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ATTITUDINAL EFFECTS OF SOURCE CHARACTERISTICS,
TYPE OF COMMITMENT, AND CHOICE TO LISTEN TO
DISSONANT INFORMATION

by

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I. INTRODUCTION

Since the original study by Hovland and Weiss (1951), it has been frequently demonstrated that a highly credible or attractive source produces more attitude change in a persuasive communication situation than an uncredible or unattractive source. The original explanation of these results focused on the source's potential influence on such factors as attention, comprehension, learning, and acceptance of the communication (Hovland, Janis, and Kelly, 1953).

In contrast, Jones and Brehm (1967) have contended that the direct relationship between positiveness of source and attitude change in the usual persuasive communication study results from the absence of choice as to whether or not to be exposed to the persuasive communication. As a result, dissonance does not derive from a voluntary decision to be exposed, but rather from the cogency of the message and the nature of the source. With message held constant, more dissonance is aroused by the positive than the negative source. Hence, the positive source will produce greater attitude change than the negative. But, given a condition of choice, they predict that the negative source will produce more attitude change than the positive; for agreeing to listen to a counter-attitudinal message creates dissonance, which is then enhanced by the negative source. Thus Jones and Brehm predict an interaction between source characteristics and degree of choice (cf., Zimbardo, 1960).

An alternative approach to the analysis of cognitive inconsistency is Baron's (1968) functional orientation. From this view, whether or not choice and commitment are of central significance in a forced compliance paradigm is a function of the type of task or dilemma involved.

Within this framework, inconsistency per se is not an autonomous motive, but derives its motivational effect from its signal properties. That is, the inconsistency provides cues concerning the adequacy of the individual's coping mechanisms. In the usual communication setting, the source of the inconsistency lies in an attitude-behavior discrepancy whose motivational effect derives from the arousal of uncertainty concerning the validity of the original attitude; that is, a persuasive communication or counterattitudinal essay generates new inconsistent cognitions and makes salient any inconsistency existing in the system. This is to be contrasted, for example, with a "moral" dilemma where a norm violation involving a value-behavior discrepancy is the basis of the inconsistency.

If the locus of inconsistency lies in a concern over the correctness of one's initial opinion, then the accompanying affective reactions of doubt and uncertainty will trigger cognitive needs to establish a correct opinion. From an experiment by Kelman and Baron (Baron, 1968), it appears that it is the content of the counterattitudinal act which induces cognitive re-evaluation of the attitude object, not the act itself (cf., Weick, 1966). In such a situation, choice should be a relatively unimportant factor.

Thus, the dissonance and functional approaches should make alternative predictions concerning a choice x source interaction:

Prediction 1: According to dissonance theory, attitude change will be a direct function of communicator characteristics under no choice conditions and an inverse function under choice conditions. Therefore, there will be an interaction between choice and communicator characteristics. In contrast, according to a functional approach, choice is not particularly important in an attitude-behavior inconsistency situation, and therefore under both choice and no choice conditions, attitude change will be a direct function of communicator characteristics.

Furthermore, according to Baron (1968), the corrective strategies employed under an attitude-behavior inconsistency will most likely involve social comparison processes; hence this situation is labeled a "consensual validation dilemma." Given the mechanism of social comparison, it follows that an individual with a positive self image will find himself more similar to an attractive than an unattractive source (cf., Stotland and Hillmer, 1962). Hence as Baron (1968, p. 305) says: "In the absence of any objective source of validation, subjects who have a cognitive need aroused concerning the validity of their opinions are more likely to move towards the attitudinal position of similar than dissimilar persons since the former are more likely to provide a more stable basis of social comparison (cf., Festinger, 1954)." Alternatively, one could argue that since the basic motivation in a consensual validation dilemma is to be correct, the strongest effect should accrue from a source defined in terms of expertise (i.e., "expertise" validation). This dichotomy is similar to Bauer's (1965) distinction between two strategies in the attitude change situation: the psychosocial game of ingratiation and ego defense focusing on source attractiveness, and the problem-solving game of coping with real world problems focusing on source competence. Thus, if two bases of regard for the source are employed, namely, credibility and attractiveness (cf., Kelman, 1961), the mechanism of attitude change operating in the present communication situation may be discriminated.

Prediction 2: If the basic motivation in a consensual validation dilemma is to be correct, then there will be greater attitude change if the communicator is defined in terms of credibility than in terms of attractiveness. On the other hand, if the mechanism producing change is one of social comparison, then the communicator defined in terms of attractiveness will produce more change than one defined in terms of credibility.

Supposedly supportive of the dissonance-predicted interaction between choice and credibility are studies involving compliance to a positive or negative inducing agent with respect to some overt counter-attitudinal act (Kiesler and DeSalvo, 1967; Powell, 1965; Smith, 1961; Zimbardo, Weisenberg, Firestone, and Levy, 1965; Zimbardo, 1964; Weick, 1964). In extending these experiments to a communication setting, Jones and Brehm (1967) considered the commitment to listen to a persuasive communication as equivalent to a commitment to engage in attitudinally discrepant behavior. However, there are numerous difficulties with the actual procedure they used. Only a few will be mentioned here. The first concerns the so-called choice manipulation. The "no choice" condition was actually an accidental hearing of a persuasive communication and therefore is not directly comparable to the involuntary compliance condition employed by Powell (1965) nor to the usual communication situation. The "choice" condition was operationalized as a voluntary compliance situation but did not involve a commitment to engage in counter-attitudinal behavior, since the subject was merely told that he could choose to listen or not to listen to a persuasive communication on some unknown issue. Thus neither the topic nor the directionality of the speaker's position was made salient at the time of choice. Hence, it is questionable that dissonance was aroused by the original commitment to listen to a communication. Actually, it appears that two kinds of choice were involved: one the one hand, subjects were or were not given a forewarning of the persuasive communication; and on the other, they could choose to listen or not to listen when the message was actually presented. With respect to the latter choice, the so-called "no choice" group had in reality the greater degree of choice. Thus,

although the predicted interaction was obtained, the basic conditions required to test the dissonance hypotheses were not met, and, therefore, the underlying assumptions have yet to receive confirmation.

What the subject's choice entails is further complicated by the fact that there are two possibilities in a communication situation. Specifically, one might be asked to commit oneself to listen to a communication where only the attitudinal direction is specified, but with the source of the message announced after the commitment. Alternatively, both the attitudinal direction and the source are known at the time of the commitment. It would appear that, in general, the latter situation more closely parallels choices in the real world than does the former. Since no research has addressed itself to the effect of this variation in knowledge at the time of commitment, the appropriate comparison conditions were introduced into the current study.

From a dissonance point of view, one could argue that if the commitment is to exposure to dissonant information alone, then the introduction of the source after the commitment should influence the effectiveness of the message, but not the amount of dissonance. Hence a positive relationship would be predicted between attitude change and positiveness of regard for the source, regardless of choice condition. In contrast, if the commitment is made with knowledge of the source, then the magnitude of dissonance should vary as a function of regard for the source; and one would expect a negative function under choice conditions. Thus:

Prediction 3: According to dissonance theory, there will be an interaction between type of commitment and source characteristics; that is, there will be a positive relationship between attitude change and positiveness of regard for the source (whether due to credibility or attractiveness), when

the commitment is to dissonant information only, and a negative relationship when the commitment is to listen to dissonant information to be presented by a specific source. A functional point of view should predict a positive relationship regardless of the type of commitment.

It should be noted that the argument regarding a differential effect as a function of when the source information is presented is similar to that of Freedman (1963) with respect to the timing of verbal justification for compliance and to that of Rossomando and Weiss (1970) with respect to the timing of presentation of a monetary incentive for compliance.

The predicted interaction between choice and source characteristics rests on the assumption that individuals tend to avoid attitudinally discrepant information, since it will arouse dissonance (Jones and Brehm, 1967). If this assumption is not valid, then the two "choice" conditions of the Jones and Brehm experiment are the same. In order to test the assumption, a baseline provided by a "free choice" control group is needed; the responses of such a group will reveal the percentage of subjects who will choose to listen to the attitudinally discrepant information under no pressure for compliance.

Prediction 4: Based on the responses of the "free choice" control group, there will be a strong tendency to choose to listen to supportive information, especially if unfamiliar content is anticipated (Jones and Brehm, 1967, p. 69).

To strengthen further the argument that dissonance is aroused by the experimental procedures, the present study will include an initial measure of the subject's willingness to listen to counterattitudinal information. This will serve as an index of the dissonance aroused by his subsequent compliance. Thus, it will be assumed that, of the subjects who comply in the experimental session, those who initially stated that they did not desire to listen to the counterattitudinal information

will experience more dissonance than those who did not object to such exposure. Since dissonance and attitude change are assumed to be positively related, the following prediction can be made:

Prediction 5: In all conditions, greater attitude change will be exhibited by those subjects who on the initial measure indicated they would prefer to listen to supportive information than by those who indicated they would prefer to listen to counterattitudinal information.

It is also important from a dissonance point of view to conceptualize the differences between high choice, low choice, and no choice. However, it should first be noted that the method of operationalizing degrees of choice is separate from the problem of what the choice entails. Specifically, dissonance theorists have employed two kinds of choice - "X vs. not-X" and "X vs. Y." In most of the so-called forced compliance studies, the former choice situation is involved; whereas, the latter situation is usually employed in tests of the hypothesis of avoidance of dissonant information (see Freedman and Sears, 1965) and in so-called "free choice" paradigms (Brehm and Cohen, 1962). Theoretically, it is not at all clear which type of choice is more appropriate for the present communication situation. However, it seems that an "X vs. not-X" type of choice involving a choice to listen to a specific message (or message by a specific source) vs. not listening to anything (or least not to the opposite of X) more closely parallels choices in the real world.

Returning to the problem of how degree of choice is best operationalized, one can only point out that, in the usual dissonance experiment, it is assumed that choice is inversely related to the amount of justification for compliance. However, it is possible that choice and justification vary independently of each other. For example, Powell's

(1965) involuntary compliance condition was supposed to represent a low choice condition and, therefore, to result in greater attitude change for the negative inducing agent than for the positive, but less change than for a high choice group. In actuality, however, the involuntary compliance group received the same justification for compliance as the voluntary compliance group (i.e., a persuasive communication), but their compliance (i.e., to donate blood) was taken for granted in the instructions. Thus, this group represents a no choice group, according to the present interpretation (i.e., no choice concerning the counterattitudinal behavior is offered and therefore compliance is assumed), and should have produced the usual direct function between source characteristics and attitude change. But, no differences were obtained as a function of degree of regard for the source.

In the present study, degree of choice will be operationalized by varying the amount of justification for listening to a counterattitudinal communication. The following levels will be represented: a free choice baseline (pre-measure for all subjects); high choice, where a choice between listening or leaving the experiment is offered (i.e., choice is made salient) but there is minimal justification for the listening alternative; low choice, where the choice between listening and leaving is made salient and justification is given for the listening alternative; and no choice, where there is forewarning of the communication to be presented (i.e., choice is not offered nor made salient and compliance is assumed). Given these conditions of choice, the various theories again make differential predictions.

Prediction 6: According to dissonance theory, the greater the choice (i.e., the less the pressure or justification for compliance), the greater the dissonance and hence attitude change. In the present situation, there will be greater

attitude change for high than for low choice groups and least change for no choice. In contrast, a functional or incentive formulation (Janis and Gilmore, 1965) predicts that the greater the justification for compliance, the greater the attitude change. Hence there will be greater attitude change for low than for high choice which in turn will be greater than no choice (i.e., no justification for listening).

Another problem which arises in all dissonance experiments is the possibility of differential loss of subjects across groups as pressure for compliance decreases. Inherent in this selective sample loss is the question of what are the subjects' internal motivations for participating in the counterattitudinal behavior. From a consideration of the personal motives for counterattitudinal participation, it may be possible to differentiate those subjects, in the low and no choice conditions, who would have participated without the additional justification for compliance, from those for whom the justification is crucial in their agreeing to engage in the counterattitudinal behavior. Thus in general, it would be helpful to have some measure which differentiates "participants" from "refusers," as well as a measure of the degree to which participation entails some "prior commitment" deriving from selected subject characteristics.

Since it has been found that volunteers are more persuasible than non-volunteers (Rosnow and Rosenthal, 1966), that volunteers are higher on N-approval than non-volunteers (Leipold and James, 1962; McDavid, 1965), and that N-approval as measured by the Marlowe-Crowne Social Desirability Scale (SDS; Crowne and Marlowe, 1964) is correlated with persuasibility (Salman, 1962) and with conformity (Crowne and Marlowe, 1964), a good case can be made for employing N-approval scores as an indirect index of such "prior commitment." Because the Marlowe-Crowne construct is defined in terms of the need for approval of important

others and the need to avoid self-criticism, one can contend that, in the present study, N-approval scores will reflect the subject's motivation to cooperate with the experimenter and/or what Rosenberg (1965) has called "evaluative apprehension." If the Marlowe-Crowne SDS does indeed tap such motivations, then one would expect higher N-approval scores for those subjects who agree to participate than for those who refuse to participate. In addition, one would expect that subjects scoring above the median on the N-approval scale will exhibit greater attitude change than those scoring below the median. Furthermore, in the low choice and no choice conditions, subjects scoring high on N-approval will exhibit a degree of attitude change more like subjects in the high choice condition than like low N-approval subjects in the low or no choice conditions; for the additional justification or pressure provided for compliance is not crucial in producing compliance for these high N-approval subjects. This expectation is based on the assumed reliability of McDavid's (1965) finding that as pressure for compliance decreases, N-approval increases. Lastly, if the relationships between N-approval and volunteering and between N-approval and persuasibility are stable, one can argue that these relationships underlie the greater attitude change usually obtained in so-called high choice conditions of dissonance experiments. Since these conditions essentially involve volunteering under minimal pressure for compliance (as usually operationalized), they should result in a high proportion of high N-approval subjects, relative to a low choice condition; and, it is the high N-approval subjects who would exhibit the greater attitude change. The validity of this latter argument, of course, hinges on the prior demonstration of a disproportionate loss of low

N-approval subjects as pressure for compliance decreases.

In summary of the previous discussion, the following alternative predictions and additional hypotheses can be stated:

1. Choice x Source Characteristics

Dissonance theory predicts an interaction between choice and source characteristics, such that, attitude change will be a direct function of communicator characteristics (i.e., credibility or attractiveness) under no choice conditions and an inverse function under choice conditions. A functional approach predicts a positive relationship under all choice conditions.

2. Choice Main Effect

Dissonance theory predicts greater attitude change for high than for low choice groups and the least change for no choice. In contrast, a functional or incentive formulation (Janis and Gilmore, 1965) predicts greater attitude change for low than high choice, which in turn will be greater than no choice.

3. Type of Commitment x Source Characteristics

Dissonance theory predicts an interaction between types of commitment and source characteristics; that is, there will be a positive relationship between attitude change and regard for source when the commitment is to listen to dissonant information only and a negative relationship when the commitment is to listen to dissonant information to be presented by a specific source. A functional point of view predicts a positive relationship regardless of the type of commitment.

4. Type of Commitment x Source Characteristics x Choice

Given the validity of the dissonance predictions outlined in (1) and (3), it follows that there will be a triple interaction among type

of commitment, source characteristics, and choice. Specifically, under choice conditions, there will be a positive relationship between source characteristics and attitude change given commitment to dissonant information only; whereas, the relationship will be negative under commitment to dissonant information to be presented by a specific source. Under no choice, there will be a positive relationship between source characteristics and attitude change under both types of commitment.

5. Choice x Initial Position

Given a commitment to listen to a counterattitudinal communication, subjects holding extreme attitudes will experience greater dissonance as a function of the greater attitude-communication discrepancy than moderate or neutral subjects and hence will exhibit greater attitude change. If there is no commitment to listen (i.e., no choice), then although the more extreme subjects are faced with a greater discrepancy than the more moderate subjects, the former are more likely than the latter to discredit the message content and/or derogate the source, and hence exhibit less attitude change. Thus there will be an interaction between initial position and choice (cf., Cohen, Terry, and Jones, 1959). In contrast, an assimilation-contrast approach (Sherif, Sherif, and Nebergall, 1965) should predict greater attitude change for the moderately opposed subjects than for the extremely opposed across choice conditions. This is based on the assumption that the former will assimilate the content of the message and hence change their opinions; whereas, the latter will contrast the content and exhibit little or no attitude change.

6. Preference for Supportive Information and Relationship to Attitude Change

- a. In a free choice condition, there will be a strong tendency to

choose to listen to supportive information especially if unfamiliar content is anticipated.

b. In all conditions, greater attitude change will be exhibited by those subjects who on the initial measure indicated they would prefer to listen to supportive information than by those who indicated they would prefer to listen to counterattitudinal information.

7. Source Definition Effect

If to be correct is the basic motivation underlying a consensual validation dilemma, then a communicator defined in terms of credibility will produce greater attitude change than one defined in terms of attractiveness. Alternatively, if the mechanism producing change is one of social comparison, a communicator defined in terms of attractiveness will produce greater attitude change.

8. N-approval, Attitude Change, and Choice

a. There will be a negative relationship between N-approval and refusing to participate.

b. There will be a positive relationship between N-approval and attitude change.

c. As the pressure for compliance decreases, the proportion of high N-approval subjects will increase.

II. METHOD

A. Design

As depicted in Table 1, the experimental design comprised a 3x2x2x2 factorial arrangement of degree of choice to listen to counterattitudinal information (high, low, and no choice), basis of regard for source (credibility vs. attractiveness), degree of regard for source (high vs. low), and type of commitment (commitment to listen to counterattitudinal information only vs. to counterattitudinal information to be presented by a specific source). In addition, there was a message-only control group (C1) and a before-after attitude-only control group (i.e., no experimental treatment group, C2). The before-after attitude design entailed two sessions, the first a group session of approximately one-half hour and the second an individual session of approximately one hour.

B. Subjects

The experimental subjects were 240 undergraduates (120 male, 120 female) in introductory psychology classes at Montgomery College, Rockville, Maryland. Subjects were randomly assigned to experimental conditions from each of the initial attitude groups, such that, in each cell the following distribution of initial attitudes obtained: six extremely opposed ("11"- "10" on an 11-point scale), three moderately opposed ("9"- "7" on the scale), and one neutral ("6" on the scale) resulting in 10 subjects per cell.* In addition, there was an equal distribution of the

* Because there was only one neutral subject per cell, they will be considered as moderately opposed in the remainder of the discussion. Thus there are two major attitude groups: extremely opposed ("11"- "10") and moderately opposed ("9"- "6").

Experimental Design

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High								
Low								
No								

TABLE 1

sexes in each cell. For session 1, all subjects were tested in their regular class periods. For session 2, subjects were tested individually and were recruited through a requirement of research participation for their psychology course. In addition, there were 24 subjects in control group 2 with the same initial attitude distribution exhibited by the experimental groups. Lastly, there were 20 extremely opposed subjects in control group 1. Due to practical considerations, the experiment was run over a period of two semesters (the spring and fall ones of 1969) with approximately half of the experimental and control subjects run during each one. Subjects were randomly assigned to all 24 experimental conditions each semester.

A total of 8 subjects were rejected on the following grounds: (1) 3 were suspicious or guessed the true purpose of the experiment, and (2) 5 indicated suspicions related to the speaker. The initial attitudes, N-approval scores, and treatments for these subjects are found in Appendix A, Item 1.

C. Pilot Studies

1. Choice of Attitudinal Issue

On the basis of a group administered questionnaire, an attitude issue appropriate for the Montgomery College sample was chosen according to the following criteria: (1) the distribution of attitude scores must be highly skewed such that the large majority of subjects are either strongly for or against the proposal as stated; (2) the issue must be of high personal importance to the subject; and (3) the issue must be such that events are not likely to influence opinions to any significant extent over the data collection period. In one pretest 110 subjects in

introductory psychology classes gave their opinions, the personal importance of the issue, the certainty of their opinion's correctness, and their familiarity with the arguments on the issue with respect to ten controversial questions. On the basis of their responses, the following proposal was chosen as the attitudinal issue: "Population growth should be limited by government policies relating to family size." The relevant distribution of attitude scores and means are found in Appendix B, Table 1.

2. Selection of Sources

Subjects in their regular class periods completed a questionnaire in which prospective sources defined in terms of occupation, status, group affiliations, implied or explicit education, etc., were rated on four different issues including the population one on the following 7-point Likert-type scales: informed-uninformed, truthful-untruthful, trustworthy-untrustworthy, like me-unlike me, my kind of person-not my kind of person, and influential for me-not influential for me. In addition, subjects indicated their judgment of each source's attitude on the proposal in question and the extent to which they desired or did not desire to hear each of the sources lecture in favor of the proposals. They also rated their desire to listen to pro and con versions of each issue with no source mentioned.

Because of the intercorrelations among the source variables, specifically the difficulty of keeping truthfulness and trustworthiness approximately constant as expertise (i.e., informed-uninformed) varied from high to low, the sources chosen for the study itself were those which maximized the differences between degrees of regard for the two sources of each type. Thus it is more accurate to say that two of the

sources differ in "credibility" (i.e., source definition is based on the "informed," "truthful," and "trustworthy") and that the other two differ in attractiveness (i.e., definition is based on the "like me" and "my kind of person" scales); hence, it was necessary to relax the original criterion that all four sources be approximately equal in truthfulness and trustworthiness. The four sources employed in the study proper and the dimensions on which the pairs primarily differed were: (1) scientist vs. old man on relief - credibility dimension, and (2) white college student vs. black militant college student - attractiveness dimension. The final source ratings employed as baseline data for the experimental groups are those supplied by control group C2, obtained during the experimental data collection period.

3. Preparation of Message with Sources

Because the messages were presented on tape, it was necessary to modify slightly the basic message so that it was appropriate for the attributed source. Thus after the four tapes were made, including the moderator's introduction of the setting of the forthcoming talk (the introduction was common to all four tapes and included the source information), they were presented to subjects in groups of 4-6, with the source introduction eliminated. After listening to a tape, subjects completed a post-questionnaire whose major purpose was to demonstrate the plausibility of attributing the specific message to the specific speaker (especially for the negative credibility source, the old man on relief). As a result of these pilots, the speech attributed to the man on relief went through four revisions until 100% plausibility was obtained.

Once plausibility was obtained, additional groups of subjects (7-8

per tape), whose initial position on the experimental issue had been obtained during class time along with the experimental subjects, listened to one of the four tapes minus the moderator's introduction but containing the source information embedded in the talk itself. They then completed a questionnaire designed to demonstrate the equivalence of the information imparted by the four messages and thereby the equivalence of the messages themselves. Specifically, the questionnaire contained: (1) a post-attitude question on the population control proposal, (2) ratings of the "anonymous" speaker on the credibility and attractive dimensions, (3) recall of the major arguments of the talk, and (4) a 15-item true-false test on the content of the talk. The baseline score on this test was provided by the subjects in the C2 group (i.e., no message group). The data indicate that there were no differences in the number of arguments recalled by the subjects exposed to each of the four speeches (all $p > .10^*$). Also there were not any differences in scores on the true-false test, with the exception that those subjects listening to the positive credibility tape (the scientist) did significantly better on the true-false test than those listening to the positive attractive source (the white college student; $t = 1.78$, 13 df, $p < .05$). This latter result was due to one "maverick" subject in the college student group whose score was much below the mean of the group; if his score is removed, the between-group difference disappears. In addition, the mean scores obtained on the true-false test by each of the four tape groups were significantly better than that obtained by the no message control group C2 (all $p < .001$).

* All t -tests are 2-tailed unless otherwise specified.

4. Relationship between N-approval and Volunteering

It seemed advisable to attempt to replicate the relationship previously found between N-approval and volunteering (Leipold and James, 1962; McDavid, 1965). Hence, subjects were given the Marlowe-Crowne SDS (Crowne and Marlowe, 1964, pp. 23-24; see Appendix C, Item 2) at the beginning of their regular class periods, presumably as part of some research a graduate student at American University was engaged in. The instructor then continued the class and shortly before dismissal requested volunteers for some research being conducted at MC at the beginning of the next semester by a professor from the University of Maryland. The results (see Table 2, Appendix B) although not significant are in the right direction; that is, as N-approval increases, willingness to participate increases.

5. Persuasive Impact of the Basic Message (Control Group C1)

In order to obtain a baseline of the effectiveness of the message alone (i.e., anonymous source), subjects were given a questionnaire composed of a before-after attitude test involving the basic message presented in written form but minus any information identifying the source during their regular class periods. The change from before-after attitude scores of 20 subjects (all extremely opposed, that is, "10"- "11" on an 11-point scale) was significant ($t = 2.71$, 19df, $p < .01$), thereby demonstrating a significant persuasive impact for the basic message. It should be pointed out, however, that this method of measuring change attributable to the message alone is, on the one hand, probably weaker than the experimental method since it was presented in written rather than spoken form, and on the other, the most subject to demand characteristics since all measures were obtained in a single session.

D. Procedure for Experiment Proper

1. Session 1

During class periods approximately 2-3 weeks prior to the communication session, all subjects completed a questionnaire as part of a "National College Survey" sponsored by the fictitious "National Education Research Council," a supposed non-profit foundation dedicated to the improvement of college and graduate training. The questionnaire was administered by the class instructor in order to minimize any perceived connection between this session and the later experimental one. The questionnaire (see Appendix C, Item 1) assessed: the subject's attitudes on 10 issues of a controversial nature including the issue of this study; the personal importance of each issue; the subjects' certainty of the correctness of their position on each issue; and their judgments of familiarity with the pro and con arguments on each issue. An 11-point Likert-type scale was employed for the attitudinal proposals and 7-point scales for the other three measures. Also, the questionnaire contained measures (7-point scales) of the subjects' desire to listen to counter-attitudinal information and to supportive information on the crucial issue plus several bogus ones. Lastly, the Marlowe-Crowne Social-Desirability-Scale (see Appendix C, Item 2) was completed under the separate sponsorship of a dissertation project being carried out by a student at George Washington University. The order of administration of the survey questionnaire and the SD scale was randomized across subjects.

2. Session 2

As part of a course requirement to participate in research, students came individually to the experimental room approximately 2-3 weeks later. Each one was exposed to the following phases of the total paradigm:

(1) a bogus perception task, viz., the Embedded Figures Test (Witkin, 1950) modified for present purposes; (2) an explanation of the experiment proper and a request to listen to counterattitudinal information on the population control issue, with the request followed by an explicit commitment by subjects in the choice conditions; (3) a message on the issue; (4) a post-questionnaire (see Appendix C, Item 3) that contained measures of attitude on the issue, perception of source and message, recall of message content, and other responses including checks on the experimental manipulations; and (6) interview questions designed to elicit the subject's interpretation of the meaning of some of the scales and any suspicions concerning the true nature of the experiment (see Appendix C, Item 4), debriefing, and a commitment not to talk about the experiment.

Specifically, on entering the room, the subject was greeted by the experimenter who said:

Hello, I'm Mrs. Rosso. I'm a graduate student at the University of Maryland in the department of physiology there and my major area of interest is perception. So today, what I'd like you to do is help test out an instrument I'm devising which hopefully will tell us something about how people's visual processes change as they get older. You'll be working on the adult version of this (as E lays out the cards); there's also a children's version and I've been studying kids of all ages which is lots of fun.

Now what I want you to do specifically is this. For each one of these simple black and white figures (cards are laid out in 4 piles with the appropriate black and white stimulus card on top of each pile), there is one or more complicated colored design. What I'd like you to do is tell me the number of these simple figures that you see in the more complicated colored one. The figure you find should always be in the upright position so don't rotate either one of the cards. Also, they should be of the same proportion, so for this equilateral triangle (the first stimulus card was an equilateral triangle; total of 4 stimulus cards and 10 colored designs), all the sides should be the same length, but the figure can vary in size, that is, it can be smaller or larger just so long as the shape is the same. O.K.? There are 10 of the colored cards so you indicate the number

that you see on this sheet here next to the appropriate trial number (S was provided with a sheet with two columns - the first containing trials 1-10 and the second providing space for the number of figures seen for each colored card). (E paused to make certain that S understood all instructions.)

The number of figures you can see in each card can vary from 0 to 20. But, in a sense, there is no right or wrong answer since what I'm interested in is, first of all, what do you see, and then questions like, well for example, do men (women) find it easier than women (men) or vice versa; does the task become more difficult with age, and if so, at what age does it become so difficult that people don't see any figures in any of the cards? Work as quickly as you can since there is a general time limit - most people finish or almost finish. Tell me when you're done.

The experimenter left the subject alone in a soundproof cubicle for a maximum of 15 minutes. After collecting the subject's responses, the choice manipulation was introduced.

No Choice

Subjects were told:

That looks pretty good - like everyone else's (or if S hadn't finished in the 15 minutes: You got farther than most people do. It looks pretty good.). Now, the second task you MUST complete to obtain your research participation credit which was announced in class is in the same general area but is based on a recent result which has been reported in the Journal of Perceptual Skills which is one of the major journals in my field. In this article the researchers suggested the following idea: if a person listens to controversial information, this arouses various physiological reactions which in turn can affect his later performance on various kinds of perceptual tasks. So what I'm going to have you do is listen to a tape I have here (pointing to a tape recorder which to this point had been out of view) on a controversial issue I think you'll find of interest and then when it's over we'll go into the other room (main room outside of cubicle containing all kinds of perceptual equipment) and test out some of your visual reactions on some of the equipment we've got. That way, hopefully, we can get at some kind of interaction between auditory stimuli on the one hand and visual stimuli on the other.

The specific talk I'm going to have you listen to is a short speech in favor of the proposition that "Population growth should be limited by government policies relating to family size" (and for the "before" groups: which was originally

presented by*). Listen carefully and when it's over we'll go into the other room and test out some of your visual responses.

(While the speech played, the experimenter retired to a table in the main room and worked quietly.) Here choice is not made salient nor even mentioned and compliance is assumed.

The tape begins with an introduction by a male moderator which is common to all conditions. The moderator explains:

Good evening ladies and gentlemen. It is with pleasure that I open the first of a series of symposia sponsored by the Office of Economic Opportunity here in Washington, D.C. As you all know, this program will involve discussions of the crucial issues facing the United States and the world today by the various elements of our society. It is hoped that through this face-to-face exchange of views among people from the academic world, the suburbs, youth, and residents of the inner city ghettos that we can create a greater dialogue and understanding among us all. All of the speakers have selected the topic which they wish to present and are here today to present a short prepared talk to be followed by general discussion. Today we will be discussing the question of the population explosion. Specifically, why: "Population growth should be limited by government policies relating to family size." The first speaker today is

The speaker then comes on the tape, thanks the moderator, and immediately launches into the basic message modified according to his implied education level, group affiliations, status, etc. (see Appendix D, Items 1 & 2).

On completion of the speech, the experimenter turned off the tape recorder and said:

*In both the choice and no choice conditions, the after-groups (i.e., commitment to dissonant information only) received the source information after the commitment, through the moderator's introduction to the speech. Thus the before-groups (i.e., commitment to dissonant information plus source information) heard the source information twice, that is, from the experimenter before the commitment and again during the moderator's introduction.

Before we do the visual tasks I have in the other room, I'd like you to answer a few questions related to what you just heard. When you're finished bring the booklet with you into the other room and we'll test your visual reactions.

The subject was then given the post-questionnaire (see Appendix C, Item 3) which included: (1) the following attitude related measures - 11-point scales asking the extent to which the subject favors or opposes the "policy" proposition that "Population growth should be limited by government policies relating to family size," and the extent to which the subject agrees or disagrees with two inferences based on the persuasive message ("The earth's resources and man's ingenuity will not be sufficient to adequately feed, clothe, and house the world's population if unrestricted population growth continues" and "By the year 2000 the human race will face extinction if population growth is not limited"); (2) the following checks on the experimental manipulations - (a) a question on when the source information was presented, (b) objective and subjective questions concerning whether or not an explicit choice to refuse to listen was offered, whether participation was necessary in order to obtain credit, the degree of pressure from the experimenter to stay, the degree of felt choice to refuse to listen, and their reasons for choosing to listen, and (c) an open-ended question on the purpose of the experiment; (3) measures of reaction to the sponsor of the message - a query on the subject's recall of the sponsor of the talk (OEO) and on their perception of the worth of the sponsoring organization; (4) source-related measures - 7-point scales asking (a) judgments of the speaker on six dimensions, (b) a question as to which dimension was most important, and (c) a series of questions asking for recall of the speaker's age, race, education, and occupation; (5) message related measures -

(a) an 11-point scale concerning the speaker's attitudinal position on the population issue, (b) a 7-point scale concerning the strength of the message, (c) a query on the recall of the major arguments of the message, (d) a series of questions concerning the number of arguments agreed with of those recalled, the number disagreed with, and whether or not the subject agreed with the speaker's solution to the population problem, and (e) 7-point scales asking for the degree of correctness of the speaker's arguments and how important it was for the subject to be correct on the issue; and (6) task related measures - a series of questions asking (a) if the subject would like to hear more information on the topic, and, if so, what kind of information, (b) if the subject would be willing to participate in another similar experiment, (c) if the subject experienced any discomfort in agreeing to listen or actually listening to the counter-attitudinal message, and (d) the extent of interest in and enjoyment of the bogus perception task and the listening task.

When the subject had completed the questionnaire and brought it to the experimenter in the main room, he was questioned carefully (see Appendix C, Item 4), debriefed, and asked to remain silent about the experiment for the remainder of the semester. His research participation slip was then signed and given to him.

High Choice

After completing the perception task, the experimenter complimented the subject on his performance as in the No Choice condition, thanked him, and then signed his research participation slip saying:

Here's your research participation slip which indicates that you came today so that you can get credit for participating. Please turn it in to your instructor on the day of the final. I'm asking everyone to do that so we can cut down on communication between those of you who have already participated and those people who haven't. O.K.?

Then the experimenter offered a choice to listen to the counterattitudinal information:

Officially you're finished now and can leave (pause) . . . but before you do I would like to tell you about some of the other hypotheses in this area which I'm testing and IF YOU'D LIKE TO STAY IT'S ENTIRELY UP TO YOU.* (Some subjects indicated willingness to stay at this point.) These hypotheses are based on a recent result.....

SO WHAT I'D LIKE YOU TO DO, IF YOU'RE INTERESTED, is listen to a tape I have here on a controversial issue I think you'll find of interest and then when it's over we can go into the other room and test out some of your visual reactions on some of the equipment we've got. That way, hopefully, we can get at some kind of interaction between auditory stimuli on the one hand and visual stimuli on the other. The specific talk I'D LIKE YOU TO LISTEN TO, IF YOU DECIDE TO AND IT IS ENTIRELY UP TO YOU (omitted if agreement already expressed), is a short speech in favor.....
.... WOULD YOU LIKE TO LISTEN?

The experimenter waited for the subject's commitment. If the subject agreed, the experimenter said: "Please listen carefully....." and after turning on the tape recorder left the room. If the subject refused to listen, he was asked to fill out a version of the post-questionnaire omitting irrelevant questions (see Appendix C, Item 5). In this condition, choice is made salient and explicit and there is minimal justification for compliance. The remainder of the procedure was identical to that for the No Choice condition.

Low Choice

As in the High Choice condition, the research participation slip was signed after completion of the perceptual task. But here, in addition to making the choice salient, the experimenter provided justification for choosing the counterattitudinal alternative, by saying:

* All instructions relevant to the particular choice manipulation in question are in capital letters.

Officially you're finished now so you can leave (pause), BUT I'D REALLY APPRECIATE YOUR STAYING AND HELPING ME TEST OUT SOME OTHER HYPOTHESES IN THIS AREA WHICH I'M WORKING ON. I PLAN TO USE THESE RESULTS FOR MY PH.D. THESIS AND FRANKLY NEED SOME ADDITIONAL SUBJECTS. (Some subjects expressed willingness to stay at this point.) The hypotheses I'm testing are based on a recent result..... The specific talk I'd like you to listen to is a short speech (omit High Choice phrase of "if you decide to and it is entirely up to you).....

The experimenter waited for the subject's commitment. The remainder of the procedure was identical to that of the other conditions.

E. No Communication Control Group (C2)

The C2 group comprised several classes drawn during the same period as the experimental subjects. These subjects were given both the pre-measure and 2-3 weeks later the post-questionnaire (see Appendix E, Item I) during regular class periods. The latter questionnaire, in addition to measuring the subjects' attitude on the crucial issue, provided the baseline measures of regard for all four sources, of the degree to which subjects wanted to listen to each of the sources deliver a speech in favor of the crucial attitudinal proposition, of the position expressed by each of a set of "supposed" magazine titles pertaining to the population issue (i.e., to provide attitudinal position for titles in an item in the experimental post-questionnaire), and of factual knowledge on the issue.

III. RESULTS

A. Introduction

Although the set of experimental conditions comprised a 3x2x2x2 factorial design, the basic analysis consisted of a 5-way analysis of variance involving initial attitude as the fifth factor; for in each cell there were six extremely opposed ("11"- "10" on an 11-point scale) and four moderately opposed ("9"- "6") subjects. Most of the computations required for the data analyses were done through the facilities of the Computer Science Center at the University of Maryland, College Park, Maryland. The University of Miami Biometric Laboratory MANOVA program was used for all analyses of variance. A total of 48 dependent variables were measured and will be discussed in groups on the basis of their intercorrelations and/or a prior psychological relatedness. Where group means and differences among experimental groups are discussed, comparisons will be among the original 24 conditions. The exceptions will occur when the analysis of variance indicated a significant main effect for initial attitude, in which case tables of means and comparisons will include all 48 groups. All of the analyses of variance and means involve all 240 experimental subjects, unless otherwise specified.

B. Equivalence of Experimental Groups

Although subjects in the two major attitude groups were assigned randomly to the 24 cells, several additional sources of information bolster the assumption of pre-experimental equivalence between the groups. First, there were only a few nonsystematic differences among the experimental groups on the 9 filler issues assessed in the

pre-measure questionnaire. Second, there were only nonsystematic differences among groups on the other initial measures. The relevant means and summaries of analysis of variance for N-approval, initial importance, initial certainty of the correctness of one's opinion, and familiarity with the pro and con arguments on the population issue are found in Appendix F, Tables 1 through 8. These tables indicate that for all these variables, except N-approval, there is a significant main effect for initial attitude. The other significant F s are few and nonsystematic, and none occur in predicted main effects or interactions. Specific differences between experimental groups are few in number, adding support to the assumption of group equivalence.

The last variable on which it was hoped that the groups would be equivalent was preference for listening to supportive information.* The relevant percentages are presented in Table 8 (see p. 53). With the exception of a few "maverick" cells, containing a very small percentage of subjects preferring to listen to supportive information, the remainder of the conditions were equivalent in the percentage of subjects desiring to listen to supportive information.

C. Equivalence of Two Semesters of Testing

As previously mentioned, data were collected at the end of the 1969 spring semester and the beginning of the 1969 fall semester. As a result, it is necessary to demonstrate the equivalence of the sample during

*Preference (based on pre-measure questionnaire items) was obtained by considering the ratio of the desire to listen to pro arguments on the population control proposal vs. the desire to listen to con arguments (both measured on 7-point scales). It should be noted that a large percentage of subjects indicated an equal desire to hear both sides of the issue (i.e., no preference).

these two periods of time. Approximately one-half of the total sample was obtained each semester ($N = 129$ and $N = 111$, respectively). The total attitude distribution for the population control proposal (Q1) for the entire student group (including favorable subjects not employed) was approximately the same each semester: 75%-78% were opposed, 16%-19% in favor, and the remainder neutral. In addition, on the major dependent variable of attitude change on Q1, the results of a 5-way ANOVA on the samples from the two separate semesters (see Appendix G, Tables 1 through 4) indicate that the pattern of results was the same each semester. Hence, the data for the two semesters were combined in the analyses.

D. Refusers

In view of the frequent criticism of dissonance experiments concerning sample biasing as a function of the number of subjects who refuse to participate, all available data on refusers were analyzed. If a subject refused to participate in the present experiment, the refusal occurred after the subject had completed the bogus perception task and was asked to listen to the counterattitudinal speech. Such subjects were asked to complete the questionnaire found in Appendix C, Item 5.

