

**THE FUNCTION OF RATING SCALE LENGTH  
IN ATTITUDE CHANGE RESEARCH**

**DOCTORAL DISSERTATION**

**BARRY THEODORE CHRISTIAN**

THE FUNCTION OF RATING SCALE LENGTH  
IN ATTITUDE CHANGE RESEARCH

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An Abstract  
Presented to  
the Graduate Council of  
Austin Peay State University

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts

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by  
Barry Theodore Christian  
August 1975

## ABSTRACT

Attitude change studies have traditionally employed Likert-type rating scales as response formats. However, despite the obvious diversity of scale lengths used, little research has been done concerning their possible influence on attitude change. The present study investigated the effect of 5-, 7-, 11-, and 31-position scales on experimental attitude change. A second aspect of the study was the comparison of high and low credibility message sources. The experiment involved 80 female college students and consisted of four basic parts: 1. a pre-treatment assessment of attitude, using the Attitude Toward Disabled People (ATDP) Scale, 2. the presentation of a high or low credible source and a persuasive message, 3. an unrelated filler task (future plans questionnaire), and 4. the final post-treatment attitude assessment using a counterbalanced, alternate form of the ATDP Scale. Attitude change was defined as the weighted score differences between the pre- and post-treatment ATDP assessments. It was found that there was no significant attitude change differences between the four scale lengths tested. However, there was a significant difference between the two source credibility conditions, with the highly credible source eliciting the most attitude change. The findings of the present study indicate there may be no difference between scale lengths, but that additional research is needed to clarify the empirical relationships in this area.

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Barry Theodore Christian  
August 1975

To the Graduate Council:

I am submitting herewith a Thesis written by Barry Theodore Christian entitled "The Function of Rating Scale Length in Attitude Change Research." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology.

Thomas T. Jackson  
Major Professor

We have read this thesis and  
recommend its acceptance:

Stephen F. Gault  
Second Committee Member

Parland E. Blair  
Third Committee Member

Accepted for the Council:

Wayne P. Stamps  
Dean of the Graduate School

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## TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION . . . . .	1
II. METHOD . . . . .	10
Subjects . . . . .	10
Apparatus. . . . .	10
Procedure. . . . .	12
III. RESULTS . . . . .	14
IV. Discussion . . . . .	17
REFERENCES . . . . .	22
APPENDIX A: TABLES . . . . .	24
APPENDIX B: FIGURES . . . . .	27
APPENDIX C: MATERIALS USED IN THE STUDY . . . . .	30

## CHAPTER I

### INTRODUCTION

Over the past three and one half decades it seems clear that the progress of social psychology, and the study of attitude change in particular, has been intimately dependent on the development and use of rating-scale techniques. It is also apparent that, among the various scaling techniques available, the bulk of work in attitude change research has employed the well known Likert-type scale. The Likert-type scales are a diverse family of rating instruments modeled after the classic Likert Scale (Likert, 1932). The Likert Scale is a method of responding to attitude statements by selecting one of five continuum positions: strongly agree, agree, undecided, disagree, and strongly disagree. For scoring purposes these responses have been traditionally assigned numerical values ranging from 1 to 5, or from +2 to -2.

Likert-type scales are constructed much the same as the original Likert Scale except that they are either expanded, with more alternate positions; or contracted, with fewer alternate positions--to provide for various degrees of response latitude. In recent studies, scale length has been found to vary from as few as 3 alternative positions (Seyfried and Hendrick, 1973) to as many as 101 alternative positions (Horne and Long, 1972).

Symonds (1924) in his much-cited study on personality

rating scales, has warned against the use of scales with too few positions. According to his data, the reliability of rating scales is sacrificed when a limited number of alternative positions causes "coarseness of grouping." Following the Symonds (1924) study, other early researchers such as Champhey and Marshall (1939), Ferguson (1941), and Jahoda, Deutsch, and Cook (1951) have presented some evidence that the reliability of a scale will increase as the number of scale points increases.

The trend of evidence from more recent studies seems to contradict the findings of Symonds (1924). Matell and Jacoby (1971) administered the Allport-Vernon-Lindzey Scale of Values (1960) and assigned their subjects to one of 18 different response formats, (i.e., 2- through 19-position Likert-type scales). Using a test-retest procedure with a three week interval, it was found that the reliability and validity of Likert-type rating scales was independent of the number of scale positions used. This finding is consistent with rating scale studies by Bendig (1954), Peabody (1962), Komorita (1963), and Komorita and Graham (1965).

In a related study, Jacoby and Matell (1971) presented additional evidence that reliability and validity are not significantly effected by the length of measuring scale, and that in light of this, it should be permissible to use either 2- or 3-position scales for all rating tasks. To demonstrate their claim, the experimenters presented test-retest data from the Allport-Vernon-Lindzey Scale of Values (1960) that

had been collected with 2- through 19-position Likert-type rating scales. Data obtained from the premeasure were analyzed to determine internal consistency reliability and concurrent validity. Both measures, pre and post, were used to assess the test-retest reliability and predictive validity. Finally, after all of the above values had been computed with raw data, a Fisher Z transformation was used to convert all reliability and validity coefficients for normality. An analysis of the transformations revealed that there were no significant reliability or validity differences between the 18 different scale lengths.

In a second operation, the Likert-type scale responses to each item were converted to either dichotomous or trichotomous measures. All even-numbered formats (i.e., 2-, 4-, 6-position, etc.) were divided at the center; responses to the left of center were scored "agree" and those to the right, "disagree". The odd-numbered formats (i.e., 3-, 5-, 7-position, etc.) were divided into three categories: "agree", "uncertain", and "disagree". The statistical findings showed that there was no significant difference between any of the original (raw data) correlations and those obtained by collapsing the multi-position Likert-type formats to dichotomous or trichotomous measures.

In light of their findings, Jacoby and Matell (1971) hold that previously collected rating scale data could be easily collapsed into dichotomous or trichotomous measures, which would not lead to any deleterious effects vis a vis reliabil-

ity or validity. As discussed earlier, the response distributions, which were originally based on unequivalent formats, could then be directly compared since they would all be projected from the same base measure. The primary implication of this study is that attitude researchers would be justified in scoring Likert-type scale items dichotomously or trichotomously, according to direction of response, after they have been collected with an instrument that provides for the measurement of direction and several degrees of intensity.

