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ATTITUDES TOWARD NUCLEAR DISARMAMENT AND ANTINUCLEAR ACTIVISM

Ву

Diane Michele Darland

A THESIS

Submitted to
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ABSTRACT

ATTITUDES TOWARD NUCLEAR DISARMAMENT AND ANTINUCLEAR ACTIVISM

Βv

Diane Michele Darland

An exploratory study was conducted to investigate attitudes which might differentiate people who protest in favor of nuclear disarmament from those who do not. Subjects of both types completed a questionnaire designed to measure attitudes specifically related to the nuclear issue and related political attitudes. Activists differed significantly from nonactivists on 11 scales, and these scales were significantly correlated with a continuous measure of protest behavior. Compared to nonactivists, activists scored higher on scales measuring expressed concern, perceived likelihood, perceived severity, and emotional reponses toward the possibility of a nuclear They also disagreed more with current nuclear arms policies, expressed greater feelings of political efficacy and personal responsibility for the problem, and reported more conventional as well as unconventional political While it would be useful to replicate this study with a larger, more randomly selected sample, results do suggest that activists and nonactivists differ in the hypothesized ways.

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TABLE OF CONTENTS

																																рā	age
LIST	OF	ΤA	BLI	ES.	• •	•	• •	•	• •	•	• •	•		•	•	••	•	•	•	•	• •	•	•	• •	•	•		•	•	• •	•	•	Ĺν
Chapter																																	
Ι.	I	Bac Nat N F T P E V	duckgruckers ucleel rus erc mot	rou lea lin st cei	ind of ar- age are on a	t r s d ed	he el of	a e e	Preference	e d f t o c t	se ic ed ns	en ta l si	t ti	Sit vetil	t u (udde de tu	y s · id	es fo	or le		• • • • • • • • • • • • • • • • • • •	t i .	i	• • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • •			•				.2 .3 .5 .6 .7
II.]	Sub Ins N A Pre N	d jed tru ucl tti lin ucl tti	ets ime lea itu nin	ent ir ide	s A y A	ct Me	i a n	vi vi su al	s	es m	M	ea	s s	u	re Sc	a	16			• •				•	•	• •		•	• •			13 15 15 16 22 22
III.	(Gro Cor	ts. up rel	Di lat	ff	e	re al	n	c e A n	es 1a	 1 y	•	e s	· ·	•	• •	•	• •	•	•	• •	•	•	• •	•	•	• •	•	•	• •	• •	•	33 33
IV.	(A I	Gro Att Lim	ssi up itu ita omm	Di ude ati	ff e-t	e e s	r e h e	en v of	ce ic t	s r h	• • e	co P	ns	si	s i	te	n	c y S t	u	• d	• • • •	•	•	• •	•	•	• •	•	•	• •	•••	•	43 45 46
REFERENCE NOTE5												51																					
LIST	OF	RE	FEF	REN	ICE	ES		•	• •	•		•		•	•	• •	•		•	•	• •		•	• •	•	•	• •	•	•	• •	•	• •	52
ADDEN	ידתנ	7																															56

LIST OF TABLES

Table		Page
1.	Pairs of Items Reflecting Opposing Positions on Nuclear Policy Issues	18
2.	Items in Disagreement Scale	27
3.	Items in the Severity Scale	28
4.	Items in the Efficacy Scale	29
5.	Items in the Awareness Scale	30
6.	Items in the Activist World View Scale	.30
7.	Items in the Tendermindedness Scale	.32
8.	Mean Differences between Activists and Nonactivists for 12 Scales	34
9.	Reliabilities of 12 Scales and their Correlations with the Nuclear Activism Scale	35
10.	Intercorrelations among 11 Scales	37
11.	Mean Differences between Groups on Ratings of Individual Emotions	38
12.	Mean Differences between Answers to Pairs of Items Reflecting Opposing Positions on Nuclear Policy	40
13.	Mean Differences between Groups on Items of the Citizen Role Scale	41
14.	Mean Differences between Groups on Ratings of Values	42

CHAPTER I

INTRODUCTION

On June 12, 1982, an estimated three-quarters of a million people demonstrated their support for nuclear disarmament by marching through the streets of New York City past the U.N. Building, where delegates were due to begin meeting in a special session on the issue. The marchers had come together from all parts of the U.S.; some had even traveled from other countries to express their convictions by being a part of the demonstration, which remains the largest nuclear disarmament demonstration ever held.

Yet the attendance represents perhaps one-third of one percent of the population of the U. S. Polls from that time tell us that a large percentage of the populace were concerned about the possibility of a nuclear war. But only a small fraction of these express their concern nationally and locally, through such activities as protest demonstrations, peace vigils, petition drives, and educational activities. This research was aimed primarily at discovering what attitudes, beliefs, and emotional responses differentiate nuclear activists from nonactivists, and secondarily, at gaining insights into what motivates some people to act on their concerns while

others do not.

Background

Activism is generally construed to consist of activities designed to influence government action and public policy which go beyond conventional political participation such as voting and involvement with political parties. It may also be aimed at influencing public opinion and educating others, so that they, in turn will be supportive of change. Activists are seen to be dissatisfied with both the current state of affairs and conventional means of redress. Activism is therefore alternately referred to as "protest behavior" or "unorthodox political behavior," (Marsh, 1977).

A fair amount of research has been devoted to activism in the past. Many studies looked at campus activists of the 1960's and early '70's, focusing on their personality attributes, family backgrounds, and political ideologies (e.g., Block, Hann, & Smith, 1969; Morse & Peele, 1971). More recent research has examined personality traits and attitudes of pro- and anti-abortion activists (Werner, 1978) and attitudes of environmental activists (Kronus, 1977; Tucker, 1978).

Marsh (1977) studied factors which related to "protest potential," a term which referred to a person's avowed willingness to use unorthodox political action in the event that he or she came to feel strongly about an issue. He found that high protest potential was related to a number of personal and political beliefs, including a

sense of political efficacy, distrust of current government actions, a sophisticated political ideology, and non-materialistic values.

Nature of the Present Study

In this study, I decided to look at the types of political and social attitudes studied by Marsh. Here, however, we can see if these and other attitudes relate to willingness to take action on this issue in particular, as opposed to a general potential for protest. A variety of measures were chosen, based on both past research and personal experience with members of nuclear activist groups. These relate to several general topics: beliefs specifically involving nuclear war or nuclear arms policy, feelings of efficacy, political trust, perceived responsibility for action, emotional responses, values, level of conventional participation, and attitudes toward related issues such as conventional war and the Soviet Union.

Nuclear-related attitudes. Clearly, beliefs about the likelihood and probable severity of a nuclear war could interact to move people to take action they feel might prevent such a war. Activists might thus be found to have more extreme views on such topics. However, one can be concerned about the possibility of war and yet not favor disarmament; in fact, many people feel that maintaining deterrence is the best way to prevent such a war. Therefore, it was also felt to be important to measure

agreement or disagreement with various policy views on such issues as the need for more weapons, the logic of maintaining deterrence, or the need to plan for a limited nuclear exchange. These were intended to discern not only which side people believed, but also, how much confusion they experienced over which side to believe. Properly stated, opposing views can both sound quite attractive. It's difficult to know which position to take, because the issues are so complex and ambiguous. On the one hand, it may seem that we do need more arms so that we can bargain with the Soviets from a position of strength. Yet it may be equally plausible to look at the build-up in another way and say that it merely encourages the Soviets to do likewise, leading to a never-ending spiral.

Attitudes and beliefs about the nuclear issue are most likely not sufficient to predict activism. The literature on attitude-behavior consistency has shown that the degree of correspondence between evaluative attitudes or cognitive beliefs about an issue and behaviors performed with regard to that issue is not necessarily very great (Ajzen & Fishbein, 1977). Wicker (1971) suggested that prediction might be improved by measuring "other variables" which relate to a person's tendency to act on a This approach has proven fruitful (e.g., belief. Frideres, 1971; Werner, 1978). Werner predicted degree of activism from strength of attitudes on the abortion issue and found that personality traits predicted additional variance in activism. In this study, it was hypothesized that the following variables would prove to bear on a person's propensity to act.

Feelings of efficacy. People are unlikely to protest unless they feel their efforts will be of some use. Previous attempts to measure such beliefs about action in the political sphere fall under the rubric "political efficacy," defined as "the feeling that political and social change is possible, and that the individual citizen can play a part in bringing about this change," (Campbell, Gurin, & Miller, 1954). Campbell et al. found that political efficacy predicted level of involvement in conventional political activities. Others have linked it to activism. For example, Block et al. (1969) found that students involved in social and political issues believed in their ability to have an impact on society. found that externality on the political factor of Rotter's (1966) I-E scale (Mirels, 1970) correlated negatively and significantly with amount of abortion activism, while the total I-E score did not.

Further support for this idea is found in Marsh (1977). He found that high protest potential was predicted not by efficacy alone, but by a combination of high efficacy and low political trust. These people distrusted the actions taken by existing political structures in dealing with issues but also felt that action they themselves might take could have an effect on the issues and on subsequent actions by authorities. Persons with low political

efficacy were, in general, unwilling to attempt any sort of action, and persons with high efficacy and high trust were also unwilling, since they were content with current handling of problems.

