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## Attraction of a Senior Citizen to a Hypothetical Stranger as a Function of the Stranger's Age, Sex, and Attitude Similarity

Carl R. Westphal

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ATTRACTION OF A SENIOR CITIZEN TO A HYPOTHETICAL  
STRANGER AS A FUNCTION OF THE STRANGER'S  
AGE, SEX, AND ATTITUDE SIMILARITY

by

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Bachelor of Science in Psychology, Kansas State University, 1970

A Thesis

Submitted to the Graduate Faculty

of the

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for the degree of

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This Thesis submitted by Carl R. Westphal in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota is hereby approved by the Faculty Advisory Committee under whom the work has been done.

Paul H. Wright  
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Dean of the Graduate School

Permission

Title ATTRACTION OF A SENIOR CITIZEN TO A HYPOTHETICAL STRANGER AS A  
FUNCTION OF THE STRANGER'S AGE, SEX, AND ATTITUDE SIMILARITY

Department Psychology

Degree Master of Arts

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Signature Carl R. Westphal

Date January 7, 1974

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## ABSTRACT

The present study was designed to examine the variables which affect attraction in a senior citizen population. In particular, variables which have been shown to affect attraction in younger persons were examined as to their relevancy to older subjects. It was predicted that a stranger's age, sex, and proportion of similar attitudes would have a significant effect on a senior citizen's attraction rating of the stranger.

A stranger's age, sex, and proportion of similar attitudes were varied according to a 3 (proportion of similar attitudes) X 3 (age of stranger) X 2 (sex of stranger) factorial design. Male and female senior-citizen subjects responded to attitude surveys representing the age, sex, and attitudes of the hypothetical stranger. The subject's response was completion of a rating scale of his attraction toward the stranger based on the information in the attitude survey.

It was found that only the proportion of similar attitudes had a significant effect on a senior citizen's attraction rating of a stranger. Age and sex of the stranger had no significant effect and none of the interactions among the variables reached significance. It was also found that the sex of the subject had no effect on his attraction rating of the stranger.

Further research was suggested to study the use of paper and pencil techniques with older subjects.



## CHAPTER I

### INTRODUCTION

The rise in both number and proportion of senior citizens in the United States has resulted in increased interest in this segment of the population (Lawton and Gottesman, 1974). Concern for a high quality of life for the aged is seen in housing projects and social programs especially designed for senior citizens (Lawton, 1969). However, many of these social programs and housing projects are being instituted with little empirical basis as to what is beneficial to senior citizens (Lawton, 1968). This appears to be due to a lack of research into older person's needs.

Old age in this society is a time of great change. Persons must adjust to decreased income due to retirement, loss of mobility, increasing health problems, decreasing productivity, and the loss of friends to death (Lawton, 1969).

Friendships in senior citizens is an area which may yield valuable information as to senior citizen adjustment. Thus far the area has received very little research attention. It seems logical that this aspect of people's lives should be considered when designing programs specifically for older persons. However the lack of research fails to confirm or disconfirm this conclusion.

Many questions remain to be answered regarding friendship in senior citizens. Do friendships decrease in importance as people grow older? Do senior citizens make efforts to make new friends? How do older persons react to the loss of friends to death? Is the attraction process among senior citizens similar to that of younger people?

A starting place for studying friendship in senior citizens may be to compare older persons on the attraction variables already known to be important in attraction among younger persons. This study is an attempt to make such a comparison.

## CHAPTER II

### BACKGROUND AND ORIENTATION

#### History of the Problem

Opposites attract. Or do they? What is true for the attraction of magnetic poles, electrical charges, and atoms may not necessarily apply to the attraction of one human being to another. In fact, just the opposite tendency has been observed as long ago as the fourth century B.C. by Aristotle (translated 1932, pp. 103-105) who noted:

. . . they are friends who have come to regard the same things as evil, they who are friends of the same people, and they who are enemies of the same people.

A similar observation has been made by Aleksander Solzhenitsyn (1968) who noted that:

A younger person who resembles one's self is always likable.

However, "common sense" observations indicating that attitude similarity leads to attraction lack objective verification. One need not look far to see that many beliefs, though widely held, have been inaccurate. Through objective verification it has been found that the world is not flat, that general paresis is not a "mental disorder," and that gravity has identical effects on objects of different masses and shapes.