Following this conclusion, it might then be inferred that the present use and cross comparison of different length Likert-type scales is justifiable in attitude change research, and that, to equate attitude change findings obtained with various length scales, the researcher need only collapse all the scaled data into either 2- or 3-point formats--without further regard for the numerical characteristics of the original scale(s). This conclusion appears to be ex post facto support for a trend in attitude change research which has been prevalent for many years: the cross comparison of experimental findings derived from unequivalent rating scales. Although this logic and technique seems generally applicable as a simple procedure to condense existing data, the justification of its use in attitude research stands in need of further evaluation. It is quite possible that the various length Likert-type scales may possess unique influential characteristics which exert subtle pressure on attitude rating behavior. More specifically, it should be considered that the number of scale positions avail-

able on a particular rating format may serve to either facilitate or inhibit the post-treatment revision of attitude.

In support of the above interpretation, Bartlett, Quay, and Wrightsman (1960) manipulated the length of rating scales in a standard attitude change study. It was found that when either a 2-point (forced choice) or a 3-point Likert-type scale was used, there was significantly more attitude change in the groups using the 3-point scale. From this study it appears that, at least in attitude change research, the number of available alternatives does influence the behavior of the respondent.

In an attempt to find further support for this idea, both a manual review and a Psychological Abstracts Search And Retrieval (PASAR) computer assisted review of the literature have failed to bring to light any other attitude change studies, before or after Bartlett et al. (1960) that have included scale length as an independent variable. In spite of this relatively uninvestigated variable, attitude studies employing various scale lengths continue to be freely compared in both theoretical and empirical discussions.

It was assumed that the most profitable research in this area would require the study of Likert-type scales in current popular use. In order to determine the most appropriate scale lengths for experimental manipulation, a systematic review was conducted of the attitude change literature published in two major social psychology journals: the Journal of Personality and Social Psychology and the Journal of Experimental

Social Psychology. It was expected that a review of these publications between the years of 1970 and 1974, would provide a very adequate sample of current attitude change research. During this five year period it was found that 27 different Likert-type scales, ranging from 3 to 101 positions, were employed in attitude change research. This diversity of scale lengths may be reason enough to question whether the present body of knowledge in this area has been properly integrated and interpreted. The following figures represent the four most frequently used scales and their respective percentages of the total: The 5-position scale (10%), 7-position scale (36%), 11-position scale (8%), and 31-position scale (6%). Because of practical limitations, the present study was restricted to the investigation of these four scale lengths which were found most often in the literature.

Obviously, if the length of rating scale can be shown to facilitate or inhibit attitude change, many studies and generalizations between studies will need to be reevaluated. The present study is offered as a much needed beginning in the investigation of the effect of various lengths of Likert-type scales in attitude change research.

Two variables will be manipulated in the present study: (A) scale length (i.e., the number of alternative positions on a Likert-type scale), and (B) the level of credibility attributed to the source of persuasive information. It was expected that subjects who indicated pre-treatment attitudes on an issue using a narrow (i.e., 5- or 7-position) scale

would tend to be more resistant to experimental attitude change than subjects in identical treatment conditions who used a broader (i.e., 11- or 31-position) rating scale. These results appear to be logically expected from at least two theoretical viewpoints. First, the well known theory of Cognitive Dissonance, as introduced by Festinger (1957), holds that individuals will tend to accept or reject new ideas and beliefs in accordance with how well they fit an already existing pattern or set of cognitions. Likewise, when a piece of attitude-discrepant behavior or information is perceived in awareness, there is a state of cognitive "discomfort" until the individual's belief pattern can be reorganized to accept or deal with the new cognition.

Cognitive Dissonance theory, as outlined above, is easily translated into a standard experimental attitude change paradigm. The subject's existing pattern of attitudes (cognitions) are assumed to be sampled (and, indeed sometimes created by) the pre-treatment assessment rating task. A dissonant cognition is then introduced during the experimental treatment. Attitude change is the expected outcome when the subject integrates the new information and revises his or her original position.

Dissonance theory would predict that subjects who indicate their position on an issue using a broad, many position rating scale will tend to exhibit more attitude change. The post-treatment rating task is an opportunity to resolve the cognitive dissonance that is assumed to exist between the

subject's pre-treatment attitude and the persuasive message. In the broad scale condition, subjects are permitted to acknowledge and integrate the dissonant cognition with a relatively small move on the rating scale. Likewise, Dissonance theory would predict proportionately less attitude change with the narrow, few position rating scale. In this condition, any post-treatment revision of the subject's original position would require a less probable, large move on the scale.

From a second viewpoint, it can be reasoned that the number of rating scale positions available provides each subject with a specific level of opportunity for movement. For example, a subject who uses a 31-point scale can be said to have roughly six times the number of available alternative positions when compared to a subject who is using a 5-point scale.

The level of source credibility (i.e. low and high) will also be manipulated. Since this is a fairly well researched variable (McGuire, 1969), it is expected that those groups receiving persuasive information from a highly credible source will show more attitude change in the direction of the persuasive message when compared to subjects receiving the same message from a low credible source.

In general, it is hypothesized that subjects in the highly credible-broad rating scale conditions will show more attitude change in the direction advocated by the message source. Following the null hypothesis, it is formally expected that subjects in the various rating scale and source credibility conditions will not differ significantly in measured attitude

change. The .05 level of confidence was selected for rejection of the null hypothesis.

## CHAPTER II

### METHOD

#### Subjects

The subjects were 80 female college students who were enrolled in full time undergraduate course work during the 1975 Spring term at Austin Peay State University, Clarksville, Tennessee. All subjects were residents of the three women's dormitories in which the experiment was conducted.

#### Apparatus

Pre- and post-treatment attitude measurement was accomplished using the Attitude Toward Disabled People (ATDP) Scale, (Appendix C, pp. 31-32) which was developed by Yuker, Block, and Campbell (1960). This instrument consists of two alternate forms, A and B; each having 30 items designed for Likert-type scaling. The use of these two forms was counterbalanced in the pre- and post-treatment assessments. The ATDP response format consisted of a separate answer sheet having Likert-type scales corresponding to each of the 30 questionnaire items. These answer sheets contained either 5-, 7-, 11-, or 31-position rating scales, (Appendix C, p. 33). Despite the number of positions, the actual length of all the rating scales was held constant at 16 centimeters.