However, although the political efficacy scale used by Marsh is intended to measure a general belief that change is possible, it mostly asked about the percieved efficacy of such conventional political behaviors as voting in influencing the actions of government. Nuclear activists use unorthodox strategies and may have broader goals. Therefore, a parallel scale was constructed for this study to measure "social efficacy," which asked about one's belief in one's ability to do something about social problems or affect what happens in society at large.

Finally, beliefs about the efficacy of specific protest behaviors were considered important. This is in accordance with the findings of Ajzen and Fishbein (1977), who have demonstrated that greater attitude-belief consistency is found if attitudes toward the behavior in question are measured, instead of attitudes toward the issue with which the behavior is concerned.

Trust and related attitudes. As pointed out by Marsh, degree of trust in the political system to do what is right may be a determinant of activism. Similarly, trust in the current administration's ability to handle this particular issue may be important. Trust is important in another sense, too. Those who support the need for a strong nuclear deterrent may harbor great distrust of the

Soviet Union and its sincerity in negotiations for arms treaties. Those who protest in support of disarmament may be more trusting of the Soviets.

Perceived responsibility for action. Perhaps activists take action not only because they perceive a problem and believe they can do something about it, but also because they feel responsible for doing something about it. Indeed, one national anti-nuclear group is called "Physicians for Social Responsibility." A variety of research studies support this hypothesis. The social responsibility scale of Berkowitz and Daniels (1963) was designed to measure the tendency to engage in sacrificial, They found that scores other-directed behavior. correlated positively with amount of help given in aiding a dependent person. Berkowitz and Lutterman (1968) showed that scores also correlated with community involvement such as doing volunteer work. More recently, Tucker (1978) found that members of environmental action groups scored higher on this scale than members of the general public. Yet as Berkowitz and Lutterman point out, high scorers are generally politically conservative and believe very conventional, traditional sort responsibility. It is therefore unlikely that this scale measures the type of social responsibility which might be found in nuclear activists.

Elliot (1980) identified four components of a pacifist belief system, one of which he labelled "active values,"

or "the willingness to perform behaviors designed to achieve a situation commensurate with one's own norms. values, and goals," (p. 34). Morse and Peele (1971) examined the behaviors people felt they ought to perform in order to be good citizens. Compared to uninvolved persons, participants in an anti-Vietnam War rally placed much less emphasis on such conventional behaviors as obeying laws and being patriotic, and much more emphasis on being involved in political activities and working to change policies with which they disagreed. Kronus (1977) found that the most important factor in explaining the involvement of community organizations in the environmental quality movement was the members' acceptance of their group's responsibility for working for the common good. These constructs seemed as though they might be more characteristic of nuclear activists than Berkowitz' social responsibility.

Emotional reactions to nuclear issues. It was also predicted that activists would have different and probably stronger emotional reactions to the nuclear issue than would non-activists. There were two lines of resoning behind this. First, Lupsha (1971), in considering alternate theories explaining political violence, emphasized the concept of moral outrage. Other popular notions have applied Dollard, Doob, Miller, Mowrer, and Sears' (1939) frustration-aggression hypothesis and have posited that people erupt into riots or rebellions because continued frustration has been triggered into aggression.

Lupsha pointed out that this is not always the case. example, whites who protested on behalf of blacks in civil rights marches were not themselves experiencing the frustration and oppression suffered by blacks. felt that these people can be better understood to be acting out of a moral indignation over conditions that are unjust and ought to be changed. Indeed, he felt that frustration is not sufficient to explain action even among those who are frustrated. He thought frustration would lead to aggression only when the one frustrated felt something ought to be done about it. Similarly, Yates (1962) had previously modified the frustration-aggression model, inserting anger as an intervening variable between frustration and aggression. These two emotional reactions, moral outrage and anger might well be experienced by nuclear protesters.

However, even more common reactions to the thought of nuclear war might be feelings of fear, anxiety, and helplessness in the face of threat. The Task Force of the American Psychiatric Association on the Psychosocial Impacts of Nuclear Advances has made an investigation into the pervasiveness of such reactions. Mack (1981), a member of the task force, reported that tenth and twelvth graders surveyed reported disturbing levels of fear and helplessness. Yet adults may experience fewer of these feelings. Lifton (1969) has written extensively about the "psychic numbing" first observed in survivors of the

Hiroshima bombing. As a defense against the death and destruction which surrounded them, survivors shut down their emotional reactions. He also saw evidence of numbing in the thinking of the scientists who developed the atomic weapons and the pilots who dropped it. Today, he feels most of us are similarly affected by the existence of the nuclear threat. "To put the matter simply," he wrote, "one cannot afford to imagine what really happens at the other end of the weapon," (p. 53). We could not go on about our daily business if we allowed ourselves to be paralyzed by fear. Therefore, we, too, may have deadened out emotional reaction. We don't feel the threat.

Mack noted that those who hold strong anti-nuclear attitudes seem to differ in this. They "seem more willing to experience, or <u>hold</u> emotionally, the reality of the nuclear danger," (p. 21). Nuclear activists would seem to fall into this category. They may act because they allow themselves to experience the extent of the threat, rather than repressing it as others do.

<u>Values</u>. According to Rokeach (1972, 1973), people tend to act in accordance with their values. Rokeach has shown that pointing out discrepancies between actions and values can cause people to change their actions. Pinsley (1975) found that environmental activists placed more emphasis on values endangered by environmental problems and less emphasis on values which might have to be sacrificed in reaching a solution to these problems. Two of Rokeach's

terminal values seem especially relevant to the nuclear issue. Activists would most likely rank "A World at Peace" high and "National Security" low.

Other social and political attitudes. Additional attitudes which might related include such things as scope of interest in politics and world affairs and attitudes toward conventional warfare. Beliefs in the value of cooperation might be important, since many anti-nuclear organizations stress that while an individual may be able to do very little alone, he or she may have considerably more impact as a group member. Finally, there may exist a generalized propensity to recognize issues which might grow into problems in the future (Wrigley, Note 1). a future orientation would seem to be important in recognizing the need for present action with regard to a number of issues, including nuclear disarmament, disposal of radioactive waste, and control of one's diet with an eye towards future health. We might call such a characteristic "longsightedness," as Wrigley has done.

In summary, it seems likely that antinuclear activism is related to a number of different attitudes toward the nuclear issue, including the estimated likelihood of a nuclear war and its probable severity, positions on various nuclear policies, and emotional reactions. Related attitudes, such as a sense of political and social efficacy, perceived responsibility for action, concern for

future hazards, distrust of government, and certain values, may also be important.

CHAPTER II METHOD

Subjects

Subjects included 34 activists (19 males and 15 females) and 59 nonactivists (28 males and 31 females). Activists were recruited from among members of several antinuclear groups in East Lansing, Michigan. These groups and the methods of recruitment are described below. All groups cooperated to some extent in an umbrella organization, the East Lansing Peace Education Center.

Physicians for Social Responsibility is a national organization with local chapters whose membership consists mainly of physicians and medical students, although anyone is eligible to join. Members strive to educate people about the medical effects of nuclear war, by showing films and giving talks to community groups. They believe that nuclear war would result in horrible deaths and injuries, exceeding the coping capabilities of the U. S. medical profession, which itself would be decimated by the explosions. Therefore, they feel it is their duty as experts and citizens to inform others so that the danger might be averted. Active members of the local group were sent surveys by mails. Nine out of 15 surveys were returned, also by mail.

The Women's International League for Peace and Freedom, founded in 1915, supports disarmament along with a wide variety of national and international causes such as civil rights, women's rights, education, environmental quality, and economic development. Surveys were passed out at a meeting of the group, and eight of 10 were returned by mail. Members were generally well-educated, middle-aged women; a few men also attended.

Mobilization for Survival is also a national organization and was one of the sponsors of the June 12th march. It focuses on educating people at a community level and emphasizes the need to spend less on the military and more to meet basic human needs. Surveys were passed out at a meeting and were collected in the group's mailbox at the Peace Center. Members were mostly college student or recent graduates. Five members completed surveys.

Additional surveys were given to individuals known to the author to be active in demonstrations or the nuclear freeze petition drive. They included members of a local church group, board members of the Peace Center, and some students, accounting for seven more subjects.

Nonactivists were also recruited from a variety of sources. The largest group was comprised of 39 students in an upper level psychology course on social movements. Virtually all of these returned their surveys. Three also handed in surveys completed by family members. Eight graduate students in psychology were prevailed upon to

complete questionnaires. Three respondents were employees of a local business. Finally, six subjects were older adults.

This is, of course, not a random sample by any means, but it does provide a comparison group for this exploratory investigation. Since most of the activists were well educated, graduate students and older, educated adults were sought as subjects in order to have nonactivists of comparable age and education. greatest systematic bias probably exists in the use of the social movements class. These participants were, on the average, younger and less educated than the majority of activists. However, students who would take such a class might be presumed to be more interested in the antinuclear social movement that the average person, and this would serve to attenuate differences between groups. fact, two students were transferred to the activists group when their surveys revealed they had participated in a wide variety of anti-nuclear activities.

Overall, the average age of the activists was 37.7 years and their average level of education was 17.2 years. The average age of the nonactivists was 28.9 years, and their average level of education was 15.3 years.

Instruments

Nuclear Activism Measure

Although subjects were divided into two groups, a continuous measure of amount of activism was also

obtained. The scale assessed both willingness to perform and actual performance of two types of behaviors: behaviors which would increase or express one's own awareness of the issue, and (b) unorthodox political behavior on behalf of the anti-nuclear issue. This multiple act criterion was used since it was more likely to produce higher correlations with dependent variables than a single act criterion (Weigel & Newman, 1976). measure used here was modelled after that of Kerpelman (1972).Subjects checked responses in a grid format. Responses were scored from 0 to 5 and included 0 (have not performed this behavior and would never do it), 1 (have not but might do it), 2 (have not but would be willing to do it), 3 (have done at least once), 4 (have done several times), and 5 (have done regularly) (see Appendix, p. 62). Attitude Measures

<u>Nuclear-related items</u>. Perceived likelihood was assessed by three items asking for judgements of the probability that there will be a nuclear war within the next five years, within the next 20 years, and within your lifetime. Responses provided from 0 almost impossible to 6 almost inevitable, with 3 (50-50 chance) as a midpoint (see Appendix, p. 61).

Perceived severity was assessed in two ways. First, six items asked subjects to select from among alternatives the extent of destruction they thought would result from a nuclear war. Items asked about such things as what types

of targets would be damaged, how long radiation would be a problems, and how long it would take to restore the current U. S. standard of living. Possible responses were scored from 0 to 4 and included days, weeks, months, a few years, or many years (see Appendix, p. 64).

Second, subjects were asked to indicate agree ment or disagreement with six Likert-type items about the severity of the aftermath of a nuclear war (e.g., "A nuclear war could destroy the Earth's capacity to sustain life."). All Likert items described here and in the following pages can be found in pp. 65-68 of the Appendix.

Twenty-one additional items with the same Likert format assessed attitudes toward other aspects of the nuclear issue, including views on nuclear arms policy. Twelve of these were constructed in pairs, such that each pair reflected what was felt to be opposing sides on an issue (see Table 1). One additional question asked subjects to endorse one of three positions on disarmament: lack of support for disarmament, support for negotiations with the Soviet Union aimed at bilateral disarmament, and support for unilateral disarmament by the U. S. (see Appendix, p. 60).

A final group of items asked in a variety of ways about the degree to which subjects were concerned about the nuclear issue. The first asked subjects to name the most important problem facing the U.S. Then, they were asked to count this as a 10 and to rate on a scale from the 1-10

TABLE 1

Pairs of Items Reflecting Opposing Positions on Nuclear Policy Issues

- The \$180 billion currently projected for spending on nuclear arms and delivery systems over the next 5 years is necessary for defense.
- 38. The \$180 billion projected to be spent on nuclear weapons over the next 5 years is needed more urgently in other areas.
- 15. Currently proposed increases in nuclear arms will allow the U.S. to negotiate for disarmament from a position of strength.
- 50. The currently proposed increase in nuclear weapons fuels the never-ending spiral of the arms race and encourages the Soviets to respond in kind.
- 22. More new nuclear weapons and delivery systems make the U.S. safer.
- 44. More nuclear weapons systems make the U.S. less safe.
- 25. Nuclear war is an awful prospect. But that's exactly why deterrence works. Neither side dares to start a war.
- 76. Deterrence is based on mutual fear--fear which grows ever greater, leading to suspicion and irrationality which could trigger a nuclear war.
- 32. We must devise nuclear strategies that will allow the U.S to emerge as the winner in the unfortunate event of nuclear war. After all, the Soviets are trying to do the same.
- 60. There can be no "winner" in a nuclear war; nuclear weapons are so far beyond conventional weapons in destructive capacity that a nuclear exchange cannot properly be called a war.
- 46. The U.S. can survive a nuclear war through adequate civil defense and contingency planning to handle circumstances after the war.
- 65. Our civilization and the values we believe in could very well be destroyed by the nuclear war we fight to protect them.

nuclear disarmament. Two other items simply asked subjects to indicate how concerned they were, on a scale from 0 (not at all concerned) to 4 (extremely concerned), about both national security and the possibility of nuclear war. Finally, one item asked how much this latter concern was on their minds, ranging from 0 (almost never) to 6 (more than once a day) see Appendix, pp. 60-61).

Feelings of efficacy. Political efficacy was measured by the six-item scale devised by Campbell, Gurin, and Miller of the Institute for Social Research at the University of Michigan (see Robinson, Rusk, and Head, 1969.) The items were originally used as a Guttman scale. Marsh, using an Anglicized version of the scale did not find that the scale conformed to Guttman scale criteria, but he did find a coefficient alpha (Cronbach, 1951) of .76. In this study, items were simply presented in a Likert format, and subjects indicated strength of agreement or disagreement with each.

However, as already noted, these items ask only about how efficacious a person feels in attempting to influence government (e.g., "People like me have no say in what the government does."). To measure social efficacy, six items were constructed to be somewhat parallel to the political items, except that they asked about ability to have an impact on social problems or influence in society at large (e.g., "People like me can have little influence in what happens in society at large.").

Finally, efficacy with regard to the nuclear issue in

particular was measured with three Likert items and four additional items asking subjects to rate the effectiveness of specific strategies used by people in pressing for disarmament. Responses here ranged from 0 (not at all effective) to 3 (very effective) (see Appendix, p. 62).

Perceived responsibility. First, six Likert items were constructed which tapped various elements of a person's propensity to feel responsible to act. Paradoxically, perhaps, some of these items also pertained to feelings of efficacy while acting, while others alluded to the responsibility to take action even if the probability of success is small.

Second, items were selected from the National Role Scale used by Morse and Peele, who adapted it from an unpublished study by Delameter, Katz, and Kelman (cited in Morse & Peele, 1971). These asked subjects to indicate how important they thought it was to perform each of 10 behaviors in order to fulfill their roles as U.S. citizens. Some of these behaviors aim at supporting the status quo (e.g., "support current policies of government") while others emphasize taking responsibility for creating change (e.g., "work within the political system to change policies with which you disagree"). Responses ranged from 0 (not at all necessary to do to be a good citizen) to 6 (absolutely necessary to do to be a good citizen) (see Appendix, p. 58).

Trust. The four-item Political Trust Scale developed by the Institute for Social Research (see Robinson et al., 1969) and adapted by Marsh was used here. Three items asked subjects to indicate how often they trust government officials to do what is right, to tell the truth, and to put the needs of the country ahead of the needs of their own party. Responses ranged from O (almost never) to 3 (almost always). A fourth item asked subjects to indicate whether they thought the country was run for the benefit of all (scored 3) of for the benefit of a few big interests (scored 0). Marsh reported a coefficient alpha of .76 for this scale (see Appendix, p. 59).

In addition, four Likert items were used, relating to trust or distrust of the Soviet Union. Finally, two Likert items tested for trust in the Reagan administration's ability to handle specific issues, including arms negotiations.

Values. The format here was the same as that used by Rokeach, i.e., subjects were given a list of values and were asked to rank them in order of importance from 1 (most important) on down. However, the list of values was altered. Values seen to be likely either to motivate (A World at Peace) or inhibit (National Security) action were included as well as others seen as generally relevant to political issue (Freedom, Equality). Values added for the purposes of this study included Concern for Other People, Job or Economic Security, Personal Safety, and Preservation of the Environment (see Appendix, p. 59).

Other variables. A scale of conventional political participation was included, which asked subjects to rate how frequently they performed various behaviors relating to awareness of and involvement in the political process. Responses ranged from O (never) to 4 (regularly). This scale was adapted from Marsh (see Appendix, p. 58). Twenty-two additional Likert items were included which pertained to other social issues related to protest and the nuclear issue (see Appendix, pp. 65-68).

In the final questionnaire, all 76 Likert items were mixed together and presented as the final group of items. Subjects were asked to indicate agreement or disagreement with each on a scale from +3 to -3. In analyses, responses to these items were transformed to a 1 to 7 format. Items were reflected as necessary such that a higher score was always in the direction in which activists were predicted to score, except for a few ambiguous items where no predictions were made. The questionnaire also contained items asking for demographic information, such as age, education, religious preference, marital status, and occupation or major. Subjects reported taking about an hour to complete the survey.

<u>Preliminary Analyses on Scales</u>

Nuclear Activism Measures

The full 15-item scale was found to have a coefficient alpha of .96. Two subscales were also examined. The six items relating only to awareness and information seeking and discussion with others resulted in a coefficient alpha

of .90. The remaining nine items represented a conceptually purer measure of protest behavior, with a coefficient alpha of .94. However, the two scales were so highly correlated (\underline{r} =.76) that the full scale was used as the continuous criterion measure. Activists averaged 57.35 on this scale, and nonactivists averaged 25.85. The difference between the two was highly significant (\underline{t} =14.84, \underline{d} f=91, p<.0001).

Attitude Measures

Some scales were acceptable for use as devised, others were not. Some of these proved to have one or more items which did not correlate with the rest, others had unacceptable reliabilities.

The Likelihood of Nuclear War scale had an average interitem correlation of .84, so the items were summed to form a single scale, producing a coefficient alpha of .92. The items measuring concern about the nuclear issue (concern for national security was not included here) had an average interitem correlation of .59. Since these items had different response formats, scores on each were standardized and then summed. Coefficient alpha was found to be .81.

The six items of the Extent of Destruction Scale correlated, on the average, .37, and when summed, yielded a coefficient alpha of .76. The seven items of the Conventional Political Participation Scale yielded an average intercorrelation of .48 and when summed into a

scale, a coefficient alpha of .87.

One item of the Emotional Responses Scale, that which asked about feelings of depression or helplessness, displayed an anomolous pattern of correlation with the rest of the items. Since it was also felt to be conceptually different, it was dropped from the scale. The remaining four items, with an average intercorrelation of .57, were added to form a scale, with a coefficient alpha of .85.

The remaining scales presented problems. First, the four items of the Efficacy of Protest Strategies scale had an average interitem correlation of .32. When added to produce a single scale, they yielded a coefficient alpha of only .60. This scale was examined in some analysies.

The Political Trust Scale was discarded altogether, since it seemed to cause difficulties for a number of subjects. Some subjects omitted one item or another, particularly the first, which asked for a choice between whether government is run for the benefit of all or for the benefit of a few big interests. Several subjects wrote in that this was not a realistic dichotomy. Answers to other items were sometimes qualified. For example, one subject answered that government officials almost always tell the truth, but wrote in, "as they see it." This destroyed the nature of the question and created suspicion that other subjects were performing similar reinterpretations.

Further problems were presented by the scales composed

of Likert items. Many of these failed to yield adequate reliabilities, for example, the perceived responsibility and political and social efficacy scales. The reliabilities of these were .70, .54, and .66, respectively. Since these three were scales of considerable interest in this investigation, it was decided to see if the items could be salvaged by performing a factor analysis of all 76 Likert items. If other items were found to cluster with the scales listed above, the additional length might contribute to a more respectable reliability.

Accordingly, a factor analysis was performed using a principal factors method with squared multiple R's as estimates of communalities. Six, eight, and ten factor solutions were rotated with varimax rotation. Six groups of items which remained relatively stable in all of these were selected as potential scales. The factors turned out to be quite easy to interpret, for the most part, and actually made more conceptual sense than the a priori scheme. This was seen to support the use of the procedure as an analytic aid in this situation, even though there were too few subjects to really justify the factor analysis.

The first factor was labelled "Disagreement." Items in this scale are listed in Table 2. Most of the anti-nuclear policy statements loaded positively here, and most pro-deterrence, need-for-nuclear-weapons policy items

loaded negatively. In addition, items involving trusting the Soviets loaded here, supporting the interpretation of this factor as reflecting disagreement with the policies of the Reagan administration. Using the 14 items as a scale produced a coefficient alpha of .90.

The items aimed at testing subjects' perceptions of the severity of the nuclear threat loaded together on a second factor, together with some other nuclear items (see Table 3). Although the factor can in general be thought of as "Severity," it must be noted that there is a strong emotional content implicit in most of these items. Coefficient alpha for these 12 items considered as a scale was 90.

Many of the efficacy items loaded together on a third factor, including those expressing a sense of political efficacy, an understanding of the issues, and the belief that something could be done about the nuclear issue in particular (see Table 4). The 13 items of this scale, labelled "Efficacy," produced a coefficient alpha of .84.

The items in a fourth factor suggested the sort of vigilant awareness postulated by the construct of "longsightedness." Several of these items leaded here, along with others suggesting a broad scope of awareness and a tendency, perhaps, to worry about things (see Table 5). This scale of six items, labelled "Awareness," yielded a coefficient alpha of .73.

A fifth factor was somewhat more difficult to interpret. It seemed to reflect a particular type of

TABLE 2

Items in Disagreement Scale

Positively scored items

- 38. The \$180 billion projected to be spent on nuclear weapons ever the next 5 years is needed more urgently in other areas.
- 44. More new nuclear weapons make the U.S. less safe.
- 43. Human services programs supported by the federal government in areas such as education, job training, health care, and the alleviation of poverty have suffered under the current administration.
- 50. The currently proposed increase in nuclear weapons fuels the never-ending spiral of the arms race and encourage the Soviets to respond in kind.
- 18. If enough people demonstrate their concern, we can bring a halt to the arms race.
- 60. There can be no "winner" in a nuclear war; nuclear weapons are so far beyond conventional weapons in destructive capacity that a nuclear exchange cannot properly be called a war.
- 72. We should believe the Soviets when they say they're interested in disarmament.

Negatively scored items

- 54. We can't trust the Russians at all.
- 24. Communism is a threat to democratic nations everywhere.
- 32. We must devise nuclear strategies that will allow the U.S. to emerge as the winner in the unfortunate event of nuclear war. After all, the Soviets are trying to do the same.
- 2. The U.S should maintain missile bases close to the Soviet border.
- 30. I trust the Reagan Administration to take the right steps in negotiations with the Soviet Union regarding nuclear disarmament.
- 22. More nuclear weapons and delivery systems make the U.S. safer.
- 15. Currently proposed increases in nuclear arms will allow the U.S. to negotiate for disarmament from a position of strength.
- 1. The \$180 billion currently projected for spending on nuclear arms and delivery systems over the next 5 years is necessary for national defense.

TABLE 3

Items in the Severity Scale

Positively scored items

- 35. Nuclear war could mean the end of the human race.
- 9. A nuclear war could very likely destroy the earth's capacity to sustain life.
- 17. The aftermath of a nuclear war will be utter chaos.
- 65. Our civilization and the values we believe in could very well be destroyed by the nuclear war we fight to protect them.
- 52. I get angry when I hear talk of a "winnable" nuclear war.
- 26. After a nuclear war, the survivors will envy the dead.
- 61. The existence of nuclear weapons is offensive to some of my deepest moral beliefs.
- 76. Deterrence is based on mutual fear--fear which grows ever greater, leading to suspicion and irrationality which could trigger a nuclear war.
- 69. I believe the existence of nuclear weapons threatens the future of the children of the world.

Negatively scored items

- 46. The U.S can survive a nuclear war through adequate civil defense and contingency planning to handle circumstances after the war.
- 58. Nuclear war is not as great a threat as some say.
- 49. Nuclear war would cause only a temporary setback in the progress of Western civilization.

TABLE 4

Items in the Efficacy Scale

Positively scored items

- 42. There are things I can do to have an influence in current affairs.
- 71. It feels good to publicly express what I believe in.
- 10. I follow what's going on in government most of the time.
- 73. I understand the important national and international issues facing the U.S. pretty well.

Negatively scored items

- 59. Sometimes politics and government seem so complicated that a person like me cannot really understand what's going on.
- 20. People like me can have little influence in what happens in society at large.
- People like me have no say in what government does.
- 27. There is not much I can do about most of the important problems that we face today.
- 68. When I have a problem or a worry, I try not to think about it, but to keep busy with something else.
- 55. Nuclear war is probably inevitable.
- 47. The international situation is so complex that it is difficult to think clearly about many issues.
- 6. The nuclear arms race is mostly a response to the difficult and dangerous world we live in.
- 40. There's very little we can do to bring about a lasting world peace.

TABLE 5

Items in the Awareness Scale

Positively scored items

- 45. I think it is important to avoid addictions to things like caffeine, cigarettes, and alcohol.
- 66. It makes sense to avoid the things scientists have declared to be carcinogenic.
- 21. Sometimes I feel I ought to take action to support a cause, even if the probability of success is small.

Negatively scored items

- 53. Children under 12 are too young to be worried about injustice in society.
- 70. I don't worry much about people in other parts of the world.
- 19. National and international happenings just don't seem relevant to my life.

TABLE 6

Items in the Activist World View Scale

Positively scored items

- 31. By taking an active part in political and social affairs, the people can control world events.
- 23. I am concerned about the future hazard posed by radioactive wastes from nuclear power plants.
- 57. The nuclear arms race is mostly a result of conscious militaristic choices by U.S. decision makers.
- 16. I consider myself a citizen of the world.
- 29. With the type of weapons available now and the uncertainty in international affairs, it would be relatively easy for a nuclear war to start by mistake.
- 5. Human nature is fundamentally cooperative.

Negatively scored items.

- 13. It's easy to avoid thinking about nuclear war.
- 25. Nuclear war is an awful prospect. But that's exactly why deterrence works. Neither side dares to start a war.

world view, including an appreciation of the nuclear threat and the value of group cooperation in working to end it (see Table 6). This scale of items, labelled "Activist World View," produced a coefficient alpha of .77.

A sixth factor was quite easy to interpret. This factor seemed to reflect tender v. toughmindedness. It included items relating to militarism and pacifism (which loaded in opposite directions) as well as the item: "If I were President and I knew the Soviets had launched a nuclear attack, I would immediately order our missiles fired in retaliation," (see Table 7). The eight-item scale was labelled "Tendermindedness" and produced a coefficient alpha of .77.