A total of six subjects (2.5%) refused to participate, five females and one male. Five of the six were in high choice conditions, the other in a low choice condition. All indicated that they felt they had a high degree of choice to refuse to listen. Five of the six had already received the source information when they refused, and three of these were in negative source conditions (see Table 1, Appendix H). Interestingly, none of the subjects was extremely opposed to the population control issue, and only one indicated that the counterattitudinal

nature of the speech was the reason for the refusal. The others said they refused because they did not have enough time or they just did not feel like participating. Lastly, four of the six had N-approval scores greater than or equal to the grand mean of the experimental subjects, and half had indicated in the pre-measure a preference to listen to dissonant information, the reverse of what was expected.

Several points concerning the data pattern of the refusers are in order. First, very few subjects refused to participate and those that did were not extremely opposed to the experimental issue. Second, the predicted relationship between refusal and N-approval was not found. Hence one could conjecture that the present situation may not have been a particularly dissonance arousing one, at least at the point where a commitment had to be made to listen to counterattitudinal information.

E. No Message (Attitude Only) Control Group (C2)

The major purposes of the attitude only control group were three-fold: (1) to provide evidence of the stability of the experimental attitude issue and to assess change on all pre-measures as a result of extra-experimental factors or events; (2) to provide a baseline for the source ratings on the relevant source definition dimensions; and (3) to provide an initial attitude measure for the two attitude related questions. The intercorrelations among these variables are found in Table 2.

The difference between the mean initial and final attitudes toward the population control proposal was nonsignificant (9.792 vs. 9.500, $t = 1.574$, 23df, $p > .10$) with an average unit attitude change over the 2-3 week period of 0.292 on an 11-point scale. Thus, it appears that the attitude toward the population control proposal was relatively

TABLE 2

Intercorrelations for Control Group (C2; N = 24)*

		r (22df)	p less than
N-approval	Initial Attitude (Q1)	-.02	ns
	Final Attitude (Q1)	-.05	ns
	Attitude 2 (Q2)	.36	.10
	Attitude 3 (Q3)	-.16	ns
	Extent of Desire to Listen to Dissonant Information (LD)	.19**	ns
	Extent of Desire to Listen to Supportive Information (LS)	.23**	ns
Initial Attitude (Q1)	Final Q1	.87	.001
	Initial Importance Q1	.48	.05
	Final Importance Q1	.50	.05
	Initial Certainty Q1	.38**	.10
	Familiarity Q1	.33**	ns
	Q2	.22	ns
	Q3	.31	ns
	LD	.18**	ns
	LS	.09**	ns
Final Attitude (Q1)	Q2	.24	ns
	Q3	.44	.05
	Attitude Change Q1	-.43	.05
	Final Certainty Q1	.35**	.10
	LD	.01**	ns
	LS	.19**	ns
Attitude 2 (Q2)	Q3	.18	ns

* All correlation coefficients are product moment correlations.

** Sign of correlation changed to indicate positive relationships since scale anchors are in opposite directions.

TABLE 2 (continued)
Intercorrelations for Source Ratings for C2

	<u>Credibility Scales</u>		<u>Attractiveness Scales</u>	
		r (22df)		r (22df)
Scientist (+ credibility)	ITr*	.54 [#]	LM,KP	.38 ^{##}
	ITs	.46 ^{**}		
	TrTs	.63 [#]		
Relief Man (- credibility)	ITr	.20	LM,KP	.44 ^{**}
	ITs	.25		
	TrTs	.48 ^{**}		
College Student (+ attractive)	ITr	.39	LM,KP	.62 [#]
	ITs	.61 [#]		
	TrTs	.38		
Black Militant College Student (- attractive)	ITr	.17	LM,KP	.61 [#]
	ITs	.20		
	TrTs	.73 [#]		

*Code: I = informed, Tr = truthful, Ts = trustworthy, LM = like me,
 KP = my kind of person

**_p less than .05

[#]_p less than .01

^{##}_p less than .10

stable over the crucial experimental period.* In addition, the importance of the issue to the subjects and the certainty of the correctness of one's opinion did not indicate significant change over the 2-3 week period (5.500 vs. 5.375, $t = .450$, 23 df, $p > .10$, and 2.792 vs. 2.458, $t = 1.356$, 23 df, $p > .10$, respectively); the direction of the change in importance and certainty was parallel to that for change of attitude.

As noted, the second major function fulfilled by this control group was to provide the baseline ratings for the four sources on the credibility and attractiveness dimensions. Also, these subjects provided ratings of the sources' expected attitudinal position on the population issue and indicated the extent of their desire to listen to each source argue in favor of the population control proposal. The relevant means are presented in Tables 3 and 4.

First, it should be pointed out that the method for obtaining the source ratings differed in two respects for the control and experimental groups. Two to three weeks after the pre-measure, the control group completed the second questionnaire during class time (in contrast to the individual testing of the experimental subjects). In addition, they rated all four sources on the relevant scales in random order (in contrast to the rating of only the source listened to by the experimental subjects). Thus, to make the baseline ratings more comparable with respect to the method by which they were obtained from the experimental subjects, ratings of only the first source evaluated by the control subjects were examined.

*Since the experimental subjects were tested over a period of six months, approximately half of the control subjects were obtained during each semester.

TABLE 3

Mean Source Ratings on Composite Indices for Control Group 2 (N = 24)[°]

INDEX	SOURCE DEFINITION		
	SOURCE SIGN	Credibility	Attractiveness
Sum Credibility *	Positive	8.166 [#] /3.687 ^{°°} (6) ^{##}	10.856/3.755 (7)
	Negative	16.833/3.302 (6)	14.800/2.489 (5)
Sum Attractiveness **		Credibility	Attractiveness
	Positive	8.000/1.414	2.714/0.950
	Negative	12.833/1.170	12.000/1.871
Sum Total ***		Credibility	Attractiveness
	Positive	16.166/1.603	13.571/4.159
	Negative	29.666/3.435	26.800/12.790

[°] Means in this table are for first source rated only. The results from ratings regardless of order are similar with only infrequent and non-systematic differences. The reasons for employing the former means are explicated in the test.

^{°°} Standard deviation.

* Sum of three 7-point scales with range of 3/21.

** Sum of two 7-point scales with range of 2-14.

*** Sum of five 7-point scales with range of 5-35.

[#] The smaller the mean the more positive the evaluation.

^{##} Number of subjects per group.

TABLE 4

Mean Source Ratings on Individual Scales for Control Group 2°

SCALE	SOURCE DEFINITION		
	SOURCE SIGN	Credibility	Attractiveness
Informed°°	Positive	1.167/0.400* (6)**	4.714/1.500 (7)
	Negative	6.667/0.810 (6)	4.400/2.400 (5)
Truthful		Credibility	Attractiveness
	Positive	3.167/0.990	2.857/1.870
	Negative	5.000/1.550	4.800/1.300
Trustworthy		Credibility	Attractiveness
	Positive	2.833/1.330	3.286/1.110
	Negative	5.167/1.690	5.600/1.340
Like Me		Credibility	Attractiveness
	Positive	5.167/1.470	1.142/0.120
	Negative	6.833/0.390	6.000/1.000
My Kind of Person		Credibility	Attractiveness
	Positive	2.833/1.170	1.571/0.250
	Negative	4.000/1.100	6.000/1.000
Influential for Me		Credibility	Attractiveness
	Positive	3.000/1.260	4.286/1.250
	Negative	6.333/1.630	4.600/2.190

TABLE 4 (continued)

SCALE	SOURCE DEFINITION		
	SOURCE SIGN	Credibility	Attractiveness
Source's Attitude	Positive	2.667/2.580	6.142/2.270
	Negative	9.000/2.450	7.800/3.830
Extent of Desire to Listen to		Credibility	Attractiveness
	Positive	2.250/1.452	4.583/1.840
	Negative	5.667/1.523	4.917/1.998

° All means are based on first source rated only.

°° All scales are 7-point scales except for source's attitude which is an 11-point scale. For all scales, the greater the mean the less positive the evaluation of the source.

* Standard deviation.

** Number of subjects per group.

Ideally, the source pairs should differ significantly only on the dimensions involved in their source definition; however, because of the intercorrelations among the measured scales (see Table 2), this criterion is sometimes violated. In regard to the differences on the relevant scales for the source pairs, there were fewer significant differences on the non-definitional than on the definitional scales for each pair. Hence, the criteria for source definition were approximated reasonably well. Specifically, as indicated in Table 5, the positive and negative credibility sources differ significantly on the definitional composite credibility index and on its component scales ("informed," "truthful," and trustworthy"). They also differ significantly on the composite attractiveness index, primarily because of a significant difference on the "like me" scale. The positive and negative attractive sources differ significantly on the definitional composite attractiveness index and on its component scales ("like me" and "my kind of person"). Although they do not differ significantly on the non-definitional credibility index, they do differ on one of the three component scales (i.e., "trustworthy"). Also, both source pairs differ significantly from each other on the total index. Finally, the two "negative" sources are indeed on the negative side of the neutral point and the "positive" sources on the positive side on the relevant dimensions.

The control subjects expected only the positive credibility source (i.e., the scientist) to be in favor of the population control proposal. In addition, they were significantly more interested in hearing this source than any of the other three (all $p \leq .001$); the differences between the latter are not significant.

TABLE 5

Differences between Source Pairs on Relevant
Dimensions for Control Group 2

	<u>Source Rated First Only</u>	
	<u>t</u> (10 df)	<u>p</u> less than
<u>Credibility Sources:</u>		
Scientist vs. Old Man on Relief		
Credibility Index	4.29	.005
Informed	14.79	.001
Truthful	2.45	.05
Trustworthy	2.65	.05
Attractiveness Index	6.45	.001
Like Me	2.67	.05
My Kind of Person	1.78	ns
Total Index	8.71	.001
Influential for Me	3.95	.01
<u>Attractive Sources:</u>		
College Student vs. Black Militant College Student		
Credibility Index	2.03	.10
Informed	.26	ns
Truthful	2.15	.10
Trustworthy	3.16	.02
Attractiveness Index	11.38	.001
Like Me	10.34	.001
My Kind of Person	8.23	.001
Total Index	2.59	.05
Influential for Me	.29	ns

The third major function of the control group was to provide pre-measures for the two attitude-related agree-disagree questions in the post-questionnaire (i.e., Q2 and Q3; see Table 6). Since for these two questions the study is an after-only design, additional support (i.e., other than random assignment of subjects to groups) for the assumption of experimental group equivalence on these two measures would be evidenced by a positive relationship between extremity on Q1 and, separately, on Q2 and Q3, for the control subjects. By Fisher's exact test, the association is indeed significant for Q1 and Q2 ($p = .034$; Q2 distribution was split at the midpoint, that is, " ≤ 6 " vs. " ≥ 6 "); and although not significant for Q1 and Q3, the relationship is in the same direction. However, if the Q3 distribution is split into strongly opposed vs. other (i.e., " ≤ 8 " vs. " > 8 " on an 11-point scale), the positive relationship between extremity on Q1 and Q3 is highly significant (by Fisher's exact test, $p < .001$).

F. Manipulation Checks

1. Choice

A total of five questions on the post-questionnaire are relevant to the choice manipulation: degree of felt choice to refuse to listen to the counterattitudinal information (7-point scale); amount of pressure exerted by the experimenter to stay (7-point scale); two yes-no questions: "Was an explicit choice to leave offered by the experimenter?" and "Was it necessary to listen in order to receive research participation credit?"; the number of reasons given for choosing to listen; and the kinds of reasons given for choosing to listen (categorized as indicating an internal or external locus of control, Appendix I, Item 1;

TABLE 6

Mean Attitude Scores in Q2 and Q3 for Control Group 2 (C2; N = 24)

DEPENDENT VARIABLE			
	<u>Q2</u>	<u>Personal Importance of Q2</u>	<u>Certainty of Correctness on Q2</u>
Mean	4.833*	5.205**	3.083**
Standard Deviation	3.286	1.744	1.585
Range	1-11		
	<u>Q3</u>	<u>Personal Importance of Q3</u>	<u>Certainty of Correctness on Q3</u>
Mean	7.917*	4.623**	3.417**
Standard Deviation	3.225	2.150	1.931
Range	1-11		

*Attitudes toward questions 2 and 3 measured on 11-point scales with 1 = complete agreement through "neither-nor" and 11 = complete disagreement.

**Importance and certainty of the correctness of one's opinion measured on 7-point scales with 1 = extremely unimportant and extremely certain through neutrality and 7 = extremely important and extremely uncertain, respectively.

and categorized according to whether or not the research requirement was mentioned as a reason). These five questions resulted in a total of seven items whose intercorrelations are found in Table 1, Appendix I. With respect to the two veridical yes-no questions, the overwhelming majority of subjects perceived the situation accurately on both questions; also, there were no significant differences between groups (see Tables 2 and 3, Appendix I). In addition, the percentage of subjects mentioning the class requirement as a reason for their choice again reveals veridical perception, since only the subjects in the no choice (NC) conditions mentioned such a requirement (see Table 4, Appendix I).

The degree of felt choice and the amount of pressure exerted by the experimenter to stay are more subjective checks on the choice manipulation. As expected, they are negatively correlated (i.e., as felt choice increases, felt pressure to stay decreases, $r = -.12$, 238 df, $p = .05$), and in addition, the chi-square analysis is highly significant ($\chi^2 = 13.75$, 1 df, $p < .001$). Specifically, a greater percentage (79.8% vs. 56.9%) of subjects who felt they had high choice to refuse to listen ('<6" vs. ">6") felt little pressure from the experimenter to stay ('<3" vs. ">3") than did those who felt they had low or no choice. The means for these two questions are presented in Appendix I, Tables 5 and 6, respectively. From the ANOVA (see Appendix I, Tables 7 and 8), it can be seen that the choice main effects for both variables are highly significant. The means involved in the choice main effect for degree of felt choice are as follows: 6.587 (HC), 5.100 (LC), and 3.600 (NC). Thus for felt choice, there is a direct relationship between choice and subjective felt choice ($F = 68.740$, 2/192 df, $p < .001$), with high choice (HC) greater than low choice (LC) and no choice (NC) ($t = 5.83$, 192 df,

$p < .001$); $t = 11.710$, 192 df, $p < .001$), and LC greater than NC ($t = 5.880$, 192 df, $p < .001$). For the experimenter pressure question ($F = 23.905$, 2/192 df, $p < .001$), the pattern is LC greater than NC which in turn is greater than HC (i.e., 1.550, HC; 3.162, LC; and 2.612, NC, respectively). Specifically, the LC and NC means are both significantly greater than HC ($t = 6.80$, 192 df, $p < .001$, and $t = 4.48$, 192 df, $p < .001$), and the LC mean is greater than the NC ($t = 2.32$, 192 df, $p < .05$). Thus, it seems that making a choice explicit and then pressuring the subject to adopt one alternative is perceived as greater constraint than when the subject is given no alternative or choice. In general, the two subjective questions also confirm the success of the experimental manipulations.

Subjects were also asked in the post-questionnaire to give the reasons for their choice to listen to the counterattitudinal information. These were handled in two ways. A simple counting of the number of different reasons given and a coding of the reason in terms of whether an internal or external locus of control or both was indicated (see Appendix I, Item 1).^{*} With reference to the first method, the mean number of reasons given are presented in Table 9, Appendix I. On the basis of the ANOVA (Table 10, Appendix I), the choice main effect was not significant. With reference to the second method, the relevant percentages for each category of reasons are given in Table 11, Appendix I. An overall chi-square analysis between choice conditions and the

^{*}All coding of open-ended questions was done by two independent raters and the percent agreement is given in the respective Appendices.

three categories of reasons (i.e., internal only, external only, or both) is highly significant ($\chi^2 = 75.10$, 4 df, $p < .001$). The locus of the significant relationship was a function of the HC vs. the combined LC and NC conditions ($\chi^2 = 73.16$, 2 df, $p < .001$; the association for the LC vs NC conditions was not significant); a significantly greater percentage (96.2% vs. 44.8%) of the HC subjects gave internal reasons than did the combined LC and NC subjects. In addition, the percentage of subjects in the HC condition giving internal reasons for the choice to stay is significantly greater than chance ($p < .001$).

2. Source Ratings: Basis of Regard and Degree of Regard for Source

As previously discussed (pp. 33-40), the source ratings for the no message control group (C2) revealed significant differences in the definitional scales for the credibility and attractive source pairs, respectively. Hence, there is ample evidence in support of the experimental manipulation of positive and negative regard for credible and attractive sources.

3. Type of Commitment: To Dissonant Information Alone vs. To Dissonant Information Plus Source

The question designed to tap veridical perception of when the source information was presented was scored on the basis of correct vs. incorrect perception. The percentage of subjects correctly remembering this manipulation are presented in Table 1, Appendix J. It can readily be seen that the majority of subjects correctly recalled when the source information had been presented. Furthermore, as expected, both commitment groups remembered the manipulation to the same extent (i.e., $\chi^2 = 2.54$, 1 df, $p > .10$).

4. Reaction to Bogus Task

It will be recalled that in order to introduce the choice manipulation, all subjects completed a bogus perception task consisting of a modification of Witkin's Embedded Figures Test. It was designed to minimize any feelings of failure or hostility towards the experimenter which might differentially affect the reaction to the subsequent experimental treatment. Two questions in the post-questionnaire were designed to tap reactions to this task; namely, separate ratings of how interesting and how enjoyable the perception task was. The relevant means are found in Appendix K, Tables 1 and 2, and the ANOVA results in Tables 3 and 4, respectively.

There are no significant F s for the degree of interest in the perception task and only two significant interactions for the degree of enjoyment of the task; neither of the latter parallels results for the major dependent variables. Furthermore, the main effect for initial attitude is not significant for either variable. The grand means for both variables (3.192 and 3.408 on 7-point scales, respectively) are on the favorable side of the neutral point, suggesting a somewhat positive response to the bogus task. Hence, it can be concluded on the basis of the available evidence that responses to the bogus task were favorable and generally uniform across treatments. Therefore, there is no evidence of negative feelings which might have affected responses to the experimental treatment itself.

5. Purpose of Experiment

The last item on the post-questionnaire which can be considered as a type of manipulation check was an open-ended question asking the purpose of the experiment. This was coded in several categories:

(1) reference to the bogus perception rationale (i.e., the "veridical response"); (2) mention of some purpose related to the questionnaire itself, with no awareness of the persuasive intent; (3) reference to an attitude study (these subjects were eliminated; see "Rejected Subjects" p. 16); and (4) mention of various other responses (see Appendix L, Table 2). The percentages of subjects giving "veridical" responses are shown in Table 1, Appendix L. As can be seen, the majority of subjects merely reiterated the bogus rationale.

There is, however, an unexpected choice effect; for a smaller percentage of the HC than the NC subjects reiterated the bogus rationale (43.6% vs. 67.1%, $p < .01$). If a complete breakdown is made of the kinds of responses the subjects gave (see Table 2, Appendix L), the HC and LC groups, to a greater but not significant extent than the NC subjects stated that the purpose of the experiment was to inform the listener or to help the experimenter or they did not know what the purpose was. The greater salience of the veridical purpose for the NC subjects may be a function of the fact that these external justifications for compliance (e.g., helping the experimenter, etc.) were not emphasized for these subjects, hence they used the explicit rationale provided by the experimenter.

6. Summary

The foregoing sections thus provide the groundwork necessary before any assertions can be made concerning differential effects of the experimental treatments on attitude change. Specifically, there is evidence of experimental group equivalence on filler issues and on the pre-measures which might differentially affect the major dependent variable, and of equivalence of the sample during the two semesters of

data collection. Further, opinions on the experimental issue as well as the other pre-measures appear to be stable for the experimental testing period. There is also ample support for the success of the experimental manipulations. The control data indicate significant differences in degree of regard for the credibility and attractive source pairs, respectively. Both objective and subjective measures of the degree of choice to refuse to listen reflect successful discrimination among the high, low, and no choice conditions. Subjects also were able to correctly recall when the source information had been presented (i.e., type of commitment). Lastly, there is evidence that the bogus perception task did not produce unfavorable affective reactions, and that, in general, subjects accepted the experimenter's rationale for the purpose of the experiment.

G. Dependent Variables Related to the Population Control Issue

1. Correlates of Initial Attitude and Attitude Change

The correlations between initial attitude, final attitude, and attitude change on the population control proposal (Q1) and the other pre-measures are found in Table 7.* It should be noted at the outset that there is an aborted range for the initial attitude scores making it difficult to obtain significant correlations; hence the correlational data are buttressed by chi-square analyses.

For experimental subjects, initial attitude is not correlated with N-approval; a chi-square analysis also is not significant. However, for the C2 group, there is a significant negative relationship between

*All correlation coefficients for the experimental subjects given in the text are within cells correlations from the ANOVA unless otherwise specified.

TABLE 7

Intercorrelations Between Pre-measures and Attitude Change on Q1
for Experimental and Control Group 2 Subjects

	Initial Attitude		Attitude Change	
	Experimental ⁺	C2 [#]	Experimental	C2
Attitude Change	.077	.071	--	--
Final Attitude	.266 ^{**}	.871 ^{***}	-.953 ^{***}	-.459 [*]
Initial Importance	.308 ^{***}	.484 [*]	-.005	.365 ^{##}
Initial Certainty	.236 ^{°**}	.378 ^{°##}	-.077 [°]	-.016 [°]
Familiarity	-.016 [°]	.328 [°]	-.027 [°]	.120 [°]
N-approval	.013	-.016	-.045	.066
Preference	-.110 ^{°°}	-.200 ^{°°}	.030 ^{°°}	-.210 ^{°°}
Listen to Supportive	.085 [°]	.184 [°]	.097 [°]	-.044 [°]
Listen to Dissonant	.020 [°]	.088 [°]	.160 ^{°*}	.149 [°]

⁺ Within cells correlations from analysis of variance (N = 240).

[#] Product moment correlations (N = 24 for no message control group).

^{##} p less than .10

^{*} p less than .05

^{**} p less than .01

^{***} p less than .001

[°] Sign of coefficient changed since scale anchors in opposite directions.

^{°°} Point-biserial correlations where dichotomous distributions are scored 0 = no, 1 = yes.

extremity of initial position and N-approval (by Fisher's exact test, $p < .02$). Specifically, a greater percentage (87.5% vs. 56.3%) of the moderately opposed C2 subjects than of the extremely opposed subjects had a high need for approval (mean split, " ≤ 13 " vs. " > 13 "). Although initial attitude and familiarity with the pro and con arguments on the issue are not significantly correlated for the experimental subjects, a chi-square analysis yields a highly significant positive association between opposition to the population control proposal and stated familiarity with the pro-con arguments ($\chi^2 = 19.29$, 1 df, $p < .001$). The percentage of extremely opposed subjects (" 11 "-" 10 " vs. " 9 "-" 6 ") who feel that they are quite familiar (" ≤ 2 " vs. " > 2 ") with the arguments is significantly greater than the percentage of moderately opposed subjects (36.5% vs. 12.5%).* As might be expected, initial attitude is significantly and positively correlated with importance on the issue and positively correlated with initial certainty of the correctness of one's opinion on the issue.

The correlation between initial attitude and the preference variable approaches significance, suggesting a positive relation between extremity of initial opinion and preference for supportive information. However, the overall chi-square (i.e., including subjects who expressed no preference) is not significant for either the experimental or C2 subjects. Although the correlation between initial position and the extent of the desire to listen to supportive information (7-point scale) is not significant, a chi-square analysis reveals a significant

*The relationship is also significant if the familiarity distribution is split into familiar (" ≤ 4 " vs. neutral and unfamiliar (" ≥ 4 "), (i.e., $\chi^2 = 8.46$, 1 df, $p < .01$). The relationship for the C2 group is not significant but is in the same direction.

positive relationship between extremity of initial opinion ("11"- "10" vs. "9"- "6") on Q1 and extent of interest in listening to supportive information ("4" vs. "24"); ($\chi^2 = 4.96$, 1 df, $p < .05$; 70.1% vs. 55.2%; the relationship for C2 is in the same direction but is not significant). Neither the correlation nor the chi-square between initial attitude and extent of the desire to listen to dissonant information was significant.

Of the pre-measures, only the extent of desire to listen to dissonant information (LD) is significantly correlated with attitude change on Q1 ($r = .16$, 238 df, $p < .05$). Since LD is not correlated with initial position but is correlated with change, a covariance analysis was performed (see Appendix M, Table 1) resulting in no basic change from the overall ANOVA for attitude change on Q1.*

2. Evidence of Dissonance

a. Dissonance Assumption of Preference for Supportive Information

It will be recalled that the basic dissonance assumption underlying this experiment was that a request to listen to counterattitudinal information would be dissonance arousing since in a free choice situation, there would be a strong tendency to choose to listen to supportive information especially if unfamiliar content is anticipated (prediction 6a). Items in the pre-measure, designed to measure the experimental subjects' preference for supportive vs. dissonant information, consisted of ratings (on 7-point scales) of the extent of desire to listen to supportive arguments and separately to dissonant arguments on the population control proposal. The ratio of the two responses was used as

* See Table 2, Appendix M, for covariance analysis with LS as covariate.

the preference score. (A ratio of 1 signified no preference; whereas, a ratio greater or smaller than 1 indicated a preference for supportive or dissonant arguments, respectively.)

First, it should be pointed out that the mean percentage of subjects exhibiting an equal desire to hear supportive and dissonant arguments on the population control proposal was 54.5%. A percentage of this magnitude is significantly greater than chance expectation ($p \leq .001$); the percentages of preference for supportive and for dissonant information are both significantly less than chance ($p \leq .001$). Second, the experimental subjects as a whole were interested in hearing both kinds of arguments. However, the rated desire to hear supportive information is significantly greater than the desire to hear dissonant information for the sample as a whole (2.862 vs. 3.300, $t = 3.39$, 239 df, $p \leq .001$). There is no difference between the extremely and moderately opposed subjects in the extent of their interest in hearing dissonant information; but the extremely opposed subjects were significantly more interested in hearing supportive information (2.611 vs. 3.240, $t = 2.766$, 238 df, $p \leq .005$), which is as expected. Thus, there is some support for the dissonance prediction (prediction 6a) of an overall preference for supportive information in a free choice situation.

The percentage of subjects indicating a preference for supportive information is found in Table 8. It can be seen that the percentages are low (grand mean = 29.58%), which may in part be attributable to the fact that the subjects felt that they were slightly familiar with the pro and con arguments on the issue as phrased in Q1 (grand mean for familiarity = 2.904 on 7-point scale). If the subjects are divided into familiar ("3") and unfamiliar ("4") groups, there is no relationship

Percentage of Experimental Subjects Indicating
Preference for Supportive Information

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	40 *	50	10	30	60	50	20	40
Low	40	40	30	20	10	20	30	10
No	30	40	50	0	10	30	20	30

TABLE 8

* N = 240 with 10 subjects/group. Grand mean = 29.58%.

between extremity of initial opinion on Q1 and interest in hearing supportive or dissonant information for the familiar group. However, there is a near significant positive relation between extremity of initial opinion and interest in listening to supportive information for the unfamiliar group ($\chi^2 = 3.50$, 1 df, $p = .07$). A greater percentage (68.8% vs. 44.9%) of extremely opposed than of moderately opposed subjects were interested in hearing supportive information ("4" vs. "24"). Thus, if only those subjects anticipating unfamiliar information are considered, there is support for prediction 6a.

Whether or not a self rating of familiarity is an accurate appraisal of knowledge on the issue and what type of familiarity is most appropriate with respect to dissonance theory are separate questions. However, although the extremely opposed subjects felt more familiar with the arguments than did the moderately opposed (2.615 vs. 3.385, $F = 17.369$, 1/192 df, $p \leq .001$), on the basis of the true-false test scores of the C2 group, they did not have more actual knowledge on the population issue ($t = 1.15$, 22 df, $p = .27$). Additional evidence of the overestimation of familiarity by the extremely opposed subjects derived from an examination of the relationship between attitude change and familiarity. On the assumption that actual familiarity provides defenses against attack, one might expect a negative relation between familiarity and magnitude of change. In actuality, the relationship is not significant.

Another variable which may affect selective exposure is certainty of the correctness of one's initial opinion. Although there is no relationship between initial certainty and preference for supportive or dissonant information, initial certainty is positively related to

degree of interest in hearing both supportive and dissonant arguments ($\chi^2 = 4.49$, 1 df, $p < .05$, and $\chi^2 = 17.69$, 1 df, $p < .001$, respectively). Thus the more certain the subjects were, the more interest they had in hearing any kind of information. Hence, the expected avoidance of dissonant information as uncertainty increases does not appear.

There is also no support for prediction 6b: there will be a positive relationship between preference for supportive information and attitude change. Neither the correlation nor the chi-square analysis was significant. The relationship is also not significant if initial position is taken into account. Further, there is no relationship between extent of desire to hear supportive information and attitude change. However, the correlation between attitude change and the desire to listen to dissonant information is significant ($r = .16$, 238 df, $p < .05$). In addition, the association between these variables is significant ($\chi^2 = 3.81$, 1 df, $p < .05$). A greater percentage (81.6% vs. 69.3%) of those whose attitude change exceeded the grand mean of the combined experimental subjects than of those exhibiting less change ("3" vs. "2") indicated interest in hearing dissonant information ("4" vs. "3").

Lastly, subjects were divided into four groups according to their degree of interest in listening to supportive and dissonant information. Any differences in initial attitude and attitude change were examined. The hope was to elucidate the role of interest in listening to supportive and dissonant information. The four resulting cells thus represent interest in hearing both types of information (LD = "4", LS = "4"), preference for supportive information ("3", "4"), preference for dissonant information ("4", "3"), and lack of interest

in either type of information ("24", "24"). The respective means for the four cells for initial attitude and attitude change are found in Table 1, Appendix N. There are only two significant differences in initial attitude. Specifically, subjects expressing interest in hearing both kinds of information and those more interested in hearing dissonant information were significantly more opposed to the population control proposal initially than were those not interested in hearing either kind of information ($t = 3.70$, 178 df, $p < .001$, and $t = 2.73$, 82 df, $p < .05$, respectively). In both cases, a selective exposure hypothesis would lead to the opposite result.

The rank order of the four cells in terms of decreasing change, as expected from the dissonance hypothesis, would be: supportive > both > neither > dissonant. On the other hand, if interest in hearing dissonant information results in the most change, as is suggested by the previously discussed chi-square analysis, then the ordering would be: dissonant > both > neither > supportive. In actuality the ordering (both > dissonant = supportive > neither) suggests that interest in hearing both kinds of information results in the most change. However, there is only one significant difference: those subjects interested in hearing both kinds of information changed significantly more than those interested in hearing neither ($t = 2.57$, 178 df, $p < .01$).

In conclusion, on the basis of the present method of determining preference for supportive information, it can be said that the majority of subjects appeared to be interested in hearing both sides of the issue. However, subjects who were initially extremely opposed, and in addition, felt unfamiliar with the arguments relevant to Q1, did exhibit a preference for supportive information. Nonetheless, as the extent of desire

to hear both kinds of information (especially dissonant information) increased, attitude change increased. Because of the large number of subjects indicating no preference, the basic assumption that the mere commitment to listen to counterattitudinal information is dissonance arousing is questionable. Thus there is only meagre support for the dissonance assumption (prediction 6a) that individuals tend to prefer supportive information especially if unfamiliar content is anticipated and no support for prediction 6b. In fact, the evidence that interest in dissonant information is positively related to attitude change is antithetical to the latter prediction.

b. Discomfort Indices

It will be recalled that two items in the post-questionnaire were designed to tap any feelings of discomfort and/or dissonance aroused by the commitment to listen to the counterattitudinal information or by the actual listening itself. With respect to the commitment, only one subject of the 240 indicated any discomfort due to the counterattitudinal nature of the task; many of the remainder gave responses indicating puzzlement as to why they should have felt any discomfort. Similarly, responses concerning the actual listening also overwhelmingly indicated no discomfort at all or no discomfort related to the counterattitudinal nature of the message. In the latter category, a few subjects listening to the negative credibility speaker (man on relief) indicated that the speech was boring and/or uninformed due to the rambling nature of the delivery; and a few listening to the black militant (negative attractive speaker) felt uncomfortable about the references to blacks getting hit the worst as a result of a population explosion. Thus, it must be concluded that if dissonance was aroused by the commitment or actual

listening, these two items did not elicit any evidence of such feelings.

c. Desire to Hear More Information and Kind of Information

The relevant percentages are presented in Appendix N, Table 2, and the summary of the ANOVA in Table 3. First, it should be noted that a large majority of subjects (grand mean = 70.0%) regardless of experimental condition indicated interest in hearing more information on the population control issue (as revealed by the yes-no item on the post-questionnaire). From dissonance theory, one might expect that a desire to hear more information could be an alternative method of dissonance reduction and, hence, that there should be a negative relationship between attitude change and such interest. Furthermore, those subjects showing change should prefer to be exposed to "dissonant" information and should avoid "supportive" information. By contrast, those subjects showing no attitude change should prefer "supportive" information and avoid "dissonant" information. Tests of these expectations are based on information from the post-questionnaire, where subjects rank ordered a series of magazine titles in terms of their interest in being exposed to such material. The attitudinal positions of these titles were provided by the C2 group.

In contrast to the dissonance expectation derived above, a chi-square analysis reveals a significant positive relationship between attitude change and the desire to hear more information (in response to a yes-no question which preceded the ranking of titles). That is, of those subjects who exhibited attitude change greater than the grand mean for the combined experimental subjects, a larger percentage (82.1% vs. 17.9%) indicated a desire to hear more information than indicated

a desire not to hear more information ($\chi^2 = 14.59$, 1 df, $p < .001$).

In terms of the kind of information subjects were interested in being exposed to, there is no relationship between the frequency of choice of supportive and dissonant titles for the first and last choice in the rank ordering procedure (i.e., no evidence of preference for supportive and avoidance of dissonant information). Also, there was no relationship between favorableness of final position on Q1 and the kind of information most or least preferred. Similarly, there is no association between magnitude of attitude change and the kind of information most or least preferred. Analyses of variance of the sum of the ranks of the supportive, dissonant, and neutral titles (see Tables 4-6, Appendix N) reveal no significant F s. In addition, the grand means of the ranks for the three kinds of titles are not significantly different from each other (supportive = 4.64, dissonant = 4.30, and neutral = 4.12, respectively).

d. Reasons for Choice to Listen to Counterattitudinal Information

In response to an open-ended question in the post-questionnaire, subjects gave reasons for their choice to stay and listen to the counterattitudinal speech on the population control proposal. These fell into six major categories listed in Appendix I, Item 1; only one of these categories is relevant here, namely, any indication of a need to be informed. Only 32.6% gave reasons of this type; of these subjects, the most relevant are those (20% of total) who indicated the importance of being open-minded and of hearing both sides of an issue. Although such responses were given at the end of the experimental session, they do not support the dissonance assumption that exposure to counterattitudinal

information arouses dissonance.

Summary: Thus, in addition to the lack of support for the dissonance predictions 6a and 6b, there is no evidence from the responses to the discomfort indices or from the reasons given for the choice to listen indicating that dissonance was aroused by the commitment to listen to counterattitudinal information. In addition, there was no support for the expectations based on dissonance theory that interest in hearing additional information on the issue served as an alternative mode of dissonance reduction.

3. Attitude Question 1: Population Control Proposal

a. Attitude Change

Attitude question 1 (Q1) is the major dependent variable of this study. It assesses the subjects' degree of approval-disapproval of the communicator's proposed solution to the population problem, namely, that population growth should be limited by government policies relating to family size.

The overall mean initial attitude score for the experimental subjects is significantly more opposed to the source's recommendation than is the final attitude score (9.604 vs. 6.929 on an 11-point scale, $t = 14.164$, 239 df, $p < .001$). The differences between the initial and final scores are also significant for 16 of the 24 experimental groups (all $p < .05$); all nonsignificant differences involve negative source groups. The means for the attitude change scores are presented in Table 9. The mean attitude change for the experimental subjects combined is significantly greater than that for the C2 group ($t = 4.00$, 262 df, $p < .001$), indicating that the communication did have a persuasive effect. If one breaks down the differences between the C2 group change scores and

Mean Attitude Change Scores on Q1

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	4.167 [*] (3.189) ^{**}	1.500 (2.739)	2.500 (2.811)	2.833 (2.994)	4.167 (3.312)	2.667 (2.944)	3.500 (3.271)	5.500 (2.950)
	Moderate	2.250 (2.630)	3.500 (2.380)	3.000 (3.559)	3.000 (3.367)	2.000 (4.082)	1.750 (2.217)	3.000 (2.828)	4.250 (2.062)
Low	Extreme	3.500 (3.391)	2.667 (2.503)	3.833 (3.312)	1.500 (2.074)	4.000 (2.966)	3.667 (1.966)	2.333 (2.582)	1.833 (2.787)
	Moderate	0.250 (1.258)	-0.500 (2.887)	3.000 (3.162)	2.750 (3.594)	3.750 (3.202)	1.000 (3.742)	3.000 (2.160)	1.500 (2.646)
No	Extreme	4.667 (3.204)	1.833 (1.722)	4.167 (3.656)	2.667 (2.875)	4.500 (3.017)	2.167 (2.317)	3.833 (3.125)	1.500 (2.168)
	Moderate	2.500 (3.416)	0.250 (2.217)	4.000 (1.826)	0.250 (3.862)	2.750 (2.217)	-1.000 (2.944)	2.000 (2.708)	-0.250 (1.258)

TABLE 9

* Attitude measured on 11-point scale. N = 6 for extremely opposed,
N = 4 for moderately opposed.

** Standard deviation.

the experimental groups in terms of initial position, the following results are found: the extremely opposed ("11"- "10") experimental subjects exhibit significantly more change than do their C2 counterparts ($t = 3.864$, 158 df, $p < .001$); but the difference between the moderately opposed ("9"- "6") experimental and control groups only approaches significance ($t = 1.809$, 102 df, $p < .10$).

The results from the ANOVA for the attitude change scores based on the 48 experimental groups are found in Table 10. There is a main effect for source sign (i.e., degree of regard for source; $F = 11.262$, 1/192 df, $p < .001$) and a choice x degree of regard for source interaction (i.e., CS interaction; $F = 3.830$, 2/192 df, $p < .023$). For the source sign effect, the positive source groups exhibit greater attitude change than the negative source groups in accord with the functional prediction (prediction 1). The means for the CS interaction are presented in Table 11 from which it can be seen that attitude change is directly related to source sign under the LC ($t = 1.76$, 192 df, $p = .08$) and NC ($t = 3.98$, 192 df, $p < .001$) conditions; but under the HC condition, source sign has no effect. Thus, this pattern only partially fulfills the dissonance prediction (prediction 1) and only partially fulfills the functional prediction. Looking at the means across choice for a given level of regard for source, there are no significant differences among the positive source groups. For the negative source groups, the HC group exhibited significantly greater attitude change than both the LC and NC groups ($t = 1.88$, 192 df, $p = .06$, and $t = 3.09$, 192 df, $p < .01$, respectively), which are not significantly different from each other.

TABLE 10
Analysis of Variance: Attitude Change Scores on Q1

Source	df	MS	F	^P less than
Choice (C)	2	12.912	1.572	
Degree of Regard for Source (S)	1	95.504	11.262	.001
Type of Commitment (O)	1	1.838	.224	
Basis of Regard for Source (T)	1	2.204	.268	
Initial Attitude (A)	1	75.625	9.207	.003
CS	2	31.454	3.830	.023
CO	2	8.138	.991	
CT	2	3.179	.387	
CA	2	8.774	1.065	
SO	1	.937	.114	
ST	1	8.437	1.027	
SA	1	.003	.000	
OT	1	3.504	.427	
OA	1	1.878	.229	
TA	1	21.025	2.560	
CSO	2	1.165	.142	
CST	2	6.237	.759	
CSA	2	4.084	.497	
COT	2	15.254	1.857	
COA	2	6.192	.754	
CTA	2	6.227	.758	
SOT	1	3.504	.427	
SOA	1	6.994	.845	
STA	1	1.736	.211	
OTA	1	.711	.087	
CSOT	2	.329	.040	
CSOA	2	2.647	.322	
CSTA	2	7.009	.853	
COTA	2	1.659	.202	
SOTA	1	3.600	.438	
CSOTA	2	1.827	.222	
WITHIN CELLS (error)	192	8.214		

TABLE 11

Mean Attitude Change (Q1) Scores for Choice x Degree of
Regard for Source (Cs) Interaction

DEGREE OF REGARD FOR SOURCE	CHOICE CONDITIONS		
	High	Low	No
Positive	3.175 [*] /3.020 ^{**}	3.050/2.846	3.700/2.893
Negative	3.125/2.830	1.925/2.731	1.150/2.547

* Attitude toward Q1 measured on 11-point scale.

** Standard deviation.

The predicted interaction between choice and initial attitude (prediction 5) was not significant. Rather, there is a highly significant main effect for initial attitude in the direction opposite to the assimilation-contrast theory's expectation ($F = 9.207$, $1/192$ df, $p < .003$). That is, the extremely opposed subjects exhibited more change than did the moderately opposed subjects.* The predicted main effect for choice (prediction 2) though not significant is in the direction expected by dissonance theory. Specifically, as choice increases, attitude change increases. The two other predicted interactions (predictions 3 and 4) involving the type of commitment were not significant. Lastly, as tested by a chi-square analysis, the predicted positive relationship (prediction 8b) between N-approval and attitude change was not found.

b. Importance of the Issue

The mean final importance of the population control proposal ratings for the experimental groups are presented in Table 1, Appendix O. The experimental groups combined are not significantly different from the C2 group ($t = .315$, 262 df, $p > .10$). If initial position is considered, however, the difference between the extremely opposed experimental and C2 subjects approaches significance ($t = 1.852$, 158 df, $p = .07$), with the experimental subjects feeling the issue to be less important. The difference between the experimental and C2 moderately opposed groups was not significant. An overall t -test indicates that there is no significant difference between the initial and final importance ratings for

*This is also true if the percent of change possible (i.e., in terms of initial position on the 11-point scale) is considered; for, the extremely opposed subjects exhibited more change than the moderately opposed (31.12% vs. 23.01%).

the experimental subjects (5.583 vs. 5.467). The ANOVA (see Table 2, Appendix 0) reveals only a main effect for initial attitude ($F = 6.170$, $1/192$ df, $p \leq .014$), with the extremely opposed subjects rating the issue of greater importance than the moderately opposed subjects after exposure to the experimental message.

The specific nature of the effect of the experimental treatment on personal importance of the issue is further elucidated by considering the change in importance as a function of initial position. By ANOVA (see Table 3, Appendix 0), there is a highly significant main effect for initial position ($F = 8.335$, $1/192$ df, $p \leq .004$). The extremely opposed subjects considered the issue to be more important and the moderately opposed subjects considered it to be less important (.347 vs. -.208). However, the extremely and moderately opposed C2 counterparts exhibit nonsignificant changes in the same directions (.313 vs. -.250; $t = 1.21$, 22 df, $p > .10$). There is no difference between the respective experimental and C2 groups.

c. Certainty of the Correctness of One's Opinion

The mean ratings of final certainty of the correctness of one's opinion on Q1 are found in Table 4, Appendix 0. An overall t -test indicates a significant difference between the initial and final certainty ratings for the experimental subjects (2.442 vs. 2.842, $t = 3.062$, 239 df, $p \leq .01$); that is, after exposure to the population control message, subjects were less certain of the correctness of their opinions. The difference between the final certainty ratings for the C2 group and the experimental subjects combined, however, does not reach significance (2.458 vs. 2.775); nor are the differences significant, if initial position is taken into account.

The ANOVA (see Table 5, Appendix 0) reveals no significant effects although the main effect for initial attitude approaches significance ($F = 2.720$, $1/192$ df, $p < .101$). The extremely opposed subjects were more certain of their final opinions' correctness than were the moderately opposed subjects. The only other pattern of means worthy of note are the choice means. Here the pattern is the reverse of that for attitude change and importance; for as choice increased, the certainty of the correctness of one's opinion decreased.

In terms of the change in certainty, there is a highly significant main effect for initial position ($F = 18.110$, $1/192$ df, $p < .001$; see Table 6, Appendix B), with the extremely opposed subjects becoming less certain of their opinion's correctness and the moderately opposed subjects becoming more certain ($-.799$ vs. $.281$). Since both C2 counterparts became more certain of their opinions, it is obvious that the experimental treatment had a significant effect only on the certainty of the extremely opposed subjects ($t = 2.206$, 158 df, $p < .05$). If one examines the relationship between attitude change and final certainty on Q1 as a function of initial position, the differential effect of the communication is further elucidated. For the extremely opposed group, there is a significant negative relationship between magnitude of attitude change and final certainty; a greater percentage (65.7% vs. 45.9%; $\chi^2 = 4.90$, 1 df, $p < .05$) of those subjects changing less than the grand mean than of those changing more than the grand mean (" ≤ 3 " vs. " > 3 ") are extremely certain of their opinions (" ≤ 2 " vs. " > 2 "). In contrast, for the moderately opposed group, the relationship is positive; a greater percentage (51.2% vs. 28.3%) of those changing more than the grand mean are extremely certain of their opinions ($\chi^2 = 4.28$, 1 df, $p < .05$) than

of those changing less than the grand mean. Thus, it appears that for the initially extreme subjects, if the communication did not change their opinions, it also did not shake their certainty of their opinions' correctness. Whereas, for the moderately opposed subjects, even though the communication did not change their opinions, it did shake their certainty.

Summary: The specific nature of the CS interaction thus provides only partial support for the dissonance prediction and only partial support for the functional approach (prediction 1), although it is obvious that choice does affect the nature of the relationship between attitude change and source characteristics. There was only meagre support for the dissonance prediction of a main effect for choice (prediction 2), and no support for the other dissonance predictions (predictions 3-5). Thus, type of commitment had no effect on attitude change. In addition, not only was there no interaction between choice and initial position (prediction 5), but the greater attitude change of the extremely opposed subjects relative to the moderately opposed was not expected.

The communication had no overall effect on the personal importance of the issue or on the certainty of the correctness of one's opinion. However, as with Q1, there was a significant main effect for initial position for both variables. Specifically, the extremely opposed subjects felt the issue was more important than the moderately opposed after exposure but were less certain that their opinions were correct. Interestingly, if the communication had no effect on opinions on Q1 for the extremely opposed subjects, it also did not shake their certainty; whereas, the moderately opposed subjects became less certain even if there was no attitude change.

4. Attitude Questions 2 and 3 (Q2, Q3)

a. Attitude Score

It will be recalled that the post-questionnaire contained two summary inferential statements related to the population message. Question 2 represented a fairly direct summary of the factual information presented in the message describing the effects of the existing and future population explosion. It differs from Q1 in that it is not a policy recommendation or a solution to the population problem discussed in the experimental message. It read: "The earth's resources and man's ingenuity will not be sufficient to adequately feed, clothe, and house the world's population if unrestricted population growth continues." Question 3 represented an inference concerning the future of mankind based on the analysis of the population explosion presented in the message. It differs from Q1 in that it also is not a policy recommendation or a solution to the problem; and it differs from Q2 in that the specific statement is more removed from the content of the counterattitudinal message. It read: "By the year 2000 the human race will face extinction if population growth is not limited."

The relevant means are presented in Tables 12 and 13. The overall mean attitude scores of the control group subjects on Q2 and Q3 are not significantly different from those of the experimental groups combined (4.833 vs. 4.167, $t = .972$, 262 df, $p > .10$; and 8.458 vs. 7.529, $t = 1.472$, 262 df, $p = .14$). If initial position is considered, however, the extremely opposed C2 group is significantly more opposed to Q3 than the extremely opposed experimental subjects (9.125 vs. 7.625, $t = 1.912$, 158 df, $p = .05$); but none of the differences for the moderately opposed groups are significant.

Mean Attitude Scores on Q2

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	4.000* (4.382)**	4.333 (4.803)	5.667 (4.676)	3.333 (3.204)	4.333 (4.082)	5.833 (4.021)	2.167 (2.858)	3.667 (2.422)
	Moderate	3.250 (1.708)	1.750 (0.957)	4.250 (3.304)	3.000 (3.367)	5.250 (4.924)	5.000 (2.828)	3.000 (1.633)	2.750 (2.363)
Low	Extreme	4.333 (2.160)	3.667 (2.066)	5.167 (4.665)	7.333 (3.141)	3.167 (3.061)	4.833 (2.977)	4.500 (2.168)	4.333 (2.658)
	Moderate	4.750 (3.304)	7.500 (3.109)	5.000 (1.414)	2.000 (2.000)	2.250 (1.500)	2.500 (1.915)	1.500 (1.000)	4.250 (3.775)
No	Extreme	3.333 (2.658)	7.500 (4.135)	5.667 (4.131)	5.167 (3.764)	3.667 (2.805)	3.500 (2.345)	3.333 (2.422)	4.667 (4.033)
	Moderate	4.000 (3.864)	6.000 (3.559)	2.500 (1.291)	3.000 (2.449)	3.500 (2.082)	2.250 (1.550)	5.000 (3.162)	4.500 (4.726)

TABLE 12

*The higher the mean the greater the opposition to Q2 on an 11-point scale.

**Standard deviation.

Mean Attitude Scores on Q3

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	8.500* (1.975)**	8.333 (3.204)	7.833 (2.137)	4.833 (2.229)	9.167 (1.329)	7.667 (2.875)	5.333 (2.582)	6.333 (3.777)
	Moderate	8.000 (2.944)	5.750 (4.573)	9.500 (3.000)	5.000 (3.162)	7.750 (3.304)	6.250 (2.754)	6.500 (2.380)	4.500 (2.082)
Low	Extreme	8.333 (3.266)	8.667 (1.966)	8.000 (2.966)	9.333 (2.066)	5.167 (3.869)	8.500 (2.881)	5.500 (3.507)	9.000 (2.757)
	Moderate	9.500 (1.291)	7.000 (3.367)	8.000 (2.160)	6.750 (2.986)	6.000 (2.944)	4.750 (3.304)	6.250 (1.708)	8.750 (0.500)
No	Extreme	8.333 (3.386)	6.833 (3.430)	7.167 (3.710)	7.333 (3.011)	9.167 (2.229)	6.000 (3.347)	8.167 (3.371)	9.500 (3.209)
	Moderate	9.750 (2.500)	7.750 (3.304)	7.000 (3.916)	7.750 (4.272)	8.750 (0.500)	8.500 (1.732)	9.000 (1.414)	8.250 (1.708)

TABLE 13

* The higher the mean the greater the opposition to Q3 on an 11-point scale.

** Standard deviation.

The results from the ANOVA are presented in Tables 14 and 15, respectively. Unlike Q1, the main effect for initial position is not significant for Q3 and only approaches significance for Q2 ($F = 3.428$, $1/192$ df, $p < .07$), with the moderately opposed subjects less opposed to Q2 than the extremely opposed subjects. For Q2, the CS interaction is not significant; but the pattern of the means parallels that for Q1, with favorableness to Q2 directly related to source sign for LC and NC and not related for HC. Since the original distribution of attitude scores on Q2 was skewed on the favorable side, the aborted range probably can account for the lack of significance of the interaction. For Q3, the CS interaction is significant ($F = 4.194$, $2/192$ df, $p < .016$); the pattern of the means is similar to those of Q1 and Q2. Specifically (see Table 16), there is a significant inverse relationship between favorableness to Q3 and source sign for the HC groups; the positive source groups are significantly more opposed than the negative source groups ($t = 2.44$, 192 df, $p < .05$). But there is no difference as a function of source sign for the LC and NC groups, respectively. Thus the negative source appears to have had a greater impact on the HC and NC conditions for Q3 than for Q1 and Q2. However (as with Q1), among the negative source groups on Q3, the HC subgroup exhibits less opposition than do the LC and NC subgroups ($t = 2.83$, 192 df, $p < .01$ and $t = 2.24$, 192 df, $p < .05$, respectively). Among the positive source groups, the only significant difference is between the LC and NC conditions, with the former exhibiting less opposition ($t = 2.09$, 192 df, $p < .05$). Lastly, the main effect for choice is not significant for Q2, but is near-significant for Q3 ($F = 2.457$, $2/192$ df, $p < .088$). The pattern of the means for both questions parallels that for attitude change on Q1; namely, as choice increases, opposition to Q2 and Q3 decreases.

TABLE 14
Analysis of Variance: Attitude Scores on Q2

Source	df	MS	F	P less than
Choice (C)	2	3.879	.378	
Degree of Regard for Source (S)	1	12.150	1.185	
Type of Commitment (O)	1	33.750	3.291	.071
Basis of Regard for Source (T)	1	.817	.080	
Initial Attitude (A)	1	35.156	3.428	.066
CS	2	5.887	.574	
CO	2	13.738	1.340	
CT	2	7.029	.685	
CA	2	.475	.046	
SO	1	1.667	.163	
ST	1	8.067	.787	
SA	1	7.367	.718	
OT	1	1.067	.104	
OA	1	3.906	.381	
TA	1	9.506	.927	
CSO	2	16.129	1.573	
CST	2	.704	.069	
CSA	2	1.536	.150	
COT	2	28.854	2.814	
COA	2	11.658	1.137	.062
CTA	2	9.700	.946	
SOT	1	18.150	1.770	
SOA	1	.156	.015	
STA	1	.117	.011	
OTA	1	24.284	2.368	
CSOT	2	5.712	.557	
CSOA	2	3.100	.302	
CSTA	2	4.803	.468	
COTA	2	11.319	1.104	
SOTA	1	3.701	.361	
CSOTA	2	26.753	2.609	.076
WITHIN CELLS (error)	192	10.255		

TABLE 15
Analysis of Variance: Attitude Scores on Q3

Source	df	MS	F	p less than
Choice (C)	2	20.513	2.457	.088
Degree of Regard for Source (S)	1	10.417	1.248	
Type of Commitment (O)	1	10.417	1.248	
Basis of Regard for Source (T)	1	9.600	1.150	
Initial Attitude (A)	1	3.600	.431	
CS	2	35.004	4.194	.016
CO	2	23.704	2.840	.061
CT	2	23.412	2.805	.063
CA	2	8.831	1.058	
SO	1	25.350	3.037	.083
ST	1	15.000	1.797	
SA	1	27.778	3.328	.070
OT	1	5.400	.647	
OA	1	.625	.075	
TA	1	1.469	.176	
CSO	2	8.863	1.062	
CST	2	11.338	1.358	
CSA	2	10.888	1.304	
COT	2	10.238	1.226	
COA	2	.640	.077	
CTA	2	10.209	1.223	
SOT	1	9.600	1.150	
SOA	1	.136	.016	
STA	1	.625	.075	
OTA	1	.544	.065	
CSOT	2	4.963	.595	
CSOA	2	.072	.009	
CSTA	2	5.069	.607	
COTA	2	5.426	.650	
SOTA	1	4.011	.481	
CSOTA	2	7.138	.855	
WITHIN CELLS (error)	192	8.347		

TABLE 16

Mean Attitude Toward Q3 for Choice x Degree of
Regard for Source (CS) Interaction

DEGREE OF REGARD FOR SOURCE	CHOICE CONDITION		
	High	Low	No
Positive	7.825 [*] /2.561 ^{**}	7.025/3.092	8.375/2.817
Negative	6.225/3.150	8.050/2.726	7.675/3.050

^{*}The higher the mean the greater the disagreement with Q3 on 11-point scale.

^{**}Standard deviation.

b. Importance of the Issue and Certainty of the Correctness
of One's Opinion

The mean importance rating of the C2 group is not significantly different from that of the combined experimental subjects for either Q2 (5.208 vs. 5.492) or Q3 (5.625 vs. 5.537), thus paralleling the results for Q1. The ANOVA for both importance variables also parallels the results of Q1 (see Appendix 0, Tables 7-8).

The mean certainty score of the control group C2 is significantly different from that of the combined experimental groups for both Q2 (3.083 vs. 2.333, $t = 2.635$, 262 df, $p < .01$) and Q3 (3.417 vs. 2.704, $t = 2.336$, 262 df, $p < .05$), indicating greater certainty for the experimental subjects. In terms of the ANOVA (see Appendix 0, Tables 9 and 10), as for Q1, the main effect for initial position is significant for Q2 ($F = 6.115$, 1/192 df, $p < .014$) and approaches significance for Q3 ($F = 2.756$, 1/192 df, $p < .099$). In both cases the extremely opposed subjects are more certain of their opinions than are the moderately opposed subjects. Similarly, if the differences between the experimental and C2 groups are considered in terms of initial position, then the overall effect appears to be due solely to the extremely opposed subjects. On both attitude questions, the extremely opposed are more certain of their opinions than are their C2 counterparts (2.181 vs. 3.187, $t = 3.211$, 158 df, $p < .01$ and 2.521 vs. 3.250, $t = 1.776$, 158 df, $p = .08$, respectively). The differences for the moderately opposed subjects are not significant.

Thus, we have the interesting result of no significant effect of the experimental treatment on opinions for Q2 and Q3; but, at least for the extremely opposed subjects, an increase in certainty of the

correctness of their opinions. This is quite reasonable for Q2 for which most subjects were in initial agreement and which tapped essentially the factual information of the experimental message. For Q3, which was an inference from the basic message, this increase in certainty is the opposite of expectation. However, if the relationship between change on Q1 and certainty on Q3 as a function of initial position is examined, it can be seen that the results parallel those for Q1. Specifically, although not significant, a greater percentage of the initially extremely opposed subjects changing less than the grand mean on Q1 than of those changing more than the grand mean were quite certain of their opinions on Q3 (62.9% vs. 50.0%, $\chi^2 = 1.91$, 1 df, $p < .20$). Thus, again it appears that for those subjects whose opinions were not affected by the experimental treatment, there was an increase in certainty.

Summary: First, there was no significant effect of the communication on the two attitude-related questions. In the case of Q2, however, this lack of effect is probably attributable to the fact that most subjects were in initial agreement with the question. The extremely opposed subjects did become more favorable to Q3, thus paralleling the results for Q1. Unlike Q1, the main effect for initial attitude was not significant for either question, probably due to the weakness of the overall effect of the communication on these questions. Second, the form of the CS interaction (significant only for Q3) for both questions is similar to that for Q1. As with Q1, the communication had no overall effect on the personal importance of either Q2 or Q3. But in contrast to Q1, the extremely opposed subjects became more certain of the correctness of their opinions on both questions after exposure.

Such an increase is reasonable for Q2 since the subjects were in initial agreement. For Q3, the effect is largely due to those extremely opposed subjects who exhibited little attitude change on Q1. Hence, as with Q1, if an individual resisted persuasion he also maintained or increased his certainty of his opinion's correctness. Perhaps this kind of reaction reflects a bolstering of the initial position in the face of attack, or alternatively, a response to psychological reactance.

5. Variables Related to Arguments of Message

a. Number of Arguments Recalled

It will be recalled that one of the items on the post-questionnaire asked for recall of the major arguments of the talk just heard. These were counted on the basis of the categorization found in Appendix 0, Item 1. The overall percentage of subjects giving reasons equivalent to Q1, Q2, and Q3 are 34.17, 40.83, and 9.58%, respectively. The number of arguments recalled is not significantly correlated with initial position or change on Q1, but is positively correlated with favorableness to Q2 and Q3.

The relevant means are found in Appendix 0, Table 11, and the summary of the ANOVA in Table 12. Neither the CS interaction nor the main effects for initial attitude, degree of regard for source, and choice were significant. Therefore, there is no evidence of greater attentiveness and hence recall, as choice increases or as a function of degree of regard for source.

b. Ratio of Arguments Agreed or Disagreed with to Total Recalled

It will be recalled that subjects were asked to list those arguments they agreed or disagreed with of the total recalled in the post-

questionnaire. The relevant means and the summary of the ANOVA are found in Appendix O, Tables 13-16. The only significant effect is that for initial position in relation to the ratio of arguments disagreed with ($F = 6.402$, $1/176$ df, $p < .012$); the extremely opposed subjects disagreed with proportionately more arguments of those recalled than did the moderately opposed subjects. Since there was no difference in the number recalled as a function of initial position, this result reveals that the extremely opposed subjects remained less favorable than the moderately opposed to specific arguments in the communication, even though they had exhibited the greater attitude change.

c. Agreement with the Conclusion of the Message

Because some subjects indicated that they agreed with many of the arguments of the message but disagreed with the conclusion or solution (as reflected by Q1), a specific question regarding agreement with the conclusion was added to the post-questionnaire for the second semester of testing. (Subjects from the first semester were included in the results only if they indicated agreement-disagreement in response to one of the open-ended questions.)

The relevant percentages and the results from the ANOVA are found in Appendix O, Tables 17 and 18, respectively. The main effect for initial attitude is significant ($F = 11.357$, $1/96$ df, $p < .001$); the moderately opposed subjects agreed with the conclusion more often than did the extremely opposed (40.35% vs. 17.24%). Nonetheless, there is a highly significant positive association between attitude change and agreement with the conclusion; a higher percentage (23.6% vs. 2.8%) of subjects whose attitude change exceeded the grand mean of the combined experimental subjects than of those exhibiting less change than the

grand mean agreed with the conclusion ($\chi^2 = 42.85$, 1 df, $p < .001$). This highly significant association holds for both the initially extremely and moderately opposed subjects (both $p < .001$, by Fisher's exact test). Thus, the apparent contradiction between the direction of the main effect of initial attitude and the chi-square analysis is a function of the fact that, although the extremely opposed subjects changed the most, many still disagreed with the message's conclusion.

The main effect for choice is also significant ($F = 4.024$, 2/96 df, $p < .021$); agreement with the conclusion increased as choice increased. The source sign effect approaches significance ($F = 3.032$, 1/96 df, $p < .085$), with subjects listening to positive sources more often agreeing with the conclusion than did subjects listening to negative sources. Although the CS interaction is not significant ($p < .309$), the pattern of the means parallels that for attitude change on Q1, attitude on Q2, and the ratio of arguments agreed with.

Summary: The variables related to the arguments of the message provide no evidence of greater attentiveness or recall as a function of any of the independent variables. The specifics of these results further indicate that although the extremely opposed subjects exhibited more attitude change on Q1 than the moderately opposed subjects, they continued to disagree with more of the specific arguments of the message and with the proposed solution to a greater extent than the moderately opposed subjects.

6. Within Cells Correlations among Attitude-Related Variables

The dependent variables discussed up to this point have been designated "attitude-related" variables as distinct from "task" variables. The intercorrelations among the former are found in Table 17. It can

Within Cells Correlations among Attitude Related Dependent Variables*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Initial Attitude	--	--	--	--	--	--	--
(2) Attitude Change (Q1)	.08	--	--	--	--	--	--
(3) Q2	.02	-.44 [°]	--	--	--	--	--
(4) Q3	.12 ^{**}	-.43 [°]	.44 [°]	--	--	--	--
(5) No. Arguments Recalled	.01	.07	-.12 ^{°°}	-.13 ^{**}	--	--	--
(6) Ratio Agreed with	-.06	.39 [°]	-.49 [°]	-.38 ^{***}	.22 ^{***}	--	--
(7) Ratio Disagreed with	.10	-.37 [°]	.47 [°]	.36 ^{***}	-.22 ^{***}	-.83 [°]	--
(8) Agreement with Conclusion#	.24 ^{***}	-.59 [°]	.25 ^{***}	.27 ^{***}	.19 ^{**}	-.41 [°]	.40 [°]

TABLE 17

* All correlation coefficients are within cells correlations from the ANOVA.

** p less than .05

*** p less than .01

° p less than .001

°° p less than .10

Point biserial correlation; 0 = agree, 1 = disagree, N = 144

be seen that attitude change on Q1 is significantly correlated with all of the other measures, except for the number of arguments recalled. Specifically, as attitude change increases, opposition to Q2 and Q3 decreases, the ratio of arguments agreed with increases, the ratio of arguments disagreed with decreases, and agreement with the conclusion of the message increases. In addition, Q2 and Q3 are positively correlated with each other as well as with the other three measures. The number of arguments recalled is negatively correlated with opposition to Q2 and Q3, even though it is not correlated with Q1, and is positively correlated with agreement with the conclusion as would be expected. The remaining significant correlations are also in the expected direction.

H. Task Related Variables

1. Intercorrelations

The intercorrelations among the dependent variables designated as task variables and their correlations with the major dependent attitude variables are presented in Table 18. Three of the four task related measures are significantly correlated with attitude change on Q1 and with positions on Q2 and Q3, and they are all significantly correlated with each other. Thus, it appears that for the present experimental situation, attitude and task variables are similarly affected. Specifically, the greater the opposition to the assertions composing the attitude questions, the less the interest in and enjoyment of the listening task and the less the interest in hearing more information on the topic. In addition, the greater the interest in the task, then the greater was the enjoyment, and the more likely were the subjects to indicate willingness to participate in a similar experiment, and the

TABLE 18

Within Cells Correlations among Task Related Variables

	(4)	(5)	(6)	(7)
(1) Attitude Change Q1	.20 ^{**#}	.24 ^{**#}	.01 [#]	.25 ^{*°}
(2) Q2	-.18 ^{**#}	-.19 ^{**#}	-.02 [#]	-.23 ^{*°}
(3) Q3	-.23 ^{**#}	-.24 ^{**#}	.02 [#]	-.21 ^{*°}
(4) Interest in Listening Task	--	--	--	--
(5) Enjoyment of Listening Task	.76 [°]	--	--	--
(6) Willingness to Participate Again [*]	.17 ^{**#}	.17 ^{**#}	--	--
(7) Desire to Hear More Information [*]	.48 ^{°#}	.43 ^{°#}	.16 ^{**}	--

* Point biserial correlation for yes-no questions scored 0 = no, 1 = yes (N = 234 for willingness to participate again; N = 240 for all other measures).

** p less than .01

°

p less than .001

Sign of correlation coefficient changed since scale anchors in opposite directions.

more likely were they to desire to hear more information. The same relations hold for the enjoyment variable. Lastly, if subjects were willing to participate in a similar experiment, they were also interested in hearing more information.

2. Interest in and Enjoyment of the Listening Task

The relevant means are presented in Appendix P, Tables 1 and 3, and the summaries of the ANOVA in Tables 2 and 4, respectively. For both variables, the main effect of initial attitude is significant ($F = 3.853$, $1/192$ df, $p \leq .051$ and $F = 3.859$, $1/192$ df, $p \leq .050$, respectively). In both cases, the extremely opposed subjects indicated greater interest and enjoyment than did the moderately opposed subjects. This pattern parallels the attitude change means for Q1. For both variables, neither source sign nor choice main effects are significant. But those groups listening to positive sources indicated greater interest and enjoyment than did those listening to negative sources. Furthermore, as choice increased, interest in and enjoyment of the task increased. Thus, the pattern of the means on both variables for these two effects parallels the pattern repeatedly evidenced by the attitude-related variables.

Both of these task variables also show a significant reversal interaction between source sign and basis of regard for the source (ST interaction F for interest = 5.024 , $1/192$ df, $p \leq .026$ and F for enjoyment = 8.216 , $1/192$ df, $p \leq .005$, respectively). Specifically, the positive credibility source groups express greater interest ($t = 2.07$, 192 df, $p \leq .05$) and greater enjoyment ($t = 2.67$, 192 df, $p \leq .02$) than do the negative credibility source groups; and the negative attractive source groups express greater interest ($t = 2.35$, 192 df, $p \leq .05$) but not significantly greater enjoyment ($t = 1.39$, 192 df, $p > .10$) than do

the positive attractive source groups. The CS interactions for both variables approach significance (F for interest = 1.721, 2/192 df, $p < .182$ and F for enjoyment = 2.817, 2/192 df, $p < .062$). In both cases, the pattern of the means parallels that for attitude change on Q1, attitude on Q2, and agreement with the conclusion of the message. That is, there is a direct relationship between source sign and degree of interest in and enjoyment of the listening task for the LC and NC groups and no relationship for the HC groups.

3. Willingness to Participate again in a Similar Experiment

This item on the post-questionnaire was a yes-no question. The percentage of subjects indicating willingness to participate again are presented in Appendix P, Table 5. The summary of the ANOVA reveals several significant F s (see Appendix P, Table 6). The main effect for initial attitude is significant ($F = 3.810$, 1/186 df, $p < .052$), with the extremely opposed subjects more willing than the moderately opposed to participate again. This result parallels the means for the interest and enjoyment variables.

In addition, several interactions are significant, the most important is the CS interaction ($F = 3.618$, 2/186 df, $p < .029$), where the pattern of the means parallels that of the interest and enjoyment variables as well as the attitude-related variables. Specifically, there is a significant inverse relationship between source sign and willingness to participate for the HC groups ($t = 2.84$, 186 df, $p < .01$), and non-significant direct relationships for the LC and NC groups ($t = 1.44$, 186 df, $p > .10$ and $t = 1.82$, 186 df, $p = .08$, respectively). Nonetheless, the relationship between attitude change (greater than vs. less than the grand mean for the experimental subjects) and willingness to

participate is not significant for either the extremely or moderately opposed subjects. This is probably due to the highly skewed distribution for the participation measure.

4. Desire to Hear More Information

All data relevant to this variable were presented earlier. See pp. 58-59.

5. Sponsor of the Talk

It will be recalled that among the items on the post-questionnaire was a question on recall of the sponsoring organization of the message (OEO) and a rating of how worthwhile this organization was (on a 7-point scale). The responses to the first item were not analyzed since only 10% of the subjects gave any response at all and most were incorrect. On the worthwhile ratings only 200 subjects responded. Since there was no recall of the sponsor and, in addition, the ratings of worth were based on a self-selected sample, the meaning of these ratings is in doubt. Most plausibly, they may be interpreted to refer to the general sponsorship of the symposium format which served as the setting for the persuasive message.

The relevant means are presented in Appendix P, Table 7, and the summary of the ANOVA in Table 8. The only significant main effect is for the basis of regard for the source ($F = 8.668$, 1/152 df, $p < .004$); those groups listening to the credibility speakers rated the sponsoring organization more worthwhile than did those listening to the attractive speakers (5.052 vs. 4.538). In addition, several interactions were significant. The pattern of means for the CS interaction ($F = 3.750$, 2/152 df, $p < .026$) is similar to that of Q1 as well as for the other attitude-related and task-related variables. There is also a significant

reversal interaction for ST ($F = 6.482$, $1/152$ df, $p \leq .012$); the positive credibility and negative attractive speaker groups rated the sponsor more worthwhile than did the negative credibility and positive attractive groups. In terms of simple effects, however, only one significant difference occurred: the positive credibility groups rated the sponsor significantly more worthwhile than did the other three groups (all $p \leq .01$).

Summary: The major finding is that the pattern of responses for the task variables parallels that for the attitude-related variables. Thus, there was a significant main effect for initial attitude; the extremely opposed subjects indicated greater interest in and enjoyment of the task and greater willingness to participate again than did the moderately opposed subjects. In addition, the patterns of the means for the CS interaction for the interest, enjoyment, participate again, and sponsor's worth variables all parallel that obtained for attitude change on Q1.

I. Message Related Variables

1. Intercorrelations

It will be recalled that subjects were asked to rate the strength of the talk they had just heard and also how correct they thought the speaker's arguments were (both on 7-point scales). The intercorrelations of these message variables and their correlations with the major dependent attitude variables are presented in Table 19. It can be seen that the greater the attitude change on Q1 and the less the opposition to Q2 and Q3, the greater the perceived strength of the talk and the speaker's correctness. In addition, the two message variables are significantly positively related.

TABLE 19

Within Cells Correlations of MessageRelated Variables (N = 240)

	Talk Strength	Correctness of Source
Attitude Change on Q1	.21 ^{°*}	.26 ^{°*}
Q2	-.14 ^{°**}	-.31 ^{°*}
Q3	-.18 ^{°*}	-.32 ^{°*}
Correctness of Source	.18 [*]	--

° Sign of correlation coefficient changed to indicate positive relationship or negative respectively since scale in anchors in opposite directions.

* p less than .01

** p less than .05

2. Strength of Talk

The relevant means are presented in Appendix Q, Table 1, and the summary of the ANOVA in Table 2. The only significant main effect is for the basis of regard for the source ($F = 6.673$, $1/192$ df, $p < .011$); those groups listening to the attractive sources felt the talk was stronger than did those groups listening to the credibility sources (2.558 vs. 3.100). In addition, there is a significant ST interaction ($F = 11.142$, $1/192$ df, $p < .001$). Those groups listening to the positive credibility source rated the talk stronger than did those listening to the negative credibility source ($t = 3.367$, 192 df, $p < .001$). However, the difference between the two attractive sources was not significant. The main effect and ST interaction are a function of the fact that those exposed to the negative credibility speaker rated the talk less strong than did the other three source groups (all $p < .01$, at least).

3. Correctness of Source's Arguments

The relevant means are presented in Appendix Q, Table 3, and the summary of the ANOVA in Table 4. The main effect for source sign is highly significant ($F = 9.367$, $1/192$, $p < .003$) and that for choice approaches significance ($F = 2.428$, $2/192$ df, $p < .091$). Specifically, those groups listening to positive sources thought their arguments were more correct than did those listening to the negative sources (2.733 vs. 3.275). This parallels the results for the attitude and task-related variables. The choice effect also parallels the results for the attitude and task-related variables; for, as choice increased, the judged correctness of the speaker's arguments increased.

Several interactions are significant, but the one of most immediate importance is the ST interaction ($F = 5.323$, $1/192$ df, $p \leq .022$). Groups listening to the positive credibility speaker thought he was more correct than did those listening to the negative credibility speaker ($t = 3.92$, 192 df, $p \leq .001$); whereas, there was no difference between the groups listening to the attractive speakers.

Summary: Although the CS interaction is not significant for either of the message variables, ratings of both message strength and source correctness were significantly correlated with attitude change. Unfortunately, there is no way of determining whether these ratings represent an "enhancement" of the message content and source preceding attitude change or "derogation" by those subjects not exhibiting change. In addition, the negative credibility speech was rated weaker than the other three speeches, and the negative credibility speaker as less correct than the positive credibility speaker.

J. Variables Related to Mechanism of Attitude Change

1. Introduction

It will be recalled that a functional analysis of the experimental situation suggests that the locus of inconsistency aroused by the exposure to counterattitudinal information lies in a concern over the correctness of one's initial opinion. Given this attitude-behavior inconsistency, two alternative (but not necessarily mutually exclusive) corrective strategies could be employed - social comparison processes (i.e., "consensual" validation) or "expertise" validation. Thus several items in the post-questionnaire were designed to elucidate the type of inconsistency aroused and the type of resolution involved. Specifically, subjects were asked how important it was for them to be

correct on the population control issue, and which speaker characteristic was more important, "informed" or "like me." In addition, the type of reason given for the choice to listen to the counterattitudinal information and the overall relative effectiveness of the two types of sources can be considered.

2. Importance of Being Correct

The means for the importance of being correct are presented in Appendix P, Table 1, and the summary of the ANOVA in Table 2. None of the main effects are significant; but there are several significant interactions, including a significant CS reversal interaction ($F = 3.052$, $2/192$ df, $p < .032$). Specifically, the pattern of means involved in the interaction (see Table 20) parallels that for attitude change on Q1, as well as for the other attitude and task-related variables. Essentially, for the HC groups, there is near-significant inverse relationship between source sign and the importance of being correct ($t = 1.81$, 192 df, $p = .08$), but a nonsignificant direct relationship for the LC and NC groups. In addition, a chi-square analysis reveals a significant positive relationship between attitude change and the importance of being correct ($\chi^2 = 5.54$, 1 df, $p < .02$). Specifically, a greater percentage (60.7% vs. 44.7%) of subjects whose attitude change exceeded the grand mean for the combined experimental subjects ("43" vs. "23") felt it was very important to be correct ("42" vs. "23"), than was true of those changing less than the grand mean.

3. Most Important Speaker Characteristic

The relevant percentages are presented in Appendix P, Table 3. The overwhelming majority (grand mean = 83.12%) in most conditions felt that being "informed" was more important than being "like me." However, many

TABLE 20

Mean Importance of Being Correct on Q1 for Choice x Degree of
Regard for Source (CS) Interaction

DEGREE OF REGARD FOR SOURCE	CHOICE CONDITION		
	High	Low	No
Positive	2.950 [*] /1.535 ^{**}	2.487/1.254	2.275/1.301
Negative	2.375/1.596	2.625/1.254	2.875/1.453

^{*} The lower the mean, the greater the importance of being correct on Q1 on 7-point scale.

^{**} Standard deviation.

subjects interpreted the "like me" scale to mean attitudinal congruence (rather than similarity on demographic variables); hence, the choice between the two types of source definition was not as originally defined. Although too few subjects to warrant statistical analysis gave reasons for their choice, those who did, indicated that being informed was more important; for, given the facts on an issue, they could then make a "well-informed" judgment. Such reasoning provides some support for supposing that the locus of inconsistency was focused on the correctness of one's opinion.

Summary: The two post-experimental indicators (i.e., importance of being correct and speaker characteristic) suggest that the present experimental situation did arouse concerns about being correct. However, if one considers which type of source or which specific source produced the most attitude change, the evidence is less clear. It will be recalled that the main effect for source type on Q1 was not significant nor was the ST interaction. In addition, although the positive credibility source produced significantly more attitude change than the negative credibility source ($t = 3.11$, 192 df, $p < .01$) and than the negative attractive source ($t = 2.02$, 192 df, $p < .05$), the positive credibility source did not produce more change than the positive attractive source ($t = .350$, 192 df, $p > .10$). Furthermore, the negative attractive source did not produce significantly greater change than the negative credibility source ($t = 1.09$, 192 df, $p > .10$). Thus, although it might be argued that there is evidence of the arousal of a consensual validation dilemma, there is no way of determining the mode of resolution from the available evidence.

K. Source Variables

1. Intercorrelations

The intercorrelations among the source variables for the experimental subjects are given in Appendix S, Table 1. Over all subjects, the credibility scales are highly positive correlated with each other; the same can be said for the two attractiveness scales. These data justify the use of composite indices.

2. Differences Between Source Pairs

The demonstration of significance between the experimental groups listening to the pairs of sources representing the credibility and attractiveness dimensions provides additional evidence of the success of the experimental manipulations. Also, it reflects the nature of the effect of the persuasive message itself, since these ratings were obtained after the attitude measure. In terms of the original dichotomies, for the sources defined primarily in terms of credibility (i.e., the scientist and old man on relief), there should be significant differences on the "informed," "truthful," and "trustworthy" scales, as well as on the composite credibility index. For the source defined in terms of attractiveness, differences on the "like me" and "my kind of person" scales, as well as on the composite index should be significant. In contrast, comparisons on the non-definitional scales and index should not be significant.

Table 21 shows the mean ratings on the composite credibility, composite attractiveness and the total index for the experimental groups. The ST interaction from the ANOVA (see Appendix S, Tables 2-4) was significant for the credibility and the total indices, and approached significance for the attractiveness index ($F = 29.589$, $1/192$ df, $p <$

TABLE 21

Mean Source Ratings for Experimental and Control Group 2

SCALE	SOURCE DEFINITION			
	SOURCE SIGN	GROUP	Credibility	Attractiveness
Sum Credibility [#]	Positive	E [°]	6.983/2.943 [*] (S) ^{**}	8.917/3.256 (C)
		C ^{°°}	8.166/3.687	10.856/3.755
	Negative	E	11.833/3.701 (R)	8.967/3.302 (B)
		C	16.833/3.302	14.800/2.489
Informed ^{##}	Positive	E	Credibility 1.883/1.329	Attractiveness 3.017/1.242
		C	1.167/1.400	4.714/1.500
	Negative	E	4.783/1.479	3.100/1.537
		C	6.667/0.810	4.400/2.400
Truthful	Positive	E	Credibility 2.483/1.242	Attractiveness 2.783/1.379
		C	3.167/0.990	2.857/1.870
	Negative	E	3.117/1.748	2.700/1.266
		C	5.000/1.550	4.800/1.300
Trustworthy	Positive	E	Credibility 2.617/1.263	Attractiveness 3.117/0.993
		C	2.833/1.330	3.286/1.110
	Negative	E	3.993/1.388	3.233/1.345
		C	5.167/1.690	5.600/1.340

TABLE 21 (continued)

SCALE

SOURCE DEFINITION

Sum
Attractiveness⁺

SOURCE SIGN	GROUP	Credibility	Attractiveness
Positive	E	9.133/2.396	8.283/2.855
	C	8.000/1.414	2.714/0.950
Negative	E	11.133/2.159	9.100/2.862
	C	12.833/1.170	12.000/1.871

Like Me

		Credibility	Attractiveness
Positive	E	4.817/1.359	4.133/1.818
	C	5.167/1.470	1.142/0.120
Negative	E	5.917/1.183	4.767/1.731
	C	6.833/0.390	6.000/1.000

My Kind of Person

		Credibility	Attractiveness
Positive	E	4.317/1.255	4.117/1.236
	C	2.833/1.170	1.571/0.250
Negative	E	5.217/1.379	4.333/1.503
	C	4.000/1.100	6.000/1.000

Sum
Total⁺⁺

		Credibility	Attractiveness
Positive	E	16.217/4.370	17.300/5.310
	C	16.166/1.603	13.571/4.159
Negative	E	22.950/4.012	17.900/5.967
	C	29.666/3.435	26.800/12.790

TABLE 21 (continued)

SCALE		SOURCE DEFINITION			
		SOURCE SIGN	GROUP	Credibility	Attractiveness
Persuasive - Influential for Me	Positive	E	4.233/1.872	4.167/1.843	
		C	3.000/1.260	4.286/1.250	
	Negative	E	5.333/1.612	3.950/1.780	
		C	6.333/1.630	4.600/2.190	

		Credibility	Attractiveness	
Source's Attitude - Evaluation vs. Anticipated Position	Positive	E	1.400/0.942	1.867/1.702
		C	2.667/2.580	6.142/2.270
	Negative	E	2.300/2.003	1.900/2.137
		C	9.000/2.450	7.800/3.830

° There was a total of 240 experimental subjects with 60 per cell.