Among the first attempts to conduct systematic observations and to operationalize the variables concerned with attraction due to attitude similarity were studies which measured similarities between husbands and wives.

Schiller (1932), utilizing a series of measures of attitudes, found the attitude agreement between husbands and wives to be 70 percent with a correlation of .65. Subsequent studies completed by Kirkpatrick and Stone (1935) and Hunt (1935) report husband-wife attitude similarity correlations of .56 and .48 respectively. Though attitude correlations vary depending on the topic, they are generally above .50 (Newcomb and Svehla, 1937).

Attitude similarity between friends was the next area investigated. Richardson (1940) tested similarity hypotheses by comparing the extent of similarity of attitudes between friends to the similarity of attitudes between randomly assigned pairs of individuals. While significantly higher than the random pairs, the correlations between friends' attitudes were not as high as the previously reported correlations for married couples.

A problem of interpretation of the results of these studies exists, as with correlational research in general. This problem is the sequence of the similarity-attraction relationship. These studies do not specify whether attraction results from similarity or whether similarity follows attraction. In a study aimed at determining this sequence Newcomb (1961) obtained attitude measures on two samples of strangers prior to their moving into a cooperative housing unit. Although attitude agreement did not predict initial attraction, it did predict the

attraction patterns which emerged later in the semester. Agreement on attitudes about fellow house members was also predictive of later attraction.

While still somewhat entangled in a correlational design, Newcomb has utilized the longitudinal method in an attempt to establish cause and effect. Though this tactic improves the previous correlational work, it still lacks the predictiveness attainable through experimental manipulation of variables.

#### Research Approaches

Several other research designs have been employed to solve the sequence problem and to try to establish a more valid paradigm for studying the relationship between attitude similarity and attraction.

Schachter (1951) used small groups in which confederates behaved in pre-arranged ways to produce situations of attitude similarity or dissimilarity. The dependent variable, attraction, was measured by a sociometric rank ordering of group members. The use of this small group technique, common in social psychological research, yielded the predicted results that the confederate was ranked lowest when his opinions deviated markedly from those of the group.

In a study by Berkowitz and Howard (1959) similar and dissimilar conditions were created by the use of pseudo-groups. Subjects received bogus written messages from other "group members" which were either similar or dissimilar to the subject's opinions. Deviate group members were rated as being less attractive than other group members.

The attitudes of tape recorded strangers, either agreeing or disagreeing with the subject regarding solutions to a problem, were used by Worschel and McCormick (1963). It was found that a disagreeing stranger was rated more negatively than an agreeing one.

Another method of experimental manipulation of the similar-dissimilar variable has been the paper and pencil stranger. This technique which was first reported by Smith (1957) has become a widely accepted approach to studying the relationship between attitude similarity and attraction, and has yielded results comparable to the methods mentioned above (Byrne, 1969; Byrne and Nelson, 1965; Nelson, 1964; and Smith, Meadow and Sisk, 1970).

The methods just discussed differ in the amount of experimental control over the stimulus; that is, what is presented to represent a stranger's attitudes, the characteristics of the stimulus itself, the measurement of the dependent variable, and topics on which the attitudes were based. However, the relationship between attitude similarity and attraction appears general enough that all the methods employed produce results which are consistent with respect to the common sense observations noted earlier.

#### Current Empirical Research

The most popular of the above methods, an adaptation of the Smith (1957) paper and pencil technique, described by Byrne (1969) consists of determining a subject's attitudes on a variety of topics using an attitude scale, presenting a bogus stranger's attitudes on the same

scale, and measuring the attraction of subject to the "stranger" via a 6-item Interpersonal Judgment Scale.

Varying the proportion of similar attitudes of a paper stranger Byrne (1961) found that subjects rated strangers with attitudes similar to their own as being significantly more attractive. Subsequent studies have consistently yielded similar results (Nelson, 1964; Aronson and Worschel, 1966; Byrne, Nelson and Reeves, 1966; Byrne, London and Reeves, 1968; and Smith, Meadow and Sisk, 1970). Byrne and Nelson (1965) found a linear relationship between attitude similarity and attraction described by the equation  $Y = 5.44X + 6.62$ . Y is the attraction measure (summation of the two key 7-point items of the Interpersonal Judgment Scale) and X is the proportion of similar attitudes. This straight line function has been supported by Byrne, London and Reeves (1968) and by Griffitt, Nelson and Littlepage (1972).