Nunnally (1978) has written that reliability ought to exceed .70 for preliminary work with a scale and should preferably exceed .80 for research applications. According to these criteria, almost all the scales just discussed display adequate reliabilities, with the exception of the Efficacy of Protest Strategies scale.

TABLE 7

Items in the Tendermindedness Scale

Positively scored items

34. Sending food and other badly needed supplies to other nations will do more to maintain stable world relations than will the policy of increasing our military strength.

Negatively scored items

- 41. People will generally take advantage of you if they can get away with it.
- 11. We should plan for a limited nuclear war.
- 4. Pacifism is simply not a practical philosophy for the world today.
- 36. It is more important to solve current U.S. economic problems than to try to bring about world peace.
- 62. U.S. arms sales to 3rd world countries provide those countries with a strong defense, so they can develop without harassment by greedy neighbors.
 7. If I were President, and I knew the Soviets had
- 7. If I were President, and I knew the Soviets had launched a nuclear attack, I would immediately order our missiles fired in retaliation.

CHAPTER III RESULTS

Group Differences

T tests were performed to test for significant differences between activists and nonactivists on the scales now defined: Likelihood, Emotional Responses, Concern, Destructiveness, Conventional Political Participation, Severity, Disagreement, Efficacy, Awareness, World View, Tendermindedness, and Efficacy of Protest. Simple t tests were used since there were a priori predictions that the two groups would differ on these items, although some of the items have been rearranged into different scales. For each variable, the groups were tested to see in the variances if each were equal. In the case that they were not, Satterthwaite's (1946) approximation for computing a t statistic and its degrees of freedom was used (see Steele & Torrie, 1980.) Results are presented in Table 8. All differences are highly significant, all but one at the p<.0001 level.

Correlational Analyses

These 12 variables were correlated with the continuous activism scale. Results are presented in Table 9. All correlations are significant, most at the p<.0001 level.

TABLE 8

Mean Differences between Activists and Nonactivists for 12 Scales

Scale	Activists	Nonactivists	<u>d f</u>	<u>t</u>
Likelihood	12.1	7.6	89	5.60**
Emotions ^a	11.8	11.8	89	5.78**
Concern	166.2	139.0	91	5.59**
Destructiveness	21.5	18.7	91	4.54**
Conventional Participation	19.9	13.1	91	6.14**
Disagreement ^a	92.3	70.1	86	8.75**
Severity ^a	75.5	63.7	87	5.40**
Efficacy	67.1	56.9	91	4.54**
Awareness ^a	36.5	31.3	88	5.30**
World View	43.5	35.3	91	5.34**
Tenderminded	43.5	32.9	91	7.35**
Efficacy of Protest	7.0	5.8	91	3.73*

 $[^]aS atterthwaite's approximation was used to compute <math display="inline">\underline{t}$ statistic and its degrees of freedom

^{*&}lt;u>p</u><.001. **<u>p</u><.0001.

TABLE 9

Reliabilities of 12 Scales and their Correlations with the Nuclear Activism Scale

Scale	Coefficient Alpha	Correlation
Likelihood	.84	.66**
Emotions	.85	.61**
Concern	.81	.73**
Destructiveness	.76	.34*
Conventional	.87	.65**
)isagreement	•90	.74**
everity	•90	.57**
fficacy	.84	.50**
wareness	.73	.47**
orld View	.77	.66**
enderminded	.77	.69**
fficacy of rotest	.60	•50**

^{*&}lt;u>p</u><.0001. **<u>p</u><.0001.

Omitting the Efficacy of Protest scale, which had an unacceptably low reliability, the remaining eleven variables were moderately to highly intercorrelated, the average correlation being .48 (see Table 10). A factor analysis of scale scores for these 11 produced only one factor, accounting for 84.1% of the shared variance. This suggests the presence of an underlying, unifying dimension. A summary variable was created from the summed standardized scores for each individual scale. Scores on this scale correlated .84 (\underline{p} <.0001) with the nuclear activism scale. In addition, activists and nonactivists differed significantly on this variable (\underline{t} =8.48, \underline{df} =91, \underline{p} <.0001).

Secondary Analyses

These included tests of certain other hypotheses. It was predicted that activists would have different emotional responses than nonactivists. On the item asking about feelings of depression and helplessness, activists and nonactivists did not differ. But activists were significantly higher on all other emotional responses (see Table 11).

It was predicted that activists would have more clearly differentiated opinions on opposing viewpoints about the nuclear issue. This was tested by performing analyses on responses to the paired items. Only subjects whose answers to the anti-nuclear item was greater than or equal to the pro-nuclear item were included here. This involved

TABLE 10

Intercorrelations Among 11 Scales

10											. 58
6										97.	.53
∞									67.	.40	.47
7								.26*	.55	.61	.56
9							69.	.37***	.50	.62	69.
5						.42	.42	.48	07.	*30**	.36***
7					.l7ns	.42	. 59	.17ns	• 43	.37**	67.
3				.17ns	77.	.64	.51	.31**	.39	.53	.56
2			.64	.39	.42	.54	69.	.18ns	67.	.58	.50
		09.	.63	.37**	.37**	.55	.53	.16ns	.37**	.63	.56
	l Likelihood	2 Emotions	3 Concern	4 Destructiveness	5 Conventional Participation	6 Disagreement	7 Severity	8 Efficacy	9 Awareness	10 World View	11 Tendermindedness

All correlations are significant at p .0001, except: ns=non significant, *p<.05, **p<.01, ***p<.001.

TABLE 11

Mean Differences between Groups on Ratings of Individual Emotions

Emotion	Activists	Nonactivists	<u>d f</u>	<u>t</u>
Worried	4.34	2.81	91	4.09**
Angry ^a	5.12	3.32	91	5.35**
Depressed	3.32	2.97	91	.88
Morally Outraged	l ^a 4.82	2.76	91	5.48**
Frightened	3.70	2.88	91	1.95*

 $^{^{}a}\text{Satterthwaite's approximation was used to compute }\underline{t}$ statistic and its degrees of freedom.

^{*&}lt;u>p</u><.05. **<u>p</u><.0001.

virtually all of the activists and between 35 to 55 of the nonactivists for each pair. The difference between the two answers was computed for each subjects and <u>t</u> tests were performed. All differences were significant (see Table 12). That is, although all of these people held basically anti-nuclear attitudes, the activists did, indeed, show greater separation of their opinions on opposing issues.

The role of perceived responsibility was tested to some degree by responses to the items of the Citizen Role Scale. As expected, activists rated certain of these items as significantly more important to do to be a good citizen. These included thinking critically about government policies, being informed, and being willing to work outside the system to create change. There was no significant difference between groups on more neutral items like voting and working to create change within the system, although activists were significantly higher on being involved in political campaigns. Nonactivists rated certain conventional items higher, such as being law abiding, being patriotic, and supporting current government policies (see Table 13).

Four of the eleven values were selected for analysis. Results (presented in Table 14) show that activists place significantly more value on "A World at Peace" and less value on "A Comfortable Life," "Job or Economic Security," and "National Security," than nonactivists.

TABLE 12

Mean Differences between Answers to Pairs of Items Reflecting Opposing Positions on Nuclear Policy

	Me	ans (N)		
Item Pair		Nonactivists	<u>df</u>	<u>t</u>
1 & 38	5.32 (34)	3.69 (51)	83	4.16**
15 & 50	4.94 (33)	2.67 (52)	83	5.55**
22 & 44	4.79 (34)	2.71 (41)	73	5.02**
25 & 76	3.66 (32)	2.05 (43)	73	3.66*
32 & 60	5.00 (34)	3.13 (55)	87	4.49**
46 & 65	5.23 (34)	3.04 (54)	85	6.54**

^{*&}lt;u>p</u><.0005. **<u>p</u><.0001.

TABLE 13

Mean Differences between Groups on Items of the Citizen Role Scale

Item	Activists	Nonactivists	<u>df</u>	<u>t</u>
Be law abiding	4.16	5.10	88	3.13***
Voting	4.76	5.03	90	1.03
Support current ^a policies	.64	1.76	87	3.95***
Be involved in campaign	3.18	1.98	90	3.26**
Think critically a about policies	5.45	4.31	89	4.53****
Be patriotic	2.14	3.47	82	3.19**
Work within system	n 4.60	4.00	90	1.78
Be informed	5.39	4.97	90	2.11*
Volunteer to fight	1.23	3.09	85	4.37***
Work outside	5.09	3.47	89	5.70****

 $^{^{}a}\text{Satterthwaite's}$ approximation was used to compute $\underline{\textbf{t}}$ statistic and its degrees of freedom.

^{*&}lt;u>p</u><.05. **<u>p</u><.01. ***<u>p</u><.001. ****<u>p</u><.0001.