°° Means for the no message control group (C2) are based on first source rated. Number of subjects per group is as follows: positive credibility = 6, negative credibility = 6, positive attractive = 7, and negative attractive = 5, respectively.

* Standard deviation.

** Code: S = Scientist; R = Man on Relief; C = College Student; B = Black Militant College Student.

Sum of three 7-point scales with range of 3-21. The smaller the mean, the greater the credibility.

The smaller the mean, the more positive the evaluation on a 7-point scale for all individual scales.

+ Sum of two 7-point scales with range of 2-14. The smaller the mean, the greater the attractiveness.

++ Sum of five 7-point scales with range of 5-35. The smaller the mean, the more positive the overall evaluation.

.001; $F = 22.698$, 1/192 df, $p < .001$; and $F = 3.197$, 1/192 df, $p < .075$, respectively). More specifically, for the credibility index the expected difference was found. An analysis of the simple effects indicated that the positive credibility source was seen as significantly more credible than the negative credibility source ($t = 7.77$, 192 df, $p < .001$); and, there was no credibility difference for the positive and negative attractive sources. For the attractiveness index, as expected, the positive attractive source was seen as significantly more attractive than the negative source ($t = 1.75$, 192 df, $p = .08$). However, the positive and negative credibility sources were also rated significantly different from each other on this dimension ($t = 4.27$, 192 df, $p < .001$). Results for the total source index (i.e., sum of all five scales) reveal a significant difference between the positive and negative credibility sources ($t = 7.24$, 192 df, $p < .001$) but no difference between the attractive sources.*

3. Comparison of Experimental and Control Ratings

Table 21 contains the mean scores for all of the source characteristics rated by the combined experimental subjects and for the source rated first by the C2 group subjects. As the ratings by the experimental subjects followed exposure to the talks, the validity of discussing any significant differences in terms of source derogation or enhancement (especially as a method of dissonance reduction alternative to attitude change rather than as attitude change correlates) is debatable. Nonetheless, the obtained differences are interesting.

*Tables of means and summaries of the ANOVA for the individual source scales comprising the composite indices are found in Appendix S, Tables 5-18.

For the two sources defined primarily in terms of credibility, there was no difference on the composite credibility index between the experimental and C2 ratings for the positive one (i.e., scientist). However, the experimental subjects rated the negative source (i.e., man on relief) significantly more credible than did the C2 subjects ($t = 3.18$, 64 df, $p < .005$). Similarly, in terms of the component scales, there were no significant differences between the experimental and C2 ratings for the positive source; whereas, the negative source was rated significantly more "informed," "truthful," and "trustworthy" by the experimental subjects than by the C2 group ($t = 3.02$, 64 df, $p < .01$; $t = 2.54$, 64 df, $p < .02$; and $t = 2.04$, 64 df, $p < .05$, respectively). On the composite attractiveness index (nondefinitional scales), there was no difference between the experimental and C2 ratings for the two credibility sources. In terms of the component scales, however, the positive credibility source was seen as less "my kind of person" by the experimental than by the C2 subjects ($t = 2.75$, 64 df, $p < .01$). All other comparisons were not significant. Lastly, on the total source index, the only difference for the credibility sources occurs for the negative source who was rated more positively by the experimental than by the C2 group ($t = 3.95$, 64 df, $p < .001$).

For the sources defined primarily in terms of attractiveness, the differences between the experimental and C2 ratings on the composite attractiveness index are in opposite directions. The experimental subjects rated the positive source (white college student) less attractive than did the C2 subjects ($t = 5.11$, 65 df, $p < .001$); whereas, they rated the negative source (black militant student) more attractive than did the C2 subjects ($t = 2.21$, 63 df, $p < .05$). In terms of the individual

scales, the positive source was rated less "like me" and less "my kind of person" by the experimental than by the C2 subjects ($t = 4.32$, 65 df, $p < .001$, and $t = 5.30$, 65 df, $p < .001$). In contrast, the negative source was seen as significantly more "my kind of person" by the experimental than by the C2 group ($t = 2.43$, 63 df, $p < .02$), with a nonsignificant difference in the same direction for the "like me" scale.

On the overall credibility index (nondefinitional scales), there was no difference between the experimental and C2 ratings for the positive attractive source. Whereas, the negative source was seen as significantly more credible by the experimental subjects ($t = 3.84$, 63 df, $p < .001$). In terms of the individual scales, the positive source was rated significantly more "informed" by the experimental than by the C2 subjects ($t = 3.35$, 65 df, $p < .005$); but there were no differences on the "truthful" and "trustworthy" scales. In contrast, the negative source was rated significantly more "trustworthy" by the experimental subjects ($t = 3.78$, 63 df, $p < .001$); on the "informed" and "truthful" scales, the differences were in the same direction and approached significance ($t = 1.74$, 63 df, $p = .08$, and $t = 1.86$, 63 df, $p = .07$, respectively). Lastly, on the total source index, there was no difference between the experimental and C2 ratings for the positive source. In contrast, the negative source was seen more positively by the experimental than by the C2 subjects ($t = 2.89$, 63 df, $p < .01$).

Summary: In summary, both negative sources were perceived as more positive by the experimental than by the C2 subjects on their respective composite definitional indices and on the total source index. But, for the positive attractive source, there was a complementary shift in the opposite direction on the definitional index. In addition, if the

differences on the individual scales are considered, then the crucial scales are those of "trustworthiness" and "my kind of person." Specifically, both negative sources were rated more "trustworthy" by the experimental than by the C2 subjects; whereas, the positive sources were rated less positively on the "my kind of person" scale.

IV. DISCUSSION

A. Introduction

Before attention is given to specific results, several points deserve mention. First, the attitude change results provide only partial support for the major dissonance prediction (prediction 1) of an interaction between source characteristics and degree of choice to listen to counterattitudinal information, and only partial support for a functional approach which argued that choice should be relatively unimportant in a consensual validation dilemma. Thus, the interaction between source characteristics and choice was significant, but the pattern of means involved in the interaction does not match dissonance theory expectations. Specifically, for the attitude questions as well as for many of the task and message-related variables, there was a significant direct relationship between source characteristics and attitude change under low choice (LC) and no choice (NC) conditions; but under high choice (HC), degree of regard for source had no effect. With respect to the other dissonance predictions, there was only meagre support for the dissonance assumption of a preference for supportive information in a "free choice" situation (prediction 6a), coupled with a failure to obtain a positive relationship between preference for supportive information and magnitude of attitude change (prediction 6b). Further, there was no evidence of interactions between type of commitment and source characteristics (prediction 3), between type of commitment, source characteristics, and choice (prediction 4), or between choice and initial position (prediction 5) across all dependent variables. Lastly, the

predicted main effect for choice (prediction 2) was in the expected direction but nonsignificant for most dependent variables.

From a functional point of view, there is some support for the contention that choice is not an important factor in a consensual validation dilemma in the failure to obtain the interactions expected by predictions 3-5 and the main effect for choice (prediction 2). However, choice did have an effect on attitude change as evidenced by the significant CS interaction. More potent support for the functional approach derives from the evidence that the inconsistency aroused by the commitment to listen to counterattitudinal information and the actual listening did involve concerns about the correctness of one's initial opinion. However, from the available evidence, it was impossible to determine whether "consensual" or "expertise" validation (prediction 7) was the more potent mode of inconsistency reduction.

There was no support for any of the predictions (predictions 8a-c) suggesting a mediational role for the personality variable N-approval in the persuasion process. And lastly, it is worthy of note that the effects of the experimental treatment on most of the dependent variables whether categorized as attitude, task, or message related, do covary.

B. Effect of the Communication

The communication did have a significant effect on opinions toward the policy recommendation of government control of family size (Q1). The experimental subjects combined exhibited significantly greater attitude change than the no message control group (C2); and in particular, the initially extremely opposed experimental subjects exhibited significantly greater change than their control counterparts. The difference

between the moderately opposed experimental and control groups was in the same direction but did not attain significance. However, the specific nature of this effect runs counter to expectation (prediction 5) and to much previous research (Hovland, Harvey, and Sherif, 1957; Sherif and Hovland, 1961; Sherif et al., 1965). The extremely opposed experimental subjects exhibited significantly greater attitude change than did the moderately opposed subjects. There was no significant effect of the communication on opinions on the two inferences (Q2 and Q3) based on the experimental message. However, most subjects were in initial agreement with the first question making only limited change possible; and for the second, although there was no overall difference between the experimental and control groups, the extremely opposed experimental subjects were significantly more in agreement with the question than were their control counterparts. This result parallels that for the population control proposal (Q1).

The result of greater attitude change for the extremely opposed subjects than for the moderately opposed on an issue of high personal importance, although unexpected, becomes understandable in view of the matrix of other characteristics differentiating the two groups of subjects. Specifically, the extremely opposed group stated initially that they were significantly more certain of their opinion's correctness, were more familiar with the pro and con arguments on the issue, felt the issue was more important, and were more interested in listening to supportive information on the issue than the moderately opposed subjects. Thus, from the pre-measures, there is considerable evidence that the extremely opposed subjects seemed fairly assured of their opinions and desirous of protecting them. However (on the basis of the C2 data),

they did not have more actual knowledge on the issue prior to exposure than the moderately opposed subjects. Therefore, it is possible that they overestimated their familiarity with the issue and had little basis for their sense of certainty.

The crucial variable thus seems to be the discrepancy between felt familiarity and actual knowledge with the magnitude of the discrepancy having implications for the ability to defend one's views. Although the population control issue is not strictly speaking a "cultural truism," McGuire's (1964) approach to such issues has relevance here. Specifically, McGuire makes two assumptions about individuals faced with attacks on cultural truisms: (1) they are unmotivated to defend their views because they regard them as unassailable, and (2) they are unpracticed in defending these views due to a lack of previous exposure to counter-argumentation. Therefore, when attacked, they exhibit little resistance to persuasion. For the present study, there is no means of testing the validity of McGuire's two assumptions. However, a discrepancy between felt familiarity and reality may be a result of a lack of previous exposure to counterattitudinal information. Further, the overestimation of familiarity implied by such a discrepancy coupled with the certainty that one is correct, might result in a lack of motivation to defend one's views. One could speculate that in McGuire's situation, if subjects were asked how familiar they felt they were with the arguments on the truism and how confident they were that their position was correct, that they would report high familiarity and high certainty. Thus, for the population control issue as well as for cultural truisms, one could argue that subjects' overestimation of familiarity coupled with their felt certainty of position would result in a greater impact of the

counterarguments when presented. A more realistic appraisal of familiarity with the issue would tend to render the counter-arguments less impressive. Thus, in the present case, the extremely opposed subjects who overestimated their familiarity with the issue and whose high confidence in their opinion's correctness was unrealistic exhibited the most attitude change when their position was attacked. Additional support for this interpretation would accrue if attitude change data were available for extreme and moderate subjects initially in favor of the population control proposal presented with a message arguing against government control of family size. Since the present study considered subjects at only one end of the attitude continuum, the validity of generalizing the obtained results is questionable. It is also possible to argue that the extremity of initial opinion was a function of rarely questioned religious training and beliefs; hence, the effect was largely due to the Catholics in the population. However, there was no relationship between magnitude of attitude change and religion (Catholic vs. other).

An alternative explanation for the greater attitude change exhibited by the extremely opposed subjects than by the moderately opposed derives from the implications of the covariation of personal importance of the issue with extremity of initial opinion. Thus, it could be argued, that the subjects for whom the issue was more important were more aware of the population problem and more involved in the sense that they felt a solution to the problem was necessary (cf., Weiss and Solomon, 1967). In addition, all balance theories would suggest that as extremity of opinion and importance increase, the need for internal consistency would increase. In accord with these suggestions, the extremely opposed subjects indicated that they felt it was more important to be correct on

the issue than the moderately opposed subjects and also were more interested in hearing additional information on the topic. In addition, they indicated a significantly more positive attitude toward the task than the moderately opposed subjects; they indicated greater interest in and enjoyment of the listening task, and a greater willingness to participate in a similar experiment again. Thus, the very involvement with the issue and the task may have resulted in greater attention to and grappling with the counter-arguments. Unfortunately, there were no differences in the number of arguments recalled as a function of initial position nor any relationship between magnitude of attitude change and the number of arguments recalled. Thus, there is no evidence to support speculations of greater attention and work on the part of the extremely opposed subjects. This failure to obtain any correlation between attitude change and performance measures, however, is quite common (cf., Zimbardo et al, 1970), and may be a function of the insensitivity of the performance measures employed.

C. Choice x Degree of Regard for Source

As expected on the basis of a functional approach (prediction 1), there was a significant main effect of degree of regard for source (i.e., source sign) for the population control proposal (Q1). (The effect did not attain significance for the other two attitude questions.) Thus, the higher the regard for the source, the more persuasive the source. The theoretical significance of this result, however, is mitigated by the fact that a significant choice x source sign interaction (CS) was obtained for Q1 (and Q3), thus providing a replication of the Jones and Brehm (1967) result on which the present study was based. However, the

pattern of the means only partially supports the dissonance prediction (prediction 1) of an inverse relationship between choice and source sign under high and low choice and a direct relationship under no choice. Specifically, attitude change on Q1 was a direct function of source sign for the LC and NC conditions; whereas, for the HC condition, source sign had no differential effect on attitude change. The predicted inverse relationship between choice and source characteristics did obtain under HC on Q3. It was also significant or near-significant for three of the task-related variables, namely, interest in and enjoyment of the listening task and willingness to participate again.

First, it should be pointed out that the direct effect obtained in the NC conditions replicates the usual communication's study result (cf., Hovland and Weiss, 1951) and thus provides some validity for the present manipulations. Although the overall pattern of results does not support the predictions of either a dissonance or functional approach, the pattern does suggest that choice affects the nature of the relationship between degree of regard for source and attitude change. In terms of the dissonance prediction of an inverse relationship under choice conditions, the major difficulty lies in the responses of the LC groups. Here an examination of several other dependent responses provides a rationale for the similarity of the LC and NC groups.

Specifically, the LC subjects' retrospective responses on the choice questions indicate a subjective reaction to the total situation more similar to the NC than to the HC groups. Thus the LC subjects felt less choice to refuse (as intended by the manipulation) and more pressure from the experimenter to stay than the HC subjects. But, more importantly, they felt more pressure to stay than the NC group. Further, the reasons

given for their choice to listen reflected an external locus of control similar to the NC subjects; whereas, the HC subjects indicated a significantly greater internal locus of control. In fact, both the LC and NC groups exhibited significantly greater external locus of control in their reasons for complying than did the HC group, but were not significantly different from each other. Thus, it could be argued that the LC conditions, where choice was made salient and then pressure in the form of justification for the counterattitudinal alternative was provided, resulted in perceptions of greater constraint and less choice than the NC conditions, where choice was not made salient and compliance was assumed. Since the LC subjects evinced the most external justification for their choice on the post-questionnaire, it can be argued that they experienced the least dissonance, or alternatively felt the least responsibility for the inconsistency aroused. Where there is little dissonance aroused as a function of the commitment to listen to counterattitudinal information, the dissonance that does result will be a function of regard for the source and strength of the message (Jones and Brehm, 1967). Hence, a direct relationship between low choice and source characteristics would be expected.

In addition, it is noteworthy that 20% of the NC subjects indicated that they had complete choice to refuse to listen to the counterattitudinal speech in spite of the fact that no explicit choice to leave had been offered (cf., March, 1970). On questioning, these subjects contended that although no choice to leave had been made explicit, they felt they could have left if they had really wanted to (i.e., "the experimenter was not holding a gun to their heads," etc.). Alternatively, it could be argued that the question about choice itself aroused

reactance or a threat to freedom defined as "the perception by an individual that there is pressure on him to behave in a specific way" (Brehm, 1968, p. 283). Thus for the NC subjects, the whole question of a choice to listen was not salient until the questionnaire item; and, therefore, they gave high choice responses. In addition, these subjects' high choice responses could refer to a choice other than the commitment to listen; for example, the choice to show up for the experiment (cf., March, 1970; Weick, 1966). Thus, it may be that the only way of operationalizing a "no" choice condition is to make the lack of choice explicit, although this method has not been employed in any of the dissonance research (Cohen, 1962; Cohen, Terry, and Jones, 1959; Festinger and Carlsmith, 1959; Powell, 1965; Zimbardo et al., 1965). Such a procedure, however, might lead to hostility which could produce a high refusal rate. Recently, Horowitz and Gumenick (1970) did successfully employ such a NC condition by telling the NC group that other subjects had a choice although they did not.

Rather than employing the magnitude of dissonance aroused to explain the attitude change results, it may be more profitable to consider the motivations aroused by the choice manipulation and source variables and the opportunities for attributing responsibility for the inconsistency to external sources. Thus as choice increases, there is an increase in the internal locus of causality and a decrease in psychological reactance, and therefore, greater pressures to resolve the dilemma, especially for the negative source groups. The LC group, however, indicated significantly greater constraint (i.e., pressure from the experimenter) than the HC and NC groups. Thus, if the constraint measure reflects psychological reactance, the order of decreasing attitude change

closely parallels the order of increasing reactance for the six cells of the CS interaction. Therefore, as choice increases, there is not necessarily an increase in dissonance or discomfort, but a decrease in reactance and external justification for compliance resulting in greater personal responsibility for the inconsistency.

In a similar vein, the situation can be interpreted in terms of Baron's (1968) functional analysis of the type of situation involved, namely, a relatively pure consensual validation dilemma. There is some evidence to support the contention that the major concerns aroused were ones of doubt about the correctness of one's opinion. Thus, the extremely opposed subjects became less certain of their opinions after exposure and felt it was more important to be correct on the issue than did the moderately opposed subjects. In addition, there was a significant positive association between attitude change and the importance of being correct on the issue. Lastly, the experimental subjects felt, in general, that it was more important for the source to be "informed" than to be "like me," since it was important to be able to make a well-informed judgment on an issue.

However, the experimental situation does involve a hedonic component, perhaps in relation to the time spent in the experimental situation, difficulty with the first perception task, and anxiety about the anticipated perception test after the experimental message (cf., Rosenberg's, 1965, evaluative apprehension). From a functional point of view (Baron, 1968; Kelman and Baron, 1968), the arousal of different motivational concerns implies different modes of inconsistency resolution. Specifically, arousal of hedonic concerns results in task re-evaluation rather than change of issue attitude. In contrast, when a

consensual validation dilemma is created, the individual focuses on the ability of the inducing agent to satisfy cognitive needs, and therefore moves toward similar persons with respect to issue attitude. Thus, Kelman and Baron (1968, p. 317) found no significant difference on issue attitude as a function of source for a pure hedonic dilemma. In contrast, on task attitude, they found a significant inverse relationship between high arousal and source sign and a direct relationship for the low arousal conditions. Thus, if the present choice manipulation is analogous to Kelman and Baron's arousal manipulation, the results on attitude change (issue attitude) and interest in and enjoyment of the listening task (task attitude) for the HC condition parallel the aforementioned results. More specifically, it can be argued that in the present study as choice increases, it acts to increase the salience of and the acceptance of personal responsibility for the hedonic component involved, thereby producing greater attitude change especially under the negative source conditions.

Two additional points about the nature of the CS interaction are worthy of note. First, if the effect of the experimental treatment on Q3 is examined, it can be seen that the reversal interaction was significant; under HC, the negative source produced significantly greater attitude change than the positive. An inverse simple effect under HC was also found for interest in and enjoyment of the listening task, willingness to participate again, and the importance of being correct on the issue. Since there is evidence that the negative credibility speech (man on relief) was weaker than the other speeches, a good case can be made that under high choice, a negative source will be more persuasive than a positive one, and that this effect did not reach significance

for Q1 due to the weakness of the negative credibility speech. (Specifically, although the negative credibility subgroup did exhibit significant attitude change, they indicated significantly less interest in and enjoyment of the task than the positive credibility and negative attractive source groups. In addition, they rated the talk as weaker and the source's arguments as less correct than the other three groups.) Additional support for this interpretation derives from a consideration of the CS interaction for attitude change for the credibility and attractiveness groups separately. Thus, for the credibility groups, the CS interaction was not significant. But, there was a highly significant direct relationship between attitude change and degree of regard for the source (i.e., positive greater than negative across choice, $F = 9.728$, $1/96$ df, $p < .002$). In contrast, for the attractive source groups, the CS interaction was significant with the pattern of the mean paralleling that for the entire sample ($F = 3.370$, $2/96$ df, $p < .039$). If this interpretation is valid, the overall results provide support for the dissonance prediction.

Alternatively, it is possible that choice differentially affects attitude change as a function of the kind of source involved. Thus, the nature of the source may arouse different concerns or motivations and/or trigger different modes of inconsistency reduction (cf., Kelman and Eagly, 1965). Since for the credibility source groups, there is a direct relationship between attitude change and degree of regard for the source, it appears that choice is unimportant in determining the direction of the relationship. Rather, as suggested by a functional approach sources defined primarily by their expertise on the issue maximize concerns about the correctness of one's opinion. Further, such sources

provide easily recognized objective standards of validation for inconsistency resolution. Therefore, the positive source is more persuasive than the negative one. In contrast, for the attractive source groups, there is no objective standard of validation to aid in the reduction of uncertainty about the correctness of one's initial opinion, forcing individuals to focus on other cues in the situation. Therefore, as choice increases, there is greater acceptance of personal responsibility for the inconsistency, and increased salience of the hedonic component of the dilemma. Both of these factors accentuate the effect of the negative source. Thus choice does affect the nature of the relationship between attitude change and degree of regard for the source, but not necessarily due to the arousal of greater dissonance.

D. Evidence of Dissonance

It will be recalled that according to dissonance theory, a commitment to listen to counterattitudinal information should arouse dissonance since in a free choice situation there will be a definite preference for supportive information especially if unfamiliar content is anticipated (prediction 6a). This crucial assumption thus served as the basis for the dissonance predictions for the current study. However, in previous studies, there has been no attempt to provide evidence of this assumption's validity in conjunction with the experimental situation. Moreover, the numerous studies in the selective exposure literature have provided weak support at best for the dissonance hypothesis (Freedman and Sears, 1965; Mills, 1968; Sears, 1968).

For the present study, all subjects on the pre-measure indicated the extent of their desire to hear supportive and dissonant information on the population control proposal (as represented by Q1) with their

ratio providing a preference index. Overall, a larger percentage of the subjects indicated a preference for supportive than for dissonant information, and in addition, were more interested in hearing supportive than dissonant arguments. However, over half (54.5%) of the subjects indicated an equal desire to hear both kinds of information (i.e., no preference; the percentage is greater than chance expectation). This lack of a clear preference for supportive information may be a function of the subjects' stated familiarity with the arguments on the issue (cf., Festinger, 1964; Brehm, 1968, p. 281), and their strong certainty of the correctness of their opinions (Canon, 1964; Festinger, 1964; Freedman, 1965; Lowin, 1967a, 1967b; Mills, 1965, a,b,c.; Mills and Ross, 1964). Thus, there is some support for the dissonance prediction (prediction 6a) of preference for supportive information if unfamiliar content is anticipated. Specifically, for "unfamiliar" subjects there was a significant positive relationship between initial attitude and interest in listening to supportive arguments; for the "familiar" subjects, the relationship was not significant. With respect to the certainty variable, one would expect that as certainty decreases, interest in dissonant information would decrease with a concomitant increase in interest in supportive information (cf., Canon, 1964; Mills, 1968; Rosnow, Giller, and Holz, 1969). However, as certainty decreased, interest in both kinds of information decreased (cf., Freedman, 1965; Lowin, 1967a, 1967b; Thayer, 1969). Thus, on the basis of the measures employed, the only evidence that a commitment to exposure to counterattitudinal information will result in dissonance derives from the slightly greater interest in hearing supportive arguments than dissonant ones, and the fact that the extremely opposed subjects were more interested in hearing

supportive arguments than dissonant ones, and in addition, were more interested in listening to supportive information than were the moderately opposed subjects.

In contrast, there is considerable evidence that the commitment itself did not arouse dissonance. Thus, subjects were interested in hearing both supportive and dissonant information on the issue (i.e., no avoidance of dissonant information), and a large percentage of subjects indicated no preference for either kind of information. The two questions concerning discomfort aroused by the choice to listen or by the actual listening itself elicited no responses indicating dissonance. In addition, the reasons given for the choice to listen yielded no evidence of dissonance arousal; in fact, many subjects indicated the importance of being open-minded and preferred the challenge of hearing both sides of an issue. Lastly, the fact that only 2.5% of all subjects refused to listen, with none of those who did refuse being extremely opposed to Q1, also suggests that the commitment to listen to counterattitudinal information was not a powerful dissonance arouser.

There is also no support for the dissonance prediction (prediction 6b) of a positive relationship between preference for supportive information and attitude change. Thus, there was no relationship between either preference for supportive information or the extent of desire to hear supportive information and the magnitude of attitude change on Q1 (overall, or for the extremely and moderately opposed subjects separately). However, the relationship was significant for interest in listening to dissonant information. In addition, when subjects were divided according to the joint level of interest in supportive and dissonant information, the greatest attitude change was exhibited by those subjects

interested in hearing both kinds of information. This latter result fits in nicely with the previously offered rationale explaining the greater attitude change of the extremely opposed subjects and Brock's (1965) theorizing on selective exposure. Brock suggests that in order to experience the gratification of dissonance reduction, it may first be necessary to expose oneself to dissonance; and, the probability of such exposure is a function of the individual's anticipated ease of discounting the dissonant information. Thus, highly confident individuals who overestimate their familiarity with the arguments on the issue will consider exposure to counterattitudinal arguments a challenge, but when faced with such counter-arguments, will not be able to resist the persuasive impact.

Since there is little evidence of dissonance arousal as a function of the commitment to listen to counterattitudinal information, it is more probable that the choice resulted in a commitment to listen to the content of the talk. It follows that the inconsistency aroused is not between own attitude and behavior (i.e., "I believe X and I am engaging in behavior which implies not-X") but between own attitude and the counter-arguments of the message. Thus, the necessity to attribute responsibility for the eventual inconsistency aroused and the uncertainty about one's opinion may not have occurred until after the choice, during or after the listening task itself.

E. Other Dissonance Predictions

Of the predictions not yet discussed, the dissonance interpretation for three of the four was not confirmed and the evidence for the fourth is ambiguous. Specifically, an interaction between degree of regard for source and type of commitment (S0; prediction 3) was expected on the basis

of several derivations from dissonance theory. This inference combined with an expected interaction between choice and source sign (CS) led to the prediction of a triple interaction (CSO; prediction 4). The variable of type of commitment (i.e., timing of presentation of source information), however, produced no main effect nor did it interact with the other independent variables, even though after exposure to the experimental message, the majority of subjects correctly recalled which timing condition they had received. The CSO interaction was also not significant for any of the major attitude related variables.

It will be recalled that the SO interaction was expected on the basis of differential order effects obtained in other research with verbal justification and monetary incentives for counterattitudinal behavior (Freedman, 1963; Rossomando and Weiss, 1970). There are two alternative conclusions to be drawn from the failure to find a significant interaction: (1) source information was not a salient supportive or dissonant cognition justifying the counterattitudinal behavior; or (2) more likely, the two times of presentation were not equivalent to previous variations of justification. In the present study, the manipulated variable (e.g., source information) was presented before or after the commitment to counterattitudinal behavior. In previous research, the manipulated variable was presented before the commitment or after both the commitment and the actual performance of the behavior. The time differential in the present study provides for differences in type of commitment (i.e., to dissonant information alone vs. to dissonant information from a specific source), but since it was previously argued that there is little evidence for dissonance arousal at the point of commitment, it should follow that the timing variable would

not be effective. This result accords with the functional prediction.

The third prediction (prediction 5) not receiving confirmation was for an interaction between choice and initial position (CA); it was based on previous dissonance research (Terry, Cohen, and Jones, 1959). This was pitted against the expectation from Sherif's (Sherif et al., 1965) assimilation-contrast approach, predicting greater change for the moderately opposed than the extremely opposed subjects. A functional orientation also suggested no effect of choice. On none of the attitude questions nor other dependent variables was the CA interaction significant; the extremely opposed subjects exhibited greater attitude change than the moderately opposed subjects across all choice conditions. As previously discussed, this result was not expected; and an explanation was offered.

Lastly, dissonance theory predicted a main effect for choice (prediction 2), and here, the results are somewhat ambiguous. According to dissonance theory, as choice increases attitude change increases. In contrast, incentive theory argues that as justification for compliance increases, attitude change increases; therefore, the LC condition should produce more change than the HC, which in turn, should produce more change than the NC condition. Although the direct relationship between choice and attitude change is one of the better replicated dissonance predictions (Cohen et al., 1959; Davis and Jones, 1960; Brock, 1962; Brock and Buss, 1962), for all three attitude questions, the main effect for choice was not significant. The order of the means was in the expected direction for all three questions as well as for many of the other dependent variables, and the effect did attain significance for agreement with the conclusion of the message. Two comments are relevant.

First, that if more dissonance had been aroused by the commitment to listen, it is possible that the choice main effect would have been significant. Second, because of the significant CS interaction with the peculiar effect on the LC groups, the main effect for choice may have been masked.

F. Evidence Related to N-approval

Another major result of the present study was the complete lack of support for any of the predictions related to N-approval (predictions 8a-c), the personality variable hypothesized to be related to persuasibility and volunteering (Marlowe and Crowne, 1964; Rosenthal and Rosnow, 1966). In spite of the pilot results replicating the positive relationship between N-approval and volunteering (cf., Leipold and James, 1962; McDavid, 1965), there was no relationship between N-approval and refusal to participate in the present experiment. That is, the percentage of high N-approval subjects did not increase as choice increased. However, given the low rate of refusal to participate, the failure of any correlation with N-approval cannot be taken as a disconfirmation of the previous results, since the sample involved was too small to provide any meaningful information. In addition, there was no relationship between N-approval and attitude change. This result may be a function of the fact that N-approval was not significantly correlated with initial position, and attitude change was related peculiarly to initial extremity of opposition to the population control proposal. Thus, the present study provides no evidence that N-approval is related to persuasibility.

G. Source Effects

Since all of the experimental ratings followed the attitude measure, any differences between the control group (C2) and the experimental ratings of source characteristics can be described only cautiously as source "enhancement" or "derogation." This caution is especially needed if these terms are taken to reflect alternative modes of dissonance reduction. Nonetheless, the present study is one of the few to have truly "negative" sources as defined on the credibility and attractiveness dimensions, respectively, and to have a pre-measure group for comparison.

For the sources defined primarily in terms of credibility, there was no difference between the experimental and C2 ratings for the positive source (i.e., scientist) on the overall credibility index. In contrast, the negative source (i.e., old man of relief) was seen as significantly more credible by the experimental than by the C2 group on the overall index, as well as on the three component scales (i.e., "informed," "truthful," and "trustworthy"). Similarly, for the attractive sources, the negative source (i.e., black militant student) was rated significantly more attractive by the experimental than by the C2 group. But, in addition, the positive source (i.e., white college student) was rated significantly less attractive on the overall index and on both of the component scales (i.e., "like me" and "my kind of person"). Thus, it appears that there was an "enhancement" of regard on the respective definitional indices and on the total source index for both kinds of negative source, but "derogation" for only the positive attractive source on the definitional index. This latter effect for the positive attractive source with no parallel effect for the positive

credibility source may be a function of the greater ease of "derogation" on attractiveness as opposed to credibility, especially derogation of expertise in the face of a patently expert source. But more likely, this result is in part due to the change in meaning of the "like me" scale for the experimental subjects. Thus, as previously mentioned, many of the experimental subjects defined the "like me" scale in terms of attitudinal congruence. Hence, a shift toward the negative end of the scale relative to the control group would be expected. If this interpretation is valid, the present results complement those of previous studies which also found a more favorable evaluation of the low credible source after exposure, with no effect on the high credible source (c.f., March, 1970; Rhine and Severance, 1970; Weiss and Solomon, 1967). The increasingly favorable evaluation of the negative source may be attributable to an improvement in the subjects' evaluation as a function of the association of the source with a message of some cogency and reasonableness. In the present experiment, this is particularly true for the negative credibility speaker.

In terms of the other differences obtained between the experimental and control ratings, the crucial scales are those of "trustworthiness" and "my kind of person." Specifically, there was an "enhancement" by the experimental subjects of the "trustworthiness" evaluations for both negative sources; whereas, the two positive sources were rated less positively on the "my kind of person" scale. Again, it can be argued that the basis of judgment for ratings on the former scale is least subject to influence from objective speaker characteristics, and hence, most susceptible to changes as a function of the association of the source with a cogent message.

There is no evidence of a positive relationship between degree of regard for the source and attitude change; none of the CS interactions was significant. For all of the source scales, the degree of regard for the source was a direct function of source sign across choice. However, even if there had been a positive relationship, it could not be argued unequivocally that regard for the source mediated attitude change since the responses followed exposure to the communication. Further, a positive relationship could reflect a devaluation of the sources by subjects least affected by the experimental communication.

H. Mechanism of Attitude Change

The last major result to be discussed is the question of the mechanism of attitude change. From a functional point of view, the locus of inconsistency aroused by the commitment to listen to the counterattitudinal information and/or by the actual listening itself lies in a concern over the correctness of one's initial opinion. Given the arousal of inconsistency, two alternative (but not necessarily mutually exclusive) corrective strategies could be employed: social comparison processes (i.e., "consensual" validation) which would result in movement toward an "attractive" source or "expertise" validation where maximum change would accrue from a source defined in terms of credibility. Since the two types of source definition in the present study attempted to maximize the respective mechanisms, their relative potency should provide some information on the preferred corrective strategy for a consensual validation dilemma.

In terms of which type of source maximized attitude change (prediction 7), the results are not clear. The main effect for source type was

not significant for any of the attitude questions nor was the ST interaction significant. In addition, the positive credibility source did not produce significantly more attitude change on Q1 than the positive attractive source, nor did the negative attractive source produce significantly more change than the negative credibility source. In addition, as it was not possible to keep the source pairs equivalent on the non-definitional scales (i.e., positive credibility source was more attractive than the negative credibility source), even if the attitude change differences were significant, the meaning would not be clear. Thus, although there is evidence of the arousal of a "consensual validation" dilemma, there is no way of determining the most potent mode of resolution from the available evidence.

I. Summary

In spite of the fact that there is little evidence for the basic dissonance assumption of preference for supportive information in a free choice situation or that strong dissonance was aroused by the commitment to listen to counterattitudinal information, choice did have an effect on attitude change as evidenced by the significant CS interaction. Furthermore, if one omits the LC group results, the pattern of the means for the HC and NC groups provides definite support for the dissonance theory prediction of an interaction between choice and degree of regard for the source. However, since there is little evidence that the commitment to listen aroused dissonance, an unfortunately common state of affairs obtains. There is apparent confirmation of a prediction based on theory, but no support for the hypothesized mediating mechanism (cf., McGuire, 1968). Dissonance theory is, of course, particularly subject to this criticism since often the only means of asserting that dissonance

has been aroused is that the predicted results were obtained. Thus, although there have been numerous recent attempts to pinpoint what variables are crucial to the arousal of dissonance (e.g., Aronson, 1968; Carlsmith, 1968; Collins, 1968, 1969, Deutsch, Krauss, and Rosenau, 1960; Rosenberg, 1966, 1968), the above-mentioned difficulty still remains. As Collins and his associates (Collins et al., 1970, p. 22) state after numerous attempts to replicate the negative relationship between incentive magnitude for forced compliance and attitude change: "Once it has been determined that dissonance exists, however, the formal theory is very useful. . . . But the publicly available, published versions of dissonance theory do not adequately specify the conditions for dissonance arousal."

Thus, as previously argued, for the present study, it is more profitable to consider the effect of the choice manipulation in terms of the specific motivational concerns aroused as suggested by a functional approach. Specifically, the locus of the inconsistency, the strength of the reactance aroused, and the available cues to be used in the attribution of responsibility for the inconsistency must be considered. In a broader context, the problem is twofold. First, the types of inconsistency aroused by various forced compliance procedures must be differentiated since the nature of the dilemma will determine the strength of the inconsistency aroused and the resolution processes employed (Kelman, 1970). Second, the relative salience of various cues in the situation and their relevance to the motivational concerns aroused must be determined. For, the final weighting will have implications for the mode of inconsistency resolution; that is, the specific attitudinal object which is re-evaluated and the dimensions along which it

is re-evaluated. Thus, in agreement with the functionalists, the present author sees a need for research going beyond a discussion of the arousal of a global inconsistency or dissonance and its subsequent reduction to the exploration of the qualitative differences involved in discrepant behavior. The development of an overall model or typology to organize the complex universe of situations potentially involved awaits further research.

In addition to these general implications of the present study for considerations of inconsistency aroused by forced compliance procedures, there are several more specific implications. First, choice is important in a situation involving exposure to counterattitudinal information. Further, it would be interesting to pursue the implication that choice differentially affects attitude change as a function of source type. Here, the evidence suggests that differences in the nature of the source provide different cues for inconsistency resolution, and hence, result in different outcomes. In addition, there is a need to explore different methods of operationalizing choice (especially no choice conditions) in forced compliance paradigms, with particular attention being paid to different methods of assessing subjective reactions (e.g., degree of choice to refuse, pressure to comply, etc.). It might be especially interesting to obtain such responses at different points in the experimental paradigm (e.g., immediately after the choice manipulation, after the counterattitudinal behavior but prior to the dependent variable assessment, or after the dependent variables are measured). Lastly, research addressed to the problem of alternative modes of inconsistency reduction should be pursued. For example, an attempt should be made to create conditions minimizing attitude change

and maximizing specific source effects, such as, derogation of a positive source and enhancement of a negative one.

V. APPENDICES

APPENDIX A

REJECTED SUBJECTS

APPENDIX A: ITEM 1

Data on Rejected Subjects

Choice	CONDITION Order	Speaker	SEX OF SUBJECT	N-APPROVAL	INITIAL ATTITUDE	FINAL Q1	REASON FOR REJECTION***
NC*	B**	+ credibility	M	20 [#]	8 ^{##}	7	1
NC	B	- credibility	F	13	11	5	1
NC	A	+ attractive	F	14	11	11	1
HC	B	- credibility	M	8	6	5	1, 2
HC	A	- credibility	F	12	11	4	2
NC	A	- credibility	M	19	11	11	2
LC	B	- credibility	M	13	9	9	2
LC	A	+ credibility	M	12	6	5	2

*Code: HC = high choice; LC = low choice; NC = no choice.

**Code: B = source information presented before commitment to listen to counterattitudinal information; A = source information presented after the commitment.

***Code: 1 = guessed purpose of experiment; 2 - suspicions related to authenticity of speaker.

[#]Grand mean on N-approval for experimental subjects = 13.517 with a maximum of 33. The greater the score the greater the N-approval.

^{##}Attitude measured on 11-point scale; the higher the mean the greater the opposition to Q1.

APPENDIX B

PILOT STUDIES

APPENDIX B: TABLE 1

Initial Attitude, Importance and Overall Distribution on
Population Control Issue

Type of Subject	Attitude		Importance	
	Mean	Standard Deviation	Mean	Standard Deviation
Females	9.0 *	3.1	5.8 **	1.4
Males	9.0	3.2	5.3	1.4
Total (N = 110)	9.0	3.1	5.5	1.4

*The higher the mean the greater the opposition to population control via government policies relating to family size on an 11-point scale.

**The higher the mean the greater the personal importance of the issue to the subject on a 7-point scale.

Attitude Score Distribution		
% PRO	% NEUTRAL	% ANTI
16.4	6.3	77.3

APPENDIX B: TABLE 2

Relationship between N-approval and
Volunteering (N = 35)

	N-approval	
	$< 14^*$	≥ 14
Non-volunteers	10**	8
Volunteers	7	10

*The range of N-approval scores was 6 to 23 with a mean of 13.4.

** $\chi^2 = .92$, $p > .30$.

APPENDIX C

EXPERIMENTAL QUESTIONNAIRES

APPENDIX C: ITEM 1

Experimental Pre-measure

NATIONAL EDUCATION RESEARCH COUNCIL

New York, New York

10021

Survey Division

Dear Student:

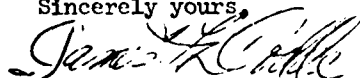
As more and more high school graduates go on to college before embarking on their life time careers, it becomes increasingly important for the faculty and administration of institutions of higher learning to try to understand the goals, interests, and opinions on major issues confronting the U.S. today of college students, if they are to provide a meaningful and quality educational program. The National Educational Research Council, a non-profit organization dedicated to the improvement of higher education in the U.S., has therefore undertaken a nation-wide survey of opinions of students in some 500 colleges and universities in all 50 states. We are attempting to canvas students from all the diverse areas of the country from small colleges to the large universities in order for you, the students, to have a voice in planning for higher education.

Montgomery Junior College is one of the colleges which has been selected to participate in the Survey, and we therefore would appreciate your fullest cooperation in completing the attached questionnaire. Please be as frank and candid as you can since we do not want you to sign your name and your responses will be completely anonymous. It would be helpful, however, if you would complete the personal information, such as, sex, date of birth, etc., requested on the next page before beginning the questionnaire.

We would also like to emphasize to you the importance of your not discussing your participation in the Survey nor its contents with any of your MJC classmates or friends in order to insure that when they complete the questionnaire they will do so spontaneously and with no foreknowledge of its details.

Thanking you for your cooperation -

Sincerely yours,



Dr. James F. Dodde
Chairman
National Education Research Council
Governing Board

ss:JFD

Please complete the information requested below and then return to the first page of the questionnaire.

TODAY'S DATE _____

COLLEGE	name	city	state

SEX _____

DATE OF BIRTH _____
month day year

MAJOR SUBJECT OR MAJOR AREA OF INTEREST

RELIGIOUS PREFERENCE _____

FATHER'S OCCUPATION _____

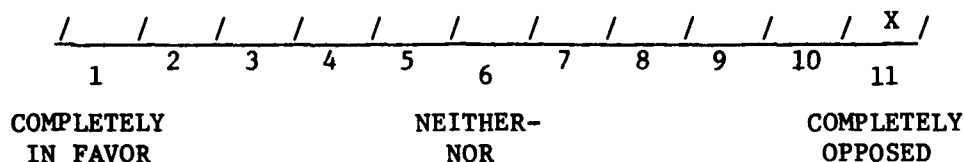
As part of this National Survey, we are interested in your opinions on several issues. Please give your present opinion on the following topics by indicating on the graphic scale provided how favorable or opposed you are to each proposal. Be as frank and candid as you can.

If you are completely in favor of the proposal, place an X in box 1; if you are completely opposed to the proposal, place an X in box 11; and if you are neither in favor nor opposed to the proposal place an X in box 6. If you are in favor of the proposal but not completely so, place an X in that box between 1 and 6 which best indicates your position. Similarly, if you are opposed to the proposal but not completely so, mark your position in the best box between 6 and 11. Place your Xs between two lines on the scale, not on a line.

Please also indicate your position using the same procedure for each issue with respect to: how important the issue is to you, how certain you are that your position on the issue is correct, and how familiar you feel you are with the pro and con arguments on the issue.

For example, consider the proposal: "The President and Vice President should be elected by direct popular vote." If you were completely opposed to this proposal, felt the issue was somewhat important to you, felt neither certain nor uncertain that your position on the issue was correct, and felt moderately familiar with the relevant pro and con arguments, your responses on the graphic scales would be as follows:

THE PRESIDENT AND VICE PRESIDENT SHOULD BE ELECTED BY DIRECT POPULAR VOTE



IMPORTANCE TO ME

/	/	/	/	/	X	/	/	/
1	2	3	4	5	6	7		
NOT AT ALL			AVERAGE		EXTREMELY			
IMPORTANT					IMPORTANT			

CERTAINTY OF MY POSITION

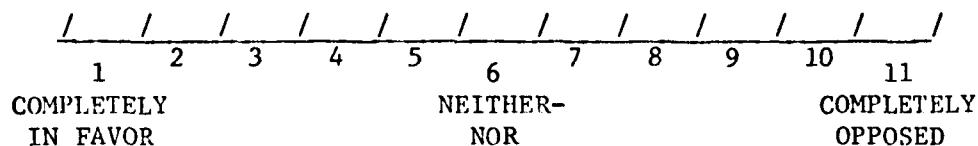
/	/	/	/	X	/	/	/	/
1	2	3	4	5	6	7		
COMPLETELY		NEITHER-			COMPLETELY			
CERTAIN		NOR			UNCERTAIN			

FAMILIARITY WITH ARGUMENTS

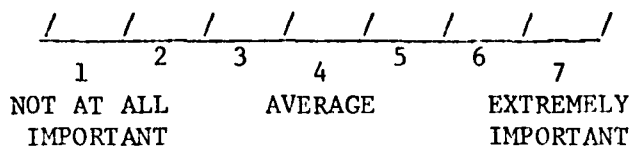
/	/	X	/	/	/	/	/	/
1	2	3	4	5	6	7		
THOROUGHLY		NEITHER-			THOROUGHLY			
FAMILIAR		NOR			UNFAMILIAR			

Please consider all of your responses carefully and if you have any questions raise your hand and your instructor will aid you. Complete only one page at a time and do not turn back once you have completed a page.

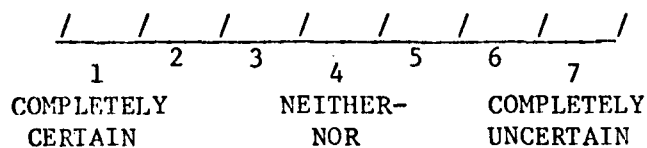
POPULATION GROWTH SHOULD BE LIMITED BY GOVERNMENT POLICIES RELATING TO
FAMILY SIZE



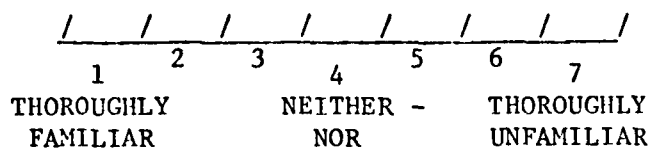
IMPORTANCE TO ME



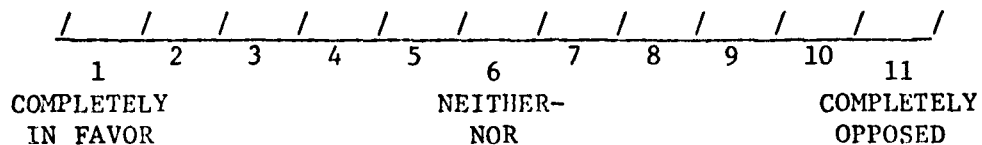
CERTAINTY OF MY POSITION



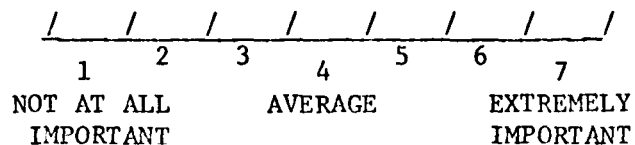
FAMILIARITY WITH ARGUMENTS



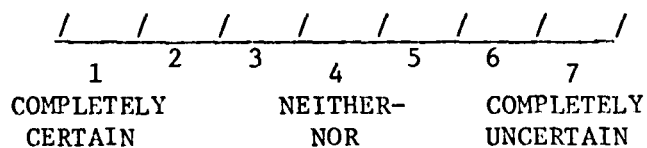
THE DRAFT SYSTEM SHOULD BE ABOLISHED



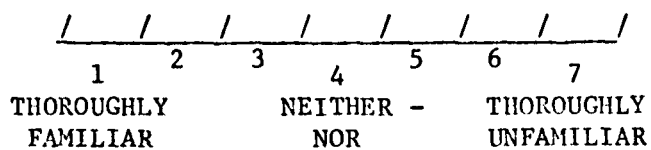
IMPORTANCE TO ME



CERTAINTY OF MY POSITION



FAMILIARITY WITH ARGUMENTS



WIRETAPPING SHOULD BE A LEGAL METHOD FOR LAW ENFORCEMENT AGENCIES IN
OBTAINING EVIDENCE IN CRIMINAL CASES

/ / / / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 IN FAVOR NOR OPPOSED

IMPORTANCE TO ME

/ / / / / / / /
 1 2 3 4 5 6 7
 NOT AT ALL AVERAGE EXTREMELY
 IMPORTANT IMPORTANT

CERTAINTY OF MY POSITION

/ / / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 CERTAIN NOR UNCERTAIN

FAMILIARITY WITH ARGUMENTS

/ / / / / / / /
 1 2 3 4 5 6 7
 THOROUGHLY NEITHER - THOROUGHLY
 FAMILIAR NOR UNFAMILIAR

OPEN HOUSING LAWS MUST BE ENFORCED TO INSURE EQUAL OPPORTUNITY FOR ALL

/ / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 IN FAVOR NOR OPPOSED

IMPORTANCE TO ME

/ / / / / / /
 1 2 3 4 5 6 7
 NOT AT ALL AVERAGE EXTREMELY
 IMPORTANT IMPORTANT

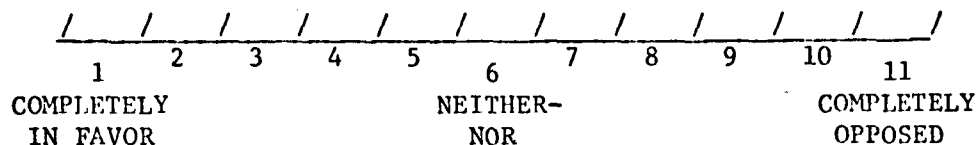
CERTAINTY OF MY POSITION

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 CERTAIN NOR UNCERTAIN

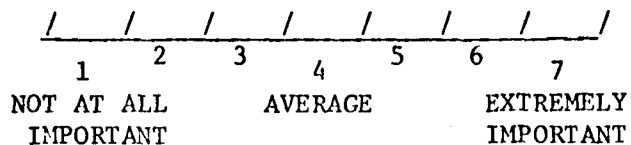
FAMILIARITY WITH ARGUMENTS

/ / / / / / /
 1 2 3 4 5 6 7
 THOROUGHLY NEITHER - THOROUGHLY
 FAMILIAR NOR UNFAMILIAR

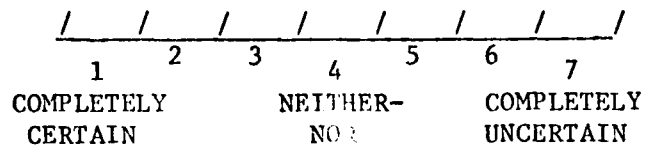
THE U.S. SHOULD DISCONTINUE ALL FOREIGN AID



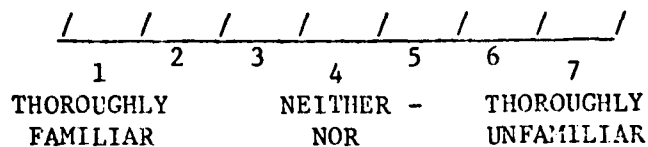
IMPORTANCE TO ME



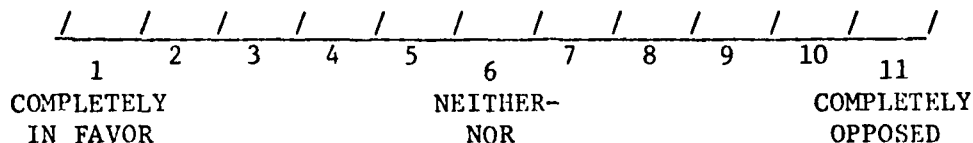
CERTAINTY OF MY POSITION



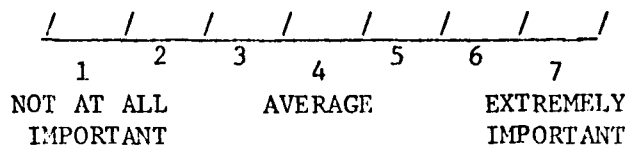
FAMILIARITY WITH ARGUMENTS



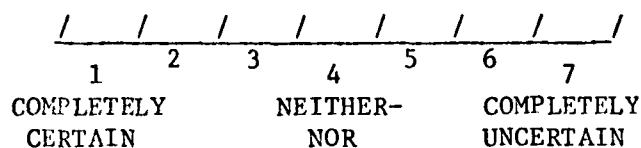
THE DEATH PENALTY SHOULD BE ABOLISHED IN ALL STATES



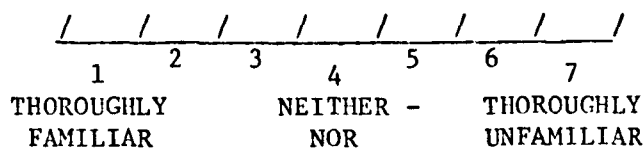
IMPORTANCE TO ME



CERTAINTY OF MY POSITION



FAMILIARITY WITH ARGUMENTS



THE USE AND POSSESSION OF MARIHUANA SHOULD BE LEGALIZED

/ / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 IN FAVOR NOR OPPOSED

IMPORTANCE TO ME

/ / / / / / /
 1 2 3 4 5 6 7
 NOT AT ALL AVERAGE EXTREMELY
 IMPORTANT IMPORTANT

CERTAINTY OF MY POSITION

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 CERTAIN NOR UNCERTAIN

FAMILIARITY WITH ARGUMENTS

/ / / / / / /
 1 2 3 4 5 6 7
 THOROUGHLY NEITHER - THOROUGHLY
 FAMILIAR NOR UNFAMILIAR

STUDENTS SHOULD HAVE NO VOICE IN MAKING COLLEGE CURRICULAR POLICY

1 2 3 4 5 6 7 8 9 10 11

COMPLETELY IN FAVOR NEITHER-NOR COMPLETELY OPPOSED

IMPORTANCE TO ME

1 2 3 4 5 6 7

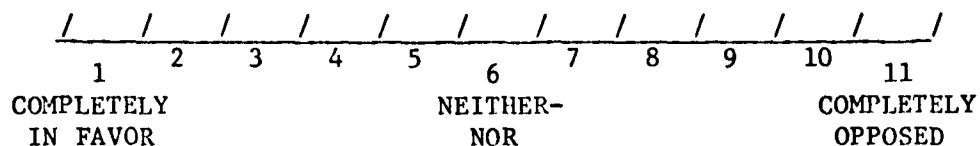
NOT AT ALL IMPORTANT AVERAGE EXTREMELY IMPORTANT

CERTAINTY OF MY POSITION

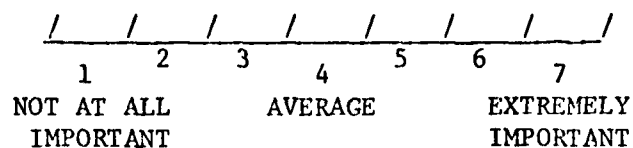
FAMILIARITY WITH ARGUMENTS

/ / / / / / /
 1 2 3 4 5 6 7
 THOROUGHLY NEITHER - THOROUGHLY
 FAMILIAR NOR UNFAMILIAR

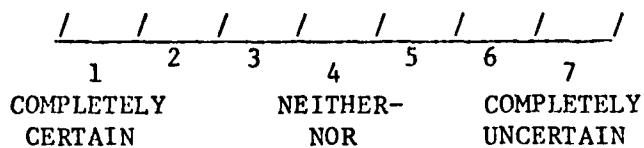
THE VOTING AGE SHOULD BE REDUCED TO 18 THROUGHOUT THE U.S.



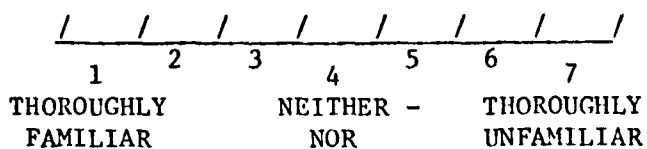
IMPORTANCE TO ME



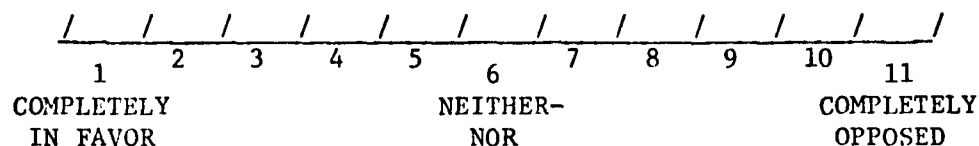
CERTAINTY OF MY POSITION



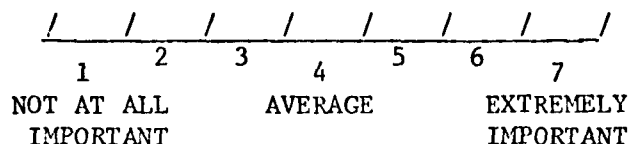
FAMILIARITY WITH ARGUMENTS



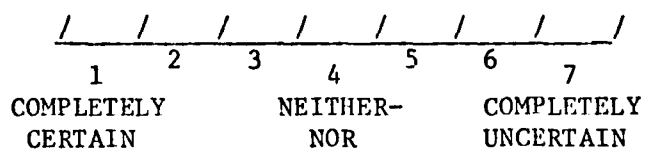
BLACK COMMUNITIES SHOULD HAVE CONTROL OF LOCAL POLICE



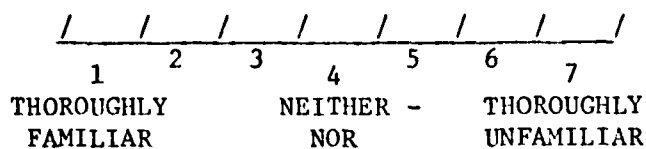
IMPORTANCE TO ME



CERTAINTY OF MY POSITION



FAMILIARITY WITH ARGUMENTS



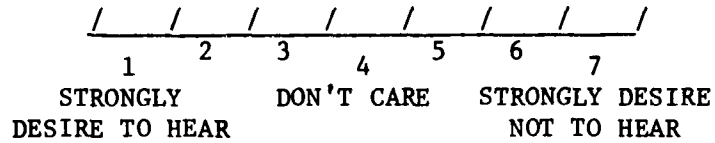
As part of the National Survey's program a series of lectures to be presented on college campuses across the country is being considered. Thus the issues you have considered are possible topics of future lectures at MJC. We are therefore interested in how strongly you desire to hear the arguments either for or against each proposal. Please place the appropriate number with reference to the graphic scale provided at the top of the page in the column next to the proposal. For example, if you strongly desire to hear a lecture in favor of the proposal listed, place a 1 in the column next to the proposal; if you strongly do NOT desire to hear a lecture in favor of the proposal, place a 7; and if you don't care whether you hear it or not, place a 4. If you do desire to hear the lecture in favor of the proposal, but not strongly so, place that number between 1 and 4 which best indicates the strength of your desire to hear it. Similarly, if you do not desire to hear the lecture, but not strongly so, indicate your position with the most appropriate number between 4 and 7.

Please consider your responses carefully since your desire to hear lectures in favor of the various proposals will be taken into account in the final selection of topics.

Please indicate below the strength of your desire to hear or not to hear lectures in favor of the various proposals listed.

/	/	/	/	/	/	/	/	/
1	2	3	4	5	6	7		
STRONGLY			DON'T CARE		STRONGLY DESIRE			
DESIRE TO HEAR					NOT TO HEAR			

	strength of desire to hear/not to hear
The U.S. should not discontinue all foreign aid	_____
The voting age should be reduced to 18 throughout the U.S.	_____
Population growth should be limited by government policies relating to family size	_____
Black communities should have control of local police	_____
The death penalty should be maintained in all states	_____
Wiretapping should not be a legal method for law enforcement agencies in obtaining evidence in criminal cases	_____
Students should have a strong voice in making college curricular policy	_____
Open housing laws must be enforced to insure equal opportunity for all	_____
The draft system should be abolished	_____
The use and possession of marihuana should not be legalized	_____



strength of desire
to hear/not to
hear

Wiretapping should be a legal method for law enforcement
agencies in obtaining evidence in criminal cases

Population growth should not be limited by government
policies relating to family size

Open housing laws need not be enforced to insure equal
opportunity for all

The U.S. should discontinue all foreign aid

The draft system should not be abolished

The use and possession of marihuana should be legalized

The voting age should not be reduced to 18 throughout
the U.S.

Black communities should not have control of local
police

The death penalty should be abolished in all states

Students should have no voice in making college
curricular policy

APPENDIX C: ITEM 2

Marlowe-Crowne Social Desirability Scale

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is TRUE or FALSE as it pertains to you personally. Please place a "T" for true or an "F" for false in the margin to the left of the number of the statement. Answer as frankly and candidly as you can since all responses are complete anonymous.

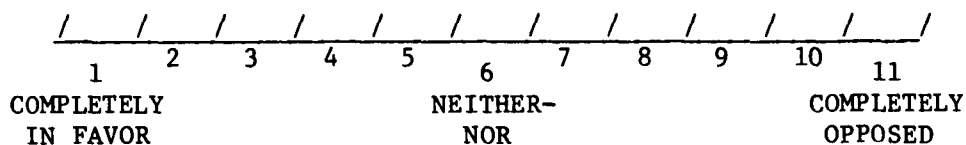
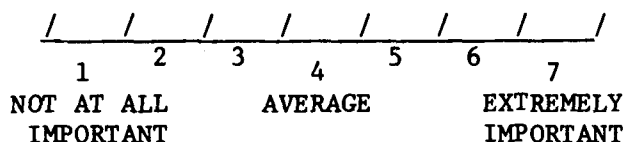
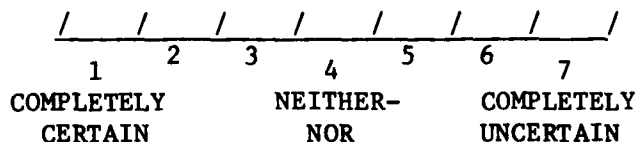
1. Before voting I thoroughly investigate the qualifications of all the candidates.
2. I never hesitate to go out of my way to help someone in trouble.
3. It is sometimes hard for me to go on with my work if I am not encouraged.
4. I have never intensely disliked anyone.
5. On occasion I have had doubts about my ability to succeed in life.
6. I sometimes feel resentful when I don't get my way.
7. I am always careful about my manner of dress.
8. My table manners at home are as good as when I eat out in a restaurant.
9. If I could get into a movie without paying and be sure I was not seen, I would probably do it.
10. On a few occasions, I have given up doing something because I thought too little of my ability.
11. I like to gossip at times.
12. There have been times when I felt like rebelling against people in authority even though I knew they were right.
13. No matter who I'm talking to, I'm always a good listener.
14. I can remember "playing sick" to get out of something.
15. There have been occasions when I took advantage of someone.
16. I'm always willing to admit it when I make a mistake.

17. I always try to practice what I preach.
18. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.
19. I sometimes try to get even, rather than forgive and forget.
20. When I don't know something, I don't mind at all admitting it.
21. I am always courteous, even to people who are disagreeable.
22. At times I have really insisted on having things my own way.
23. There have been occasions when I felt like smashing things.
24. I would never think of letting someone else be punished for my wrongdoings.
25. I never resent being asked to return a favor.
26. I have never been irked when people expressed ideas very different from my own.
27. I never make a long trip without checking on the safety of my car.
28. There have been times when I was quite jealous of the good fortune of others.
29. I have almost never felt the urge to tell someone off.
30. I am sometimes irritated by people who ask favors of me.
31. I have never felt that I was punished without cause.
32. I sometimes think when people have a misfortune that they only get what they deserved.
33. I have never deliberately said something that hurt someone's feelings.

APPENDIX C: ITEM 3

Experimental Post-Measure

Please indicate your present opinion concerning the statements below by placing an X in the appropriate box on the graphic scales provided. Thus you will first indicate to what extent you are in favor or opposed to the statement or agree or disagree with it. Then indicate how important each issue is to you, and lastly, how certain you are that your position concerning the statement is correct.

POPULATION GROWTH SHOULD BE LIMITED BY GOVERNMENT POLICIES RELATING TOFAMILY SIZEIMPORTANCE TO MECERTAINTY OF MY POSITION

THE EARTH'S RESOURCES AND MAN'S INGENUITY WILL NOT BE SUFFICIENT TO ADE-
QUATELY FEED, CLOTHE, AND HOUSE THE WORLD'S POPULATION IF UNRESTRICTED

POPULATION GROWTH CONTINUES

/ / / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 IN FAVOR NOR OPPOSED

IMPORTANCE TO ME

/ / / / / / /
 1 2 3 4 5 6 7
 NOT AT ALL AVERAGE EXTREMELY
 IMPORTANT IMPORTANT IMPORTANT

CERTAINTY OF MY POSITION

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 CERTAIN NOR UNCERTAIN

BY THE YEAR 2000 THE HUMAN RACE WILL FACE EXTINCTION IF POPULATION GROWTH

IS NOT LIMITED

/ / / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 IN FAVOR NOR OPPOSED

IMPORTANCE TO ME

/ / / / / / /
 1 2 3 4 5 6 7
 NOT AT ALL AVERAGE EXTREMELY
 IMPORTANT IMPORTANT IMPORTANT

CERTAINTY OF MY POSITION

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 CERTAIN NOR UNCERTAIN

When did you find out who the speaker was? (circle the best answer)

1. before the moderator introduced the talk (i.e., from the experimenter)
2. during the moderator's introduction
3. at the beginning of the talk
4. at the end of the talk
5. some other time (specify) _____

Who sponsored the talk you just heard? _____

How worthwhile or worthless do you think the sponsoring organization is?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
COMPLETELY WORTHLESS		NEITHER- NOR		EXTREMELY WORTHWHILE			

On the basis of what you know about the speaker, please answer the following questions about him.

How informed or uninformed do you think the speaker is?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
HIGHLY INFORMED		NEITHER- NOR		HIGHLY UNINFORMED			

How truthful or untruthful do you think the speaker was?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
COMPLETELY TRUTHFUL		NEITHER- NOR		COMPLETELY UNTRUTHFUL			

How trustworthy or untrustworthy do you think the speaker is?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
HIGHLY TRUSTWORTHY		NEITHER- NOR		HIGHLY UNTRUSTWORTHY			

How much like you or unlike you as a person is the speaker?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
VERY MUCH LIKE ME		NEITHER- NOR		VERY MUCH UNLIKE ME			

To what extent is the speaker your kind of person or not your kind of person?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
DEFINITELY			NEITHER-		DEFINITELY NOT		
MY KIND OF PERSON			NOR		MY KIND OF PERSON		

How persuasive or unpersuasive do you think the speaker was for you?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
EXTREMELY			NEITHER-		EXTREMELY		
PERSUASIVE			NOR		UNPERSUASIVE		

Which characteristic of the speaker - being informed or being like you as a person - is more important to you? Why?

On the basis of the kind of talk the speaker delivered, answer the following questions about the speaker as best you can. Either circle the most appropriate answer or fill in the blank.

Approximate age 18-22 23-35 36-45 46-55 56-65 65 or older

Race of speaker Caucasian Negro Oriental don't know

Level of education grade school high school college
graduate or professional degree

Occupation _____

How much in favor or opposed do you think THE SPEAKER is to the proposition: "Population growth should be limited by government policies relating to family size"?

/	/	/	/	/	/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	8	9	10	11		
COMPLETELY IN FAVOR			NEITHER- NOR					COMPLETELY OPPOSED				

How strong a lecture in favor of HIS position did the speaker give?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
EXTREMELY STRONG		NEITHER- NOR			EXTREMELY WEAK		

LIST and number the major arguments of the talk you just heard.

Which arguments did you agree with, if any? (list numbers) _____

Which arguments did you disagree with, if any? (list numbers) _____

Did you agree with his solution to the problem? Yes No

In general, how correct or incorrect were the arguments presented?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
COMPLETELY CORRECT		NEITHER- NOR			COMPLETELY INCORRECT		

How important or unimportant is it for you to be correct on this issue?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
EXTREMELY IMPORTANT		NEITHER- NOR			EXTREMELY UNIMPORTANT		

Did the experimenter give you a choice to leave instead of listen to the
talk? Yes No

How much do you feel the experimenter pressured you to stay and listen
to the talk?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
NOT AT ALL			SOME		A LOT		

Did you have to listen to the talk in order to receive research partici-
pation credit for your psychology course? Yes No

Would you like to hear more information on the topic of population

control? Yes No

If yes, please rank order the magazine article titles listed below in the order in which you would like to read them; that is, place a "1" by the title you would most like to read, a "2" by the one you'd next most like to read, etc.

- a. Geneticist Petitions U.N. to Act on Population Explosion
- b. Disaster in the Year 2000: Effects of an Uncontrolled Population Explosion
- c. Government Programs to Control the Birth Rate: New Perspectives
- d. Congressmen Demand Legislation to Curb Birth Rate
- e. Pope Decries Political Solutions to the Population Problem
- f. Totalitarianism: Government Intervention in Family Planning
- g. Ethical Problems Involved in Controlling Population Growth
- h. Can the Population Explosion Be Stopped? - Proposed Solutions

How much choice do you feel you had to refuse to listen to the speech in favor of the proposition: "Population growth should be limited by government policies relating to family size"?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
NO		SOME			COMPLETE		
CHOICE		CHOICE			CHOICE		

Give the reasons why you agreed to listen to the talk.

Would you be willing to participate in another experiment like the listening task? Yes No

Did you feel comfortable or uncomfortable about agreeing to listen to the talk? Explain why.

Did you feel comfortable or uncomfortable while listening to the talk? Explain.

What was the purpose of listening to the talk?

How interesting or uninteresting was the first perception test?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
EXTREMELY INTERESTING			NEITHER- NOR		EXTREMELY UNINTERESTING		

How enjoyable or unenjoyable was the first perception test?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
EXTREMELY ENJOYABLE			NEITHER- NOR		EXTREMELY UNENJOYABLE		

How interesting or uninteresting was the listening task?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
EXTREMELY INTERESTING			NEITHER- NOR		EXTREMELY UNINTERESTING		

How enjoyable or unenjoyable was the listening task?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
EXTREMELY ENJOYABLE			NEITHER- NOR		EXTREMELY UNENJOYABLE		

List any thoughts you had while participating in this experiment or any comments you have about the experiment or about anything else.

APPENDIX C: ITEM 4

Post-experimental Interview Questions

1. Do you have any comments or questions?
2. Were you surprised that we didn't do the visual tasks immediately after the tape was over and instead did the questionnaire?
3. Did you think we were going to do the visual tasks?
4. Do you have any ideas about why I wanted you to listen to the tape other than to test your visual responses?
5. Do you think there was a relationship between the first perception test and the listening task? If yes, what?
6. Was any part of this experiment related to anything else you've done this semester in class? If yes, what? If no mention of National Survey - have you done anything related to the population issue before? If now mention National Survey, ask if they think they were connected and how.
7. In what sense did you feel you had _____ choice to refuse to listen to the tape.
8. In what sense did you interpret "like me-unlike me"? (i.e., in terms of similarity on demographic variables, attitudinal congruence, personality, or other).
9. Questions about any other ambiguous or blank responses on questionnaire.
10. Have you heard anything about the experiment from any of your classmates? If so, what?

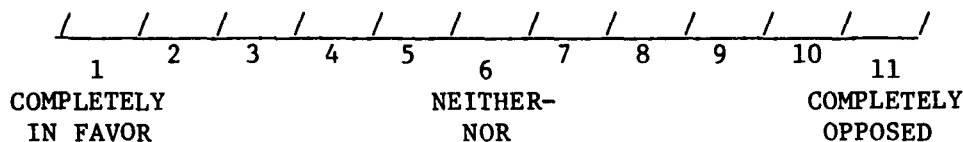
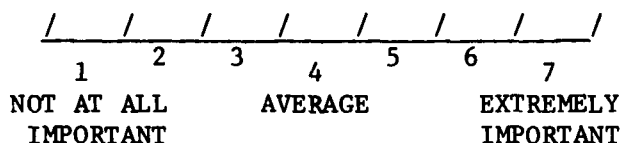
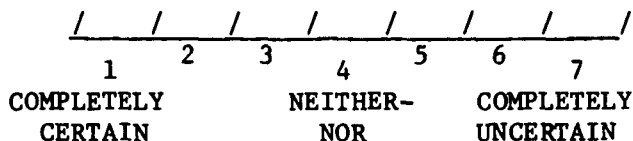
Brief explanation of purpose of experiment.

APPENDIX C: ITEM 5

Refuser's Post-Questionnaire

Please indicate your present opinion concerning the statements below by placing an X in the appropriate box in the graphic scales provided. Thus you will first indicate to what extent you are in favor or opposed to the statement or agree or disagree with it. Then indicate how important each issue is to you, and lastly, how certain you are that your position concerning the statement is correct.

POPULATION GROWTH SHOULD BE LIMITED BY GOVERNMENT POLICIES RELATING TO
FAMILY SIZE

IMPORTANCE TO MECERTAINTY OF MY POSITION

THE EARTH'S RESOURCES AND MAN'S INGENUITY WILL NOT BE SUFFICIENT TO ADE-
QUATELY FEED, CLOTHE, AND HOUSE THE WORLD'S POPULATION IF UNRESTRICTED

POPULATION GROWTH CONTINUES

/ / / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 AGREE NOR DISAGREE

IMPORTANCE TO ME

/ / / / / / /
 1 2 3 4 5 6 7
 NOT AT ALL AVERAGE EXTREMELY
 IMPORTANT IMPORTANT IMPORTANT

CERTAINTY OF MY POSITION

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 CERTAIN NOR UNCERTAIN

BY THE YEAR 2000 THE HUMAN RACE WILL FACE EXTINCTION IF POPULATION

GROWTH IS NOT LIMITED

/ / / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 AGREE NOR DISAGREE

IMPORTANCE TO ME

/ / / / / / /
 1 2 3 4 5 6 7
 NOT AT ALL AVERAGE EXTREMELY
 IMPORTANT IMPORTANT IMPORTANT

CERTAINTY OF MY POSITION

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 CERTAIN NOR UNCERTAIN

HOW MUCH CHOICE did you feel you had to refuse to listen to the speech in favor of the proposition: "Population growth should be limited by government policies relating to family size"?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
NO CHOICE			SOME CHOICE		COMPLETE CHOICE		

Give the reasons why you refused to listen to the talk.

Would you be willing to participate in another experiment like the listening task? Yes No

How interesting or uninteresting was the first perception test?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
EXTREMELY INTERESTING			NEITHER-NOR		EXTREMELY UNINTERESTING		

How enjoyable or unenjoyable was the first perception test?

/	/	/	/	/	/	/	/
1	2	3	4	5	6	7	
EXTREMELY ENJOYABLE			NEITHER-NOR		EXTREMELY UNENJOYABLE		

Would you like to hear more information on the topic of population

control? Yes No

If yes, please rank order the magazine titles listed below in the order in which you would like to read them; that is, place a "1" by the title you would most like to read, a "2" by the one you'd next most like to read, etc.

- a. Geneticist Petitions the U.N. To Act on Population Explosion
- b. Disaster in the Year 2000: Effects of an Uncontrolled Population Explosion
- c. Government Programs to Control the Birth Rate: New Perspectives
- d. Congressmen Demand Legislation to Curb Birth Rate
- e. Pope Decries Political Solutions to the Population Problem
- f. Totalitarianism: Government Intervention in Family Planning
- g. Ethical Problems Involved in Controlling Population Growth
- h. Can the Population Explosion Be Stopped? - Proposed Solutions

List any thoughts you had while participating in this experiment or any comments you have about the experiment or about anything else.

APPENDIX D

EXPERIMENTAL MESSAGES

APPENDIX D: ITEM 1

Basic Message Modified According to Source

The basic message was modified in the taped versions to make the source attribution as plausible as possible. The four source descriptions provided by the moderator at the end of his introduction were as follows: (1) positive credibility - "Dr. Spencer is a scientist who is director of research at the National Population Research Council. He has also recently been appointed as a scientific advisor to the Nixon administration"; (2) negative credibility - "Mr. Spencer is on relief and lives in the inner city of a large metropolitan area. He has been unemployed on and off for many years"; (3) positive attractive - "Mr. Spencer is a student at a junior college in the Washington area. He is working part-time while attending school"; and (4) negative attractive - "Mr. Spencer is a student at Howard University and a member of several black militant organizations."

All additions to the basic message are indicated in the text for the positive credibility and positive and negative attractive sources respectively as follows: comments made by the scientist by _____, comments by the white college student will be in parentheses, and comments by the black militant student will be in caps. The revised speech for the negative credibility speaker is found in Item 2 of this appendix.

As a scientist (AS A COLLEGE STUDENT CONCERNED ABOUT CURRENT DAY PROBLEMS) AND MORE SPECIFICALLY AS A BLACK COLLEGE STUDENT CONCERNED ABOUT THE SOCIAL, POLITICAL, AND ECONOMIC PROSPECTS OF MY BLACK BROTHERS AND SISTERS, I believe that the population crisis is the greatest problem facing humanity. This problem is immediately brought into sharp focus by considering some relevant statistics which I have gathered from newspaper and magazine articles as well as scientific reports. Fifteen years ago there were 2.5 billion people on earth. Today there are 3.5 billion - with more than one million newcomers a week! In another fifteen short years, there will be at least 4.5 billion people. Most of them hungry. This country's population is also increasing rapidly with most of the increase in our already overcrowded cities AND ON A PERSONAL LEVEL IT IS IN THESE OVERCROWDED CITIES WHERE MY BLACK BROTHERS AND SISTERS SUFFER MOST. I don't think even the United States can long remain an island of prosperity in a sea of poverty and hunger.

Now let's consider the year 2000, when most of (us) YOU young people here will be in (our) YOUR fifties with families of (our) YOUR own. In that mere 31 years, the population of the United States will increase over 75% and for the world it will double. If corrective measures to check this human flood are not taken right here and now, as I have constantly re-emphasized in my role as presidential advisor, the resulting world-wide misery, strife, revolutions, REVOLUTIONS - (Laughs), and wars will make crises of the past appear minor in contrast.

Keeping the scientific projections for population growth in mind, we can consider three questions: can the planet earth support so many people with the existing natural resources; can technology resolve the

concomitant increased need for housing and jobs; and if not, how can the population be limited in the most humanitarian and equitable manner?

At a meeting of the American Association for the Advancement of Science which I attended last year, Prof. Barry Commoner of Washington University stated that the environment is being placed under stress "to the point of collapse" and that this planet is approaching "a crisis which may destroy its suitability as a place for human society." Prof. L.C. Cole of Cornell University suggested that even the continued availability of the earth's oxygen supply can no longer be taken for granted and that the world's population may "already be beyond what the world can support on a continuing basis."

These are only a few of the danger signals being flagged by (THE MEMBERS OF), my colleagues in, the scientific community. More specifically, professors of agriculture have concluded that agricultural output if continued at the present rate would be inadequate to cope with the population demands of the United States, let alone feed the rest of the world. We cannot feed the world even now, as we have found after shipping \$15 billion worth of food abroad in recent years.