A typewritten 475 word persuasive message was presented, which advocated that disabled people are actually very similiar to physically normal people in their personality,

outlook on life, and social responsibilities. Although the persuasive communication was held constant for all groups, the attributed source described in a typewritten 250 word introductory statement was either of high or low credibility: a respected rehabilitation counselor who is also physically disabled, or a fraudulent door-to-door salesman who has been accused of taking advantage of his customers. Both introductory statements, and the persuasive message, are included in Appendix C, pages 34 through 36.

Also used in the study was a 15-item future plans questionnaire (Appendix C, p. 37) that was not analyzed as part of the experiment proper. This questionnaire included a wide range of topics dealing with the anticipated future of the respondent. Included among eight multiple choice questions were an additional seven items which required the subject to write out her responses or fill in blank spaces with her own words. The future plans task was used as an intermediate activity between the first part of the experiment and the final rating task. It was expected that the questionnaire would be both demanding and interesting enough to temporarily divert the subject's attention from the ATDP Scale and treatment materials.

A content comprehension quiz (Appendix C, pp. 39-40) was constructed for the final task. This instrument was entitled "How Well Did You Read?", and was designed to identify any subjects who did not comprehend the information presented in the experimental treatment. Two forms of the quiz were prepared, both consisting of six items. The first three ques-

tions dealt with either the high or low credible sources, while the final three questions concerned the persuasive message and were therefore identical on both forms of the quiz. A cut-off point of three incorrect responses was used to eliminate subjects from the study. It was expected that experimental error could be somewhat reduced by the elimination of those subjects who, as evidenced by their quiz performance, had read carelessly or were disinterested in the reading task. All subjects performed satisfactorily on the quiz and so all original participants were retained in the study.

### Procedure

Subjects were approached systematically according to their dormitory room numbers and were asked to help the experimenter in his thesis research by answering an attitude questionnaire. Attitude assessment and experimental treatment was conducted in small groups of three to five subjects, and took place in an empty dormitory room in each of three participating residence halls. All experimental materials were prearranged in packet form and were readily available to the experimenter in the testing room.

After agreeing to take part in the study, subjects were escorted to the testing room and seated at separate desks. A short introductory statement was made and the subjects were then presented with either form A or form B of the pre-treatment attitude assessment scale (ATDP). These forms were counterbalanced and randomly assigned. An answer sheet con-

sisting of either 5-, 7-, 11-, or 31-position Likert-type scales was also randomly assigned and provided for each subject. When subjects had finished reading the persuasive material, the 15 item future plans questionnaire was presented. In the following phase, the alternate form of the ATDP and an appropriate answer sheet were selected from the subject's packet and presented for the final rating task. At the beginning of this task it was announced that each subject had been given 30 additional items concerning disabled people. This practice was included in the procedure to assure all subjects that they were not merely repeating the first questionnaire. Finally, each subject was given an appropriate content comprehension quiz and informed of a debriefing announcement to be posted in the dormitory. It was explained that the debriefing statement would include a more specific description of the purpose of the study, the general results, and directions for obtaining additional feedback. All participants were then urged to remain secretive about the experimental materials, thanked for their cooperation, and dismissed.

## CHAPTER III

### RESULTS

The experiment was comprised of a pre-assessment of attitude, the experimental treatment, and a post assessment of the same attitude. Attitude change in the direction of the treatment message was inferred to exist wherever the post-assessment ATDP scores were greater than the pre-assessment scores. For each of the ATDP items, the rating scales were constructed so that the central (neutral) position was given a score value of zero. Successively positive score values were assigned to rating scale positions which indicated agreement with the essential normalcy of disabled people. Likewise, negative score values were assigned to rating scale positions which indicated disagreement with the essential normalcy of disabled people. For example, on the 11-point scale the central position was assigned a score value of zero and positive score values from 1 to 5 were given to those positions which indicated agreement with the normalcy of disabled people. In the opposite direction, successively negative scores from 1 to 5 were assigned to the scale positions indicating disagreement with the normalcy of disabled people.

Scores for each of the 30 ATDP Scale items were summed to arrive at the total score for each assessment. The final attitude change value for each subject was obtained by sub-

tracting the pre-treatment score from the post-treatment score. Due to the different lengths of rating scales used, and the resulting diversity of numerical values, all the attitude change scores were transformed to a common 100-point scale. A weighting procedure was used for the transformation in which all attitude change scores were multiplied by appropriate constants. The rating scales and their respective constants were: 31-position, 3.22; 11-position, 9.09; 7-position, 14.28; 5-position, 20.00 .

An analysis of variance (ANOVA) was performed on the main variables: (A) scale length (i.e., 5-, 7-, 11-, and 31-position), and (B) source credibility (i.e., high or low). The results are presented in Table 1. Concerning scale length, no significant differences in attitude change existed between the four scales tested,  $F(3, 72) = .357, p > .05$ . In light of these findings, the present study failed to reject the null hypothesis, and it must therefore be assumed that any attitude change differences between scale length conditions were the result of chance variation.

Message source credibility, however, was found to account for significant differences in measured attitude change,  $F(1, 71) = 4.561, p < .05$ . As is evident from the group means presented in Table 2, subjects in the high credibility conditions were found to show more post-treatment attitude change than subjects in the low credibility conditions. Although there was not found to be significant attitude change differences between scale length conditions, it was of interest to

the experimenter to determine if there were attitude change differences for various rating scales within specific credibility conditions. It was noted (see Figure 1) that subjects who received the highly credible message source and the 7-position rating scale, exhibited the largest amount of attitude change. However, when this high credibility group which showed the most change was compared to the high credibility group with the least attitude change (11-position), there was not found to be any significant difference,  $t(18) = 1.597$ ,  $p > .05$ . It might also be noted from Figure 1, that in the low credibility condition, the 5-position scale was found to have the least, and the 11-position scale the greatest amount of attitude change. The actual difference between these two scale conditions was not found to be significant,  $t(18) = .102$ ,  $p > .05$ .

To summarize, subjects who received the high credibility message source were found to demonstrate significantly more attitude change than subjects in the low credibility condition. In reference to scale length, no significant difference was found between the four scales tested. There were trends in the data which indicated that the 5-position scale produced the least, and the 7-position scale produced the most attitude change. These trends, however, were not found to be statistically significant at the conventional .05 level.

## CHAPTER IV

### DISCUSSION

The major emphasis of the present study was an investigation of the effect of various length Likert-type rating scales on experimental attitude change. It was expected that the broader scales would present more opportunity for post-treatment attitude revision, due to the large number of alternative positions available on the rating scales. More specifically, it was expected that a small fractional move (e.g.,  $1/31$ ) would be more easily obtained than a larger fractional move (e.g.,  $1/5$ ). Along with this, it was also expected that the smaller increments available on the broader scales would allow subjects a considerable degree of freedom to resolve any possible cognitive dissonance created by the experimental treatment. In comparison, the narrower scales were expected to offer less opportunity for attitude change, due to the limited number of alternative positions available on the rating scale. Minimal attitude change was also predicted for these subjects because of the assumption that any resolution of cognitive dissonance would require a relatively large move on the rating scale.

Although there was not found to be any significant effect for scale length (see Figure 1), subjects in the narrowest scale condition showed less attitude change when compared to subjects in the other three broader rating scale condi-

tions. Although this might be construed as marginal support for the experimental hypothesis, the trend was not significant and did not apply consistently to all scale conditions. In fact, an inverted V pattern is evident in Figure 2, with the 7-position scale eliciting more attitude change and both the broader and narrower scales eliciting less.

In general, the prediction from the experimental hypothesis concerning credibility was confirmed. An analysis of the data has shown that there is a significant difference between the two credibility conditions, with the high credible source eliciting more attitude change than the low credible message source. With the 11-position scale, however, subjects in both credibility conditions were found to be essentially equal in measured attitude change,  $t(18) = .460$ ,  $p > .05$ .

With regard to the experimental manipulation of rating scale lengths, the hypothesized results did not occur. The non-significant differences obtained in the present study add further evidence to the earlier conclusions reached by Jacoby and Matell (1971), Komorita and Graham (1965), and Bendig (1954). There are several possible explanations for the obtained data: It is possible that the subjects were, in reality, drawn from an extremely heterogeneous population and that the subjects' attitudes toward the use of rating scales, participation in experiments, and the experimenter, along with a diversity in intelligence, perceptual, and organizational sets, etc., all added together to cancel out the effect of scale length. As is evident from the ANOVA table (see Table 1) the greatest

amount of variance was accounted for by experimental error (i.e., within group variance). This variance may be taken as evidence for the above explanation.

A second explanation of the results deals with the nature of the attitude topic that was targeted for change. It might be assumed that college students do not tend to have highly developed attitudes toward disabled people. The topic appears to be, at best, only rarely discussed, with a resultant low level of ego-involvement. As evidence of this tendency, it was noted that during the pre-treatment administration of the ATDP Scale, the experimenter was confronted many times with such comments as: "I never really thought about this much.", or "What if you don't know any disabled people?".

It seems apparent from the above comments and the somewhat lengthy rating period, that subjects were unsure of their attitudes during the first assessment. With this state of uncertainty, the persuasive message might be seen as providing a new attitude category as well as informational input concerning that category. Considering the topic of disabled people, it might be questioned whether the present study involved attitude change or attitude formation. Since there was less deliberation during post-treatment assessment, and considerable pro-message attitude revision on all scales, it seems reasonable to conclude that the persuasive message helped to form a new attitude by serving as a reference point for all subjects in all source credibility and scale length conditions.

There was significantly more movement,  $\chi^2 (1) = 31.26 \text{ } p < .05$ ,

in the direction of the treatment message than negative movement or neutrality. This trend was the same in all scale length conditions. Subjects tended to shift from a relatively neutral position to a fairly strong positive position in all scale conditions. It seems reasonable that the interpretation of the experimental data must include mention of the neutral nature of the attitude topic. There was generally low ego-involvement in the pre-treatment situation, and possibly because of the neutrality, there was an apparent willingness to shift attitudinal position on the basis of any provided information. Finally, since subjects in all scale conditions appeared willing to greatly revise their positions, it might be reasoned that the effects of scale length have been totally obscured.

The above interpretation of the data carries with it a strong implication that the experimental hypothesis might best be tested with the use of a high ego-involvement topic. It seems necessary that a topic be selected, such as statements concerning the doubling of all college tuition, or the restriction of certain student rights, etc., where very little attitude change is expected. With the use of such high ego-involvement topics, it would be expected that the persuasive message might decline in effectiveness and the differences in attitude change between scale length conditions would be accentuated.

As is apparent from the review of the literature, very little research has been done on attitude change as a function of rating scale length. Although several studies were cited

that dealt with various scale characteristics (i.e., reliability, validity, ease of administration, etc.) the present study has been the first research effort to investigate scale length as it relates to attitude change.

In light of the present findings, it should be considered that Likert-type rating scale length, might possibly have no effect on attitude change. However, due to the obvious fact that so much of our present knowledge in this area has been derived from diverse, unequivalent scales, additional research is strongly indicated.

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**APPENDIX A:****Tables**

TABLE 1

Analysis of Variance: Weighted Attitude Change Scores

Source	SS	df	MS	F
Scale Length (A)	76270.44	3	25423.48	.357
Credibility (B)	324051.06	1	324051.06	4.561 *
A x B	171872.00	3	57290.67	.806
Error	5114810.53	72	71039.03	
Total	5687004.03	79		