Considerable attention has been focused on attempts to generalize the positive relationship between attitude similarity and attraction to new situations. The first area of generalization to be discussed is the stimulus mode, i.e., the mode by which the stranger's attitudes are presented to the subject. Byrne and Clore (1966) found that there were no significant differences among stimulus modes (paper attitude scale, tape recordings, or 8mm movies) used to present a stranger's attitudes. McWhirter and Jecker (1967) extended the stimulus mode to include face-to-face presentation of attitudes by employing a stooge to present the bogus stranger's attitudes. Again stimulus mode showed no significant effect on the attractiveness rating.

Another parameter of the attitude-attraction relationship discussed by Newcomb (1956, p. 578) is that of topic importance. He contended that:

The discovery of agreement between one's self and a new acquaintance regarding some matter of only casual interest will probably be less rewarding than the discovery of agreement concerning one's own pet prejudices.

The topic importance variable was investigated in two studies by Byrne and Nelson (1964, 1965). It was again found that proportion of similar attitudes has a significant effect on the attraction rating, but neither the topic importance nor the interaction between topic importance and attitude similarity had a significant effect.

The populations to whom the attitude-attraction relationship has been extended include female clerical workers (Krauss, 1966), Job Corps workers (Byrne, Griffitt, Hudgins and Reeves, 1969), children (Byrne and Griffitt, 1966), and senior citizens (Griffitt, Nelson and Littlepage, 1972). The above studies serve to generalize the attitude-attraction relationship beyond the college sophomore on age, socio-economic, and occupational variables.

Social comparisons made by strangers are not restricted to attitude similarity-dissimilarity, but include comparisons on a variety of variables. Several studies have been aimed at similarities on variables other than attitudes. Byrne, Clore and Worchel (1966) varied the economic status of a paper and pencil stranger so that the stranger was either similar or dissimilar to the subject rating him. Subjects were from both upper and lower economic groups. It was found that the strangers who were most similar to the subject's own economic background



were rated as being most attractive. Again similar strangers appear to be the most attractive to the subject. A positive relationship between similarity of vocational interest and attraction reported by Hall and Blank (1972) serves to further generalize the effect of specific similarities and dissimilarities on attraction.

Investigations into areas in which similarity is more general or abstract have yielded the same preference for similar persons. Griffitt (1966) found that persons are more attracted to others who have similar self-concepts; Hendrick and Page (1970) found a preference for persons with similar self-esteem; and Byrne, Griffitt and Stefaniak (1967) reported consistent results when the similarity variable manipulated was the stranger's responses to a repression-sensitization scale.

Considerable time and attention has been devoted to generalization of the independent variable, that of similarity. However, the measurement of the dependent variable, attraction, has also been the subject of several studies. The paper and pencil Interpersonal Judgment Scale (IJS) used by Byrne and others was found by Schwartz (1966) to be highly correlated ( $r = .68$ ) with social distance, another measure of attraction garnered by paper and pencil rating scales. Stroebe, et al. (1971) argue that although the six dependent variable measures of the IJS are not significantly different from one another, they are not alike and, therefore, should be weighted differently and not simply summed across items. Stroebe contends that the weighting of the different items of the IJS would add precision to this attraction measure. It appears that Stroebe may be attacking a straw man since Byrne (1966) and his disciples actually use only two of the six items of the IJS,

those used being whether or not the subject would like to work with the stranger, and whether or not the subject would like the stranger. Conceptualized as a 2-item response measure, a split-half reliability measure of .85 has been found between these two items. Though not perfect, the IJS as a measure of attraction is reliable, is highly related to other measures of attraction, and is relatively simple to use (Byrne, 1969).

### Theories of Attraction

Theoretical explanations of the attitude-attraction relationship may be generally categorized as cognitive and reinforcement models. Though there are several theoretical explanations which fall outside the boundaries of these two theoretical classifications, they lack both the empirical and popular support generated by the cognitive and reinforcement models.

Cognitive models of the attitude-attraction relationship are based on variations of Heider's (1958) balance theory which emphasizes the balance among elements of a closed triadic system comprised of two persons and an object of communication. Within this triadic system certain arrangements between the elements are seen as being preferable to other arrangements. Using the symbols employed by Heider (1958), a positively balanced and, hence, desirable situation occurs when person (P) evaluates person (O) positively and both P and O agree or have a similar attitude regarding another object or person (X). An attitude similarity situation involving imbalance results when P and O have opposing (dissimilar) opinions regarding X. If P and O are strangers

and know only that they disagree regarding X, then the situation may be balanced either by P or O changing his attitude toward X, or by P and O developing negative attitudes toward each other. Since the attitudes toward X are presumably based on past experience they are unlikely to change quickly. Therefore, P and O will regard each other negatively and achieve balance in this manner. The positive relationship between agreement and attraction reviewed earlier is clearly consistent with cognitive balance theory.

Byrne (1973) reports that other cognitive theorists propose that inconsistent cognitions produce unpleasant states of dissonance or a state of incongruity which may be reduced by altering the opinion or evaluation of a target person, in this case the stranger. These theories appear to be different ways to state the same concept as balance theory.

The reinforcement model of attraction as proposed by Byrne and Clore (1966) is an attempt to explain attraction in traditional reinforcement terms. Byrne (1969, p. 69) conceptualized the effect that attitude similarity-dissimilarity has an attraction as being a reward or punishment phenomenon. Similarity and dissimilarity operate as positive and negative reinforcers as explained by Byrne (1969, p. 70):

When one individual receives positive reinforcement from another, positive affect is elicited and, through simple conditioning, becomes associated with the other individual. Subsequent evaluative responses directed toward that other individual will be positive. When one individual receives negative reinforcement from another, negative affect is elicited and becomes associated with the other individual. In this instance, subsequent evaluative responses directed toward that other individual will be negative. The empirically established effect of similar and dissimilar attitudes on attraction is interpreted as a special case of reward and punishment.

Several investigations have been undertaken which support the validity of the above assumption that attitude similarity-dissimilarity is analogous to positive and negative reinforcement.

Golightly and Byrne (1964) studied the use of similar-dissimilar attitudes in place of traditional feedback ("right" or "wrong") on a learning task. A group receiving similar attitudes for correct responses and dissimilar attitudes for incorrect responses performed significantly better than a control group which received neutral statements.

An extension of the Golightly-Byrne design indicated that both similar attitude statements and neutral attitude statements act as positive reinforcement while dissimilar attitude statements act as negative reinforcement (Byrne, Young and Griffitt, 1966).

Attempts to vary the magnitude of reinforcement by differentially wording the attitude statements have thus far proved inconclusive. A study by Clore (1966) indicated that the way in which attitude similarity-dissimilarity is stated has no significant effect on the magnitude of reward or punishment characteristics of the similarity-dissimilarity.

The motivating factor of the reinforcement model of attraction is attributed to the affect aroused by the presentation of attitudinal material, and to an effectance motive (Byrne, 1961). The effectance motive, as described by White (1959), is a process related to effective interaction with the environment. Byrne and Clore (1966) state that predictability is essential for effective interactions with the environment and therefore is to be maximized. When predictability is threatened or ceases to exist, the effectance motive is aroused.

Effectance reduction can be achieved only by consensual validation or consensual invalidation of a person's opinions or attitudes. Consensual validation provides satisfaction for the effectance motive and therefore arouses positive affect while consensual invalidation frustrates the effectance motive and results in negative affect toward the source of the consensual invalidation.

The use of intervening variables such as affect arousal and effectance motive provides reinforcement theorists a common ground with cognitive theorists. Byrne, Nelson and Reeves (1966) describe the effectance motive as including the following: the need to experience an integrated and meaningful world, the need to know and predict the environment, the desire for certainty, and the drive to evaluate one's own opinions and abilities. Therefore, effectance motive closely approximates the cognitive theorists use of need for congruity, need for consistency, desire for balance, and the need to reduce dissonance.

In addition to the use of an intervening state by both theoretical approaches, there is a second important similarity. The same predictions are made by both regarding the effects of similar and dissimilar attitudes on attraction. The major difference between cognitive and reinforcement theories is the motivational emphasis. Whereas cognitive theorists stress a homeostatic mechanism, reinforcement theorists stress the positive and negative consequences of external stimulation. Both theoretical explanations appear to be viable explanations for what occurs in the relationship between attitude similarity and attraction.

### Old Persons as Research Subjects

One segment of the general population which has been ignored as subjects in psychological research is senior citizens. This fact is true of several major areas of psychology, including developmental, learning, personality, social, and clinical. The convenience of other populations, especially the highly studied college sophomore, appears to be the primary reason for the exclusion of older subjects. Older persons have traditionally been a small proportion of the population and have not been highly visible within society. This coupled with western society's emphasis on youth has had the apparent effect that older persons are seldom considered as proper subjects of or for research.

The fact that people change as they age should be all the more reason for studying them, rather than automatically excluding them. In addition to an increasing proportion of older people, an increased emphasis on the quality of life for older persons is now evident in this country. Medicare, low and moderate income housing, and concern for the quality of nursing and retirement homes are but a few examples of the interest in improvement of living conditions of senior citizens.

Since psychological research has neglected older persons as subjects it is necessary that research employing older persons be completed before generalizations on the age variable can be considered valid. Social psychological research is certainly no exception to the need to use the senior citizen segment of the population. Assuming that friendship is an important characteristic in the quality of senior

citizen's lives, then friendship is a valid topic of psychological research with older subjects.

To date only one study has been published regarding the relationship between attitude similarity and attraction using old-age subjects. This study is the Griffitt, Nelson and Littlepage (1972) work cited earlier in this paper. Subjects for this experiment were 40 college freshmen (mean age 18.25 years) and 40 members of a Golden Agers Club (mean age 76 years). Subjects were pretested on a 12-item attitude scale, college S's being tested during a class period and old-age S's being tested in their homes.

Employing a 2 (age of subject) X 2 (age of stranger) X 2 (proportion of similar attitudes) factorial design Griffitt, et al., measured the attraction for a stranger using the Interpersonal Judgment Scale (IJS). An analysis of variance of the data revealed significant effects due to proportion of similar attitudes and due to a 3-way interaction among the independent variables. None of the tests on the remaining main effects or 2-way interactions approached significance. Attraction was positively related to the proportion of similar attitudes regardless of the age of the subjects or the age of the stranger. These results are interpreted by Griffitt, et al., as indicating that old-age subjects do not maintain stereotypes about non-peers with regard to age which negatively or positively influence their evaluation of these non-peers.

Statement of Problem

Acceptance of a particular theoretical position may lead to ready acceptance of research which supports that theoretical position. This appears to be what Griffitt, et al. (1972) do in interpreting the results of the attraction study done with senior citizens, and is what Byrne (1973) does in his apparently uncritical acceptance of Griffitt's conclusions.

The relationship between attitude similarity and attraction, or law of attraction as Byrne and Nelson (1965) prefer to call it, may well be valid for people of all ages, including senior citizens. However, it seems a bit hasty to accept generalization upward on the age variable based on the evidence of just one study as Byrne (1973) has done.

The study by Griffitt, et al. (1972) has omitted certain levels of both the similarity variable and the age of the stranger variable which may have yielded valuable information. Old persons evaluating a stranger were presented only strangers of either very high or very low similarity and who were only young (18) or old (65). Griffitt, et al., concluded that only the proportion of similar attitudes has a significant effect on how senior citizens perceive strangers. Also omitted from the Griffitt study was consideration of the sex of the stranger. It was evidently assumed by Griffitt that the sex variable had no significant effect. While this is true of college age subjects (Byrne, London and Reeves, 1968), empirical evidence is necessary before a valid generalization can be made regarding the sex variable among older persons.



Several reasons exist for questioning Griffitt's conclusions. Hurlock (1968) reports that older persons generally view young persons in a negative way. Weatherick (1966) and Cantril (1951) describe old-age as a time of increasing rigidity and intensification of attitudes. These findings are inconsistent with Griffitt's, et al. (1972) conclusions and suggest that further research in the area is necessary before strong conclusions can be drawn regarding generalization upward on the age variable.

#### Goals of This Research

The basic goal of this research is to determine whether the strong effect of attitude similarity on attraction is present in a random sample of senior citizens. In addition, the variables of strangers' age and sex will be examined to ascertain any effect by them on the attraction process in senior citizens.

A further, more general, goal is to examine the suitability of the paper and pencil stranger technique in an older population which may be less familiar with various surveys and scales than is the college population.

## CHAPTER III

### METHOD

#### Design

The design employed in this research was a 3 (proportion of attitude similarity) X 3 (age of stranger) X 2 (sex of stranger) factorial design. The three levels of the attitude similarity variable were .75, .50, and .25. The proportion of similar attitudes has most often been confined to a high (.80) and a low (.20) proportion. It was decided to use three levels of similarity in this study to avoid overlooking the possible effects of the age and sex variables at the middle proportion of similarity. The age of the stranger was 22, 46, or 68 years and the sex of the stranger was dichotomized as alike or different. Ten subjects were randomly assigned to each of the eighteen cells of this design.

#### Subjects

The subjects of this study were 180 persons 65 years or older, mean age 72.3 years, who lived in northeastern North Dakota and northwestern Minnesota. There were 72 males and 108 females in the subject sample.

The four sources of subjects are as follows: The Grand Forks, North Dakota City Directory, Valley Memorial Nursing Home in Grand

Forks, Sunshine Terrace (a senior citizens housing unit) in East Grand Forks, Minnesota, and foster grandparents at Grafton State School for the Mentally Retarded at Grafton, North Dakota. The 121 subjects from the Grand Forks City Directory were obtained by telephoning 386 randomly selected retired persons listed in the directory. Approximately one in three that were telephoned agreed to participate. The 18 subjects from the Valley Memorial Home were randomly selected from the population of that nursing home. Twenty-one subjects from Sunshine Terrace and 20 subjects from the foster grandparent program at Grafton State School were volunteers recruited at those facilities.

As all subjects were contacted either personally or by telephone it was possible to screen out subjects who failed to show understanding of the task which would be required of them. Fourteen potential subjects were excluded from the experiment on that basis.

#### Instruments

The "Survey of Attitudes" questionnaire consisted of 16 items covering a variety of issues about which people might be expected to differ in opinion. Several earlier studies reported by Byrne (1972) indicate that the specific content of the attitudes is not a crucial factor. A copy of the "Survey of Attitudes" is included in Appendix A. Accompanying the survey was an instruction sheet, also presented in Appendix A, which gave instructions for the completion of the survey.

The subject's attraction toward the bogus stranger was measured by employing the Interpersonal Judgment Scale (IJS), (Byrne, 1966). The IJS is a 6-item, 7-point rating scale of the stranger's intelligence,

knowledge of current events, morality, and adjustment. In addition it measures the S's rating of how much he would enjoy working with the stranger, and how much he would like the stranger. A copy of the IJS and instructions for its completion are presented in Appendix B.

### Procedure

The procedure followed was a variant of the bogus stranger approach developed by Smith (1957) and popularized by Byrne (1961). This approach involves measuring the subject's attitudes, age, and sex, and presenting to the subject a bogus stranger constructed to express either similar or dissimilar attitudes, and to be of either similar or dissimilar age and sex. As discussed in the Introduction, the way in which the stranger is presented (i.e., in person, tape recorded, or by a paper and pencil attitude scale) does not significantly affect the attraction rating.

After subjects had agreed to complete an attitude-related questionnaire (Survey of Attitudes) and a follow-up questionnaire (IJS), the survey and instructions for its completion were sent to them through the mail. Each survey was number coded so that the E could know which S returned which survey. The Ss were assured of strict confidentiality which was in fact maintained.

Upon return of each S's survey the S was randomly assigned to one of the eighteen experimental conditions of the design discussed above. After assignment to an experimental condition a bogus stranger was constructed for each S using a "Survey of Attitudes" to represent the stranger's attitudes, age, and sex. The items of the stranger's

survey which were to agree with the S's survey were randomly selected from the possible 16 items. Agreement was defined as either the same response as the S or one scale step further in the same direction as the S's response. