toward atomic energy must, then, concentrate on differentiating the discovery from the bomb, and on pointing out the constructive side of the former.

But this interpretation is not uniquely the result of the present study. We could learn this from former studies of public opinion toward war and atomic energy. What is the unique contribution of the analysis presented herein?

In previous studies, where emphasis has been placed on variables dealing with the perception of the threat of atomic war, conclusions like the following have been dictated by findings: "The more relevant the threat, the more likely the respondent is to take action toward relieving the threat." Such a conclusion, viewed by the educator, would seem to day, "Make people feel that the danger is imminent, and they will be disposed toward constructive action."

But we have seen in the data of this report that other things influence the constructiveness with which an individual responde to threat. Emphasizing a threat may only serve to frighten and immobilize people who feel really ineffective. Our analysis indicates that we probably cannot frighten people into taking a more active part in their government's efforts to solve threatening problems. Our low effectiveness group shows all the signs of fear-they deny the problem of war through fear, they would like to deny the development of atomic energy. For people who feel ineffective, withdrawal is one of the few means by which they can respond to a frightening problem.

Rather than emphasizing the enormity of problems, a more promising educational means by which to involve these people would seem to be to emphasize the solubility of as many problems as possible and to publicize examples of solutions and the means by which citizens can contribute to these.

Research of the kind presented raises another question—what is the predictive value of attitudes? Can we assume that people who feel effective are more likely to engage in more overt activity than those who feel ineffective?

We have already seen that respondents who feel ineffective are less likely to know directions in which and means by which to act in public affairs. On this basis alone we would predict that less overt participation would be forthcoming from this group.

But the question of the translation of attitudes into behavior is not a simple one. External obstructions like heavy family demands and odd work hours can keep a person from participating regardless of high motivation. Competing interests, availability of co-enthusiasts, and other factors intervene between motivation and participation. This is another problem which a later phase of analysis of the data derived from this study will attempt to clarify.

Appendix A

The Interview

Procedure

The questionnaire reproduced below was designed to yield information relevant to the primary objectives of this study. One of two forms was administered to a representative sample of all labor force members of the adult population of the Detroit tracted area.2

Interviewing took place between May 15 and July 15, 1952. Each respondent was interviewed for a minimum of forty minutes. Interviewing was done in the respondent's home by trained interviewers. A standard set of questions was asked, and in most cases these questions were of an "open-ended" type permitting full and free responses.

These responses, recorded approximately verbatim by the interviewer, were categorized by the Center's content analysis staff, and coded for statistical analysis. The coded information was transferred to punch cards for the tabulations which form the bases of the data in the tables of this report.

^{1/} For the purposes of this study a labor force member was defined as
anyone who "is employed, temporarily unemployed, or seeking employment." This is similar to the census definition.

^{2/} Details of the sample selection procedures, and a discussion of the reinterview technique, are presented in Appendix B.

^{3/} For a general statement of the procedures used in a sample survey, see Eleanor E. Maccoby and Robert R. Holt, "How Surveys are Made", The Jnl. of Social Issues, May, 1946, v. II No. 2, pp. 45-57.

Questionnaire Objectives

Following from the research objectives stated in Chapter 2, the following specifications were listed for the questionnaire. The question numbers of questions covering each objective are given in parentheses.

A. To measure:

- 1. Attitudes toward atomic energy and atomic warfare. (Questions 22-26).
- 2. Attitudes toward second national-level problem to provide a general problem base for later questions. (Questions 27-29).
- 3. Attitudes toward the average citizen's role in government decisions, from which the measure of effectiveness was to be derived. (Questions 30-34).
- B. To derive measures of the following variables which, we hypothesized, would be related to the attitudes listed under A above:
 - 1. Personal Competence (Questions 2, 5, 9, 12, 14).
 - 2. Occupational Stability (Questions 1, 3-8).
- C. In addition to the foregoing objectives, the questionnaire included questions designed to measure certain other aspects of the respondent's value framework and personality characteristics. Relationships between these variables and personal competence are to be explored and presented in a later publication— in an effort to clarify the nature of the latter variable. (Questions 10, 11, 13, 15-21, 35-36).

Question ordering followed from interviewing requirements and considerations of rapport and respondent cooperation. Job-related questions were asked first to provide a relaxed introduction to the interviewing situation. The value-personality questions, in some ways more problematic than the other questions, followed the job questions. Most respondents found them interesting and answered freely. The discussion of national affairs ended the interview.