\*  $p < .05$

TABLE 2

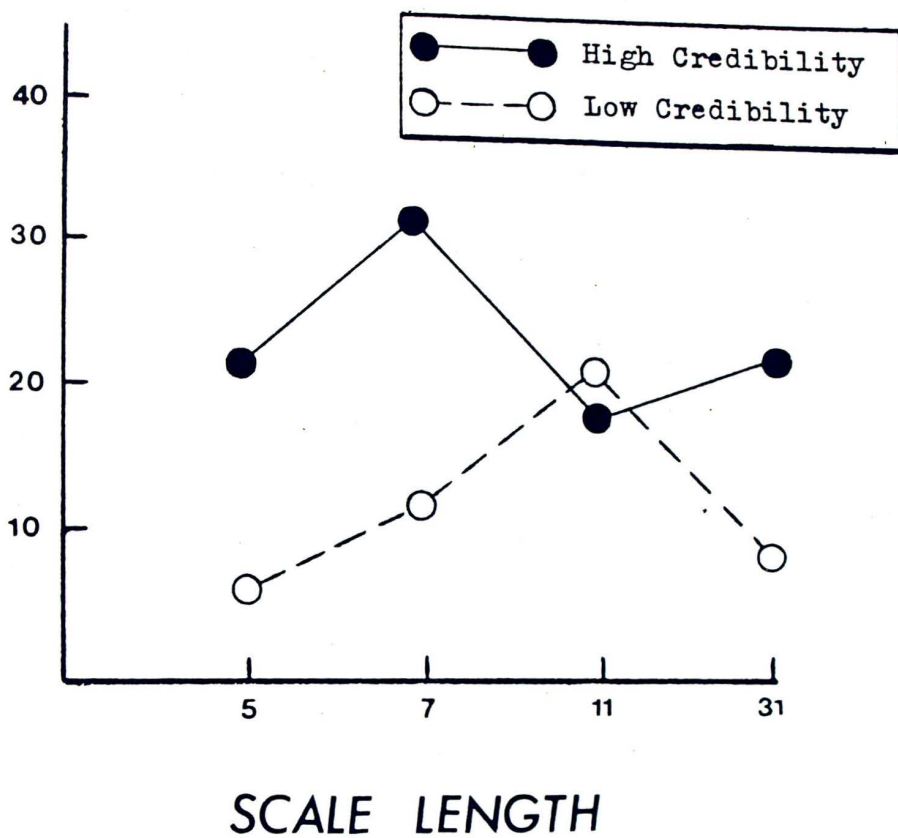
Mean Weighted Attitude Change Scores \*

Credibility	Scale Length			
	5	7	11	31
High	22.60	32.57	18.18	24.24
Low	6.20	12.00	21.27	7.51

\* The tabled values also represent the mean percentages of scale movement.

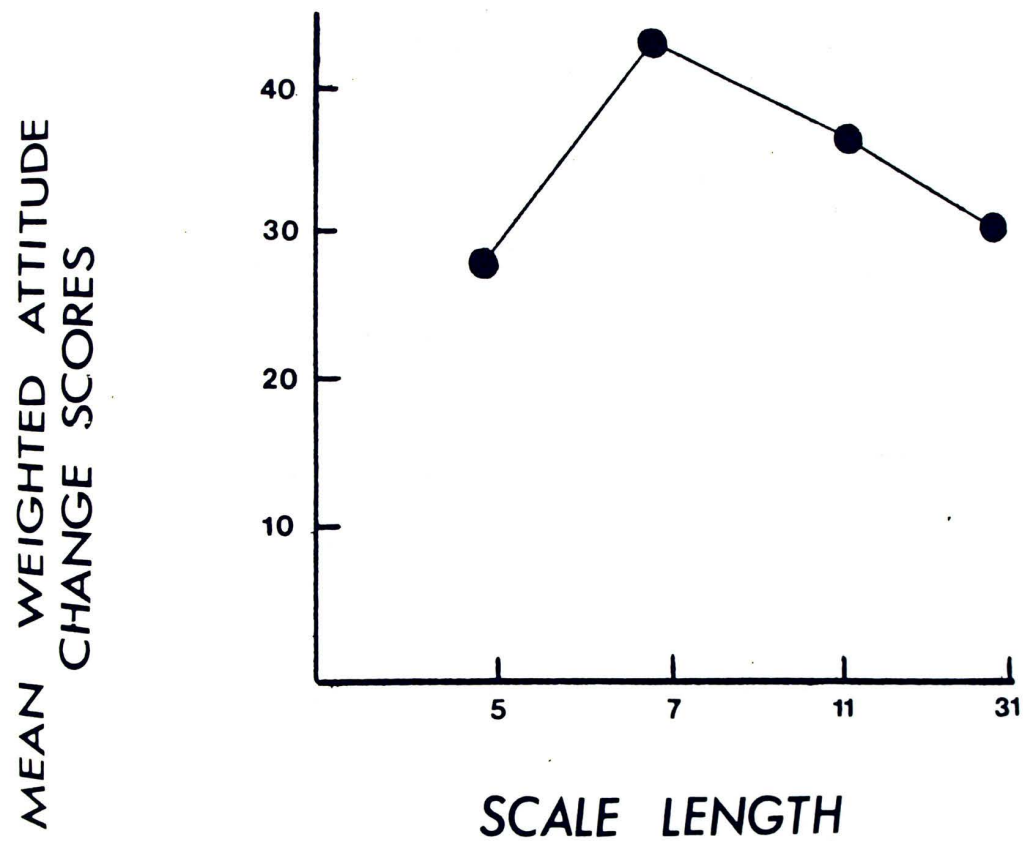
APPENDIX B:  
**Figures**

MEAN WEIGHTED ATTITUDE  
CHANGE SCORES



Attitude Change as a Function of Rating  
Scale Length and Credibility Level

Figure 1



Attitude Change as a Function  
of Rating Scale Length

Figure 2

# APPENDIX C:

## Materials Used in the Study

Page

1. Attitude Toward Disabled People (ATDP) Scale	
Form A.....	31
Form B.....	32
2. Samples of the Four Likert-Type Scales.....	33
3. Message Source Descriptions	
High Credible.....	34
Low Credible.....	35
4. Persuasive Information.....	36
5. Future Plans Questionnaire.....	37
6. Content Comprehension Quiz	
For High Credible Condition.....	39
For Low Credible Condition.....	40

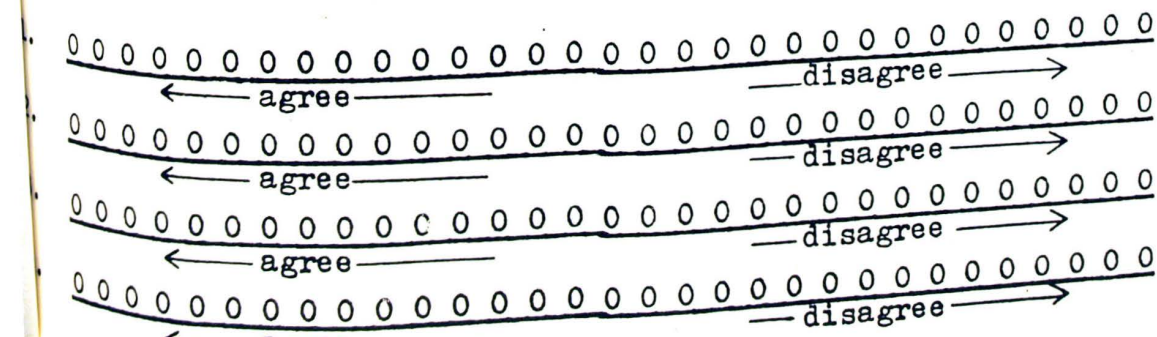
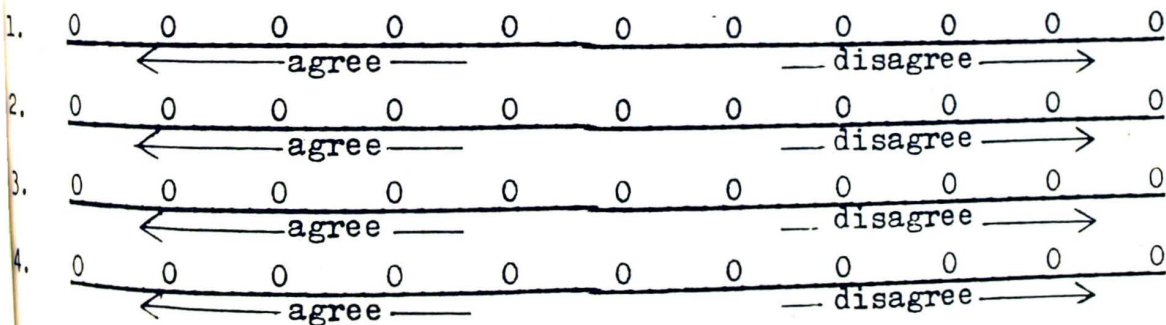
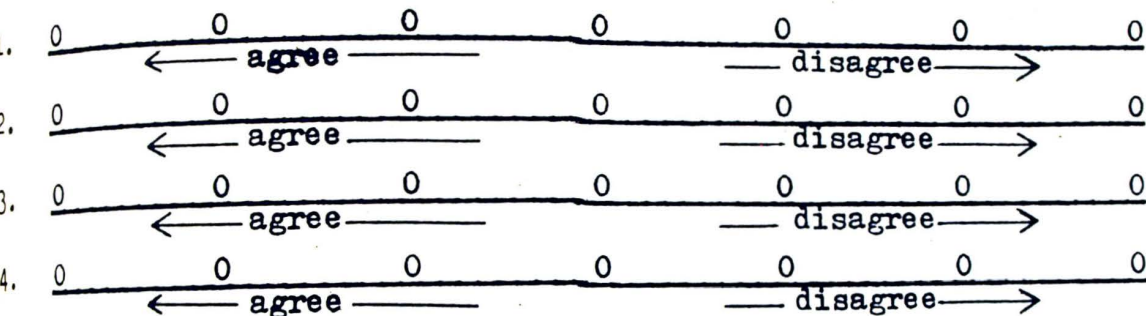
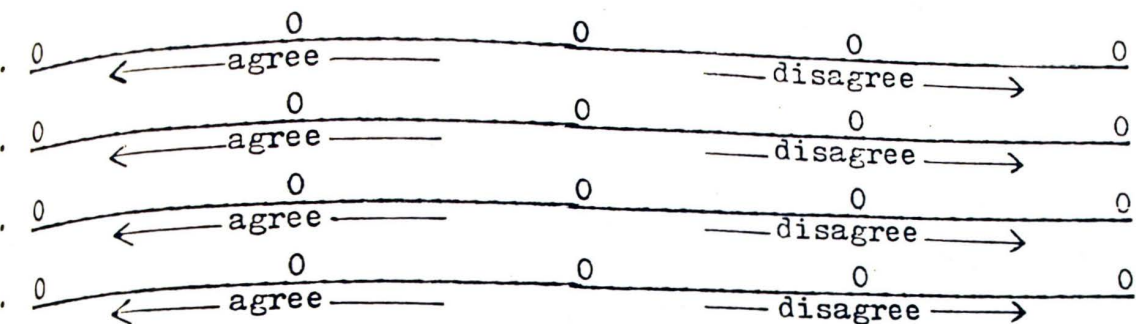
Instructions: Please indicate your personal attitude toward each of the following statements by marking the corresponding items on your answer sheet. There are no right or wrong answers--so be free to mark exactly how you feel.

1. Disabled people are often unfriendly.
2. Disabled people should not have to compete for jobs with physically normal persons.
3. Disabled people are more emotional than other people.
4. Most disabled persons are more self-conscious than other people.
5. We should expect just as much from disabled as from non-disabled persons.
6. Disabled workers cannot be as successful as other workers.
7. Disabled people usually do not make much of a contribution to society.
8. Most non-disabled people would not want to marry anyone who is physically disabled.
9. Disabled people show as much enthusiasm as other people.
0. Disabled persons are usually more sensitive than other people.
1. Severely disabled persons are usually untidy.
2. Most disabled people feel that they are as good as other people.
3. The driving test given to a disabled person should be more severe than the one given to the non-disabled.
4. Disabled people are usually sociable.
5. Disabled persons usually are not as conscientious as physically normal persons.
6. Severely disabled persons probably worry more about their health than those who have minor disabilities.
7. Most disabled persons are not dissatisfied with themselves.
8. There are more misfits among disabled persons than among non-disabled persons.
9. Most disabled persons do not get discouraged easily.
0. Most disabled persons resent physically normal people.
1. Disabled children should compete with physically normal children.
2. Most disabled persons can take care of themselves.
3. It would be best if disabled persons would live and work with non-disabled persons.
4. Most severely disabled people are just as ambitious as physically normal persons.
5. Disabled people are just as self-confident as other people.
6. Most disabled persons want more affection and praise than other people.
7. Physically disabled persons are often less intelligent than non-disabled ones.
8. Most disabled people are different from non-disabled people.
9. Disabled persons don't want any more sympathy than other people.
0. The way disabled people act is irritating.

Instructions: Please indicate your personal attitude toward each of the following statements by marking the corresponding items on your answer sheet. There are no right or wrong answers--so be free to mark exactly how you feel.