Perhaps these numbers aren't too meaningful. Let me try to bring the problem closer to home. Now just think, just think, while you are eating dinner tonight, 417 people will die from starvation. Every 8.6 seconds someone in an under-developed country dies as a result of illness caused by malnutrition. That's 7 deaths every minute. Four hundred seventeen deaths every hour. Ten thousand deaths every day. Most of them children - RED, YELLOW, AND BLACK CHILDREN. The world's population has already outgrown the world's food supply!

Predictions of housing authorities also demonstrate the need to limit the population. These experts have stated that given the present building materials and expected resources, there just will not be enough room for everybody. (AND, OF COURSE, IT IS THE POOR) AND THE BLACKS (IN THIS COUNTRY WHOSE HOUSING CONDITIONS WILL GET WORSE FIRST.) From animal studies, psychologists and population researchers have demonstrated that overcrowding results in an increase in disease, infant mortality, aggressive tendencies, frustrations, and mental illness. In a nation already faced with increasing crime and violence, we can ill afford to aggravate existing frustrations.

In addition to the problems of adequate food and shelter, there will be economic problems as a result of enormous increases in population. The present standard of living will go down. This will be due to the fact that technology although expanding will not be able to create enough new jobs to keep up with the demand of an ever increasing labor force. Thus it is possible that a person (like me) with just a college degree in the next several decades will be fighting for a job with two to three other qualified applicants. In the year 2000, an increase of a mere 1% in unemployment in this country will mean 1.2 million people out of work (and that means many of us) AND TO ME I FEEL IT WILL BE ME AND MY BLACK BROTHERS AND SISTERS WHO WILL SUFFER THE MOST.

Ironically, the present necessity to limit the population stems from some of the humanitarian efforts of our times. For the first time in man's history, medicine has progressed to the point where infant mortality in the United States is low and the life span has been greatly extended. What with the advent of greater success with organ transplants and artificial organs as well as miracle drugs for cancer and other

diseases on the horizon, we can expect further increases in the life span. Thus there will be more people in the year 2000 than those predicted from birth statistics alone. Also many of our senior citizens will not be self-sufficient putting a greater burden on the employed, and, of course, competing for the available food, housing, and other resources.

In past centuries, of course, population growth has been periodically limited by natural and man-made events such as plagues, earthquakes, floods, and war. Today plagues have been more or less wiped out by medical advances, and earthquakes and floods in the world of billions contribute only negligibly to limiting the population growth. And war . . . in the nuclear age, with the possibility of the elimination of life on earth, must be ruled out as a means of population reduction.

Given this dim forecast in terms of numbers and the available resources, what can we do about it? Two things. We can try to increase the food supply. And we can try to check the growth of population. Some progress had been made in increasing the food supply but it cannot keep up with the ever increasing population. Therefore, something must be done to reduce population growth.

Unfortunately, there is little evidence that people will limit the birth rate voluntarily. And, in fact, efforts at massive birth control programs in South America and countries like India have not been able to reverse the adverse people-to-food ratio. People are still starving at the rate of 10,000 a day. So, if we and our children are to avoid living (AS A) BLACK COLLEGE (STUDENT WHO WILL SHORTLY BE STARTING A CAREER AND FAMILY OF MY OWN, I DO NOT WANT TO LIVE) in a world plagued with starvation, lack of housing, unemployment, and the many problems of overcrowding,

(THEREFORE), I feel, as a private citizen and a scientist, that the government must take the initiative to limit family size. Some people, AND THE MAN IN PARTICULAR, of course, will feel that having children is an inalienable right. But, it is also the child's inalienable right to be born into an environment in which he will not only have adequate food, clothing, and shelter, but an opportunity for normal psychological development, education, and potentially productive employment.

Because many people will not limit the birth rate voluntarily, the best solution to insure equal treatment for all families will be to have government restrictions concerning the number of children per family. In this way, limited restrictions on everyone's freedom will result in greater total freedom for all.

There's a lot at stake. Not only the lives of the starving people of the world, but our lives. And the lives of our children, BLACK AND WHITE. A hungry world can never be a peaceful world. Nothing less than survival of civilization is at stake.

Thank you.

APPENDIX D: ITEM 2

Message of Negative Credibility Speaker

Uh, thank you, Mr. Moderator. Yeah, yeah, I got somethin to say bout this. Cause you know, I - I been around, yeah. I'm a - I'm a poor man, been on relief a long time, ain't got no job. I live downtown, you know, in a, well, what you might call a slum, yeah. It's crowded, there's lots of people, and people are dying an - an being drunk, an well, it seems to me like there's an awful lot of people. You know, more people than than 10-15 years ago - and it just seems to me they keep comin. Many many kids, yeah. An an where I live, most of the kids are hungry. Yeah, everywhere I go - lots of people - and most of them - you know, well, they're in the city with me. You know, when I - when I was in school, they used to call the USA the "good ole land of plenty" - well, it ain't gonna be that way for long, yeah, if this keeps up.

You know now, I know, it's hard for you kids here in the audience listening to me to think about when - you're - think bout the future when you're gonna be old like me an in your, in your fifties and you have families of your own and - yeah - think about the - how many people there's gonna be then. There's gonna be a lot of people - unless - unless they do somethin bout it. Cause - you know - when you have people - well - you gotta have food, you gotta have jobs, you gotta have someplace to live. An now it's hard, what - what about then? When you kids are old?

You know, the other day - I was in a bar, you know, not gettin drunk or nothin - no havin some lunch, I was watchin TV an they were having a show - and they were, were talking bout somethin like this - like what

we're talking bout now. An they, they were talkin about how much food there is, an they said there ain't enough food to feed even this country - let alone the whole world. Yeah you know, even now - with all the other food we got, we can't feed the world. These, these fellows on TV, he said lots a people starve just when we eat dinner. Yeah. We already, yeah, got more people than we got food. I, I don't know, it don't sound good, even now. I, I bet, I bet, even now, that - you know - if you built all houses with everything we got there won't be enough room. Yeah, you know, I see what happens when there's not enough room - you get people gettin sick, an kids die, an oh people get ornery, hurt each other, an an we don't need no more fightin, yeah. We get enough fightin and killing now. We, we don't need more of that.

Even now, you know, there's no jobs now. What about when there's more? I know, you - you kids, think cause you go to school - you know, get a job cause you go to school, you got an education - but then, everybody's gonna be that way, and you guys gonna be like me. That ain't good. That ain't good.

You know, I - I seen some wonderful things in my day - yeah. Doctors - doctors they can do wonderful things. Downtown they got a clinic, got a clinic for old folks like me - and uh - they take care of us, an they got clinics for the kids, and they take care of the kids. And people don't die so easy - that's why we got more people in the slums - that's why we got more. We got the old folks and we got the kids and everyone just keeps on comin and livin. So there ain't gonna be less people cause they die. Naw. They - an - don't die anymore from floods - an well - I don't know wars. When I was a boy - in St. Louie where I grew up, there used to be floods - the Mississippi, ole miss, real floods.

It ain't bad no more, people don't die. And wars - I hope we ain't never have another big one - yeah, that ain't no way to do it.

You know, with all these people what are they gonna do bout it? Well, I guess, I guess the first thing you can say is like make more food. You know, have bigger farms and stuff - make more food. Well, but these guys said on TV this is it - there ain't no more. They said everythin's growin now and we can't feed em. So it - it kinda looks like the best thing is to - stop people from havin so many kids - yeah. But the trouble is with that - is that people don't do it themselves. They just don't - I, I seen it. They just don't - they keep on havin the kids one after the other. Maybe there better be a law or somethin - yeah - maybe that's it. The government oughta make a law - how many people you can have. Oh, I know, you, you say bout your rights, and how it's a right to have kids, and - well, let me tell ya, kids have rights too - yeah - to have food and clothes, an education, an a job. They got rights. An with so many people lots of em ain't gonna make it.

Yeah, you know, this whole thing looks pretty important to me - it looks bad - yeah, all them starving people in the world - an in the slums - right here, in this country. Right here. What about our lives and the lives of our kids? Yeah, and, an you know, if everyone's hungry all they wanta do is fight - yeah, an then there ain't gonna be no peace.

I, I know, but some people - they, they ain't gonna stop havin kids themselves. No, they just ain't. I seen it. An, it probably would be the fairest - if the government makes a law - an, tells em how many kids everyone can have - yeah. That way, yeah that way, everyone will have the same rules and it would be the fairest for everybody. You know, it's some plan like that or the whole world will be a slum.

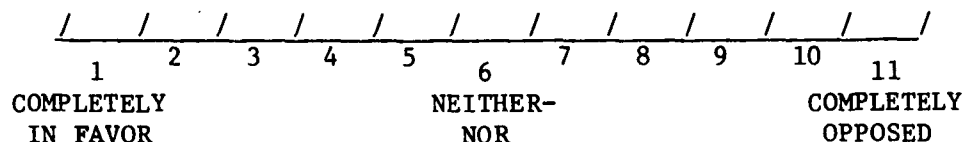
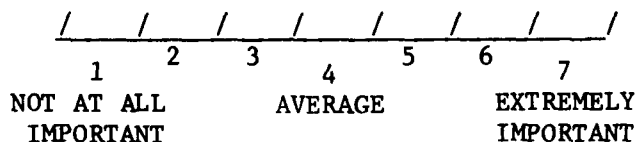
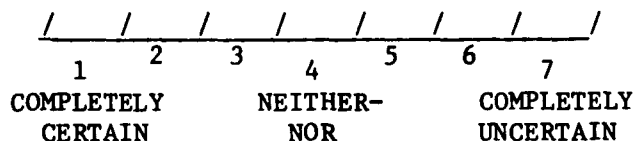
APPENDIX E

NO MESSAGE CONTROL GROUP POST-QUESTIONNAIRE

APPENDIX E: ITEM 1

Second Attitude Measure for No Message Control Group

Please indicate your present opinion concerning the statements on this page and the next by placing an X in the appropriate box on the graphic scales provided. Thus, first indicate to what extent you are in favor or opposed to the statement or the extent to which you agree or disagree with the statement. Then indicate how important each issue is to you, and lastly, how certain you are that your position concerning the statement is correct.

POPULATION GROWTH SHOULD BE LIMITED BY GOVERNMENT POLICIES RELATING TOFAMILY SIZEIMPORTANCE TO MECERTAINTY OF MY POSITION

THE EARTH'S RESOURCES AND MAN'S INGENUITY WILL NOT BE SUFFICIENT TO ADE-
QUATELY FEED, CLOTHE, AND HOUSE THE WORLD'S POPULATION IF UNRESTRICTED

POPULATION GROWTH CONTINUES

/ / / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 AGREE NOR DISAGREE

IMPORTANCE TO ME

/ / / / / / /
 1 2 3 4 5 6 7
 NOT AT ALL AVERAGE EXTREMELY
 IMPORTANT IMPORTANT

CERTAINTY OF MY POSITION

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 CERTAIN NOR UNCERTAIN

BY THE YEAR 2000 THE HUMAN RACE WILL FACE EXTINCTION IF POPULATION GROWTH

IS NOT LIMITED

/ / / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 AGREE NOR DISAGREE

IMPORTANCE TO ME

/ / / / / / /
 1 2 3 4 5 6 7
 NOT AT ALL AVERAGE EXTREMELY
 IMPORTANT IMPORTANT

CERTAINTY OF MY POSITION

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 CERTAIN NOR UNCERTAIN

In connection with the National Survey, the individuals listed below are being considered to lecture at colleges all over the country. To help in the selection of the final speakers, we would like to know how you feel about each one. First, indicate how much each speaker is like you or unlike you, and second, to what extent he is your kind of person by placing the appropriate number from the graphic scale examples in the column next to the speaker's description. For example, if you feel that the first proposed speaker is very much like you and to some extent your kind of person, you would place a "1" and "2" in the columns next to his description.

/ / / / / / / /							/ / / / / / / /								
1	2	3	4	5	6	7	1	2	3	4	5	6	7		
VERY MUCH LIKE ME			NEITHER- NOR		VERY MUCH UNLIKE ME		DEFINITELY MY KIND OF PERSON			NEITHER- NOR		DEFINITELY NOT MY KIND OF PERSON		Like- Unlike Me	My - Not My Kind of Person
Prof. of Sociology and Urban Affairs, presently staff member of Dept. of Housing and Urban Development, author of book on criminology														_____	_____
Student at a junior college, works part time														_____	_____
Black militant, Prof. of Urban Affairs at large eastern university, presidential advisor														_____	_____
Chairman of Board of Ortho Contraceptives, owns controlling interest in firm, founder of Committee to Bring Birth Control to Developing Nations														_____	_____
Scientist, Director of Research of National Population Council, presidential advisor														_____	_____
Black militant, student at Howard University														_____	_____
Woman on welfare, mother of 4														_____	_____
Rookie policeman in metropolitan area														_____	_____
Graduate of MJC, social worker with several years experience in ghettos and working with prisoners														_____	_____
Black militant, on welfare in large metropolitan area, unemployed since leaving school in 9th grade														_____	_____
Graduate of MJC, self-employed businessman, store in ghetto destroyed during riot														_____	_____
Housewife, mother of 4, lives in suburbs														_____	_____
High school dropout, works two jobs to support family														_____	_____
Old man on relief in large metropolitan area, unemployed on and off over a period of years														_____	_____

Define or explain what you meant by the terms LIKE ME - UNLIKE ME and MY KIND OF PERSON with respect to the proposed speakers you just rated.

LIKE ME:

MY KIND OF PERSON:

On the following pages the various speakers being considered as lecturers are listed with respect to the proposition on population growth. Please indicate your responses for each individual with respect to this issue on the graphic scales provided. Specifically, we would like to know: how informed or uninformed you think he is on the proposal, how truthful or untruthful his lecture on the proposal will be, how trustworthy or untrustworthy you think he is, how influential or uninfluential you think he would be for you, and lastly, your judgment of what the speaker's position on the proposal will be.

POPULATION GROWTH SHOULD BE LIMITED BY GOVERNMENT POLICIES RELATING TO
FAMILY SIZE

SPEAKER: Student at junior college, works part time

/ / / / / / /
 1 2 3 4 5 6 7
 HIGHLY NEITHER- HIGHLY
 INFORMED NOR UNINFORMED

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 TRUTHFUL NOR UNTRUTHFUL

/ / / / / / /
 1 2 3 4 5 6 7
 HIGHLY NEITHER- HIGHLY
 TRUSTWORTHY NOR UNTRUSTWORTHY

/ / / / / / /
 1 2 3 4 5 6 7
 DEFINITELY NEITHER- DEFINITELY
 INFLUENTIAL NOR NOT INFLUENTIAL
 FOR ME FOR ME

/ / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 IN FAVOR NOR OPPOSED

POPULATION GROWTH SHOULD BE LIMITED BY GOVERNMENT POLICIES RELATING TO
FAMILY SIZE

SPEAKER: Scientist, Director of Research of National Population Council,
 presidential advisor

/ / / / / / /
 1 2 3 4 5 6 7
 HIGHLY NEITHER- HIGHLY
 INFORMED NOR UNINFORMED

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 TRUTHFUL NOR UNTRUTHFUL

/ / / / / / /
 1 2 3 4 5 6 7
 HIGHLY NEITHER- HIGHLY
 TRUSTWORTHY NOR UNTRUSTWORTHY

/ / / / / / /
 1 2 3 4 5 6 7
 DEFINITELY NEITHER- DEFINITELY
 INFLUENTIAL NOR NOT INFLUENTIAL
 FOR ME FOR ME

/ / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 IN FAVOR NOR OPPOSED

POPULATION GROWTH SHOULD BE LIMITED BY GOVERNMENT POLICIES RELATING TO
FAMILY SIZE

SPEAKER: Black militant, student at Howard University

/ / / / / / /
 1 2 3 4 5 6 7
 HIGHLY NEITHER- HIGHLY
 INFORMED NOR UNINFORMED

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 TRUTHFUL NOR UNTRUTHFUL

/ / / / / / /
 1 2 3 4 5 6 7
 HIGHLY NEITHER- HIGHLY
 TRUSTWORTHY NOR UNTRUSTWORTHY

/ / / / / / /
 1 2 3 4 5 6 7
 DEFINITELY NEITHER- DEFINITELY
 INFLUENTIAL NOR NOT INFLUENTIAL
 FOR ME FOR ME

/ / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 IN FAVOR NOR OPPOSED

POPULATION GROWTH SHOULD BE LIMITED BY GOVERNMENT POLICIES RELATING TO
FAMILY SIZE

SPEAKER: Old man on relief in large metropolitan area, unemployed on and off over a period of years

/ / / / / / /
 1 2 3 4 5 6 7
 HIGHLY NEITHER- HIGHLY
 INFORMED NOR UNINFORMED

/ / / / / / /
 1 2 3 4 5 6 7
 COMPLETELY NEITHER- COMPLETELY
 TRUTHFUL NOR UNTRUTHFUL

/ / / / / / /
 1 2 3 4 5 6 7
 HIGHLY NEITHER- HIGHLY
 TRUSTWORTHY NOR UNTRUSTWORTHY

/ / / / / / /
 1 2 3 4 5 6 7
 DEFINITELY NEITHER- DEFINITELY
 INFLUENTIAL NOR NOT INFLUENTIAL
 FOR ME FOR ME

/ / / / / / / / / / / /
 1 2 3 4 5 6 7 8 9 10 11
 COMPLETELY NEITHER- COMPLETELY
 IN FAVOR NOR OPPOSED

We would now like you to indicate how strongly you would desire to hear or not to hear arguments in favor of the proposition: "Population growth should be limited by government policies relating to family size," as presented by a specific speaker. Please place the appropriate number with reference to the graphic scale provided in the column next to the speaker's description listed on the next page indicating the degree to which you desire to hear or not to hear that speaker argue in favor of the proposal. Consider your responses carefully since your choices will have some bearing on the final selection of speakers.

The speaker will be arguing in favor of: Population growth should be limited by government policies relating to family size.

/	/	/	/	/	/	/	/	/
1	2	3	4	5	6	7		
STRONGLY DESIRE TO HEAR			NEITHER- NOR		STRONGLY DESIRE NOT TO HEAR			

Degree to which
you desire to hear
or
not to hear the
speaker

Prof. of Sociology and Urban Affairs, presently
staff member of Dept. of Housing and Urban
Development, author of book on criminology

Student at junior college, works part time

Black militant, Prof. of Urban Affairs at large
eastern university, presidential advisor

Chairman of Board of Ortho Contraceptives, owns con-
trolling interest in firm, founder of Committee to
Bring Birth Control to Developing Nations

Woman on welfare, mother of 4

Scientist, Director of Research of National Population
Council, presidential advisor

Black militant, student at Howard University

Graduate of MJC, social worker with several years ex-
perience in ghettos and working with prisoners

Black militant, on welfare in large metropolitan area,
unemployed since leaving school in 9th grade

Housewife, mother of 4, lives in suburbs

High school dropout, works two jobs to support family

Old man on relief in large metropolitan area, un-
employed on and off over a period of years

The following are titles of articles taken from recent issues of popular magazines and newspapers. Please indicate with reference to the graphic scale provided, how much in favor or opposed you think the author of each title is to the proposition: "Population growth should be limited by government policies relating to family size." Place the appropriate number in the column next to the article's title. Thus, for example, if the title indicates that the author is completely in favor of the proposal you would place a "1" next to the title and conversely, if the title indicates that the author is completely opposed to the proposal you would place an "11" and so on.

	/	/	/	/	/	/	/	/	/	/	/	/
	1	2	3	4	5	6	7	8	9	10	11	
	COMPLETELY IN FAVOR				NEITHER- NOR				COMPLETELY OPPOSED			
	Degree to which title indicates author is in favor or opposed to the proposal											
1.	Disaster in the Year 2000: Effects of an Uncontrolled Population Explosion											_____
2.	Pope Decries Political Solutions to the Population Problem											_____
3.	Can the Population Explosion be Stopped? - Proposed Solutions											_____
4.	Geneticist Petitions U.N. To Act on Population Explosion											_____
5.	Totalitarianism: Government Intervention in Family Planning											_____
6.	Ethical Problems Involved in Controlling Population Growth											_____
7.	Congressmen Demand Legislation to Curb Birth Rate											_____
8.	Government Programs to Control the Birth Rate: New Perspectives											_____

Please indicate whether the following statements are true or false as best you can. Place a "T" for TRUE or an "F" for FALSE in the margin to the left of the statement. If you are not sure, guess; do not leave any blanks.

1. Most people will not voluntarily limit their family's size.
2. By the year 2000 the world's population will have tripled.
3. Approximately 10,000 people die from starvation each day.
4. In the U.S., if the population is not limited, there shortly will not be enough houses or apartments for everyone.
5. According to research studies overcrowding is not related to the incidence of mental illness.
6. In the next several decades, an individual with a college degree will have 2-3 other qualified competitors when he applies for a job.
7. On a worldwide basis, natural events like plagues, earthquakes, and floods contribute only negligibly to population reduction.
8. Technological improvements and expansion in the next several decades will maintain unemployment at the current low rate.
9. Massive birth control programs in South America and countries like India have been highly successful in reducing the birth rate.
10. There is no evidence that the earth's natural resources will not be able to maintain the expected increases in population by the year 2000.
11. In spite of expected increases in population, the standard of living in the U.S. will not go down.
12. There is at present a net gain (i.e., birth rate minus death rate) of one million people a week for the world as a whole.
13. It is a basic human right to be born into a world where one will have adequate food, clothing, and shelter as well as the opportunity to obtain an education and gainful employment.
14. The current crime explosion in the U.S. is related to the population explosion.
15. Some government restrictions on individual freedom are necessary and justified to prevent a worldwide population crisis.

APPENDIX F

PRE-MEASURES FOR EXPERIMENTAL SUBJECTS

Mean N-approval Scores

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	12.900 ^{*#}	17.800	12.700	11.600	13.600	14.800	11.600	14.800
	(4.771) ^{**}	(7.115)	(4.398)	(6.835)	(6.310)	(6.546)	(3.718)	(5.095)
Low	11.800	12.900	11.900	13.600	14.800	12.900	13.400	12.700
	(5.138)	(4.095)	(4.725)	(6.275)	(3.048)	(4.667)	(5.758)	(4.473)
No	13.800	15.000	12.400	11.000	14.700	15.300	12.700	15.700
	(5.266)	(4.546)	(4.088)	(6.429)	(4.029)	(4.523)	(4.138)	(4.448)

* The greater the score the greater the N-approval with maximum of 33.

** Standard deviation.

Grand mean = 13.517.

APPENDIX F: TABLE 1

APPENDIX F: TABLE 2
Analysis of Variance: N-approval Scores

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	16.217	.605	
Degree of Regard for Source (S)	1	58.017	2.164	
Type of Commitment (O)	1	38.400	1.432	
Basis of Regard for Source (T)	1	109.350	4.078	.045
Initial Attitude (A)	1	23.256	.867	
CS	2	20.267	.756	
CO	2	12.950	.483	
CT	2	20.450	.763	
CA	2	19.908	.742	
SO	1	.417	.016	
ST	1	2.400	.090	
SA	1	10.167	.379	
OT	1	14.017	.523	
OA	1	2.756	.103	
TA	1	22.251	.830	
CSO	2	27.267	1.017	
CST	2	10.850	.405	
CSA	2	7.011	.261	
COT	2	17.717	.661	
COA	2	26.175	.976	
CTA	2	17.286	.645	
SOT	1	77.067	2.874	.092
SOA	1	150.156	5.600	.019
STA	1	.117	.004	
OTA	1	3.306	.123	
CSOT	2	17.317	.646	
CSOA	2	7.233	.270	
CSTA	2	1.136	.042	
COTA	2	20.575	.767	
SOTA	1	28.617	1.067	
CSOTA	2	46.336	1.728	
WITHIN CELLS (Error)	192	26.814		

Mean Initial Importance Scores

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	5.833 ^{*#} (1.169) ^{**}	5.333 (1.506)	6.000 (1.549)	5.333 (1.506)	5.667 (1.211)	6.000 (1.265)	5.500 (2.345)	5.833 (0.983)
	Moderate	5.000 (0.000)	5.000 (0.816)	4.750 (0.957)	5.750 (0.957)	4.750 (1.258)	4.000 (2.160)	4.500 (1.000)	5.250 (0.957)
Low	Extreme	5.667 (1.506)	6.000 (1.095)	6.833 (0.408)	6.000 (0.894)	4.833 (2.317)	6.667 (0.516)	5.833 (1.472)	6.000 (1.095)
	Moderate	5.500 (1.291)	3.500 (1.000)	5.500 (1.291)	5.250 (0.957)	5.750 (1.258)	5.750 (1.258)	5.000 (1.414)	3.500 (2.082)
No	Extreme	6.000 (1.095)	6.500 (1.225)	5.833 (2.401)	7.000 (0.000)	6.833 (0.408)	6.167 (0.753)	6.167 (1.169)	5.667 (1.366)
	Moderate	6.000 (1.414)	3.750 (2.062)	5.000 (1.155)	5.250 (1.500)	5.250 (1.258)	5.000 (0.816)	5.500 (1.000)	5.250 (1.258)

* The greater the mean, the greater the importance on 7-point scale.

** Standard deviation.

Grand Mean = 5.583.

APPENDIX F: TABLE 3

APPENDIX F: TABLE 4

Analysis of Variance: Initial Importance

Source	df	MS	F	p less than
Choice (C)	2	4.054	2.298	
Degree of Regard for Source (S)	1	.600	.340	
Type of Commitment (O)	1	.417	.236	
Basis of Regard for Source (T)	1	.267	.151	
Initial Attitude (A)	1	56.406	31.970	.001
CS	2	.238	.135	
CO	2	.179	.102	
CT	2	.129	.073	
CA	2	.540	.306	
SO	1	.817	.463	
ST	1	.267	.151	
SA	1	4.556	2.582	
OT	1	4.817	2.730	
OA	1	.017	.010	
TA	1	.056	.032	
CSO	2	2.679	1.519	
CST	2	3.379	1.915	
CSA	2	3.544	2.009	
COT	2	1.704	.966	
COA	2	1.567	.888	
CTA	2	2.027	1.149	
SOT	1	2.817	1.596	
SOA	1	.006	.004	
STA	1	5.501	3.118	.079
OTA	1	.201	.114	
CSOT	2	1.304	.739	
CSOA	2	4.477	2.538	.082
CSTA	2	.159	.090	
COTA	2	2.688	1.524	
SOTA	1	1.951	1.106	
CSOTA	2	.776	.440	
WITHIN CELLS (Error)	192	1.764		

Mean Initial Certainty Scores

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	2.167 ^{*#} (0.753) ^{**}	3.000 (0.816)	1.667 (1.211)	1.500 (0.548)	1.500 (0.837)	1.167 (0.408)	1.333 (0.816)	2.667 (1.862)
	Moderate	3.500 (1.291)	2.000 (1.549)	2.250 (1.258)	3.500 (1.291)	2.750 (0.957)	4.250 (1.893)	4.000 (1.633)	3.250 (1.708)
Low	Extreme	2.167 (1.602)	1.500 (0.837)	1.000 (0.000)	3.833 (2.858)	1.833 (0.753)	2.167 (1.951)	2.500 (1.761)	2.000 (1.095)
	Moderate	4.250 (0.500)	3.250 (0.957)	2.500 (1.000)	3.250 (1.500)	3.500 (1.915)	2.500 (0.577)	3.250 (0.957)	3.000 (1.414)
No	Extreme	2.333 (1.506)	1.500 (1.225)	1.667 (1.211)	1.333 (0.516)	1.167 (0.408)	2.167 (1.602)	1.500 (0.837)	1.667 (1.211)
	Moderate	2.500 (1.732)	2.500 (1.291)	4.250 (1.892)	3.000 (0.816)	4.250 (1.258)	3.500 (0.577)	3.000 (1.414)	3.000 (0.816)

* The greater the mean, the less the certainty of correctness of one's opinion on a 7-point scale.

** Standard deviation.

Grand Mean = 2.408.

APPENDIX F: TABLE 5

APPENDIX F: TABLE 6
Analysis of Variance: Initial Certainty

Source	df	MS	F	p less than
Choice (C)	2	1.317	.784	
Degree of Regard for Source (S)	1	.267	.159	
Type of Commitment (O)	1	.067	.040	
Basis of Regard for Source (T)	1	.000	.000	
Initial Attitude (A)	1	113.344	67.479	.001
CS	2	1.117	.665	
CO	2	.267	.159	
CT	2	.200	.119	
CA	2	1.669	.994	
SO	1	.150	.089	
ST	1	3.750	2.233	
SA	1	2.178	1.297	
OT	1	.417	.248	
OA	1	1.225	.729	
TA	1	.625	.372	
CSO	2	3.950	2.352	.098
CST	2	2.850	1.697	
CSA	2	1.453	.865	
COT	2	2.817	1.677	
COA	2	1.108	.660	
CTA	2	1.633	.972	
SOT	1	5.400	3.215	.075
SOA	1	.336	.200	
STA	1	.625	.372	
OTA	1	1.111	.661	
CSOT	2	3.150	1.875	
CSOA	2	.869	.518	
CSTA	2	.400	.238	
COTA	2	4.044	2.408	.093
SOTA	1	.100	.060	
CSOTA	2	8.100	4.822	.009
WITHIN CELLS (Error)	192	1.680		

Mean Familiarity Scores

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	3.833 ^{*#} (1.722) ^{**}	3.750 (1.258)	2.000 (2.000)	2.500 (1.871)	2.667 (1.506)	2.333 (1.751)	2.333 (1.033)	3.167 (1.472)
	Moderate	3.500 (1.915)	3.000 (2.280)	2.750 (2.363)	2.750 (0.957)	2.250 (1.258)	4.250 (1.258)	3.750 (1.708)	3.750 (0.957)
Low	Extreme	2.833 (1.329)	2.167 (0.753)	1.333 (0.516)	6.000 (2.000)	2.333 (1.862)	2.500 (0.577)	3.167 (1.722)	2.500 (1.049)
	Moderate	4.250 (0.500)	4.000 (0.816)	3.500 (1.291)	3.750 (1.500)	3.250 (2.217)	2.500 (1.871)	4.000 (1.414)	4.000 (1.414)
No	Extreme	2.000 (1.095)	2.000 (1.095)	2.667 (2.160)	1.500 (0.548)	2.000 (1.549)	2.333 (1.033)	2.667 (1.751)	2.167 (1.472)
	Moderate	3.250 (1.708)	3.750 (2.217)	3.250 (1.708)	2.500 (1.000)	4.000 (1.633)	3.250 (0.957)	3.000 (1.414)	3.000 (0.816)

* The greater the mean, the less felt familiarity with pro and con arguments on 7-point scale.

** Standard deviation.

Grand Mean = 2.904.

APPENDIX F: TABLE 7

APPENDIX F: TABLE 8
Analysis of Variance: Familiarity

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	6.817	2.960	.054
Degree of Regard for Source (S)	1	1.067	.463	
Type of Commitment (O)	1	.417	.181	
Basis of Regard for Source (T)	1	.067	.029	
Initial Attitude (A)	1	40.000	17.369	.001
CS	2	3.017	1.310	
CO	2	2.217	.963	
CT	2	5.017	2.178	
CA	2	1.069	.464	
SO	1	.817	.355	
ST	1	2.400	1.042	
SA	1	.336	.146	
OT	1	4.817	2.092	
OA	1	.278	.121	
TA	1	1.600	.695	
CSO	2	6.217	2.699	.070
CST	2	6.650	2.888	.058
CSA	2	3.209	1.393	
COT	2	2.617	1.136	
COA	2	.551	.239	
CTA	2	1.431	.621	
SOT	1	4.817	2.092	
SOA	1	1.003	.435	
STA	1	4.225	1.835	
OTA	1	1.878	.815	
CSOT	2	6.717	2.917	.057
CSOA	2	2.072	.900	
CSTA	2	3.194	1.387	
COTA	2	2.463	1.070	
SOTA	1	4.225	1.835	
CSOTA	2	4.856	2.109	
WITHIN CELLS (Error)	192	2.303		

APPENDIX G

DATA FOR TWO SEMESTERS OF TESTING

APPENDIX G: TABLE 1

Analysis of Variance: Attitude Change First Semester Tested (N = 129)

Source	df	MS	F	p less than
Choice (C)	2	6.806	.883	
Degree of Regard for Source (S)	1	41.657	5.407	.023
Type of Commitment (O)	1	.135	.018	
Basis of Regard for Source (T)	1	.525	.068	
Initial Attitude (A)	1	46.374	6.019	.016
CS	2	13.123	1.703	.189
CO	2	7.320	.950	
CT	2	.204	.026	
CA	2	14.811	1.923	
SO	1	2.167	.281	
ST	1	3.160	.410	
SA	1	6.015	.781	
OT	1	17.049	2.213	
OA	1	4.556	.591	
TA	1	5.317	.690	
CSO	2	.377	.049	
CST	2	26.456	3.434	.037
CSA	2	4.515	.586	
COT	2	2.352	.305	
COA	2	10.311	1.338	
CTA	2	2.683	.348	
SOT	1	.032	.004	
SOA	1	1.288	.167	
STA	1	7.230	.939	
OTA	1	.001	.000	
CSOT	2	.433	.056	
CSOA	2	.269	.035	
CSTA	2	.654	.085	
COTA	2	.059	.008	
SOTA	1	8.581	1.114	
CSOTA	2	3.474	.451	
WITHIN CELLS (Error)	81	7.703		

APPENDIX G: TABLE 2
 Analysis of Variance: Attitude Change First Semester Tested (N = 111)

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	6.593	.655	
Degree of Regard for Source (S)	1	51.199	5.090	.028
Type of Commitment (O)	1	2.145	.213	
Basis of Regard for Source (T)	1	2.112	.210	
Initial Attitude (A)	1	29.093	2.892	.094
CS	2	19.530	1.942	.152
CO	2	1.539	.153	
CT	2	7.124	.708	
CA	2	1.349	.134	
SO	1	.041	.004	
ST	1	6.604	.657	
SA	1	11.045	1.098	
OT	1	6.553	.651	
OA	1	.141	.014	
TA	1	28.391	2.823	
CSO	2	2.483	.247	
CST	2	11.022	1.096	
CSA	2	8.144	.810	
COT	2	21.414	2.129	
COA	2	11.270	1.120	
CTA	2	8.810	.876	
SOT	1	2.836	.282	
SOA	1	6.874	.683	
STA	1	.398	.040	
OTA	1	.605	.060	
CSOT	2	9.261	.921	
CSOA	2	.837	.083	
CSTA	2	19.230	1.912	
COTA	2	.985	.098	
SOTA	1	27.386	2.723	
CSOTA	2	3.406	.339	
WITHIN CELLS (Error)	63	10.059		

APPENDIX G: TABLE 3

Mean Attitude Change First Semester Tested (N = 129)
for Choice x Degree of Regard for Source Interaction

		CHOICE		
		HIGH	LOW	NO
DEGREE OF REGARD FOR SOURCE	+	3.045 [*] [22] ^{**} (3.307) ^{***}	3.000 [19] (1.849)	3.364 [22] (2.469)
	-	2.955 [22] (2.322)	1.909 [22] (2.278)	1.136 [22] (1.571)

* Attitude measured on 11-point scale.

** Number of subjects per cell.

*** Standard deviation.

APPENDIX G: TABLE 4

Mean Attitude Change Second Semester Tested (N = 111)
for Choice x Degree of Regard for Source Interaction

		CHOICE		
		HIGH	LOW	NO
DEGREE OF REGARD FOR SOURCE	+	3.333 [*] [18] ^{**} (2.117) ^{***}	3.094 [21] (3.398)	4.111 [18] (1.477)
	-	3.333 [18] (2.877)	2.111 [18] (2.257)	1.167 [18] (2.243)

* Attitude measured on 11-point scale.

** Number of subjects per cell.

*** Standard deviation.

APPENDIX H

REFUSERS

Refusers

SEX OF SUBJECT	CONDITION	N-APPROVAL	ATTITUDE Q1 INITIAL/FINAL	IMPORTANCE INITIAL/FINAL	CERTAINTY INITIAL/FINAL	CHOICE TO REFUSE	DESIRE TO HEAR MORE INFORMATION
F	HC, B, S*	19**	9/7***	4/4 [#]	4/4 ^{##}	6 ^{###}	Yes
F	HC, B, BM	12	6/2	4/6	2/1	5	Yes
F	HC, B, BM	11	6/8	5/5	6/4	6	Yes
M	HC, B, R	18	6/6	4/4	2/3	7	Yes
F	HC, A, S	13	7/9	4/5	2/5	6	Yes
F	LC, B, C	23	9/6	6/4	6/4	7	Yes

* Code: HC = high choice, LC = low choice; B = source information presented before commitment to listen to counterattitudinal information, A = source information presented after commitment to listen; S = scientist - positive credibility speaker, R = man on relief - negative credibility speaker, C = college student - positive attractive speaker, and BM = black militant college student - negative attractive speaker, respectively.

** The smaller the score the less the N-approval with a maximum of 33; grand mean for experimental subjects = 13.517.

*** The greater the score the greater the opposition to Q1 on an 11-point scale.

[#] The greater the score the greater the personal importance of the issue on a 7-point scale.

^{##} The greater the score the less the certainty of the correctness of one's opinion on a 7-point scale.

^{###} The greater the score the greater the felt choice to refuse to listen on a 7-point scale.

APPENDIX H: TABLE 1

APPENDIX I

CHOICE MANIPULATION CHECKS

APPENDIX I: ITEM 1

Types of Reasons for Choice to Listen to Counterattitudinal
Information and Coding in Terms of Type of Reasoning*

1. General Interest
 - a. curiosity
 - b. topic, interesting, important, and/or controversial
 - c. interest in hearing specific speaker
 - d. interest in psychological research
2. Specific Evidence of Need to be Informed
 - a. want to be informed on topic
 - b. want to be open-minded
 - c. want to or think it is important to hear both sides of an issue
 - d. to form an opinion must evaluate both sides of an issue
 - e. personal uncertainty on issue
 - f. problem affects my future therefore need to listen
3. Nothing Better to Do
4. Help the Experimenter
5. Requirement
 - a. participation required for psychology course
 - b. listening was part of the experiment
6. Obligation or Asked to Stay

Coding: Internal vs. External Locus of Control

Internal Reasoning: categories, 1, 2, and 3; 4 if in High Choice Condition

External Reasoning: 4 if in Low Choice Condition or No Choice Condition; 5 and 6

*Two independent raters counted and categorized the reasons given. There was 96.7% agreement on the number of reasons given and 92.7% agreement on the locus of control indicated.

APPENDIX I: TABLE 1

Intercorrelations of Choice Variables for Experimental Subjects^o

	(1)	(2)	(3)	(4)	(5)
(1) Choice	--	--	--	--	--
(2) Experimenter Pressure	-.12 ^{#*}	--	--	--	--
(3) Number of Reasons Given for Choice	.09 [#]	-.01 [#]	--	--	--
(4) Choice Was Given to Leave	-.09	.00	.03	--	--
(5) Listening Was Required	.06	-.08	-.08	-.84 ^{oo*}	--
(6) Requirement Was Mentioned	-.44 [*]	.05	.19 ^{**}	--	--
(7) Internal-External Locus of Control ^{##}	-.40 [*]	.32 [*]	-.16 ^{***}	.02 ^{oo}	.03 ^{oo}

^o All correlation coefficients are point-biserial unless otherwise noted. For dichotomous variables 0 = no, 1 = yes.

^{oo} Tetrachoric correlations.

[#] Within cells correlation coefficients from analysis of variance.

^{##} Internal-external locus of control considered a dichotomous variable with 0 = internal reasoning only, 1 = external reasoning only.

^{*} p less than .001

^{**} p less than .01

^{***} p less than .05

Percentage of Subjects Indicating Veridical Perception of Choice to Leave

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	100	100	100	100	100	100	100	100
Low	100	90	100	90	100	90	100	90
No	80	100	100	100	90	90	90	100

APPENDIX I: TABLE 2

Percentage of Subjects Indicating Veridical
Perception of Requirement to Listen

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	90	100	100	100	90	90	100	100
Low	100	100	100	90	100	100	100	100
No	100	90	100	100	100	100	100	100

APPENDIX I: TABLE 3

Percentage of Subjects Mentioning Class Requirement
As Reason for Choice

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	0	0	0	0	0	0	0	0
Low	0	0	0	0	0	0	0	0
No	50	80	50	30	60	70	80	80

APPENDIX I: TABLE 4

Mean Degree of Felt Choice to Refuse to Listen

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	6.300* (1.494)**	6.900 (0.316)	6.900 (0.316)	6.600 (0.966)	6.700 (0.483)	6.400 (0.966)	6.000 (1.155)	6.900 (0.316)
Low	5.500 (1.650)	4.300 (2.111)	5.600 (1.430)	5.400 (1.713)	4.700 (1.494)	5.600 (1.265)	4.400 (1.350)	5.300 (1.494)
No	3.900 (2.470)	3.800 (1.989)	3.100 (2.025)	3.600 (2.066)	3.100 (1.912)	3.700 (1.947)	3.600 (2.066)	4.000 (2.494)

* Degree of felt choice measured on 7-point scale; the higher the mean the greater the perceived choice.

** Standard deviation.

APPENDIX I: TABLE 5

Mean Felt Experimenter Pressure to Listen

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	1.700 [*] (1.252)**	1.200 (0.422)	1.300 (0.949)	1.800 (1.229)	2.000 (1.563)	1.500 (0.972)	1.900 (1.449)	1.000 (0.000)
Low	3.500 (1.716)	4.600 (1.713)	3.100 (1.595)	2.500 (1.650)	2.300 (1.252)	3.900 (1.853)	3.000 (1.563)	2.400 (1.265)
No	3.400 (2.459)	2.400 (1.713)	2.500 (1.581)	3.700 (2.163)	1.700 (0.949)	2.700 (1.494)	1.900 (1.287)	2.600 (1.350)

* Degree of felt pressure from experimenter to listen measured on 7-point scale; the greater the mean the greater the pressure.

** Standard deviation.

APPENDIX I: TABLE 6

APPENDIX I: TABLE 7

Analysis of Variance: Degree of Choice to Refuse to Listen

Source	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u> less than
Choice (C)	2	178.504	68.740	.001
Degree of Regard for Source (S)	1	3.038	1.170	
Type of Commitment (O)	1	.937	.361	
Basis of Regard for Source (T)	1	.104	.040	
Initial Attitude (A)	1	.584	.225	
CS	2	.312	.120	
CO	2	.237	.091	
CT	2	.204	.079	
CA	2	3.805	1.465	
SO	1	7.004	2.697	
ST	1	1.204	.464	
SA	1	1.167	.450	
OT	1	.104	.040	
OA	1	9.184	3.537	.062
TA	1	.017	.007	
CSO	2	3.179	1.224	
CST	2	.179	.069	
CSA	2	.747	.287	
COT	2	4.154	1.600	
COA	2	.551	.212	
CTA	2	3.042	1.172	
SOT	1	.038	.014	
SOA	1	2.256	.869	
STA	1	2.417	.931	
OTA	1	.017	.007	
CSOT	2	3.763	1.449	
CSOA	2	1.915	.737	
CSTA	2	.442	.170	
COTA	2	8.405	3.257	.041
SOTA	1	.306	.118	
CSOTA	2	4.477	1.724	
WITHIN CELLS (Error)	192	2.597		

APPENDIX I: TABLE 8
Analysis of Variance: Experimenter Pressure to Listen

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	53.754	23.905	.001
Degree of Regard for Source (S)	1	1.667	.741	
Type of Commitment (O)	1	9.600	4.269	.040
Basis of Regard for Source (T)	1	4.267	1.897	
Initial Attitude (A)	1	1.284	.571	
CS	2	4.054	1.803	
CO	2	4.063	1.807	
CT	2	4.929	2.192	
CA	2	.180	.080	
SO	1	.150	.067	
ST	1	.817	.363	
SA	1	.156	.069	
OT	1	.150	.067	
OA	1	1.667	.741	
TA	1	.056	.025	
CSO	2	2.713	1.206	
CST	2	11.579	5.149	.007
CSA	2	.394	.175	
COT	2	2.188	.973	
COA	2	7.517	3.343	.037
CTA	2	2.519	1.120	
SOT	1	8.067	3.587	.060
SOA	1	.756	.336	
STA	1	.006	.003	
OTA	1	.756	.336	
CSOT	2	1.254	.558	
CSOA	2	2.965	1.318	
CSTA	2	1.202	.535	
COTA	2	.156	.069	
SOTA	1	.367	.163	
CSOTA	2	3.367	1.497	
WITHIN CELLS (Error)	192	2.249		

Mean Number of Reasons for Decision to Listen

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	1.600 (0.843)*	1.200 (0.632)	1.000 (0.000)	1.400 (0.516)	1.800 (1.317)	0.900 (0.316)	1.300 (0.483)	1.400 (0.516)
Low	1.500 (0.527)	1.500 (0.850)	1.000 (0.667)	1.600 (0.516)	0.900 (0.316)	1.400 (0.516)	1.300 (0.483)	1.100 (0.316)
No	1.400 (0.516)	1.600 (0.699)	1.300 (0.675)	1.000 (0.000)	1.400 (0.516)	1.400 (0.516)	1.600 (0.699)	1.300 (0.675)

* Standard deviation.

APPENDIX I: TABLE 9

APPENDIX I: TABLE 10
 Analysis of Variance: Number of Reasons for Decision to Listen

Source	df	MS	F	p less than
Choice (C)	2	.154	.408	
Degree of Regard for Source (S)	1	.037	.099	
Type of Commitment (O)	1	.037	.099	
Basis of Regard for Source (T)	1	.704	1.863	
Initial Attitude (A)	1	.117	.310	
CS	2	.987	2.612	.076
CO	2	.613	1.620	
CT	2	.029	.077	
CA	2	.353	.933	
SO	1	.704	1.863	
ST	1	.337	.893	
SA	1	.001	.002	
OT	1	1.204	3.185	.076
OA	1	.056	.149	
TA	1	.584	1.545	
CSO	2	.129	.342	
CST	2	2.262	5.985	.003
CSA	2	.186	.492	
COT	2	.054	.143	
COA	2	.533	1.411	
CTA	2	.311	.823	
SOT	1	.337	.893	
SOA	1	.001	.002	
STA	1	.367	.972	
OTA	1	.056	.149	
CSOT	2	.938	2.480	.086
CSOA	2	.003	.007	
CSTA	2	.619	1.639	
COTA	2	.258	.683	
SOTA	1	.034	.090	
CSOTA	2	.486	1.286	
WITHIN CELLS (Error)	192	.378		

APPENDIX I: TABLE 11

Percent of Kinds of Reasons Given for Choice to Listen to
Counterattitudinal Information*

Kind of Reason	Choice Condition		
	High (N=79)	Low (N=77)	No (N=79)
Internal Only	96.2	41.6	34.2
External Only	2.5	28.6	38.0
Both	1.3	29.8	27.8

*Total N = 235

APPENDIX J

TYPE OF COMMITMENT MANIPULATION CHECK

Percentage of Subjects Correctly Remembering Order of
Presentation of Source Information

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	90	70	70	80	100	70	80	80
Low	80	90	90	70	60	100	70	80
No	100	(9)*	100	90	70	70	(9)*	70

* Number of subjects per cell (all others = 10/cell).

APPENDIX J: TABLE 1

APPENDIX K

REACTION TO BOGUS TASK

Mean Interest in Bogus Task

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	4.000*	2.200	2.600	3.200	3.100	3.400	3.400	3.400
	(1.247)**	(1.619)	(1.350)	(1.687)	(1.663)	(1.506)	(1.350)	(2.066)
Low	3.500	3.200	3.100	2.800	3.400	2.800	3.500	3.500
	(1.080)	(1.814)	(1.197)	(1.874)	(1.578)	(0.919)	(1.841)	(1.434)
No	3.200	2.800	3.100	2.900	3.300	3.500	3.400	3.300
	(1.549)	(1.549)	(2.079)	(1.197)	(1.636)	(2.068)	(1.578)	(1.160)

*The greater the mean the less interest measured on 7-point scale.

**Standard deviation.

APPENDIX K: TABLE 1

Mean Enjoyment of Bogus Task

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	3.900 [*]	2.300	3.000	3.300	3.400	3.600	3.700	3.400
	(1.287)**	(1.494)	(1.247)	(0.699)	(1.506)	(1.075)	(1.059)	(1.955)
Low	3.700	3.800	2.700	3.100	3.500	2.900	3.600	3.600
	(1.337)	(1.687)	(0.949)	(1.729)	(1.650)	(0.994)	(1.506)	(1.506)
No	3.400	3.500	3.100	3.500	3.600	3.800	4.000	3.400
	(0.966)	(1.434)	(1.729)	(0.850)	(1.265)	(1.989)	(1.633)	(1.506)

*The greater the mean the less enjoyment on 7-point scale.

**Standard deviation.

APPENDIX K: TABLE 2

APPENDIX K: TABLE 3
 Analysis of Variance: Interest in Bogus Task

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	.079	.031	
Degree of Regard for Source (S)	1	2.817	1.094	
Type of Commitment (O)	1	4.817	1.871	
Basis of Regard for Source (T)	1	.017	.006	
Initial Attitude (A)	1	.044	.017	
CS	2	.154	.060	
CO	2	.279	.108	
CT	2	.004	.002	
CA	2	.469	.182	
SO	1	2.017	.783	
ST	1	2.817	1.094	
SA	1	5.378	2.089	
OT	1	2.017	.783	
OA	1	.003	.001	
TA	1	3.803	1.477	
CSO	2	.704	.273	
CST	2	1.579	.613	
CSA	2	.853	.331	
COT	2	.904	.351	
COA	2	.186	.072	
CTA	2	2.919	1.134	
SOT	1	2.817	1.094	
SOA	1	5.136	1.995	
STA	1	.225	.087	
OTA	1	.011	.004	
CSOT	2	3.529	1.371	
CSOA	2	1.636	.635	
CSTA	2	1.358	.528	
COTA	2	3.853	1.496	
SOTA	1	1.600	.621	
CSOTA	2	1.158	.450	
WITHIN CELLS (Error)	192	2.575		

APPENDIX K: TABLE 4
Analysis of Variance: Enjoyment of Bogus Task

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	.950	.470	
Degree of Regard for Source (S)	1	.704	.349	
Type of Commitment (O)	1	4.004	1.982	
Basis of Regard for Source (T)	1	.337	.167	
Initial Attitude (A)	1	.006	.003	
CS	2	.717	.355	
CO	2	.517	.256	
CT	2	.450	.223	
CA	2	.133	.066	
SO	1	.338	.167	
ST	1	1.504	.744	
SA	1	3.306	1.636	
OT	1	3.037	1.503	
OA	1	.034	.017	
TA	1	8.867	4.389	.037
CSO	2	1.850	.916	
CST	2	1.317	.625	
CSA	2	.908	.450	
COT	2	2.450	1.213	
COA	2	.219	.109	
CTA	2	6.369	3.153	.045
SOT	1	4.537	2.246	
SOA	1	1.284	.636	
STA	1	.756	.374	
OTA	1	.306	.152	
CSOT	2	2.450	1.213	
CSOA	2	1.303	.645	
CSTA	2	.225	.111	
COTA	2	5.633	2.788	.064
SOTA	1	1.667	.825	
CSOTA	2	.286	.142	
WITHIN CELLS (Error)	192	2.020		

APPENDIX L

RESPONSES RELATED TO PURPOSE OF EXPERIMENT

Percentage of Subjects Reiterating Stated
Purpose of Experiment (N = 232)

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	60	40	50	40	40	40	(9)* 33.3	(9) 44.4
Low	50	40	(9) 66.7	30	(9) 55.6	60	60	60
No	(9) 66.7	60	70	(9) 66.7	(9) 66.7	(9) 55.6	80	70

* Number of subjects per cell (others = 10/cell).

APPENDIX I: TABLE 1

APPENDIX L: TABLE 2

Categories of Responses Describing Purpose of Experiment as a
Function of Choice Condition*

CHOICE CONDITION	CATEGORY**							
	1	2	3	4	5	6	7	8
High (N = 78)	34	5	0	13	9	6	3	8
Low (N = 78)	41	7	0	12	9	4	2	3
No (N = 76)	51	4	0	8	4	1	2	6

* Two independent raters categorized the responses to the open-ended question on the purpose of the experiment with 96.9% agreement.

** Category numbers refer to the following types of purposes:

- (1) veridical (i.e., purpose stated in instructions)
- (2) purpose related to questionnaire content
- (3) attitude study
- (4) to inform listener
- (5) to help the experimenter
- (6) don't know what purpose is
- (7) purpose was to test comprehension or retention of message
- (8) miscellaneous or unclassifiable

APPENDIX M

COVARIANCE ANALYSES WITH EXTENT OF DESIRE TO LISTEN
TO DISSONANT OR SUPPORTIVE INFORMATION AS COVARIATES

APPENDIX M: TABLE 1
Analysis of Covariance: Attitude Change with Extent of Desire to
Listen to Dissonant Information as Covariate

Source	df	MS	F	p less than
Regression	1	40.206	4.997	.027
Choice (C)	2	17.158	2.132	
Degree of Regard for Source (S)	1	91.938	11.427	.001
Type of Commitment (O)	1	1.682	.209	
Basis of Regard for Source (T)	1	.291	.036	
Initial Attitude (A)	1	73.424	9.125	.003
CS	2	24.229	3.011	.052
CO	2	11.115	1.381	
CT	2	2.657	.330	
CA	2	9.937	1.235	
SO	1	.343	.043	
ST	1	4.142	.515	
SA	1	.216	.027	
OT	1	1.793	.223	
OA	1	1.670	.208	
TA	1	25.675	3.191	
CSO	2	2.201	.274	
CST	2	7.035	.874	
CSA	2	3.023	.376	
COT	2	13.358	1.660	
COA	2	6.571	.817	
CTA	2	8.052	1.001	
SOT	1	5.587	.694	
SOA	1	9.396	1.168	
STA	1	2.048	.255	
OTA	1	2.012	.250	
CSOT	2	.456	.057	
CSOA	2	1.089	.135	
CSTA	2	9.298	1.156	
COTA	2	1.479	.184	
SOTA	1	3.532	.439	
CSOTA	2	1.993	.248	
WITHIN CELLS (Error)	191	8.046		

APPENDIX M: TABLE 2
Analysis of Covariance: Attitude Change with Extent to Listen to
Supportive Information as Covariate

Source	df	MS	F	p less than
Regression	1	14.806	1.810	.180
Choice (C)	2	13.877	1.697	
Degree of Regard for Source (S)	1	92.308	11.286	.001
Type of Commitment (O)	1	2.642	.323	
Basis of Regard for Source (T)	1	2.610	.319	
Initial Attitude (A)	1	60.833	7.438	.007
CS	2	25.109	3.070	.049
CO	2	8.856	1.083	
CT	2	2.586	.316	
CA	2	8.611	1.053	
SO	1	.879	.108	
ST	1	6.554	.801	
SA	1	.007	.001	
OT	1	4.091	.500	
OA	1	2.343	.286	
TA	1	20.987	2.566	
CSO	2	1.552	.190	
CST	2	5.630	.688	
CSA	2	5.159	.631	
COT	2	17.807	2.177	
COA	2	7.604	.930	
CTA	2	7.393	.904	
SOT	1	3.619	.442	
SOA	1	8.259	1.010	
STA	1	2.065	.252	
OTA	1	.896	.110	
CSOT	2	.720	.088	
CSOA	2	2.086	.255	
CSTA	2	7.851	.960	
COTA	2	1.133	.139	
SOTA	1	3.276	.400	
CSOTA	2	1.952	.239	
WITHIN CELLS (Error)	191	8.179		

APPENDIX N

EVIDENCE OF DISSONANCE

APPENDIX N: TABLE 1

Means for Initial Attitude and Attitude Change for Groups
Classified According to Extent of Desire to Listen to
Supportive and Dissonant Information

Initial Position

		Listen to Dissonant*	
		≤ 4	≥ 4
Listen to Supportive	≤ 4	9.73**/.87***	10.05/2.73
	≥ 4	10.29/1.10	8.93/2.00

Attitude Change

		Listen to Dissonant	
		≤ 4	≥ 4
Listen to Supportive	≤ 4	3.11/2.97	2.64/2.79
	≥ 4	2.59/2.81	1.96/2.80

* Listen to dissonant and listen to supportive on 7-point scales with "1" representing the positive end of the scale through neutral and "7" the negative end.

** Initial attitude to Q1 measured on 11-point scale; the higher the mean the greater the opposition to Q1.

*** Standard deviation.

Percentage of Subjects Desiring to Hear More Information

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	60	80	80	100	70	50	100	80
Low	100	50	70	70	70	90	60	60
No	60	60	60	70	70	80	90	40

APPENDIX N: TABLE 2

APPENDIX N: TABLE 3
Analysis of Variance: Desire to Hear More Information

Source	df	MS	F	p less than
Choice (C)	2	.087	.417	
Degree of Regard for Source (S)	1	.017	.080	
Type of Commitment (O)	1	.067	.318	
Basis of Regard for Source (T)	1	.000	.000	
Initial Attitude (A)	1	.084	.401	
CS	2	.204	.974	
CO	2	.254	1.212	
CT	2	.388	1.848	
CA	2	.097	.460	
SO	1	.017	.080	
ST	1	.017	.080	
SA	1	.251	1.196	
OT	1	.267	1.272	
OA	1	.506	2.415	
TA	1	.017	.083	
CSO	2	.554	2.643	.074
CST	2	.304	1.451	
CSA	2	.042	.202	
COT	2	.004	.020	
COA	2	.027	.129	
CTA	2	.151	.719	
SOT	1	.417	1.988	
SOA	1	.001	.003	
STA	1	.001	.003	
OTA	1	.667	3.183	.076
CSOT	2	.504	2.405	.093
CSOA	2	.192	.918	
CSTA	2	.005	.023	
COTA	2	.617	2.945	.055
SOTA	1	.156	.745	
CSOTA	2	.402	1.918	
WITHIN CELLS (Error)	192	.210		

APPENDIX N: TABLE 4
 Analysis of Variance: Sum of Ranks of Consonant Titles

Source	df	MS	F	p less than
Choice (C)	2	15.031	1.410	
Degree of Regard for Source (S)	1	.011	.001	
Type of Commitment (O)	1	8.062	.756	
Basis of Regard for Source (T)	1	.568	.053	
Initial Attitude (A)	1	.291	.027	
CS	2	9.854	.924	
CO	2	16.769	1.573	
CT	2	9.989	.937	
CA	2	1.437	.135	
SO	1	2.007	.188	
ST	1	29.499	2.766	.099
SA	1	1.708	.160	
OT	1	21.721	2.037	
OA	1	3.309	.310	
TA	1	27.526	2.581	
CSO	2	12.582	1.180	
CST	2	15.611	1.464	
CSA	2	12.383	1.161	
COT	2	11.478	1.076	
COA	2	10.407	.976	
CTA	2	.671	.063	
SOT	1	.454	.043	
SOA	1	55.575	5.212	.024
STA	1	2.569	.241	
OTA	1	9.358	.878	
CSOT	2	18.307	1.717	
CSOA	2	2.285	.214	
CSTA	2	.039	.004	
COTA	2	3.023	.283	
SOTA	1	5.088	.477	
CSOTA	2	5.446	.511	
WITHIN CELLS (Error)	105	10.664		

APPENDIX N: TABLE 5
Analysis of Variance: Sum of Ranks of Dissonant Titles

Source	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u> less than
Choice (C)	2	12.635	.926	
Degree of Regard for Source (S)	1	2.808	.206	
Type of Commitment (O)	1	17.488	1.282	
Basis of Regard for Source (T)	1	2.596	.190	
Initial Attitude (A)	1	9.452	.693	
CS	2	8.007	.587	
CO	2	45.050	3.303	.041
CT	2	6.012	.441	
CA	2	11.674	.856	
SO	1	.170	.012	
ST	1	8.031	.589	
SA	1	2.348	.172	
OT	1	9.709	.712	
OA	1	.026	.002	
TA	1	45.321	3.323	
CSO	2	34.883	2.558	
CST	2	8.104	.594	
CSA	2	6.863	.503	
COT	2	30.208	2.215	
COA	2	4.583	.336	
CTA	2	.085	.006	
SOT	1	.602	.044	
SOA	1	81.849	6.001	.016
STA	1	11.948	.876	
OTA	1	28.201	2.068	
CSOT	2	25.680	1.883	
CSOA	2	6.507	.477	
CSTA	2	.604	.044	
COTA	2	.044	.003	
SOTA	1	3.879	.284	
CSOTA	2	2.277	.167	
WITHIN CELLS (Error)	105	13.638		

APPENDIX N: TABLE 6
Analysis of Variance: Sum of Ranks of Neutral Titles

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	5.967	.584	
Degree of Regard for Source (S)	1	1.122	.110	
Type of Commitment (O)	1	1.518	.148	
Basis of Regard for Source (T)	1	.013	.001	
Initial Attitude (A)	1	17.749	1.736	
CS	2	14.551	1.423	
CO	2	1.465	.143	
CT	2	16.455	1.609	
CA	2	2.755	.269	
SO	1	7.035	.688	
ST	1	16.082	1.573	
SA	1	5.223	.511	
OT	1	9.619	.941	
OA	1	16.252	1.589	
TA	1	.183	.018	
CSO	2	8.389	.820	
CST	2	3.864	.378	
CSA	2	1.292	.126	
COT	2	3.843	.376	
COA	2	1.678	.164	
CTA	2	6.661	.651	
SOT	1	.369	.036	
SOA	1	.055	.005	
STA	1	9.732	.952	
OTA	1	12.951	1.267	
CSOT	2	7.564	.740	
CSOA	2	.163	.016	
CSTA	2	.651	.064	
COTA	2	1.988	.194	
SOTA	1	1.026	.100	
CSOTA	2	.373	.037	
WITHIN CELLS (Error)	105	10.225		

APPENDIX 0

ATTITUDE RELATED VARIABLES

Mean Final Importance of Issue (Q1)

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	4.833 [*] (1.472) ^{**}	5.500 (1.291)	5.500 (2.345)	5.667 (1.506)	6.000 (0.632)	6.000 (1.265)	5.667 (1.033)	5.667 (1.211)
	Moderate	3.750 (0.500)	5.500 (2.345)	5.000 (1.155)	6.500 (0.577)	5.750 (1.258)	5.250 (0.957)	5.250 (1.500)	5.750 (1.258)
Low	Extreme	5.833 (1.169)	4.500 (2.588)	5.833 (1.941)	6.500 (0.837)	5.500 (0.847)	5.667 (1.211)	5.167 (1.169)	6.000 (1.265)
	Moderate	5.500 (1.000)	4.250 (1.258)	5.250 (0.957)	5.750 (0.957)	5.000 (1.414)	6.000 (0.000)	5.500 (1.291)	5.000 (1.155)
No	Extreme	5.500 (1.225)	5.500 (1.049)	6.000 (1.095)	5.167 (1.941)	5.667 (1.366)	5.833 (1.472)	5.833 (0.983)	6.167 (1.169)
	Moderate	4.500 (2.646)	4.750 (0.957)	4.500 (1.000)	5.250 (0.957)	5.250 (0.957)	5.250 (1.258)	6.000 (1.414)	4.250 (0.500)

* The greater the mean, the greater the importance on 7-point scale.

** Standard deviation.

APPENDIX O: TABLE 1

APPENDIX O: TABLE 2
 Analysis of Variance: Final Importance of Issue (01)

Source	df	MS	F	p less than
Choice (C)	2	.179	.096	
Degree of Regard for Source (S)	1	.817	.436	
Type of Commitment (O)	1	4.267	2.278	
Basis of Regard for Source (T)	1	3.750	2.002	
Initial Attitude (A)	1	11.556	6.170	.014
CS	2	1.779	.950	
CO	2	.879	.469	
CT	2	.313	.167	
CA	2	1.258	.672	
SO	1	.150	.080	
ST	1	.267	.142	
SA	1	.201	.107	
OT	1	6.017	3.213	.075
OA	1	.084	.045	
TA	1	.017	.009	
CSO	2	3.413	1.822	
CST	2	2.179	1.164	
CSA	2	.853	.455	
COT	2	1.279	.683	
COA	2	.211	.113	
CTA	2	.903	.482	
SOT	1	1.067	.570	
SOA	1	4.784	2.554	
STA	1	.306	.164	
OTA	1	.251	.134	
CSOT	2	2.679	1.431	
CSOA	2	1.011	.540	
CSTA	2	1.008	.538	
COTA	2	.144	.077	
SOTA	1	1.951	1.042	
CSOTA	2	1.244	.664	
WITHIN CELLS (Error)	192	1.873		

APPENDIX O: TABLE 3
 Analysis of Variance: Change in Importance of Issue (O1)

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	5.337	2.503	.085
Degree of Regard for Source (S)	1	3.267	1.532	
Type of Commitment (O)	1	6.667	3.126	.079
Basis of Regard for Source (T)	1	2.408	1.125	
Initial Attitude (A)	1	17.778	8.335	.004
CS	2	.954	.447	
CO	2	.454	.213	
CT	2	.087	.041	
CA	2	.347	.162	
SO	1	1.350	.633	
ST	1	.017	.008	
SA	1	6.136	2.877	
OT	1	.017	.008	
OA	1	.069	.033	
TA	1	.044	.021	
CSO	2	3.088	1.448	
CST	2	11.154	5.230	.006
CSA	2	1.251	.586	
COT	2	1.954	.916	
COA	2	.917	.430	
CTA	2	1.076	.504	
SOT	1	.267	.125	
SOA	1	4.900	2.297	
STA	1	7.803	3.658	.057
OTA	1	.025	.012	
CSOT	2	.704	.330	
CSOA	2	8.444	3.959	.021
CSTA	2	1.572	.737	
COTA	2	4.244	1.990	
SOTA	1	.011	.005	
CSOTA	2	.417	.196	
WITHIN CELLS (Error)	192	2.133		

Mean Final Certainty of Correctness of One's Opinion on Issue (Q1)

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	2.700 [*]	2.000	2.800	2.200	1.700	2.900	3.200	2.800
	(0.949) ^{**}	(1.333)	(1.476)	(0.789)	(0.675)	(1.449)	(1.814)	(1.317)
Low	3.400	2.600	2.200	3.300	2.800	3.000	3.200	2.700
	(1.838)	(1.174)	(1.229)	(2.406)	(1.135)	(1.491)	(1.033)	(1.703)
No	2.600	2.600	3.100	3.600	2.500	3.300	3.300	2.100
	(1.350)	(1.265)	(1.969)	(1.578)	(0.850)	(1.636)	(1.829)	(0.876)

*The greater the mean the less the certainty on 7-point scale.

**Standard deviation.

APPENDIX O: TABLE 4

APPENDIX O: TABLE 5

Analysis of Variance: Final Certainty of the Correctness of
One's Opinion on Issue (O1)

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	3.388	1.534	
Degree of Regard for Source (S)	1	.067	.030	
Type of Commitment (O)	1	.067	.030	
Basis of Regard for Source (T)	1	2.400	1.087	
Initial Attitude (A)	1	6.006	2.720	.101
CS	2	.129	.059	
CO	2	.804	.364	
CT	2	1.463	.662	
CA	2	1.540	.697	
SO	1	.150	.068	
ST	1	1.350	.611	
SA	1	.756	.343	
OT	1	.017	.008	
OA	1	.756	.343	
TA	1	1.284	.582	
CSO	2	3.412	1.546	
CST	2	3.038	1.376	
CSA	2	1.131	.512	
COT	2	3.229	1.463	
COA	2	.540	.244	
CTA	2	1.242	.563	
SOT	1	19.267	8.726	.004
SOA	1	.006	.003	
STA	1	2.417	1.095	
OTA	1	.251	.114	
CSOT	2	.304	.138	
CSOA	2	.515	.233	
CSTA	2	1.417	.642	
COTA	2	.226	.102	
SOTA	1	.084	.038	
CSOTA	2	.151	.068	
WITHIN CELLS (Error)	192	2.208		

APPENDIX O: TABLE 6
Analysis of Variance: Change in Certainty of Correctness of
One's Opinion on Issue (O1)

Source	df	MS	F	p less than
Choice (C)	2	3.629	.976	
Degree of Regard for Source (S)	1	.600	.162	
Type of Commitment (O)	1	.000	.000	
Basis of Regard for Source (T)	1	2.400	.647	
Initial Attitude (A)	1	67.167	18.110	.001
CS	2	1.838	.495	
CO	2	1.137	.307	
CT	2	2.413	.650	
CA	2	.180	.048	
SO	1	.000	.000	
ST	1	9.600	2.588	
SA	1	5.501	1.483	
OT	1	.600	.162	
OA	1	3.906	1.053	
TA	1	.117	.032	
CSO	2	5.863	1.581	
CST	2	.487	.131	
CSA	2	.263	.071	
COT	2	.337	.091	
COA	2	.102	.028	
CTA	2	4.917	1.326	
SOT	1	4.267	6.150	
SOA	1	.434	.117	
STA	1	.584	.157	
OTA	1	2.417	.652	
CSOT	2	2.629	.709	
CSOA	2	2.280	.615	
CSTA	2	6.301	.351	
COTA	2	5.576	1.503	
SOTA	1	.001	.000	
CSOTA	2	6.076	1.638	
WITHIN CELLS (Error)	192	3.709		

APPENDIX O: TABLE 7
 Analysis of Variance: Importance of Q2

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	.804	.398	
Degree of Regard for Source (S)	1	.017	.008	
Type of Commitment (O)	1	3.267	1.615	
Basis of Regard for Source (T)	1	.150	.074	
Initial Attitude (A)	1	3.025	1.496	
CS	2	4.529	2.239	
CO	2	5.154	2.548	.081
CT	2	.038	.019	
CA	2	1.633	.808	
SO	1	1.667	.824	
ST	1	1.350	.667	
SA	1	3.025	1.496	
OT	1	1.667	.824	
OA	1	.136	.067	
TA	1	.044	.022	
CSO	2	2.079	1.028	
CST	2	6.112	3.022	.051
CSA	2	1.658	.820	
COT	2	.904	.447	
COA	2	6.103	.545	
CTA	2	.136	.067	
SOT	1	5.400	2.670	
SOA	1	3.403	1.682	
STA	1	.900	.445	
OTA	1	1.111	.549	
CSOT	2	3.412	1.687	
CSOA	2	.053	.026	
CSTA	2	.700	.346	
COTA	2	1.686	.834	
SOTA	1	1.878	.928	
CSOTA	2	1.323	.644	
WITHIN CELLS (Error)	192	2.023		

APPENDIX O: TABLE 8
Analysis of Variance: Importance of Q3

Source	df	MS	F	p less than
Choice (C)	2	.787	.387	
Degree of Regard for Source (S)	1	.104	.051	
Type of Commitment (O)	1	.104	.051	
Basis of Regard for Source (T)	1	4.004	1.970	
Initial Attitude (A)	1	2.336	1.149	
CS	2	1.504	.740	
CO	2	2.129	1.047	
CT	2	.554	.273	
CA	2	1.772	.871	
SO	1	1.837	.904	
ST	1	.337	.166	
SA	1	.278	.137	
OT	1	4.004	1.970	
OA	1	1.111	.547	
TA	1	2.669	1.313	
CSO	2	.913	.449	
CST	2	6.787	3.339	.038
CSA	2	1.722	.847	
COT	2	3.029	1.490	
COA	2	1.305	.642	
CTA	2	.651	.328	
SOT	1	1.504	.740	
SOA	1	2.669	1.313	
STA	1	5.378	2.645	
OTA	1	.044	.022	
CSOT	2	1.929	.949	
CSOA	2	.563	.277	
CSTA	2	1.084	.533	
COTA	2	2.717	1.337	
SOTA	1	1.003	.493	
CSOTA	2	1.526	.750	
WITHIN CELLS (Error)	192	2.033		

APPENDIX O: TABLE 9
Analysis of Variance: Certainty of Correctness
of One's Opinion on Q2

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	5.554	4.042	.019
Degree of Regard for Source (S)	1	2.017	1.468	
Type of Commitment (O)	1	2.817	2.050	
Basis of Regard for Source (T)	1	.150	.109	
Initial Attitude (A)	1	8.403	6.115	.014
CS	2	1.204	.876	
CO	2	2.654	1.932	
CT	2	.937	.682	
CA	2	4.463	3.248	.041
SO	1	.067	.049	
ST	1	.067	.049	
SA	1	.178	.129	
OT	1	.600	.437	
OA	1	.044	.032	
TA	1	.100	.073	
CSO	2	10.454	7.608	.001
CST	2	.754	.549	
CSA	2	8.292	6.035	.023
COT	2	6.088	4.430	.013
COA	2	4.176	3.039	.050
CTA	2	5.052	3.667	.027
SOT	1	2.017	1.468	
SOA	1	.336	.245	
STA	1	3.669	1.943	
OTA	1	6.136	4.465	.036
CSOT	2	.754	.549	
CSOA	2	.230	.167	
CSTA	2	3.534	2.572	.079
COTA	2	.867	.631	
SOTA	1	2.844	2.070	
CSOTA	2	1.513	1.101	
WITHIN CELLS (Error)	192	1.374		

APPENDIX O: TABLE 10
Analysis of Variance: Certainty of Correctness
of One's Opinion on Q3

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	2.554	1.507	
Degree of Regard for Source (S)	1	.938	.553	
Type of Commitment (O)	1	.504	.298	
Basis of Regard for Source (T)	1	.104	.061	
Initial Attitude (A)	1	4.669	2.756	.099
CS	2	.487	.288	
CO	2	6.904	4.075	.018
CT	2	.579	.342	
CA	2	.119	.070	
SO	1	1.504	.888	
ST	1	.038	.022	
SA	1	2.500	1.475	
OT	1	3.504	2.068	
OA	1	2.336	1.379	
TA	1	.069	.041	
CSO	2	6.254	3.691	.027
CST	2	3.613	2.132	
CSA	2	4.908	2.897	.058
COT	2	3.229	1.906	
COA	2	.436	.257	
CTA	2	4.803	2.834	.061
SOT	1	19.837	11.707	.001
SOA	1	1.878	1.108	
STA	1	4.011	2.367	
OTA	1	.336	.198	
CSOT	2	.912	.539	
CSOA	2	.586	.346	
CSTA	2	.811	.479	
COTA	2	.486	.287	
SOTA	1	1.600	.944	
CSOTA	2	1.733	1.023	
WITHIN CELLS (Error)	192	1.694		

APPENDIX O: ITEM 1

Types of Reasons Given in Recall of MajorArguments of Message^{*#}

1. Present and Future Facts of Population Explosion
 - a. population statistics
 - b. starvation statistics
 - c. failure of old methods of population limitation (i.e., war and natural disasters)
 - d. effect of medical advances (i.e., increasing life span and decreasing death rate)
2. Ill Effects of Overpopulation
 - a. starvation and malnutrition
 - b. increase in crime, disease, and mental illness
 - c. greater probability of war
 - d. exhaustion of natural resources
3. Effects of Technology's Inability to Cope with Overpopulation
 - a. pollution; lack of housing, food, jobs; meaninglessness of education
 - b. implied extinction of mankind by the year 2000 if no limitation
4. Policy Statements
 - a. the U.S. should stop trying to feed the world
 - b. children have the right to be born into a world where they will have opportunities for adequate food, clothing, and shelter as well as opportunity for meaningful employment and good psychological growth
 - c. people won't limit the birth rate voluntarily (viz., failure of massive birth control programs in India and Latin America)
 - d. poor, blacks will suffer the most (black militant speech only)
 - e. limitation of the population by the government will in the long run result in greater freedom for all
 - f. we all have obligation to future generations
5. Solutions
 - a. grow more food
 - b. government regulation of family size

* Mention of any subcategory was counted as a reason.

** Two independent raters counted and categorized the reasons given. There was 99.7% agreement on the number of reasons given and 96.8% agreement with respect to the categorization.

Mean Number of Arguments Recalled

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	3.200 (1.135)*	2.900 (1.449)	3.700 (2.163)	4.100 (1.287)	3.100 (1.197)	3.200 (1.229)	3.300 (1.418)	3.100 (0.876)
Low	3.400 (1.075)	3.200 (1.229)	3.400 (1.265)	2.600 (1.350)	3.000 (1.826)	4.000 (1.414)	3.400 (1.174)	2.900 (0.994)
No	3.500 (1.716)	2.600 (1.350)	3.700 (1.160)	3.300 (0.675)	3.200 (1.619)	2.600 (0.843)	3.600 (0.516)	2.900 (1.197)

* Standard deviation.

APPENDIX O: TABLE 11

APPENDIX O: TABLE 12
Analysis of Variance: Number of Arguments Recalled

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	.454	.262	
Degree of Regard for Source (S)	1	4.004	2.310	.130
Type of Commitment (O)	1	.704	.406	
Basis of Regard for Source (T)	1	1.858	1.060	
Initial Attitude (A)	1	.100	.058	
CS	2	2.379	1.372	
CO	2	1.254	.723	
CT	2	3.763	2.170	
CA	2	1.140	.657	
SO	1	.704	.406	
ST	1	.704	.406	
SA	1	.225	.130	
OT	1	1.504	.868	
OA	1	.178	.103	
TA	1	.100	.058	
CSO	2	1.079	.623	
CST	2	2.604	1.502	
CSA	2	2.152	1.241	
COT	2	.879	.507	
COA	2	2.117	1.221	
CTA	2	.415	.239	
SOT	1	2.604	1.502	
SOA	1	7.803	4.501	.035
STA	1	1.469	.848	
OTA	1	3.600	2.077	
CSOT	2	.054	.031	
CSOA	2	1.522	.878	
CSTA	2	.538	.310	
COTA	2	.090	.052	
SOTA	1	1.736	1.002	
CSOTA	2	1.755	1.012	
WITHIN CELLS (Error)	192	1.734		

Mean Ratio of Arguments Agreed With of Those Recalled (N = 224)

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	9* .778 (.291)**	9 .609 (.378)	9 .797 (.342)	10 .758 (.332)	9 .592 (.484)	9 .724 (.136)	10 .735 (.359)	9 .797 (.200)
Low	9 .667 (.369)	10 .459 (.437)	9 .792 (.334)	9 .583 (.250)	10 .700 (.377)	10 .628 (.321)	10 .666 (.294)	9 .705 (.400)
No	8 .704 (.308)	9 .601 (.365)	10 .655 (.305)	10 .651 (.336)	9 .619 (.481)	9 .694 (.320)	10 .709 (.311)	9 .500 (.359)

* Number of subjects per cell.

** Standard deviation.

APPENDIX O: TABLE 13

APPENDIX O: TABLE 14
 Analysis of Variance: Ratio Arguments Agreed
 With of Total Recalled

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	1729.605	1.461	
Degree of Regard for Source (S)	1	1585.785	1.339	
Type of Commitment (O)	1	41.281	.035	
Basis of Regard for Source (T)	1	1023.978	.865	
Initial Attitude (A)	1	2074.138	1.752	
CS	2	411.727	.348	
CO	2	492.804	.416	
CT	2	648.252	.548	
CA	2	655.588	.554	
SO	1	1851.669	1.564	
ST	1	35.718	.030	
SA	1	138.401	.117	
OT	1	96.738	.082	
OA	1	21.880	.018	
TA	1	1424.512	1.203	
CSO	2	619.603	.522	
CST	2	433.978	.367	
CSA	2	950.749	.803	
COT	2	96.532	.082	
COA	2	46.612	.039	
CTA	2	1797.046	1.518	
SOT	1	917.919	.775	
SOA	1	36.536	.031	
STA	1	68.687	.058	
OTA	1	591.654	.500	
CSOT	2	557.426	.471	
CSOA	2	1863.731	1.574	
CSTA	2	698.310	.590	
COTA	2	1647.364	1.391	
SOTA	1	914.016	.772	
CSOTA	2	770.690	.651	
WITHIN CELLS (Error)	176	1183.850		

Mean Ratio of Arguments Disagreed With of Total Recalled (N = 224)

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	.250 (.294)**	.404 ⁵ (.276)	.266 ⁵ (.434)	.138 (.154)	.445 (.390)	.138 (.221)	.263 (.389)	.222 (.404)
	Moderate	.083 ^{3*} (.144)	.375 (.479)	.125 (.250)	.285 (.481)	.333 ³ (.577)	.167 ³ (.289)	.133 (.162)	.000 ³ (.000)
Low	Extreme	.225 (.352)	.222 (.251)	.400 ⁵ (.418)	.550 ⁵ (.299)	.208 (.246)	.280 (.235)	.347 (.227)	.318 (.367)
	Moderate	.330 ³ (.000)	.395 (.427)	.000 (.000)	.125 (.144)	.188 (.375)	.050 (.100)	.000 (.000)	.083 (.144)
No	Extreme	.174 ⁵ (.103)	.445 (.390)	.335 (.310)	.360 (.251)	.292 (.401)	.382 ⁵ (.371)	.180 (.143)	.362 (.240)
	Moderate	.333 ³ (.335)	.110 ³ (.191)	.175 (.236)	.063 (.125)	.277 ³ (.254)	.125 (.250)	.395 (.427)	.567 (.412)

* Number of subjects per cell as noted; otherwise "6" extremely opposed and "4" moderately opposed.

** Standard deviation.

APPENDIX O: TABLE 15

APPENDIX O: TABLE 16
Analysis of Variance: Ratio of Arguments Disagreed
With of Total Recalled

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	588.483	.633	
Degree of Regard for Source (S)	1	240.286	.259	
Type of Commitment (O)	1	183.756	.198	
Basis of Regard for Source (T)	1	200.378	.216	
Initial Attitude (A)	1	5949.919	6.402	.012
CS	2	389.936	.420	
CO	2	626.506	.674	
CT	2	793.245	.854	
CA	2	601.396	.647	
SO	1	1416.069	1.524	
ST	1	62.013	.067	
SA	1	164.736	.177	
OT	1	74.518	.080	
OA	1	17.180	.018	
TA	1	1337.985	1.440	
CSO	2	988.562	1.064	
CST	2	66.937	.072	
CSA	2	1536.504	1.653	
COT	2	111.095	.120	
COA	2	963.475	1.037	
CTA	2	2467.256	2.655	.073
SOT	1	1265.166	1.361	
SOA	1	85.248	.092	
STA	1	390.525	.420	
OTA	1	1429.533	1.538	
CSOT	2	778.990	.838	
CSOA	2	310.673	.334	
CSTA	2	219.480	.236	
COTA	2	1589.810	1.711	
SOTA	1	11.057	.012	
CSOTA	2	465.570	.501	
WITHIN CELLS (Error)	176	929.384		

Percentage of Subjects Agreeing With Message Conclusion (N = 144)

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	2 [*] 50	5 0	4 0	4 25	4 25	3 0	6 33.3	3 100
	Moderate	4 50	3 66.7	2 100	2 50	2 50	2 0	2 50	3 100
Low	Extreme	4 50	4 0	1 0	4 0	3 33.3	3 33.3	4 0	3 0
	Moderate	3 0	3 0	2 50	3 33.3	3 66.7	1 0	2 50	3 33.3
No	Extreme	4 25	4 0	3 0	2 0	3 0	5 0	5 40	4 0
	Moderate	2 50	2 50	3 33.3	3 33.3	1 100	2 0	1 0	3 0

*Number of subjects per cell.

APPENDIX O: TABLE 17

APPENDIX O: TABLE 18
Analysis of Variance: Agreement with Message Conclusion

Source	df	MS	F	p less than
Choice (C)	2	.675	4.024	.021
Degree of Regard for Source (S)	1	.509	3.032	.085
Type of Commitment (O)	1	.037	.219	
Basis of Regard for Source (T)	1	.094	.557	
Initial Attitude (A)	1	1.907	11.357	.001
CS	2	.199	1.188	
CO	2	.075	.449	
CT	2	.350	2.085	
CA	2	.156	.930	
SO	1	.001	.005	
ST	1	.545	3.247	.075
SA	1	.028	.165	
OT	1	.135	.802	
OA	1	.190	1.130	
TA	1	.164	.975	
CSO	2	.158	.939	
CST	2	.152	.906	
CSA	2	.002	.011	
COT	2	.396	2.361	
COA	2	.298	1.778	
CTA	2	.343	2.040	
SOT	1	.091	.540	
SOA	1	.414	2.468	
STA	1	.030	.179	
OTA	1	.214	1.273	
CSOT	2	.198	1.178	
CSOA	2	.024	.145	
CSTA	2	.208	1.238	
COTA	2	.015	.089	
SOTA	1	.980	5.837	.018
CSOTA	2	.009	.550	
WITHIN CELLS (Error)	96	.168		

APPENDIX P

TASK RELATED VARIABLES

Mean Interest in Listening Task

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	3.667 [*] (2.338) ^{**}	2.833 (1.169)	2.833 (1.329)	2.667 (1.211)	2.667 (1.211)	3.333 (2.066)	3.167 (1.169)	2.000 (1.673)
	Moderate	2.750 (1.258)	3.000 (1.414)	4.250 (1.500)	3.000 (1.414)	2.750 (0.957)	3.250 (1.500)	3.250 (1.500)	2.250 (1.500)
Low	Extreme	2.667 (0.516)	4.500 (2.429)	2.667 (1.211)	2.667 (1.506)	2.667 (1.211)	3.167 (1.472)	3.333 (1.211)	2.167 (1.602)
	Moderate	3.000 (0.816)	4.250 (3.202)	4.500 (2.380)	2.750 (1.500)	3.000 (0.816)	3.250 (1.258)	2.750 (1.500)	4.000 (1.826)
No	Extreme	3.667 (1.633)	3.167 (1.602)	3.000 (1.265)	3.000 (1.549)	3.167 (2.041)	3.833 (1.722)	2.667 (1.033)	2.667 (1.211)
	Moderate	2.750 (2.363)	5.250 (0.957)	3.500 (1.732)	2.500 (0.577)	2.750 (1.708)	3.500 (2.380)	3.500 (2.380)	6.250 (0.500)

*The higher the mean the less the interest on 7-point scale.

**Standard deviation.

APPENDIX P: TABLE 1

APPENDIX P: TABLE 2
Analysis of Variance: Interest in Listening Task

Source	df	MS	F	p less than
Choice (C)	2	3.617	1.442	
Degree of Regard for Source (S)	1	1.204	.480	
Type of Commitment (O)	1	1.504	.600	
Basis of Regard for Source (T)	1	3.037	1.211	
Initial Attitude (A)	1	9.669	3.854	.051
CS	2	4.317	1.721	.182
CO	2	1.217	.485	
CT	2	.050	.020	
CA	2	.953	.380	
SO	1	.704	.281	
ST	1	12.604	5.024	.026
SA	1	2.178	8.680	
OT	1	1.837	.732	
OA	1	.225	.090	
TA	1	9.025	3.598	.059
CSO	2	1.517	.605	
CST	2	1.517	.605	
CSA	2	2.419	.964	
COT	2	1.950	.777	
COA	2	.908	.362	
CTA	2	.158	.063	
SOT	1	1.204	.480	
SOA	1	2.844	1.134	
STA	1	.278	.111	
OTA	1	1.003	.400	
CSOT	2	4.017	1.601	
CSOA	2	1.719	.685	
CSTA	2	.969	.386	
COTA	2	6.369	2.539	.082
SOTA	1	16.900	6.737	.010
CSOTA	2	1.358	.541	
WITHIN CELLS (Error)	192	2.509		

Mean Enjoyment of Listening Task

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	4.833 [*] (1.602) ^{**}	3.500 (1.761)	3.500 (1.643)	3.000 (1.549)	3.000 (1.265)	3.667 (1.751)	3.333 (1.633)	2.167 (1.602)
	Moderate	3.250 (0.957)	3.750 (2.062)	4.500 (1.291)	3.500 (1.732)	3.000 (1.414)	3.750 (1.258)	3.250 (1.708)	2.250 (1.500)
Low	Extreme	2.667 (0.516)	4.000 (1.414)	3.333 (1.211)	2.667 (1.506)	3.000 (1.265)	3.667 (1.366)	3.667 (1.506)	2.833 (1.472)
	Moderate	3.500 (1.000)	4.750 (2.217)	4.250 (2.062)	3.000 (1.826)	3.250 (0.957)	4.250 (2.062)	3.750 (1.258)	4.500 (1.291)
No	Extreme	4.167 (1.472)	3.833 (1.602)	3.167 (1.169)	3.333 (1.506)	2.667 (1.033)	4.333 (1.633)	3.000 (0.894)	3.000 (1.095)
	Moderate	3.000 (2.828)	5.250 (0.957)	3.500 (1.915)	3.250 (0.500)	2.750 (0.957)	4.000 (2.160)	4.000 (2.000)	5.500 (1.291)

* The higher the mean the less the enjoyment on 7-point scale.

** Standard deviation.

APPENDIX P: TABLE 3

APPENDIX P: TABLE 4
Analysis of Variance: Enjoyment of Listening Task

Source	df	MS	F	p less than
Choice (C)	2	1.129	.496	
Degree of Regard for Source (S)	1	1.838	.807	
Type of Commitment (O)	1	3.037	1.334	
Basis of Regard for Source (T)	1	5.104	2.242	
Initial Attitude (A)	1	8.867	3.895	.050
CS	2	6.412	2.817	.062
CO	2	3.237	1.422	
CT	2	.554	.243	
CA	2	2.086	.916	
SO	1	2.604	1.144	
ST	1	18.704	8.216	.005
SA	1	3.701	1.626	
OT	1	2.604	1.144	
OA	1	.584	.257	
TA	1	5.017	2.204	.139
CSO	2	.454	.200	
CST	2	.904	.397	
CSA	2	.344	.151	
COT	2	1.979	.869	
COA	2	.853	.375	
CTA	2	.786	.345	
SOT	1	.204	.090	
SOA	1	.017	.008	
STA	1	.667	.293	
OTA	1	.434	.191	
CSOT	2	2.629	1.155	
CSOA	2	1.344	.591	
CSTA	2	.686	.301	
COTA	2	3.403	1.495	
SOTA	1	8.251	3.624	.058
CSOTA	2	.836	.367	
WITHIN CELLS (Error)	192	2.276		

Percentage of Subjects Willing to Participate Again (N = 234)

CHOICE	INITIAL ATTITUDE	TYPE OF COMMITMENT							
		Dissonant Information Alone				Dissonant Information Plus Source			
		BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
		Credibility		Attractiveness		Credibility		Attractiveness	
		DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
		+	-	+	-	+	-	+	-
High	Extreme	5* 60	100	100	5 100	83.3	5 80	3 66.7	100
	Moderate	75	100	50	100	75	3 33.3	3 100	100
Low	Extreme	100	50	100	100	100	5 80	100	100
	Moderate	100	100	100	100	50	50	50	75
No	Extreme	83.3	100	83.3	100	100	100	100	50
	Moderate	100	100	75	75	100	75	100	50

*Number of subjects per cell as noted; otherwise there were "6" extremely opposed and "4" moderately opposed subjects per group.

APPENDIX P: TABLE 5

APPENDIX P: TABLE 6
Analysis of Variance: Willingness to Participate Again

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	.024	.225	
Degree of Regard for Source (S)	1	.007	.068	
Type of Commitment (O)	1	.371	3.481	.064
Basis of Regard for Source (T)	1	.049	.462	
Initial Attitude (A)	1	.406	3.810	.052
CS	2	.385	3.618	.029
CO	2	.038	.359	
CT	2	.485	4.554	.012
CA	2	.032	.298	
SO	1	.396	3.721	.055
ST	1	.060	.566	
SA	1	.003	.033	
OT	1	.003	.024	
OA	1	.370	3.477	.064
TA	1	.040	.380	
CSO	2	.377	3.539	.031
CST	2	.284	2.664	.072
CSA	2	.197	1.847	
COT	2	.050	.466	
COA	2	.447	4.198	
CTA	2	.024	.226	
SOT	1	.000	.001	
SOA	1	.084	.791	
STA	1	.016	.152	
OTA	1	.752	7.060	.009
CSOT	2	.262	2.465	.088
CSOA	2	.108	1.014	
CSTA	2	.100	.939	
COTA	2	.078	.737	
SOTA	1	.006	.055	
CSOTA	2	.101	.952	
WITHIN CELLS (Error)	186	.107		

Mean Worth of Sponsor (N = 200)

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	7 [#]	8	7	8		8	8	7
	5.714 [*]	5.750	4.286	4.750	5.200	4.750	4.250	5.143
	(1.380) ^{**}	(1.282)	(1.704)	(1.035)	(1.317)	(1.389)	(0.707)	(1.345)
Low	8	9	9	8	8	9	8	8
	4.875	3.889	3.667	5.000	5.750	4.778	4.125	4.875
	(1.553)	(1.691)	(1.500)	(1.309)	(1.282)	(1.481)	(1.246)	(0.991)
No		6		8	8	9	9	
	5.700	4.667	4.800	4.125	5.000	4.556	5.333	4.100
	(1.160)	(0.816)	(1.229)	(0.354)	(0.926)	(1.236)	(1.225)	(0.738)

APPENDIX P: TABLE 7

[#]Number of subjects per cell as noted; otherwise 10 subjects per cell.

^{*}The higher the mean the more worthwhile the sponsor on 7-point scale.

^{**}Standard deviation.

APPENDIX P: TABLE 8
Analysis of Variance: Worth of Sponsor

Source	df	MS	F	p less than
Choice (C)	2	2.438	1.588	
Degree of Regard for Source (S)	1	2.515	1.638	
Type of Commitment (O)	1	.102	.066	
Basis of Regard for Source (T)	1	13.312	8.668	.004
Initial Attitude (A)	1	.574	.374	
CS	2	5.759	3.750	.026
CO	2	3.106	2.022	
CT	2	.650	.423	
CA	2	.087	.057	
SO	1	.147	.096	
ST	1	9.955	6.482	.012
SA	1	2.509	1.634	
OT	1	.581	.378	
OA	1	.004	.003	
TA	1	.318	.207	
CSO	2	.099	.005	
CST	2	4.970	3.236	.042
CSA	2	3.301	2.149	
COT	2	3.559	2.317	
COA	2	.873	.568	
CTA	2	2.157	1.404	
SOT	1	.395	.257	
SOA	1	.009	.006	
STA	1	.002	.001	
OTA	1	1.719	1.120	
CSOT	2	1.583	1.031	
CSOA	2	1.910	1.243	
CSTA	2	.120	.078	
COTA	2	2.706	1.762	
SOTA	1	2.344	1.326	
CSOTA	2	4.314	2.809	.063
WITHIN CELLS (Error)	152	1.535		

APPENDIX Q

MESSAGE RELATED VARIABLES

Mean Strength of Message

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	2.800 [*] (1.874) ^{**}	3.800 (1.874)	2.300 (1.160)	2.000 (1.563)	1.700 (1.059)	3.500 (1.900)	3.700 (1.703)	2.100 (0.738)
Low	3.600 (1.350)	3.800 (1.989)	2.900 (1.729)	3.100 (1.197)	2.000 (1.414)	3.500 (2.014)	2.800 (1.814)	2.700 (1.418)
No	2.900 (2.283)	3.500 (1.509)	2.300 (1.337)	1.600 (0.699)	2.600 (1.506)	3.500 (2.068)	2.600 (0.843)	2.600 (1.955)

*The greater the mean the weaker the talk on 7-point scale.

**Standard deviation.

APPENDIX Q: TABLE 1

APPENDIX Q: TABLE 2
Analysis of Variance: Strength of Message

Source	df	MS	F	p less than
Choice (C)	2	2.954	1.120	
Degree of Regard for Source (S)	1	5.104	1.935	
Type of Commitment (O)	1	.704	.267	
Basis of Regard for Source (T)	1	17.604	6.673	.011
Initial Attitude (A)	1	3.600	1.365	
CS	2	.379	.144	
CO	2	3.879	1.470	
CT	2	1.454	.551	
CA	2	.890	.337	
SO	1	.937	.355	
ST	1	30.104	11.412	.001
SA	1	2.500	.948	
OT	1	14.504	5.498	.020
OA	1	.136	.052	
TA	1	.625	.237	
CSO	2	.938	.355	
CST	2	3.379	1.281	
CSA	2	7.152	2.711	
COT	2	.829	.314	
COA	2	1.159	.439	
CTA	2	.015	.006	
SOT	1	4.537	1.720	
SOA	1	1.736	.658	
STA	1	.625	.237	
OTA	1	.711	.270	
CSOT	2	2.187	.829	
CSOA	2	6.372	2.415	
CSTA	2	.652	.247	
COTA	2	1.376	.521	
SOTA	1	.178	.067	
CSOTA	2	.330	.125	
WITHIN CELLS (Error)	192	2.638		

Mean Correctness of Source's Arguments

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	2.400 [*]	4.100	2.800	2.800	2.800	3.200	2.400	2.100
	(0.966) ^{**}	(1.663)	(0.789)	(0.789)	(1.619)	(1.229)	(0.843)	(0.994)
Low	2.800	4.400	2.500	3.100	2.400	2.300	2.800	3.000
	(0.632)	(1.897)	(1.179)	(2.025)	(0.966)	(0.949)	(0.789)	(1.414)
No	2.600	4.200	3.000	3.200	2.800	3.300	3.500	3.600
	(1.578)	(1.549)	(1.700)	(1.476)	(1.398)	(1.767)	(1.650)	(1.265)

*The greater the mean the less correct the source's arguments on 7-point scale.

**Standard deviation.

APPENDIX Q: TABLE 3

APPENDIX Q: TABLE 4
Analysis of Variance: Correctness of Source's Arguments

Source	df	MS	F	P less than
Choice (C)	2	4.554	2.428	.091
Degree of Regard for Source (S)	1	17.604	9.367	.003
Type of Commitment (O)	1	5.704	3.035	.083
Basis of Regard for Source (T)	1	2.604	1.386	
Initial Attitude (A)	1	2.669	1.420	
CS	2	.129	.069	
CO	2	2.029	1.106	
CT	2	2.554	1.359	
CA	2	.401	.213	
SO	1	10.004	5.323	.022
ST	1	10.004	5.323	.022
SA	1	1.736	.924	
OT	1	5.704	3.035	.083
OA	1	.136	.072	
TA	1	3.403	1.811	
CSO	2	.254	.135	
CST	2	.929	.494	
CSA	2	2.992	1.592	
COT	2	3.529	1.878	
COA	2	1.209	.643	
CTA	2	1.109	.590	
SOT	1	4.538	2.414	
SOA	1	2.336	1.243	
STA	1	1.225	.652	
OTA	1	.136	.072	
CSOT	2	.037	.020	
CSOA	2	.784	.417	
CSTA	2	2.790	1.484	
COTA	2	.717	.382	
SOTA	1	.469	.250	
CSOTA	2	1.876	.998	
WITHIN CELLS (Error)	192	1.879		

APPENDIX R

VARIABLES RELATED TO MECHANISM OF ATTITUDE CHANGE

Mean Importance of Being Correct on Q1

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	3.500 [*]	2.700	2.200	2.500	2.900	2.500	3.200	1.800
	(1.581) ^{**}	(1.829)	(1.135)	(1.900)	(1.663)	(1.716)	(1.619)	(0.789)
Low	2.500	3.400	1.700	2.200	2.600	2.200	3.000	2.700
	(1.179)	(1.713)	(1.059)	(0.632)	(1.265)	(0.789)	(1.333)	(1.337)
No	2.000	3.400	2.500	2.800	2.000	2.400	2.600	2.900
	(1.054)	(1.174)	(1.841)	(1.751)	(1.054)	(1.506)	(1.174)	(1.370)

*The greater the mean the less the importance of being correct on 7-point scale.

** Standard deviation.

APPENDIX R: TABLE 1

APPENDIX R: TABLE 2
Analysis of Variance: Importance of Being Correct on Q1

Source	df	MS	F	p less than
Choice (C)	2	.329	.163	
Degree of Regard for Source (S)	1	.267	.132	
Type of Commitment (O)	1	.150	.074	
Basis of Regard for Source (T)	1	1.667	.824	
Initial Attitude (A)	1	.900	.445	
CS	2	7.079	3.502	.032
CO	2	.787	.390	
CT	2	2.804	1.387	
CA	2	2.775	1.373	
SO	1	8.067	3.990	.047
ST	1	.817	.404	
SA	1	1.469	.727	
OT	1	11.267	5.573	.019
OA	1	1.878	.929	
TA	1	2.500	1.237	
CSO	2	.404	.200	
CST	2	.554	.274	
CSA	2	.719	.356	
COT	2	1.279	.633	
COA	2	.136	.067	
CTA	2	.633	.313	
SOT	1	.150	.074	
SOA	1	.225	.111	
STA	1	2.336	1.156	
OTA	1	1.344	.665	
CSOT	2	3.462	1.713	
CSOA	2	.533	.264	
CSTA	2	4.119	2.038	
COTA	2	1.019	.504	
SOTA	1	.003	.001	
CSOTA	2	1.753	.867	
WITHIN CELLS (Error)	192	2.022		

Percentage of Subjects Stating "Informed" Is Most Important
Speaker Characteristic (N = 231)

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	(9)* 77.8	90	100	90	90	80	80	80
Low	100	(9) 55.6	(9) 55.6	100	70	80	80	70
No	80	90	90	90	80	90	90	80

*Number of subjects per cell (all others = 10/cell).

APPENDIX R: TABLE 3

APPENDIX S

SOURCE VARIABLES

APPENDIX S: TABLE 1

Within Cells Correlations of Source Variables

	(1)	(2)	(3)	(4)
(1) Informed	--	--	--	--
(2) Truthful	.59 [*]	--	--	--
(3) Trustworthy	.37 [*]	.54 [*]	--	--
(4) Like Me	.19 ^{**}	.34 [*]	.34 [*]	--
(5) My Kind of Person	.22 ^{**}	.28 [*]	.37 [*]	.57 [*]

^{*}
p less than .01

^{**}
p less than .05

APPENDIX S: TABLE 2
Analysis of Variance: Composite Credibility Index

Source	df	MS	F	$\frac{P}{\text{less than}}$
Choice (C)	2	1.613	.138	
Degree of Regard for Source (S)	1	360.150	30.834	.001
Type of Commitment (O)	1	22.817	1.953	
Basis of Regard for Source (T)	1	13.067	1.119	
Initial Attitude (A)	1	1.667	.143	
CS	2	9.687	.829	
CO	2	4.679	.401	
CT	2	10.729	.919	
CA	2	4.197	.359	
SO	1	8.817	.755	
ST	1	345.600	29.589	.001
SA	1	6.534	.559	
OT	1	21.600	1.849	
OA	1	6.534	.559	
TA	1	10.506	.899	
CSO	2	.304	.026	
CST	2	3.837	.329	
CSA	2	3.351	.287	
COT	2	6.113	.523	
COA	2	7.880	.675	
CTA	2	.990	.085	
SOT	1	4.267	.365	
SOA	1	17.117	1.466	
STA	1	8.556	.733	
OTA	1	6.806	.583	
CSOT	2	7.304	.625	
CSOA	2	.776	.066	
CSTA	2	.694	.059	
COTA	2	25.356	2.171	
SOTA	1	6.806	.583	
CSOTA	2	14.102	1.207	
WITHIN CELLS (Error)	192	11.680		

APPENDIX S: TABLE 3
Analysis of Variance: Composite Attractiveness Index

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	3.463	.527	
Degree of Regard for Source (S)	1	119.004	18.112	.001
Type of Commitment (O)	1	1.204	.183	
Basis of Regard for Source (T)	1	124.704	18.980	.001
Initial Attitude (A)	1	1.600	.244	
CS	2	5.804	.883	
CO	2	5.054	.769	
CT	2	4.929	.750	
CA	2	35.777	5.445	.005
SO	1	.038	.006	
ST	1	21.004	3.197	.075
SA	1	.711	.108	
OT	1	9.204	1.401	
OA	1	.011	.002	
TA	1	.136	.021	
CSO	2	17.262	2.627	
CST	2	18.504	2.816	
CSA	2	3.651	.556	
COT	2	5.554	.845	
COA	2	8.817	1.342	
CTA	2	2.338	.356	
SOT	1	3.504	.533	
SOA	1	2.178	.331	
STA	1	2.336	.356	
OTA	1	3.803	.579	
CSOT	2	1.829	.278	
CSOA	2	14.922	2.271	
CSTA	2	1.909	.291	
COTA	2	3.234	.492	
SOTA	1	7.225	1.100	
CSOTA	2	5.952	.906	
WITHIN CELLS (Error)	192	6.570		

APPENDIX S: TABLE 4
Analysis of Variance: Total Source Index

Source	df	MS	F	p less than
Choice (C)	2	9.754	.376	
Degree of Regard for Source (S)	1	806.667	31.082	.001
Type of Commitment (O)	1	22.817	.879	
Basis of Regard for Source (T)	1	220.417	8.493	.004
Initial Attitude (A)	1	6.806	.262	
CS	2	29.304	1.129	
CO	2	10.529	.406	
CT	2	.529	.020	
CA	2	70.558	2.719	
SO	1	9.600	.370	
ST	1	589.067	22.698	.001
SA	1	3.906	.151	
OT	1	84.017	3.237	
OA	1	.506	.020	
TA	1	12.656	.488	
CSO	2	18.712	.721	
CST	2	27.079	1.043	
CSA	2	8.633	.333	
COT	2	18.904	.728	
COA	2	35.158	1.355	
CTA	2	11.158	.430	
SOT	1	.067	.003	
SOA	1	30.917	1.191	
STA	1	.117	.005	
OTA	1	9.834	.379	
CSOT	2	18.654	.719	
CSOA	2	10.753	.414	
CSTA	2	.969	.037	
COTA	2	44.811	1.727	
SOTA	1	28.617	1.103	
CSOTA	2	7.019	.270	
WITHIN CELLS (Error)	192	25.953		

Mean "Informed" Scores

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	1.500 [*] (0.972) ^{**}	4.900 (1.370)	2.900 (0.738)	3.300 (1.703)	1.900 (1.287)	4.300 (1.636)	3.100 (1.449)	2.700 (0.949)
Low	2.300 (1.418)	5.000 (1.826)	3.000 (1.054)	3.500 (1.581)	1.300 (0.480)	4.500 (1.354)	3.600 (1.897)	3.100 (1.969)
No	2.400 (2.221)	4.900 (1.729)	2.800 (0.789)	3.100 (1.729)	1.900 (0.876)	5.100 (1.197)	2.700 (1.252)	2.900 (1.370)

*The greater the mean, the less informed the source on 7-point scale.

**Standard deviation.

APPENDIX S: TABLE 5

APPENDIX S: TABLE 6
Analysis of Variance: "Informed" Scores

Source	df	MS	F	p less than
Choice (C)	2	.954	.469	
Degree of Regard for Source (S)	1	133.504	65.599	.001
Type of Commitment (O)	1	2.604	1.280	
Basis of Regard for Source (T)	1	4.538	2.230	
Initial Attitude (A)	1	1.056	.519	
CS	2	.054	.027	
CO	2	.204	.100	
CT	2	2.863	1.407	
CA	2	.869	.427	
SO	1	1.204	.592	
ST	1	119.004	58.474	.001
SA	1	1.534	.754	
OT	1	.937	.461	
OA	1	2.101	1.032	
TA	1	.667	.328	
CSO	2	1.804	.887	
CST	2	.179	.008	
CSA	2	.172	.084	
COT	2	1.363	.669	
COA	2	6.188	3.041	.050
CTA	2	4.051	1.990	
SOT	1	1.837	.903	
SOA	1	2.417	1.188	
STA	1	6.006	2.951	.087
OTA	1	5.017	2.465	
CSOT	2	.912	.448	
CSOA	2	.172	.084	
CSTA	2	2.290	1.125	
COTA	2	1.092	.537	
SOTA	1	.951	.467	
CSOTA	2	1.667	.819	
WITHIN CELLS (Error)	192	2.035		

Mean "Truthfulness" Scores

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	2.500* (1.179)**	3.200 (1.874)	3.200 (1.619)	2.300 (0.949)	2.800 (1.476)	2.600 (1.350)	2.800 (1.229)	2.600 (0.843)
Low	3.200 (1.398)	3.500 (1.841)	2.500 (1.269)	3.300 (1.567)	2.300 (0.823)	2.400 (1.265)	2.800 (1.549)	2.800 (1.033)
No	2.000 (1.333)	3.900 (1.969)	2.000 (0.919)	2.700 (1.767)	2.100 (0.994)	3.100 (2.025)	3.200 (1.619)	2.500 (1.269)

*The greater the mean the less truthful the source on 7-point scale.

**Standard deviation.

APPENDIX S: TABLE 7

APPENDIX S: TABLE 8
Analysis of Variance: "Truthfulness" Scores

Source	df	MS	F	p less than
Choice (C)	2	.404	.193	
Degree of Regard for Source (S)	1	4.538	2.170	
Type of Commitment (O)	1	2.604	1.246	
Basis of Regard for Source (T)	1	.204	.098	
Initial Attitude (A)	1	.434	.208	
CS	2	3.412	1.632	
CO	2	1.829	.875	
CT	2	.079	.038	
CA	2	.353	.169	
SO	1	4.538	2.170	
ST	1	7.704	3.685	.056
SA	1	1.056	.505	
OT	1	5.104	2.441	
OA	1	.851	.407	
TA	1	4.556	2.179	
CSO	2	1.137	.544	
CST	2	3.854	1.843	
CSA	2	.858	.411	
COT	2	.904	.432	
COA	2	.469	.225	
CTA	2	.900	.430	
SOT	1	.204	.098	
SOA	1	1.167	.558	
STA	1	.667	.319	
OTA	1	.017	.008	
CSOT	2	1.779	.851	
CSOA	2	.203	.097	
CSTA	2	.278	.133	
COTA	2	6.519	3.118	.046
SOTA	1	1.167	.558	
CSOTA	2	4.103	1.962	
WITHIN CELLS (Error)	192	2.091		

Mean "Trustworthiness" Scores

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	2.800 [*] (0.919) ^{**}	3.800 (1.751)	3.100 (1.197)	3.200 (1.033)	2.500 (1.179)	3.600 (1.350)	3.300 (0.823)	3.200 (0.789)
Low	3.000 (0.943)	3.800 (1.317)	3.000 (1.054)	3.200 (1.619)	2.000 (1.155)	3.500 (1.179)	3.300 (0.823)	3.000 (1.247)
No	2.900 (2.079)	4.500 (1.354)	3.100 (1.197)	3.300 (1.829)	2.500 (0.972)	4.400 (1.350)	2.900 (0.994)	3.500 (1.581)

*The greater the mean the less trustworthy the source on 7-point scale.

**Standard deviation.

APPENDIX S: TABLE 9

APPENDIX S: TABLE 10
Analysis of Variance: "Trustworthiness" Scores

Source	df	MS	F	$\frac{P}{\text{less than}}$
Choice (C)	2	1.738	1.015	
Degree of Regard for Source (S)	1	30.817	17.998	.001
Type of Commitment (O)	1	1.667	.973	
Basis of Regard for Source (T)	1	.600	.350	
Initial Attitude (A)	1	.034	.020	
CS	2	1.929	1.127	
CO	2	.279	.163	
CT	2	1.138	.664	
CA	2	3.686	2.153	
SO	1	.267	.156	
ST	1	21.600	12.615	.001
SA	1	.006	.004	
OT	1	2.817	1.645	
OA	1	.156	.091	
TA	1	4.556	2.661	
CSO	2	.204	.119	
CST	2	.112	.066	
CSA	2	.175	.102	
COT	2	.279	.163	
COA	2	.158	.092	
CTA	2	2.258	1.319	
SOT	1	.817	.477	
SOA	1	1.667	.974	
STA	1	.306	.179	
OTA	1	.506	.296	
CSOT	2	.554	.324	
CSOA	2	.344	.201	
CSTA	2	.408	.238	
COTA	2	1.908	1.115	
SOTA	1	.117	.069	
CSOTA	2	.411	.240	
WITHIN CELLS (Error)	192	1.712		

Mean "Like Me" Scores

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	5.200* (1.229)**	6.100 (1.449)	5.000 (1.700)	3.900 (1.524)	4.400 (1.506)	5.900 (1.197)	4.000 (1.491)	4.400 (1.647)
Low	5.200 (1.135)	6.300 (0.823)	3.500 (1.434)	5.000 (1.886)	5.100 (1.449)	5.800 (1.398)	4.800 (1.398)	4.800 (1.814)
No	4.200 (1.619)	5.900 (1.287)	3.600 (2.366)	4.800 (1.549)	4.800 (1.135)	5.500 (0.972)	3.900 (2.183)	5.700 (1.829)

*The greater the mean the less "like me" the source on 7-point scale.

**Standard deviation.

APPENDIX S: TABLE 11

APPENDIX S: TABLE 12
Analysis of Variance: "Like Me" Scores

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	1.504	.630	
Degree of Regard for Source (S)	1	45.067	18.889	.001
Type of Commitment (O)	1	.067	.028	
Basis of Regard for Source (T)	1	50.417	21.132	.001
Initial Attitude (A)	1	1.167	.489	
CS	2	4.304	1.804	
CO	2	2.754	1.154	
CT	2	1.504	.630	
CA	2	9.211	3.861	.023
SO	1	.017	.007	
ST	1	3.267	1.369	
SA	1	.006	.003	
OT	1	4.267	1.788	
OA	1	.506	.212	
TA	1	.017	.007	
CSO	2	5.104	2.139	
CST	2	4.654	1.951	
CSA	2	1.425	.597	
COT	2	.454	.198	
COA	2	2.308	.968	
CTA	2	1.169	.490	
SOT	1	.817	.342	
SOA	1	.056	.024	
STA	1	1.056	.443	
OTA	1	.584	.245	
CSOT	2	2.454	1.029	
CSOA	2	4.375	1.834	
CSTA	2	.700	.293	
COTA	2	2.053	.860	
SOTA	1	6.534	2.739	
CSOTA	2	1.053	.441	
WITHIN CELLS (Error)	192	2.386		

Mean "My Kind of Person" Scores

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	4.400* (1.174)**	5.400 (1.174)	4.700 (1.059)	3.800 (1.135)	3.800 (1.135)	5.400 (1.174)	4.000 (0.943)	4.000 (1.155)
Low	4.600 (1.075)	6.000 (1.333)	3.500 (1.509)	4.500 (1.650)	4.500 (1.179)	4.700 (2.003)	4.200 (1.229)	4.700 (1.494)
No	4.200 (1.476)	4.900 (0.994)	4.300 (1.337)	4.600 (1.430)	4.400 (1.578)	4.900 (1.287)	4.000 (1.247)	4.400 (2.119)

* The greater the mean the less "my kind of person" is the source on 7-point scale.

** Standard deviation.

APPENDIX S: TABLE 13

APPENDIX S: TABLE 14
Analysis of Variance: "My Kind of Person" Scores

Source	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p</u> less than
Choice (C)	2	.517	.284	
Degree of Regard for Source (S)	1	18.704	10.278	.002
Type of Commitment (O)	1	1.504	.827	
Basis of Regard for Source (T)	1	17.604	9.673	.002
Initial Attitude (A)	1	.117	.064	
CS	2	.717	.394	
CO	2	.217	.119	
CT	2	1.117	.614	
CA	2	8.938	4.911	.008
SO	1	.038	.021	
ST	1	7.004	3.849	.051
SA	1	1.167	.641	
OT	1	1.204	.662	
OA	1	.201	.110	
TA	1	.156	.086	
CSO	2	3.200	1.758	
CST	2	4.317	2.372	.096
CSA	2	3.655	2.008	
COT	2	3.017	1.658	
COA	2	1.842	1.012	
CTA	2	.456	.251	
SOT	1	.704	.387	
SOA	1	1.167	.641	
STA	1	.117	.064	
OTA	1	1.056	.580	
CSOT	2	.067	.037	
CSOA	2	3.776	2.075	
CSTA	2	1.867	1.026	
COTA	2	.077	.042	
SOTA	1	.001	.000	
CSOTA	2	2.138	1.175	
WITHIN CELLS (Error)	192	1.820		

Mean "Persuasive" Scores

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	4.600 [*]	5.700	4.500	3.800	4.200	5.600	4.100	3.000
	(1.578) ^{**}	(1.636)	(1.716)	(1.549)	(2.440)	(1.350)	(1.792)	(1.414)
Low	4.200	5.300	3.600	5.000	3.700	4.500	4.400	4.400
	(1.476)	(1.703)	(2.271)	(1.826)	(1.947)	(1.650)	(1.776)	(1.647)
No	4.200	5.900	3.900	3.200	4.500	5.000	4.500	4.300
	(2.201)	(1.663)	(2.025)	(1.619)	(1.780)	(1.633)	(1.716)	(2.111)

*The greater the mean the less persuasive the source on 7-point scale.

**Standard deviation.

APPENDIX S: TABLE 15

APPENDIX S: TABLE 16
Analysis of Variance: Persuasive Scores

Source	df	MS	F	$\frac{p}{\text{less than}}$
Choice (C)	2	.067	.020	
Degree of Regard for Source (S)	1	11.704	3.573	.060
Type of Commitment (O)	1	1.204	.368	
Basis of Regard for Source (T)	1	31.537	9.628	.002
Initial Attitude (A)	1	11.201	3.419	.066
CS	2	2.317	.707	
CO	2	2.717	.829	
CT	2	6.650	2.030	
CA	2	2.013	.615	
SO	1	2.604	.795	
ST	1	26.004	7.939	.005
SA	1	9.834	3.002	.085
OT	1	4.004	1.222	
OA	1	5.751	1.756	
TA	1	.084	.026	
CSO	2	.817	.249	
CST	2	4.717	1.440	
CSA	2	3.451	1.053	
COT	2	3.015	.921	
COA	2	.134	.041	
CTA	2	3.180	.971	
SOT	1	.004	.001	
SOA	1	2.101	.641	
STA	1	.006	.002	
OTA	1	.117	.036	
CSOT	2	2.867	.875	
CSOA	2	4.930	1.505	
CSTA	2	.190	.058	
COTA	2	.376	.115	
SOTA	1	5.256	1.605	
CSOTA	2	.644	.197	
WITHIN CELLS (Error)	192	3.276		

Mean Source Attitude on Q1

CHOICE	TYPE OF COMMITMENT							
	Dissonant Information Alone				Dissonant Information Plus Source			
	BASIS OF REGARD FOR SOURCE				BASIS OF REGARD FOR SOURCE			
	Credibility		Attractiveness		Credibility		Attractiveness	
	DEGREE OF REGARD FOR SOURCE				DEGREE OF REGARD FOR SOURCE			
	+	-	+	-	+	-	+	-
High	2.000* (1.633)**	2.000 (1.944)	1.400 (1.265)	2.100 (2.807)	1.200 (0.632)	2.600 (1.838)	2.700 (2.359)	1.300 (0.675)
Low	1.100 (0.316)	2.200 (2.044)	1.300 (0.949)	2.800 (3.615)	1.400 (1.265)	2.500 (2.677)	2.600 (2.366)	1.800 (1.619)
No	1.200 (0.422)	2.500 (1.650)	1.800 (1.619)	1.200 (0.632)	1.500 (0.527)	2.000 (2.160)	1.400 (0.699)	2.200 (1.814)

* The greater the mean the greater the opposition to Q1 on 11-point scale.

** Standard deviation.

APPENDIX S: TABLE 17

APPENDIX S: TABLE 18
Analysis of Variance: Source Attitude on Q1

Source	df	MS	F	<u>P</u> less than
Choice (C)	2	1.254	.392	
Degree of Regard for Source (S)	1	13.067	4.085	.045
Type of Commitment (O)	1	1.067	.334	
Basis of Regard for Source (T)	1	.067	.021	
Initial Attitude (A)	1	2.584	.808	
CS	2	1.529	.478	
CO	2	.129	.040	
CT	2	1.304	.408	
CA	2	7.909	2.473	
SO	1	2.400	.750	
ST	1	11.267	3.523	.062
SA	1	1.284	.401	
OT	1	.600	.188	
OA	1	.367	.115	
TA	1	10.506	3.285	.071
CSO	2	2.637	.825	
CST	2	.129	.040	
CSA	2	6.759	2.113	
COT	2	.462	.145	
COA	2	.534	.167	
CTA	2	1.769	.553	
SOT	1	5.400	1.688	
SOA	1	1.284	.401	
STA	1	.084	.026	
OTA	1	2.584	.808	
CSOT	2	11.287	3.529	.031
CSOA	2	2.734	.855	
CSTA	2	.388	.121	
COTA	2	2.013	.629	
SOTA	1	.201	.063	
CSOTA	2	2.605	.814	
WITHIN CELLS (Error)	192	3.198		

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