^{14/} The value and personality questions are considered in relation to attitudes toward war and atomic energy in a doctoral dissertation in preparation by Alan M. Walker at the University of Michigan, Social Psychology Program.

QUESTIONNAIRE, Form I

First, I'd like to ask you a few questions about the kind of work you do. *1. Could you describe, as well as you can, what you do on your job?

(IF UNEMPLOYED NOW)

- *la. Would you describe what you did on your last regular job?
- *1b. Did you work for yourself or someone else or what?
- *lc. About how long did you work there?

(SKIP TO QUESTION 9)

*ld. Do you consider this to be your regular line of work or not?

(IF NO) le. What is your regular line of work?

*2. Some people feel quite secure financially; others have many worries about how they will get along. How is it in your case?

*2a. Why do you say so?

*3. About your job again -- Do you work for yourself or someone else or what?

(IF WORKS FOR SOMEONE ELSE)

*3a. About how long have you worked at the place you are now?

(IF UNDER 5 YEARS)

- *3b. How many different fulltime jobs have you had since the war ended in 1945?
- *3c. Now what about your present job the place you work at are you considering staying on that job or changing?

(IF CHANGE)

. *3d. What kind of job are you looking for or considering?

(IF SELF-EMPLOYED)

*3a. About how long have you had this business (practice)?

(ASK ALL BUT PROFESSIONALS)

*3b. What did you do before you had this business?

^{*} Form II of the questionnaire included, at the beginning, a picturestory projective test composed of three pictures. The respondent was asked to respond to each picture with an imaginative story. Form II did not include questions marked with an asterisk.

(IF WORKS FOR SOMEONE ELSE)

4. If you could have a choice, what kind of work would you feel most satisfied in doing for the rest of your life?

(IF CHANGE INDICATED)

- *4a. Why would you choose that kind of work?
- *4b. All in all, what do you think your chances are of getting to be (refer to 4)?
- *4c. What are some of your reasons for saying that?
- 5. Would you say your job is a steady and secure one, or one that could easily fold up?

We'd like to talk a little new about promotions at the place you work.

- *6. What sort of things do the promotions there generally depend on?
 - *6a. Anything else?
- *7. What do you think your chances are of being promoted in the job you have now?
 - *7a. Why do you say that?

(IF NATURE OF PROMOTION NOT MEN-TIONED)

- *7b. If you were to be promoted, what would the promotion most likely be?
- *8. On the whole, what would you say your future looks like at the place you work -- pretty bright, not much to look forward to, or what?
 - 8a. Why do you say that?

(IF SELF-EMPLOYED)

4. If you could have a chclce, what kind of work would you feel most satisfied in doing for the rest of your life?

(IF CHANGE INDICATED)

- *ha. Why would you choose that kind of work?
- *4b. All in all, what do you think your chances are of getting to be (refer to 4)?
- *4c. What are some of your reasons for saying that?

- *8. What would you say your future in this line of work is -- pretty bright, not much to look forward to, or what?
 - 8a. Why do you say that?

^{*} Omitted from Form II.

(EVERYONE)

- 9. Some people feel they can make pretty definite plans for their lives for the next few years. Others feel they aren't in a position to plan ahead. How about you do you feel able to plan ahead or not?
 - 9a. Why do you say that?
 - *9b. What sort of plans do you have in mind?
 - 9c. When you do make plans, do you usually feel they're almost certain to work out, or that you can't count on them working out, or what?
- 10. Many of us have ideas about what kind of life we'd like to have. Would you describe to me what you'd like to have in order to live the way you want?
 - 10a. Is there anything else you would think important?
- *11. What kind (or class) of people would you say live the way you'd like to?
 - *lla. About how many people in our country live that way? Most of them, about half, only a few, or what?
- 12. Now, what do you think your chances are of living the kind of life you'd like to have? Do you think they are pretty good, not so good, or what?
 - 12a. Why do you say that?
- *13. In general, what things would you say help a person most to get ahead these days?
 - *13a. Is there anything else?
- 14. Some people feel that their lives have worked out just the way they wanted. Others feel they've really had bad breaks. How do you feel about the way your life is turning out?
 - lha. How does your life compare with what you wanted it to be like?
- Now, I'd like to ask you a few questions about the way people sometimes feel, and what you think they should do about it.
- 15. Take a person who has an awful lot of worries, and they're really getting him down. What do you think he should do about it?
 - 15a. What do you think makes some people worry a lot when other people hardly ever worry?

^{*} Omitted from Form II.

- 16. Some people feel that it's good for everyone to get really angry now and then, and "blow off steam". Others say it's childish to let yourself feel so angry. How do you feel about this?
- 17. We hear a lot these days about different ways to bring up children. Would you tell me whether you agree or disagree with these statements about raising children? (PROBE FOR EACH: Why?)
 - A. Children should have no worries -- they should be protected from troubles as much as possible.
 - B. Parents should plan out the child's program each day so they're sure he is learning the right things.
 - C. Children should be taught to fight their own battles as early as possible.
 - D. Parents should make children try things that are a little beyond them in order to make them ambitious.
- 18. Do you think it's a good idea or a bad idea to tell children that babies are brought by the stork?
 - 18a. Why?
- 19. What would you say was the nicest thing about being a child?
- 20. If a daughter of yours were getting married, what things would you want to know about the man she was marrying?
 - 20a. Anything else?
- 21. If you had a choice, would you like to see a son of yours do the same kind of work you do, or some other kind of work?
 - 2la. Why is that?
 - (IF NOT SAME WORK) 21b. What kind of work would you like to see him get into?
- Now let's talk a little about some of the problems facing our country.
 *22. One problem we hear about is the possibility of an atomic war. Do you think this is:

	the control of the problem
	Quite important few problems are more important for our country
	Not too important many other problems are just as important for our country

Very important -- the country's number one problem

Not at all important

^{*} Omitted from Form II.

- 23. How about you? Would you say you!re very concerned about it, not at all concerned, or what?
 - 23a. How do you mean?
- *24. What do you think could be done to cut down the chances of an atomic war?
- *25. Our government is now spending about a billion dollars to build a super atom bomb (hydrogen bomb). Do you think this is the best way to spend this money to cut down the chances of war, or should we do other things with it?
 - *25a. How is that?
- *26. Considering all its uses in peace and war, do you think we are better off for having discovered atomic energy or would we be better off if no one had discovered it?
 - *26a. Why do you say that?

What about the cost of living. Some people feel this is the most important problem facing our country. Others feel there are more important problems. *27. How important do you feel it is for the country?

- 28. How about in your case -- would you say this problem bothers you a lot, not at all, or what?
 - 28a. Why is that?
- *29. Who do you think could do something to solve this problem (cost of living)?

On problems like the cost of living, the government often has to make decisionslike whether to have price control, or not.

- 30. How much of an influence do you think the average citizen can have on decisions like these?
 - 30a. Why do you say that?
- *31. Would you say the amount of influence the average citizen has now is just about right, or would you like to see him have more, or less, or what?
 - 31a. How do you mean?
 - 32. Do you think most people want more of a voice in these decisions, or do you think they're satisfied as things are?
 - 32a. How do you mean?
 - 32b. How about you? Are <u>you</u> satisfied, or would you want more of a voice in these decisions?

^{*} Omitted from Form II

33. When the government has to make decisions about problems like the cost of living, do you think they pay more attention to what the average person wants, or to what special groups want, like businessmen or labor unions?

(IF SPECIAL GROUPS) 33a. What special groups?

34. What are some of the things ordinary citizens can do to have an influence on government decisions?

34a. Anything else?

(IF MENTIONS SOMETHING)

34b. Do you think the people who make decisions in our government pay much attention to this kind (these kinds) of thing, or not?

34c. Why do you say that?

(IF BELONGING TO AN ORGANIZATION NOT MENTIONED)

34d. What about belonging to an organization that takes a stand on problems like these? Do you think that belonging to such an organization helps people to have more of a say in government decisions, or not?

34e. How do you mean?

(IF YES TO Q. 34d) 34f. What kind of organization do you have in mind?

(IF LETTERS OR PETITIONS NOT MENTIONED)

34g. How about writing letters to Congressmen, or signing petitions, and things like that? Does that do any good?

35. As far as politics are concerned, why do you think people go into politics as an occupation?

35a. Anything else?

36. Some people say that what this country needs is better leaders. What kind of a person do you think makes a good leader?

36a. Anything else?

37. If you were asked to use one of these four names for your social class, which would you say you belonged in?

Middle Class Lower Class Working Class Upper Class Appendix B

The Sample

A. The Population Studied

The respondents chosen for this study represent a cross-sectional sample of all adult members of the labor force in the Detroit tracted area. They were selected from a sample of the total adult population of the Detroit area living in private households, interviewed earlier in the year by the Detroit Area Study, a research program of the University of Michigan, associated with the Survey Research Center.

Membership in the labor force was defined for this study as being employed, seeking employment, or merely temporarily unemployed, at the time of the Detroit Area Study interview.

The Detroit tracted area corresponds roughly to the official Detroit
Standard Metropolitan Area used by the U.S. Census Eureau, but excludes
the non-tracted outlying areas of the three counties—Wayne, Macomb, and
Oakland—which comprise the Standard Area and which contain about 10 percent
of its population. Two-thirds of the Detroit Area Study interviews were
taken in the City of Detroit, the remainder in the surrounding suburban areas.
A map and detailed reports of the area included in the 1952 Detroit Area
Study are available in its publication, "A Social Profile of Detroit."
Appendix A of that report includes, in addition, a more complete account
of the sampling process than will be given here.

B. The Sampling Method

A "three-stage area sample" design was used to select the original dwelling units to be visited by Detroit Area Study interviewers. First census tracts, then blocks within tracts, and finally dwelling units within blocks were systematically selected to ensure that each private dwelling unit in the defined area had the same chance of being included in the sample. In each household one adult resident was selected as the respondent by an objective procedure. Up to ten call-backs were made to be certain the interview was completed with the appropriate respondent.

For the reinterview, all Detroit Area Study interviews were carefully examined and separated into labor force and non-labor force categories. New face sheets were made out for the former giving address, date, and time of household (and in ambiguous cases more complete identifying data). The interviewers were also instructed to ascertain from the respondent whether he recalled being interviewed before to provide a further check on the identification. By means of this information, the interviewers were able to revisit all the labor force respondents, with the exceptions noted below.

上 Kish, L. "A Procedure for Objective Respondent Selection within the Household." Jnl. of the Amer. Statistical Assn., September, 1949, V44, pp.380-387.

C. Sources and Estimates of Error

Three types of errors in survey results may occur. One type-"reporting" or "response" error--results from inaccurate answers by the
respondents, recording by interviewers, or classifying by coders. The
number of such errors can only be surmised, but their occurrence has been
reduced by careful training, experience, and caution on the part of the
survey staff.

Another type of error--"non-response" error--results from the failure to obtain interviews with every respondent selected for inclusion in the sample. To a certain extent, such difficulty is inherent in any survey, but it is magnified in a reinterview study where resistance to a second interview or changes in residence or life situation may make the interview impossible. The following table gives a summary of "non-response" distribution for the Detroit Area Study and the reinterview on which this study is based.

Appendix Table B-l

Number and Percentage of Non-Interviews
by Reason for Non-Interview

	Detroit Area Study		Reinterview Study	
	Number	Percent	Number	Percent
Total designated respondents	842	(100%)	433	(100%)
Completed interviews	737	(87)	316	(73)
Non-interviews by reason:				
Refusals	72	(9)	47	(11)
Not at home	33	(4)	25	(6)
Moved			30	(7)
Other			15	(3)
	842	(100%)	433	(100%)

The third type of error--"sampling" error--results from the fact that only a sample of the total population is interviewed. The size of the sampling error depends chiefly on the size of the sample and can be estimated by disregarding the first two types of errors. A measure of sampling error equal to two times the standard error is customarily used to represent the limits on either side of an obtained sample result within which the "true value" (the value that would have resulted if the total population had been measured) lies. The probability that the true value is within the sampling error limits is 95 out of 100 (and 2 out of 3 that it is with-in one-half the sampling error limits).

The following table gives approximate sampling errors for the total sample and for given sub-groups of the sample, for varying percentage splits.

Appendix Table B-2

Approximate Sampling Errors for Given Subgroups of the Population and Varying Percentage Splits

For percentages around:		Sample	Size	
	<u>316</u>	200	100	<u>50</u>
50	6%	7%	10%	14%
20 or 80	5%	6	8%	-
10 or 90	4	Ц	_	-

Appendix C

Sample Distributions on Questions of Citizen Influence

Appendix Table C-1

"How much of an influence do you think the average citizen can have on decisions like these (made by the government)?"	
A lot of influence	25%
Some influence	14
Little (not much) influence	30
No influence	23
Don't know	3
Not ascertained	5
	100%
Number of cases	(316)

Appendix Table C-2

"Would you say the amount of influence the average citizen has now is just about right, or would you like to see him have more, or less, or what?"

About right	33%
Should have more	57
Don!t know	3
Not ascertained	7
	100%
Number of cases	238

"How do you mean? (about how much influence the average citizen should have?")

	~	
Amount of influence about right now		
All average citizen is capable of taking	8%	
All average citizen is willing to take	7	
Amount now right (no reason given)	18	
•		33%
Average citizen should have more influence		
More influence would benefit him, his interest would be cared for	20	
would be cared for	29	
Morally right that in a democracy he should have more	13	
Would improve functioning of democracy, overcome apathy	10	
Other or no reason given	_ 5	
		57
Don't know		3
Not ascertained		7
		100%
Number of cases	((238)

"Do you think most people want more of a voice in these decisions or do you think they're satisfied as things are?"

Most people want much more voice	15%
Most people want more	40
Some want more, some satisfied	2
Most people are satisfied	33
Most people want less voice	1
Don't know	4
Not ascertained	5
	100%
Number of cases	(316)

Appendix Table C-5

"How do you mean? (About other people's satisfaction with their influence)"

their influence)"	_
Reasons for saying people want more influence	
People are dissatisfied with the way things are	19%
People want to increase democratic functioning	11
People want to improve chances of reaching own goals	10
Reasons for saying people are satisfied	
People (are apathetic) lack interest in participation	16
People lack interest in problems like war and prices	4
Solution of such problems province of government leaders	4
Problems too difficult for most people	3
Other reasons (for both categories)	12
Don't know	2
Inapplicable (Don't know or not ascertained above)	9
Not ascertained	17
Number of cases	(316)

^{***} This table totals to more than 100 percent because some respondents gave more than one reason for their judgment.

"How about you? Are you satisfied, or would you want more of a voice in these decisions?"

Satisfied	41%
Pro-con	1
Dissatisfied (want more influence)	50
Unconcerned (not interested in having any influence)	ı
Don't know	*
Not ascertained	7
	100%
Number of cases	(316)

^{*} Less than half of one percent.

Appendix Table C-7

"When the government has to make decisions about problems like these, do you think they pay more attention to what the average person wants, or to what special groups want, like businessmen or labor unions?"

Pay more attention to average person	12%
Pro-con	4
Pay more attention to special groups	73
All are meeded equally	3
Pay attention to neither	1
Don't know	4
Not ascertained	3
	100%
Number of cases	(316)

"What special groups? (Of those who said the government pays more attention to special groups)."

· ·	
Business groups	61,%
Labor unions	48
Pressure groups (in general)	12
Political groups	7
Farm bloc groups	5
Religious or ethnic groups	1
Veterans or civic groups	1.
Experts	1
Other	1
Don't know	2
Not ascertained	2
Number of cases	(230)

 $^{^{398}}$ This totals to more than 100 percent since some respondents mentioned more than one group.

"What are some of the things ordinary citizens can do to have an influence on government decisions? Anything else?"

Vote	53%
Trite letters to Congressmen	45
Join organizations	15
Educate oneself	8
Sign petitions	10
Form an organization	9
Pressure activities (boycotts, pickets)	9
Talk to others	3
Nothing they can do	5
Don't know what they can do	7
Not ascertained	3
Number of cases	(316)

^{**} Totals more than 100 percent because some respondents mentioned more than one action.

Appendix Table C-10

"Do you think the people who make decisions in our government pay much attention to this kind (these kinds) of thing(s) or not?"

Yes	36%
Pro-con	10
No .	10
Don't know	3
Not ascertained	14
Not applicable no mechanism other than voting mentioned	27
Number of cases	100% (316)

Two kinds of mechanisms—sending letters or petitions to congressmen, and joining or forming organizations—were selected for special questions. All respondents who had not mentioned such mechanisms in the previous question were asked specifically about them. The summaries of respondents attitudes toward these two mechanisms are presented in the following two tables.

Appendix Table C-11

Letters and/or Petitions as a Means of Influencing Government Decisions

Spontaneously mention letters or petitions	49%
Think letters or petitions effective when asked	21
Do not think letters or petitions effective	22
Don't know	3
Not ascertained	. 5
Number of cases	100% (316)

Appendix Table C-12

Group Membership as a Means of Influencing Government Decisions

Spontaneously mention group membership	25%
Think it effective when asked	43
Do not think it effective	17
Don't know	7
Not ascertained	_ 9
Number of cases	100% (316)



(Asked of respondents who think group membership is effective) "What kind of organization do you have in mind?"

Labor unions	40%
Civic Groups	16
Veterans' groups	12
Business groups	9
Political groups	9
Religious and ethnic groups	5
Fraternal groups	5
Other	3
Any group	8
Don't know	3
Not ascertained	16
	**
Number of cases	(218)

^{*} This totals to more than 100 percent since some respondents mentioned more than one group.

"As far as politics are concerned why do you think people go into politics as an occupation?"

Positive motivations mentioned	
Altruism - help people, country	47%
Personal satisfaction, like the work	22
Feel suited to the job	7
Negative motivations mentioned	
Economic reasons (graft, riches)	60 .
Power (want to run things)	15
Desire for limelight, fame	14
Prestige (like honor)	13
Easy living	7
Social mobility (to get ahead)	4
Don't know	3
Not ascertained	3
	**
Number of cases	(316)

This totals more than 100 percent since some respondents mentioned more than one motive.

Appendix D
Supplementary Tables

Comparison of Low Effectiveness Group to Total Population on Responses to the Question: "How much of an influence do you think the average citizen can have on decisions like these?"

Citizen can have:	Total Population	Low Effectiveness
A lot of influence	25%	O %
Some influence	14	5
Little (not much) influence	30	36
No influence	23	49
Don't know	3	5
Not ascertained	5	5
	100%	100%
Number of cases	(316)	(63)

^{*} The X^2 value for a 4 x 2 table is 34.085 (p<.001)

Comparison of "War Not Likely" Group to Total Population on Responses to the Question: "How much of an influence do you think the average citizen can have on decisions like these?"

Citizen can have:	Total Population	War Not Likely
A lot of influence	25%	2կ%
Some influence	11;	18
Little (not much) influence	30	41
No influence	23	15
Don't know	3	2
Not ascertained	5	-
	100%	100%
Number of cases	(316)	(46)

^{*} The X^2 value for a 4 x 2 table is 3.177 (p < .50; .30).

Appendix Table D-3

Relation of Knowledge of Mechanisms to Effectiveness with Education Held Constant*

:Education Junior High Grammar High School School College Effectiveness Mechanism $\mathbf{H} \quad \mathbf{M} \quad \mathbf{F}$. н м L H M 27 H M L 60% 40% 16% 85% 64% 64% Mention a mechanism 76% 71% 70% 90% 88% 67% other than voting 40 60 84 Mention only voting or 15 36 36 29 30 24 10 12 33 know of no mechanisms 100% 100% 100% Number of cases (13) (22) (14) (54) (44) (33) (19) (17) (9) (5) (10) (6)

^{*} Within educational levels, the percentage mentioning a mechanism other than voting varies in the predicted direction (decreases from left to right in the table) in seven of the eight possible comparisons, with one tie. The probability of finding seven cases in one direction with no exceptions is eight in one thousand, by the binomial expansion. This is equivalent to a p value beyond the .Ol level in the confidence intervalsused elsewhere in this report.

Appendix Table D-4
Relation between Age and Effectiveness*

Age	Effectiveness			War
	High	Medium	Low	Not Likely
21-29	34%	35%	16%	24%
30-39	38	37	45	ելե
40-49	22	18	22	15
50 and over	6	10	14	17
Not ascertained	_	_	1	_
	100%	100% ,	100%	100%
Number of cases	(91)	(93)	(63)	(46)

^{*} The Chi-square value for a μ x 3 table is 9.2 (p<.20>.10)

Appendix Table D-5

Relation between Sex and Effectiveness*

<u>Sex</u>	Effectiveness			146
	High	Medium	Low	War Not Likely
Male	74%	65%	76%	87%
Female	26	35	24	13
Number of cases	190% (91)	100 % (93)	100 % (63)	1.00% (46)

^{*} The Chi-square value for a 2 x 3 table is 2.2 (p $\langle .50 \rangle .30$).

Appendix Table D-6
Relation between Occupation and Effectiveness*

Occupation	Effectiveness			War
	High	Medium	Low	Not Likely
Professional	3%	8%	2%	9%
Bueiness	11	10	8	. 2
White collar	11	5	5	4
Sales	8	10	14	Ц.
Clerical	11	8	5	7
Manual: industrial	30	37	36	57
Manual: other	22	11	27	13
Unemployed	4	10	3	4
Not ascertained		1		_
	100%	100%	100%	100%
Number of cases	(91)	(93)	(63)	(46)

^{*} The Chi-square value for a 4 x 3 table is 8.4 (p < .30). Professional, Business and White collar were grouped in one category. Sales and Clerical formed the second category, Manual industrial the third, and Manual non-industrial the fourth.