1. Disabled persons are usually friendly.
2. People who are disabled should not have to pay income taxes.
3. Disabled people are no more emotional than other people.
4. Disabled people can have a normal social life.
5. Most physically disabled persons have a chip on their shoulder.
6. Disabled workers can be as successful as other workers.
7. Very few disabled persons are ashamed of their disabilities.
8. Most people feel uncomfortable when they associate with disabled people.
9. Disabled people show less enthusiasm than non-disabled people.
10. Disabled people do not become upset any more easily than non-disabled people.
11. Disabled people are often less aggressive than normal people.
12. Most disabled persons get married and have children.
13. Most disabled persons do not worry any more than anyone else.
14. Employers should not be allowed to fire disabled employees.
15. Disabled people are not as happy as non-disabled ones.
16. Severely disabled people are harder to get along with than those with minor disabilities.
17. Most disabled people expect special treatment.
18. Disabled persons should not expect to lead normal lives.
19. Most disabled people tend to get discouraged easily.
20. The worst thing that could happen to a person would be for him to be very severely injured.
21. Disabled children should not have to compete with non-disabled children.
22. Most disabled people do not feel sorry for themselves.
23. Most disabled people prefer to work with other disabled people.
24. Most severely disabled persons are not as ambitious as other people.
25. Disabled persons are not as self-confident as physically normal persons.
26. Most disabled persons don't want more affection and praise than other people.
27. It would be best if a disabled person would marry another disabled person.
28. Most disabled people do not need special attention.
29. Disabled persons want sympathy more than other people.
30. Most physically disabled persons have different personalities than normal persons.

Please fill-in the oval above the scale position which best reflects your personal opinion. Remember--the scale positions represent stronger feelings, you move further out on the scale in the direction of the arrows.



Instructions: The short article below describes a person who holds a specific opinion concerning disabled persons. The information presented in the description and in the statement of opinion on the following page was gathered and compiled by a graduate student who used both newspaper articles and a personal interview. After reading the descriptive article, turn to the next page and read the statement of opinion.

Dr. Robert R. Britton

Dr. "Bob" Britton is 34 years old and lives near Nashville, Tennessee with his wife Linda and their two daughters: Susan, 8, and Beverly, 3. While serving with the U.S. Army in South Viet Nam (1968) Bob was severely wounded in a mortar attack and suffered the loss of his right arm. After being returned to the U.S. he was hospitalized for a period of 8 months. During this time Bob underwent continued medical treatment along with rehabilitation training.

Upon leaving the hospital, Bob began graduate study in Psychology at the University of Tennessee, Knoxville. He later completed his Ph.D. degree at the University of Kentucky, Lexington. Dr. Britton is presently employed at Vanderbilt Hospital's outpatient clinic where he conducts intensive rehabilitation counseling with a special caseload of severely disabled adolescents and adults. The major focus of rehabilitation counseling is the rebuilding of the patient's self-concept. According to Dr. Britton, vocational preparation, employment, and the feeling of being self-supporting are the largest steps toward recovery.

Bob also owns and operates a small (non-profit) gymnasium and sports club designed especially for the physically disabled people of Nashville. In 1974 he published a well known Psychology textbook entitled: Let Me Be Me: A Guide To Understanding The Disabled Person. Many Doctors in the Nashville area feel that Dr. Britton's personal experience as a physically disabled person, has provided him with the rare opportunity to really understand and help his patients.

Instructions: The short article below describes a person who holds a specific opinion concerning disabled persons. The information presented in the description and in the statement of opinion on the following page was gathered and compiled by a graduate student who used both newspaper articles and a personal interview. After reading the descriptive article, turn to the next page and read the statement of opinion.

Mr. Walter S. Fleming

Mr. "Wally" Fleming is 51 years old, somewhat overweight, and lives by himself in a small upstairs apartment on the east side of Nashville, Tennessee. He has been separated from his second wife, his daughter, and step-daughter, for the past six years. Wally is employed as a door-to-door salesman, offering ladies cosmetics and beauty supplies at an extremely low price. Recently, however, there have been many complaints that Wally's cosmetics have not been delivered to paying customers--as promised. He is being investigated for possible false advertisement and fraud by the Nashville Metro Better Business Bureau.

Until five years ago, Wally was the owner-operator of a small pawn shop near Fort Campbell, Kentucky. He was forced to close down his business there when several customers, including a local vice squad officer, charged him with fraudulent and unfair practices. Wally ended up paying a stiff fine, and decided to sell his business. The shop has been back in operation for the past few years--under new management.

It has been said that Wally has continually taken advantage of non-English speaking people, the disabled, the elderly, and others not familiar with contracts and business law. Acquaintances of Wally who were interviewed described him as a "smooth talker" and a "fast-sales artist." Wally himself often jokes about his life philosophy. He believes in his own right to be himself (despite who gets hurt), to make good profits, and to take advantage of all who will let him. According to Wally, this is the "law of nature."

"....Well, as you know, in my line of work I meet many types of people everyday. You mentioned disabled people...And I think the fact that needs to be remembered here is that disabled people are almost exactly the same as physically normal people. One example I've heard is that the physically disabled person is just a normal person disguised by some specific handicap.

Once you let yourself get to know these people, you'll find that they have much the same hopes and dreams, the same fears and loves, personality quirks, marital problems, the same points and bad points...in general, the same feelings that non-disabled people have.

As an example of how 'normal' these people are, I have found they are just as susceptible to the common gimmicks of the door-to-door salesman as anyone else. I have met only a few who did not want the basic things that everyone else wants. The disabled person can be tricked into buying things...what I mean is they fall for advertisements--just like everyone else. They like to think they're getting a good deal--they put out money for cosmetics and beauty supplies, for clothes and cars and breakfast cereal--you know, "the American way".

In fact, that reminds me,...I just finished talking with a disabled person who was really mad about a recent purchase agreement. There's a quiet dignity in this too, you know. It's the feeling that they are not immune to being "taken" in a shrewd business deal. It makes life for them just as much a gamble as the next person...

Like I told you before, when I come into contact with a disabled person, I try to see him or her as a normal person--with merely a physical problem. I try to let them know that just like before their disability, they are responsible for their own behavior--both legally and ethically. They are still responsible for the quality of their own life. These things are still the same.

Out in the working world we sometimes find disabled people who are forced to take on special 'protected' roles. Apparently, employers--and the public--see the disabled as less than whole persons, you know, like they need to be pampered and treated as helpless people. Believe it or not, despite the severity of their handicap, most disabled people want to be employed--in a regular job, one they have been trained for. They want to work regular hours, and spend their money--just like everyone else.