TABLE 13

Mean Differences between Groups on Ratings of Values

Value	Activists	Nonactivists	<u>df</u>	<u>t</u>
A Comfortable Life ^a	8.7	7.4	89	2.61*
A World at Peace	2.9	4.5	90	2.73**
Job or Economic Security	6.8	5.7	90	2.19*
National Security ^a	9.1	6.8	90	5.12***

 $[^]a S atterthwaite's approximation was used to compute <math display="inline">\underline{t}$ statistic and its degrees of freedom

^{*}p<.05. **p<.01. ***p<.0001.

CHAPTER IV

DISCUSSION

Group Differences

The activists in this study seemed to differ in a number of ways from the nonactivists. They have greater feelings of efficacy, as found in previous studies (e.g., Marsh, 1977). While the moderating role of trust was not tested here, simple disagreement with current handling of affairs proved to be important. Actually, there are conceptual similarities between these two. Both imply that a person does not approve of government actions. The political trust scale can possibly be reinterpreted as representing disagreement with the way things are run, Indeed, the respondent who wrote in that politicians tell the truth as they see it seems to have been expressing disagreement with what the truth is seen to be, rather than distrust in politicians' truthfulness.

Many items originally planned for a trust-related scale loaded on the Disagreement factor, including those expressing the belief that we ought to trust that the Soviets do wish to negotiate for disarmament. Also included here was the item "I trust the Reagan Administration to take the proper steps in negotiating for disarmament." Again, the issue of trust may not be as

important as the disagreement over what is proper. Finally, the straightforward policy items as well as "Communism is a threat to democratic nations everywhere," loaded on this factor. All of these items are questions of belief, not trust. So it seems that activists disagreed more with government than nonactivists but were not necessarily mistrustful of it. Supporting this idea is the fact that activists were more active in conventional politics than nonactivists. These people were not alienated from the system; they continued to use those avenues of influence, too.

Activists also seemed to have a broad, action-oriented world view, and they may be more future-oriented. They report concern with other issues such as carcinogenic food additives and the hazards of nuclear waste, which demand an appreciation of a problem which may only develop in the future. They seemed more likely to deliberately focus attention on these issues rather than to avoid them, in line with the observations of Mack. On one of the concern measures, activists reported that their concern is on their minds more often than nonactivists (\underline{t} =5.64, \underline{df} =91, \underline{p} <.0001). This may relate to Byrne's (1964) concept of repression v. sensitization to threat and worry.

Further evidence for this hypothesis comes from an examination of individual emotional responses. Activists apparently sometimes felt as depressed and helpless about the prospect of nuclear war as anyone else, but, in addition, they feel more frightened, anxious, angry, and

morally outraged. This may dispose them to take action.

Activists regarded nuclear war as more likely to occur than nonactivists, and if it were to happen, they believed the effects would be more disastrous than nonactivists. These two factors, coupled with activists' lack of avoidance and sense of efficacy, would also seem to make them more likely to take action to prevent a nuclear war.

Activists valued the goal of world peace more than nonactivists and placed less emphasis on material prosperity and security, which may occupy the time of the more conventional and less secure. Finally, activists seemed to have clearer-cut opinions; they differentiated more between positions on opposite sides of the nuclear issue.

Attitude-behavior Consistency

In general, attitude-behavior consistency was quite high here. Correlations with activism for the five scales which address attitudes and beliefs about the nuclear issue (Likelihood, Perceived Destructiveness, Severity, Expressed Concern, and Emotional Responses) were moderately high. Another variable, Disagreement, which contained considerable nuclear-relevant content, also correlated quite highly with activism. These results agree with those of Werner, who found relatively high correlations between abortion attitudes and activism. As he noted, the correlations may be high because special efforts were made to secure activists as subjects, who are

presumably engaging in a great deal of attitude-relevant behavior. Activism would thus seem to be a behavior which might be of considerable interest to those who study attitude-behavior consistency. And yet, several other variables in this study also correlated highly with activism.

<u>Limitations</u> of the Present Study

This research must be viewed as exploratory. Neither sample was random, and the control group is in particular probably not a good sample of the population it was supposed to represent—that is, all people who are not nuclear activists.

Some concepts were not adequately measured, such as trust and perceived responsibility. The former no longer seems as important, in light of the discussion of disagreement, but the latter is still worth more attention. For example, recent work by Tyler and McGraw (1984) looked at attributions for cause and prevention of nuclear war. Regardless of attributions for cause, attribution of responsibility for prevention to the self was positively correlated with anti-nuclear activism.

Many of the scales devised in this study must be viewed as experimental. Although the scales did differentiate between the two groups here, the use of factor analysis on responses from the same subjects may have capitalized on chance. It is also possible that the factor structure obtained may be unstable, due to the small number of subjects employed. Replication with a larger, random

sample would be highly desirable.

The high degree of overlap among the different variable here was unexpected, since they seemed so conceptually different. This may again be a function of the sample. And yet, it may be that activism <u>is</u> the intersection of these qualities.

Finally, these results show only that differences exist between activists and nonactivists. We cannot infer that any of these attitudes actually motivated activists to take action. It may be that activists become increasingly polarized after joining a group. And yet it may be that changes in some attitudes do correspond with the beginning of activism. Personal observations of the author indicate that both of these are likely. A longitudinal study following the couse of development of individual activists would be most interesting.

Recomendations for Activists

Bearing these points in mind, can any suggestions be made to activists who try to recruit others into their ranks? It seems possible. Even though there is no evidence here that in becoming activists people move from one set of attitudes to the other, again, it is anecdotally true that a part of this process involves moving from lesser awareness to a state of heightened awareness of the issue.

One major goal of activists is fighting against psychic numbing, simply getting the issue out in the open for

inspection and consideration. This would seem to be necessary, but the evidence here suggests that something like a personality trait will cause some to resist awareness.

Activist groups aften sponsor horrifying movies, which graphically depict the effect of nuclear explosions, or publish pamphlets showing the effect of a nuclear explosion over one's hometown. It would seem to be useful to convince people there is greater danger than they believe. It may indeed be particularly useful to concentrate on creating concrete images, such as destruction of familiar buildings, rather than images of abstract chaos. Fiske, Pratto, and Pavelchak (1984) found that subjects who responded with concrete images to the open question "What does the thought of nuclear war bring to mind?" were more likely to be activists than those who responded with images of vague destruction.

Yet here activists ought to heed the warnings of social psychologists on the use of fear in persuasion. Scaring people can backfire, unless they are given some means of acting to avert the danger (Janis & Feshbach, 1953; Leventhal, 1970). People must be given some method of dealing with their fears, which could be particularly difficult, since nonactivists may feel less efficacious than activists.

Suggesting action is difficult also because even activists sometimes feel helpless. But perhaps something as simple as signing a petition might be a start and might

also serve as a "foot-in-the-door" (Freedman & Fraser, 1966), in that people who perform this simple, low-cost act may come to think of themselves as supporters of the cause and be more prone to perform greater acts later (Snyder & Cunningham, 1975).

The findings that activists reject conservative views on issues is not encouraging in this year of the reelection of Ronald Reagan. Activists might do best to look for supporters among the liberal and politically active. Yet this limitation might not apply if the issue can be made into a moral one. Gorsuch and Ortberg (1983) found that when a situation is seen as a moral situation, subjects' perceived moral obligations were more important in determining intent to act than their attitudes toward the issues. Activists therefore might try to encourage alternate emotional reactions to the issue such as anger and moral outrage. Many churches have taken this tack.

Finally, activists might try to point out out discrepancies in the logical structure of nonactivists' opinions. This might encourage them to seek cognitive consistency by differentiating more between viewpoints on opposite sides of the issue. Thus, they might become more strongly anti-nuclear.

Recently, Ball-Rokeach, Rokeach, and Grube (1984) have demonstrated that people who viewed a TV show making certain values more salient became more likely to donate money to organizations supporting causes related to these

values. Perhaps activists should try to stress the value of a world at peace as an antidote to the horrors of nuclear war.

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1. Wrigley, C.F. Personal communications, 1982.

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APPENDIX

POLITICAL ATTITUDES AND NUCLEAR WAR

This survey contains some questions about general political attitudes and others concerning the issue of nuclear disarmament and the risk of nuclear war. The purpose is, first, to find out how concerned people are about this subject; second, to see what people are doing about their concern; and finally, to learn how feelings about the nuclear issue relate to beliefs about politics in general.

I am interested in your views on this subject and would appreciate your cooperation in filling out this survey. It takes about 30 minutes to complete, and I hope you find it interesting. The responses of individuals will be completely confidential and anonymous: Please do not sign your name. A summary of results for the total group of people who fill out this questionnaire will be available upon request from the Dept. of Psychology at MSU.

This research is being conducted for my master's thesis in psychology under

the direction of Prof. Charles Wrigley.

Thank you for your help.
Diane Darland
Dept. of Psychology, Snyder Hall
349-2816 or 355-2162

I.	Sex Age Married? No. of children Are you a student?
	Last grade or degree completed Area of study
	Occupation Hours worked per week
	Do you consider yourself religious? Religious preference
	Are your political beliefs: (please circle one) very conservative/conservative/moderate/liberal/very liberal/radical
11.	Do the spending and policies of the federal government reflect the priorities you think govt. ought to have? To what degree are you satisfied?
	100% 95% 90% 80% 70% 60% 50% 40% 30% 20% 10% 5% 0%
	Please name, if you can, 3 things you feel the govt. should do which it's not doing:
	1. 2.
	3.
	Please name, if you can, 3 things the govt. shouldn't do which it is doing: 1.
	2.
	2

XVI.	1.	Do you wish something could be done to reduce the number of nuclear weapons in the world?									
		Yes / No / Don't Know									
	2.	Have you thought about personally doing something to support nuclear disarmament?									
		Yes / Maybe / No									
	3.	The following is a list of reasons people give to explain why they don't work to support nuclear disarmament. Do any of them apply to you? (Please check all the ones that you agree with.)									
		I think the U.S. needs nuclear weapons for defense.									
		Frankly, I don't care that much about it.									
		I don't think a nuclear war is that likely.									
		I just don't think that much about the issue.									
		I'm not emotionally involved in the issue.									
		_ It doesn't seem like an emergency to me.									
		_ I don't believe disarmament is possible.									
		_ I don't really know what to do.									
		_ I don't think there is anything I could do that would be effective, because the people in govt. who decide these things wouldn't listen to me.									
		_ I don't think it would help, because the Russians aren't interested in cooperating.									
		_ I don't feel I could make a very great contribution to the effort.									
		_ We should support the government's efforts on this issue, not dissent.									
		_ I have more important things than this to worry about.									
		_ I'm too busy with my job.									
		_ I'm too busy with school.									
		_ I'm too busy with my family.									
		_ I'm too busy with my personal life.									
		_ I'm prevented by health reasons.									
		This isn't my responsibility; the country's leaders should take care of it.									
		_ Enough other people are doing something.									
		_ I devote my time to other issues.									
		_ Such matters are in the hands of God.									
		Are there any other comments you'd like to make?									

XVI. The following section has to do with reasons why you are active.

If the statement is an important reason why you are currently active, put a check in the space in <u>front</u> of it.
If coming to the belief indicated by the statement was an important reason in why you became active (such as coming to believe there are effective things you can do) put a check in the space behind it. (You might check both)
<u>Effectiveness</u>
I think there are effective things I can do
Doing something is better than doing nothing
Attitudes toward Activity
Demonstrations are fun
I don't trust leaders to handle this
I think it's important to do my part
It's my moral responsibility as a religious person
It's my ethical responsibility as a human being
Emotional Responses
I'm angry
I'm morally offended
I'm afraid
Nuclear Attitudes
I'm concerned about my children's future
I'm concerned about the fate of the earth
I'm concerned about destruction of animal and plant life
I'm concerned about the destruction of civilization
I'm concerned about what life would —— be like after a nuclear war ——
I think nuclear war is likely unless I do something
I see nuclear weapons as a symbol of —— America's misplaced priorities ——
I'm concerned about the future of the human race
Other Reasons for Becoming Active
I found a group which was working on the issue
I became less busy
Reagan went too far with his talk of military build-up
I simply became aware of the issue, began thinking about it

I met a person who was active, or a friend became active ____

	•	· · · · · ·	r				
III.	How involved in politics are you? Please check off one box in each row to indicate how frequently you do each of the following:	regularly	often	sometimes	seldom	never	
	Do you read about politics in the newspaper?						
	Do you discuss political issues with friends or family?						
	Do you contact public officials or politicians?						
•	Do you vote in elections?					-	
•	Do you try to persuade friends to vote as you do?						
	Do you attend political meetings or rallies?						
•	Do you ever work for a political candidate?						
	U.S. citizen. Please rate each one of these ideas for you to do in order to fulfill your role as a c scale and put a number (from 0 to 6) in the blank not at all necessary 0 1 2 3 4 5 to do to be considered— a good citizen of medium importance	itize in for 6 at	en. Tront d	Jse to feach tely to be	he fo ch be neces cons	llowing havior	:
	Be law abiding						
	Vote in elections						
	Support current policies of government						
	Be involved in political campaigns						
	Think critically about government policies						
	Be patriotic			•			
	— Work within the political system to change pol disagree	icies	with	n whi	ch yo	u	
	Be informed about current events						
	Volunteer to fight in a war like World War II						
	Be willing to work outside the political syste with which you disagree (form groups of like-m educate neighbors, participate in public prote	inded	l peop	ile, ı	work '	to	

- V. 1. Generally speaking, would you say the government runs this country for the benefit of a few big interests, or is it run for the benefit of all (circle one) the people? few big interests / all the people

 - 2. How much do you trust the govt. in Washington to do what is right? just about always/most of the time/only some of the time/almost never
 - When people in politics speak on television or to the newspapers or in Congress, how much, in your opinion, do they tell the truth? just about always/most of the time/only some of the time/almost never
 - How much do you trust politicians from either party to put the needs of this country above the needs of their own party? just about always/most of the time/only some of the time/almost never
- VI l. How interested are you in national politics and government? (circle one) very interested/interested/somewhat interested/not very interested
 - 2. How interested are you in international affairs and U.S. foreign policy? very interested/interested/somewhat interested/not very interested
 - How interested are you in local govt. and politics and community affairs? very interested/interested/somewhat interested/not very interested
- VII. Below is a list of 11 values arranged in alphabetical order. Please rank them in order of how important they are to you as guiding principles in your life. Put a 1 next to the value which is most important to you, a 2 next to the value which is 2nd in importance to you, and so on, so that the value which is least important to you, relative to the others, is ranked 11th. Some people find this easier to do if they first pick out the ones which are most important, then the ones which are least important (from 11 up), then worry about the ones left in the middle.

A COMFORTABLE LIFE (a materially prosperous life)
A WORLD AT PEACE (free from war and conflict)
CONCERN FOR OTHER PEOPLE
EQUALITY (social and economic equality)
FREEDOM (independence, free choice)
JOB OR ECONOMIC SECURITY
NATIONAL SECURITY (protection from attack)
PERSONAL SAFETY (no fear of crime for self or home)
PLEASURE (enjoyable leisure time)
PRESERVATION OF THE ENVIRONMENT
SALVATION (saved, eternal life)

- VIII. When driving or riding in a car, how often do you wear a seat belt?

 almost always / sometimes / seldom / never
 - IX. 1. Who do you think is ahead in the nuclear arms race? (circle one)
 - A. The U.S. has superior nuclear forces.
 - B. The U.S.S.R. has superior nuclear forces.
 - C. The U.S. and U.S.S.R. are roughly equal
 - 2. How many news stories have you read or heard in an average week recently about issues related to nuclear disarmament, nuclear weapons, nuclear war, or various countrys' policies on these subjects?
 - 0 / 1 to 3 / 4 to 6 / 7 to 9 / 10 or more
 - 3. What do you think the U.S. should do regarding the planning, production, and deployment of nuclear weapons? (check more than one if you need to)
 - A. Keep planning only
 - B. Keep planning and producing, but not deploying
 - C. Keep planning, producing, and deploying
 - D. Negotiate a bilateral nuclear freeze (involving both the U.S. and U.S.S.R.) calling for a halt in development, production, and deployment of all nuclear weapons, missiles, and delivery systems in a way that can be checked by both sides
 - E. Unilaterally halt planning, production, and deployment
 - 4. What is your position on nuclear disarmament?
 - A. I don't support disarmament.
 - B. The U.S. should begin negotiations with the Soviet Union aiming at bilateral disarmament.
 - C. The U.S. should begin unilateral (one-sided) disarmament.
 - 5. What do you think is the biggest barrier to nuclear disarmament?
 - X. 1. What do you think is the most important problem facing the U.S. today?
 - 2. If this problem rates a "10" in importance, what number, from 9 down to 0, would your assign to the issue of nuclear disarmament and the risk of nuclear war?
 - 3. Do you see these 2 issues as: A. Connected B. Separate
 - XI. 1. How concerned are you about national security?

extremely very concerned concerned concerned concerned

2. How concerned are you about the possibility of a nuclear war occurring?

extremely very concerned concerned concerned concerned

3. How much is this concern on your mind? That is, how much do you actually think about the prospect of nuclear war?

3-4 more than almost 1-2 less than almost once times times once once every a day never a day dav a week a week a week

4. How do you handle your concern?

XII. 1. How likely is it that there will be a nuclear war in the next 5 years?

almost very somewhat 50-50 somewhat very almost unlikely unlikely impossible

2. Within the next 20 years?

almost very somewhat 50-50 somewhat very almost inevitable likely likely unlikely unlikely impossible

3. Within your lifetime?

almost very somewhat 50-50 somewhat very almost inevitable likely likely unlikely unlikely impossible

- XIII. When you think about nuclear weapons or nuclear war or hear a news story referring to the subject, what emotional reactions do you have? Please circle your responses to the following on a scale from 0 to 6:
 - 1. Do you feel worried or anxious?

0 1 2 3 4 5 6 not very very

2. Do you feel angry?

0 1 2 3 4 5 6

3. Do you feel depressed or helpless?

0 1 2 3 4 5 6

4. Do you feel morally outraged?

0 1 2 3 4 5 6

5. Do you feel vulnerable, threatened, or frightened?

0 1 2 3 4 5 6

63	·						
	YES	I H		NC) I	HAV	EN'T
XIV. In the past year, have you done (or would you be willing to do) any of the following in support of nuclear disarmament? Please check off one response in each row:	regularly	several times	at least once	but would be	willing to	but might do	and would never do
Discussed the issue with friends or family							
Argued about the issue to change someone's opinion							
Paid special attention to news media stories							
Sought additional material in order to find out more about the subject						•	
Attended speakers, films, or church meetings about the subject							
Written Congressmen							
Written a letter to the editor, pamphlet, etc., designed to inform or convince people							
Signed a petition							
Circulated a petition							
Passed out information							
Donated money							
Attended meetings of a group whose focus is taking action on this issue							
Led or assisted in leading an organized group							
Participated in a protest march or rally							
Addressed an audience							

XV. What do you think of the effectiveness of each of the following strategies people use in pressing for nuclear disarmament?

1.	Contacting elected officials	very effective	somewhat effective	not very effective	not at all effective
2.	Petition drive	very effective	somewhat effective	not very effective	not at all effective
3.	Educating people	very effective	somewhat effective	not very effective	not at all effective
4.	Public demonstrations	very effective	somewhat effective	not very effective	not at all effective

- XVII 1. What type of damage do you think will result from a nuclear war?
 - A. Damage mostly to military areas
 - B. Damage mostly to military areas and major cities, smaller cities and rural areas left relatively undisturbed
 - C. Damage mostly to military areas and major cities, but fallout a problem in most other areas
 - D. Extensive, unpredictable damage. Few cities left untouched. Vast areas of devastation.
 - E. Virtually total devastation of the entire continent.
 - 2. What do you think medical care will be like after a nuclear war?
 - A. It will be generally adequate, with a little advance planning
 - B. There will be problems treating the injured
 - C. Medical care will be woefully inadequate
 - 3. How long after a nuclear war do you think radiation will be a problem?
 a few days / a few weeks / a few months / a year or so / years
 - 4. How long after a nuclear war do you think it might take to restore:

long distance telephone service? days/weeks/months/few years/many years
food production and distribution
to normal? days/weeks/months/few years/many years

current standard of living in U.S.?

days/weeks/months/few years/many years

XVIII. 1. What percent of your 1982 tax dollar do you think is slated to be spent on the military?

5% 10% 15% 20% 25% 30% 35% 40% 45% 50% 55% 60%

- 2. Which of the following is true with regard to the balance of land- and sea-based nuclear warheads?
 - A. U.S. has more sea-based warheads, U.S.S.R. more land-based
 - B. U.S. has more of both types
 - C. U.S.S.R. has more of both types
 - D. U.S. has more land-based, U.S.S.R. has more sea-based
- President Reagan has stated that the U.S. will not be the first to use nuclear weapons in Europe, even if the Soviets launch an attack with conventional forces.

True / False

4. The Russians were the first to introduce MIRV's (multiple, independently-targetable warheads on a single missile) in 1974, thus significantly accelerating the arms race.

True / False

5. What is a cruise missile like?

Please indicate the extent to which you agree or disagree with each of these statements by writing a number from the following scale in the space in front of each:

+2 = 1	I strongly agree I agree I tend to agree	O = I neither agree nor disagree	-3 = I strongly disagree-2 = I disagree-1 = I tend to disagree
			nding on nuclear arms and cessary for national defense.
Th	ne U.S. should maint	ain missile bases close	to the Soviet border.
Pe	eople like me have n	o say in what the gover	nment does.
Pa	acifism is simply no	t a practical philosophy	y for the world today.
Hu	ıman nature is funda	mentally cooperative.	
	ne nuclear arms race orld we live in.	is mostly a response to	o the difficult and dangerous
		and I knew the Soviets I rder our missiles fired	had launched a nuclear attack in retaliation.
	enerally speaking, to cople pretty quickly		ssmen lose touch with the
	nuclear war could v fe.	ery likely destroy the e	earth's capacity to sustain
I	follow what's going	on in government most of	of the time.
We	should plan for a	limited nuclear war.	
	isn't so important chance to win.	to vote when you know y	your candidate doesn't have
It	's easy to avoid th	inking about nuclear wa	r.
	ting is the only wa evernment runs thing		ve any influence on the way
		creases in nuclear arms ment from a position of	
I	consider myself a c	itizen of the world.	

___ The aftermath of a nuclear war will be utter chaos.

+3 = I strongly agree +2 = I agree +1 = I tend to agree 0 = I neither agree nor disagree -3 = I strongly disagree -2 = I disagree -1 = I tend to disagree
If enough people demonstrate their concern, we can bring a halt to the arms race.
National and international happenings just don't seem relevant to my life.
People like me can have little influence in what happens in society at large
Sometimes I feel I ought to take action to support a cause, even if the probability of success is small.
More new nuclear weapons and delivery systems make the U.S. safer.
I am concerned about the future hazard posed by radioactive wastes from nuclear power plants.
Communism is a threat to democratic nations everywhere.
Nuclear war is an awful prospect. But that's exactly why deterrence works. Neither side dares to start a war.
After a nuclear war, the survivors will envy the dead.
There is not much I can do about most of the important problems that we face today.
I have been economically secure most of my life.
With the type of weapons now available and the uncertainty in international affairs, it would be relatively easy for a nuclear war to start by mistake.
I trust the Reagan Administration to take the right steps in negotiations with the Soviet Union regarding nuclear disarmament.
By taking an active part in political and social affairs, the people can control world events.
We must devise nuclear strategies that will allow the U.S. to emerge as the winner in the unfortunate event of nuclear war. After all, the Soviets are trying to do the same.
We should be willing to let American investments in foreign countries be lost if the only alternative is war.
Sending food and other badly needed supplies to other nations will do more to maintain stable world relations than will the policy of increasing our military strength.
Nuclear war could mean the end of the human race.
It is more important to solve current U.S. economic problems than to try to bring about world peace.
Members of a vocal minority have less impact on social issues than they think they do.

+3 = I strongly agree +2 = I agree +1 = I tend to agree	O = I neither agree nor disagree	
	ected to be spent on nuc urgently in other areas.	lear weapons over the next 5
All in all, I'm prett	y satisfied with the fut	ure I see for myself.
There's very little w	e can do to bring about	a lasting world peace.
People will generally	take advantage of you i	f they can get away with it.
There are things I ca	n do to have an influenc	e in current affairs.
as education, job tra	ms supported by the fede ining, health care, and he current administratio	ral government in areas such the alleviation of poverty n.
More new nuclear weap	ons systems make the U.S	. less safe.
I think it is importa cigarettes, and alcoh	nt to avoid addictions tol.	o things like caffeine,
	a nuclear war through ad to handle circumstances	equate civil defense and after the war.
The international sit clearly about many is		t it is difficult to think
Political parties are opinions.	only interested in gett	ing votes, not in people's
— Nuclear war would cau civilization.	se only a temporary setb	ack in the progress of Western
		apons fuels the never-ending viets to respond in kind.
It is contrary to my of other people.	moral principles to part	icipate in war and the killing
I get angry when I he	ar talk of a "winnable" :	nuclear war.
Children under 12 are	tooyoung to be worried a	about injustice in society.
We can't trust the Ru	ssians at all.	
Nuclear war is probab	ly inevitable.	
I am making good prog	ress toward reaching my	life goals.
The nuclear arms race by U.S. decision make	is mostly a result of cors.	onscious militaristic choices

+2	I strongly agree 0 = I neither agree -3 = I strongly disagree -2 = I disagree -1 = I tend to disagree	
	Nuclear war is not as great a threat as some say.	
	Sometimes politics and government seem so complicated that a person like me cannot really understand what's going on.	
	There can be no "winner" in a nuclear war; nuclear weapons are so far beyond conventional weapons in destructive capacity that a nuclear exchange cannot properly be called a war.	
	The existence of nuclear weapons is offensive to some of my deepest moral peliefs.	
	J.S. arms sales to 3rd world countries provide those countries with a strong defense, so they can develop without harassment by greedy neighbors.	
	merican society is basically unjust, and revolutionary changes are needed n its economic system.	
	his world is run by the few people in power.	
	Our civilization and the values we believe in could very well be destroyed by the nuclear war we fight to protect them.	
	t makes sense to try to avoid the things scientists have declared to be arcinogenic.	
	ith regard to death, I am unprepared and frightened.	
	hen I have a problem or worry, I try not to think about it, but to keep busy ith more cheerful things.	,
	believe the existence of nuclear weapons threatens the future of the hildren of the world.	
	don't worry much about people in other parts of the world.	
	t feels good to publicly express what I believe in.	
	e should believe the Soviets when they say they're interested in disarmament	•
	understand the important national and international issues facing the .S. pretty well.	
	ou can't blame people who don't have the time for not doing more about ocial problems.	
	don't think public officials care much what people like me think.	
	eterrence is based on mutual fearfear which grows ever greater, leading o suspicion and irrationality which could trigger a nuclear war.	