Appendix Table D-7

Relation between Dwelling Unit Income and Feeling of Effectiveness*

Dwelling Unit Income	Effectiveness			War
	High	Medium	Low	Not Likely
Under \$4,000	26%	38%	41%	15%
\$4,000 to \$6,999	54	43	43	67
\$7,000 and over	18	1.8	13	18
Not ascertained	2	1	3	
	100%	100%	100%	100%
Number of cases	(91)	(93)	(63)	(կ6)

^{*} The Chi-square value for a 3 x 3 table is 4.5 (p $\langle .50 \rangle .30$).

"Some people feel that their lives have worked out just the way they wanted. Others feel they've really had bad breaks. How do you feel about the way your life is turning out?"

Emphasis on:	masis on: Effectiveness		War	
	High	Medium	Low	Not Likely
Satisfaction with life	82%	66%	60%	91%
Pro-con	2	8	6	7
Bad breaks	15	26	32	2
Not ascertained	1		2	
	100%	100%	100%	100%
Number of cases	(91)	(93)	(63)	(46)

The value of Chi-square for a 2 x 3 table is 10.7 (p <.01). "Pro-con" was grouped with "bad breaks."

"What do you think your chances are of living the kind of life you'd like to have? Do you think they are pretty good, not so good, or what?"*

Chances are:	<u>I</u>	115		
	High	Medium	Low	War Not Likely
Good	76%	60,5%	54%	81%
Pro-con	10	13	11	6
Poor	14	26.5	35	13
	100%	100%	100%	100%
Number of cases	(91)	(93)	(63)	(46)

^{*} The Chi-square value for a 2 x 3 table is 8.1. (p < .01). "Pro-con" and "Poor" were combined.

Appendix Table D-10

"Some people feel they can make pretty definite plans for their lives for the next few years. Others feel they aren't in a position to plan ahead. How about you—do you feel able to plan ahead or not?"*

Ability to Plan	<u> </u>	War		
	High	Medium	Low	Not Likely
Yes	63%	51.%	31%	62%
Pro-con	6	9	11	4 .
No	33.	40	58	34
	100%	100%	100%	100%
Number of cases	(91)	(93)	(63)	(46)

^{*} The value of Chi-squate for a 2 x 3 table is 13.0 (p < .001). "Pro-con" and "No" were combined.



Appendix E

The Index of Personal Competence

The competence index consists of three items covering the following areas—satisfaction with one's present life state, anticipation of good outcomes in one's future life, and feeling of personal control over such future outcomes.

We conceive of the index as a measure of one aspect of ego-strength—that is, self-confidence or feeling of personal competence. We do not feel that it reflects ego strength in its totality since, for example, it provides no check on the reality-testing ability of the respondent or on such characteristics as flexibility. The possibility that in some cases conscious level self-confidence may serve as a defense against basic insecurity is recognized, and may contribute error to our predictions. However, this aspect of one's personal outlook seemed to be the kind of variable which would affect one's conscious sense of effectiveness with respect to public affairs, and this assumption is borne out in our data.

The index is not viewed, either, as a reflector of exclusively psychological factors (stemming from early learning experiences). Certainly reality conditions such as the individual's actual environmental situation (social and economic) affect the responses used in the index. We feel, however, that the way in which such conditions are psychologically integrated by the individual is an important consideration when prediction of attitudes is the final goal of research. The fact that single demographic measures were not adequate predictors to feelings of effectiveness in public affairs lends support to this view.

Methodological Justification for the Index

Scale patterns for the 3 items accounted for 82% of the cases in our sample. By chance we would expect only 66% of the cases to fall in scale patterns. The X² between the expected and obtained frequencies is significant at a very high confidence level (beyond the .001 level). This fact indicates that there is internal consistency among the items, beyond any reasonable chance expectancy.

Relationships between the Index and Demographic Variables

Appendix Table E-1

Relation between Education and Personal Competence*

Education	Competence			
	High	Moderately High	Moderately Low	Low
Grade school or less	22%	35%	24%	47%
Some high school	56	49	61	42
Some college	22	16	15	8
Not ascertained	-		-	3
	100%	100%	100%	100%
Number of cases	(116)	(102)	(59)	(36)

^{*} The value of Chi-square for a 3 x μ table is 7.38 in the predicted direction (p < .20).10). The two lowest competence categories were combined.

Appendix Table E-2
Relation between Age and Personal Competence*

Age	Competence			
	<u> High</u>	Moderately High	Moderately Low and Low	
21-29	37%	25%	23%	
30-44	34	41	41	
45-54	20	19	24	
55 and over	9 100%	15 	12	
Number of cases	(116)	(102)	(95)	

^{**}The Chi-square value for a 4×3 table is 9.10 (p < .20 >.10). No direction could be predicted in advance.

Appendix Table E-3
Relation between Respondent's Income and Personal Competence*

Income

	<u> High</u>	Moderately High	Moderately.	Low
Under \$3,000	12%	14%	15% .	28%
\$3,000-\$5,000	47	48	63	47
\$5,000 and over	38	34	22	25
Not ascertained	3	4		
	1:00%	100%	1.00%	100%
Number of cases	(116)	(102)	(59)	(36)

^{*} The value of Chi-square for a 3 x μ table is 8.47 in the predicted direction (p< .20 > .10).

Appendix F

The Index of Job Outlook

The job index consists of responses to three items dealing with different aspects of the individual's job future: 1) the steadiness or security of his job, 2) his general future outlook at the place he works, and 3) his chances for promotion. Positive responses in all three areas were necessary for a score of "high"; positive answers in two of the three areas were given a score of "medium"; and one or no positive responses were scored "low."

Occupation alone is not significantly related to effectiveness or personal competence. Yet we believed that this important aspect of the life of employed people would contribute in some way to their feelings of ability to handle problem situations on both these levels. Therefore, we selected the three items listed above as indicators of the respondents' evaluation of the job future, or what might be termed anticipation of positive outcomes on the job.

The series has a logical ordering in terms of prerequisites for future job satisfaction. Steadiness, or simply continuation of the job, is necessary before one's future can seem bright; and a judgment of a generally satisfactory future on the job may be expected to precede an anticipation of improvement.

The inherent logic of this ordering invites an attempt to scale the responses. Investigation disclosed that 89 percent of the 204 cases in which necessary data were available, fall in the major scale patterns. This was a significantly higher proportion than would be expected by chance.

Non-scalar cases with two pluses were collapsed into the second ("Medium") category, and non-scalar cases with a single plus score were collapsed into the third category. The third (one-plus) and fourth (no pluses) categories were further combined into the "low" group because of low frequencies.

Relationships between the Index of Job Outlook and Other Variables

The job index is positively related to effectiveness (Table 22), and personal competence (Appendix Table F-1).

From the total sample of 316 cases, 112 cases, consisting of 78 respondents given Form II of the questionnaire and 34 unemployed or self-employed persons, were excluded from this analysis. Twelve persons who answered "Don't know" to one or more of the questions, and 20 who gave at least one unclassifiable response, are included in the scoring as negative cases. This means that we split the population into those who gave positive responses against any other response.

Appendix Table F-1
Relation of Index of Job Future and Index of Personal Competence*

Personal	Job Index			
Competence Index	<u>High</u>	Medium	Low	
High	50%	41%	17%	
Medium .	35	34	34	
Low	15	25	49	
	100%	100%	100%	
Number of cases	(40)	(83)	(6L)	

^{*} The Chi-square value for a 3 x 3 table is 18.94 (p < .001).

It is also related to occupation when the latter is dichotomized into white collar (sales, clerical, business, professional) and blue collar (skilled, semi-skilled, unskilled, protective services, construction workers,) (Appendix Table F-2).

Appendix Table F-2

Relation of Index of Job Future and Occupation*

Occupation	Job Index			
	High	Medium	Low	
White collar	48%	36%	23%	
Blue collar	52	64	77	
	100%	100%	100%	
Number of cases	(42)	(91)	(70)	

^{*} The value of Chi-square for a 2 x 3 table is 8.2 (p(.02).

These interrelationships suggest that position in the occupational structure may account for part of the observed relation between job outlook and felt effectiveness. To test whether job outlook is related to effectiveness when the effect of occupation is removed, we related effectiveness and job outlook separately for each of the two occupational levels. Appendix Table F-3 discloses that job outlook is still highly related to effectiveness, with occupation held constant.

Appendix Table F-3

Relation of Job Future Index to Effectiveness with Occupation Held Constant*

Occupation

	White Collar			<u>B</u>	Blue Collar		
Effectiveness	Job Index						
	High	Medium	Low	High	Medium	Low	
High	67%	53%	40%	50%	44%	18%	
Medium	33	5	27	37	40	32	
Low		42	33	13	16	50	
	1.00%	100%	1.00%	100%	100%	100%	
Number of cases	(15)	(19)	(19)	(16)	(43)	(38)	

^{*} For the total table, the value of X² is 24.30. With eight degrees of freedom, this is significant beyond the .01 level.