Also, in the area of social and moral behavior, I have known disabled people who have ranged from respected attorneys and judges--to hard-drug pushers and cheap holdup men. Of course the majority of disabled people are somewhere in between--and that's the way you'd expect it--they are much like the general population."

1. Are you satisfied with your present major ?  
☐ somewhat ☐ no  
☐ yes ☐ undecided
2. What is your present major in school ? \_\_\_\_\_
3. Do you think you will actually enter into a life-time career in the area of your major ?  
☐ yes  
☐ no, it would be a real drag.  
☐ no, it's too crowded right now.  
☐ undecided
4. If yes to #3, what will the career be ? \_\_\_\_\_
5. In what part of the U.S. would you like to live and work ?  
(name a region, state, or city) \_\_\_\_\_
6. Do you think you will actually get to live there within the next five years.  
☐ yes, definitely  
☐ it would be nice, but not very probable  
☐ no  
☐ can't say
7. List one of your major reasons for wanting to live there.  
\_\_\_\_\_
8. What about marriage ?  
☐ not a chance, I'd rather stay single.  
☐ Maybe, with the right person.  
☐ Definitely, with the right person  
☐ I'm already married.
9. If yes to the above question, what about children ?  
☐ I don't want to have children.  
☐ I don't want to have children, (but may adopt.)  
☐ would want one child.  
☐ would want two children.  
☐ would want three or more children
10. At present, what type of car would you like to own ?  
name: \_\_\_\_\_
11. Have you changed any of your future plans concerning travel--due to the gasoline shortage and high prices ? \_\_\_\_\_

Considering your age, occupation, and place of residence--in five years--what will be one of your favorite types of leisure activity?

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In five years from now, do you think you will still be in contact with most of your close college friends ?

- ☐ no, probably not.
- ☐ yes, probably most of them.
- ☐ just a few of my closest friends.
- ☐ can't say.

Looking ahead to 1985, the outlook for yourself (and others now in college) seems \_\_\_\_.

- ☐ much the same as present.
- ☐ dismal with many problems.
- ☐ bright and promising.
- ☐ some good and some bad points.
- ☐ (other) \_\_\_\_\_.

5. When the first warm days of Spring come, I usually feel \_\_\_\_.

- ☐ the same as I did in Winter.
- ☐ depressed.
- ☐ alive and full of energy.
- ☐ (other) \_\_\_\_\_.

From the information you were given in this study, complete the following.

1. Bob is \_\_\_ years old and \_\_\_.

(Check one)

- \_\_\_ 51, lives in Lexington, Kentucky
- \_\_\_ 51, lives in Nashville, Tennessee
- \_\_\_ 34, lives in Lexington, Kentucky
- \_\_\_ 34, lives in Nashville, Tennessee

2. Bob is employed as a \_\_\_ at \_\_\_.

(Check one)

- \_\_\_ rehabilitation counselor, a hospital
- \_\_\_ psychotherapist, a child guidance center
- \_\_\_ social worker, a county court
- \_\_\_ psychiatrist, a Veteran's hospital
- \_\_\_ none of the above

3. Many Doctors have said that Bob's \_\_\_ has provided him with the opportunity to understand and help his patients.

(Check one)

- \_\_\_ advanced psychological training
- \_\_\_ personal interest and years of experience
- \_\_\_ personal experience as a disabled person
- \_\_\_ unusual therapeutic skill
- \_\_\_ research experience

4. According to the interview, the speaker believes that disabled people have \_\_\_.

(Check one)

- \_\_\_ a desire for more cosmetics
- \_\_\_ the same feelings as non-disabled people
- \_\_\_ a need for specially designed automobiles
- \_\_\_ special ability at spotting bad deals
- \_\_\_ none of the above

5. According to the interview, in the area of social and moral behavior, \_\_\_.

(Check one)

- \_\_\_ disabled people range from good to bad
- \_\_\_ disabled people can not be judged
- \_\_\_ disabled people are often bitter
- \_\_\_ disabled people are more stable

6. According to the available information, the interview was recorded \_\_\_.

(Check one)

- \_\_\_ via telephone conference
- \_\_\_ during a visit in the speaker's home
- \_\_\_ in a conference room at a courthouse
- \_\_\_ at a well known country club
- \_\_\_ none of the above

From the information you were given in this study, complete the following.

1. Wally is \_\_\_\_\_ years old, and somewhat \_\_\_\_\_.  
(Check one)
  - \_\_\_\_\_ 34, slight of build
  - \_\_\_\_\_ 34, overweight
  - \_\_\_\_\_ 51, slight of build
  - \_\_\_\_\_ 51, overweight
2. Wally is employed as a \_\_\_\_\_ salesman, dealing in ladies \_\_\_\_\_.  
(Check one)
  - \_\_\_\_\_ department store, lingerie
  - \_\_\_\_\_ catalogue, watches
  - \_\_\_\_\_ door-to-door, cosmetics
  - \_\_\_\_\_ junior, jewelry
  - \_\_\_\_\_ none of the above
3. It has been said that Wally takes advantage of \_\_\_\_\_.  
(Check one)
  - \_\_\_\_\_ the disabled
  - \_\_\_\_\_ non-English speaking people
  - \_\_\_\_\_ the elderly
  - \_\_\_\_\_ none of the above
  - \_\_\_\_\_ all of the above
4. According to the interview, the speaker believes that disabled people have \_\_\_\_\_.  
(Check one)
  - \_\_\_\_\_ a desire for more cosmetics
  - \_\_\_\_\_ the same feelings as non-disabled people
  - \_\_\_\_\_ a need for specially designed automobiles
  - \_\_\_\_\_ special ability at spotting bad deals
  - \_\_\_\_\_ none of the above
5. According to the interview, in the area of social and moral behavior, \_\_\_\_\_.  
(Check one)
  - \_\_\_\_\_ disabled people range from good to bad
  - \_\_\_\_\_ disabled people can not be judged
  - \_\_\_\_\_ disabled people are often bitter
  - \_\_\_\_\_ disabled people are more stable
6. According to the available information, the interview was recorded \_\_\_\_\_.  
(Check one)
  - \_\_\_\_\_ via telephone conference
  - \_\_\_\_\_ during a visit in the speaker's home
  - \_\_\_\_\_ in a conference room at a courthouse
  - \_\_\_\_\_ at a well known country club
  - \_\_\_\_\_ none of the above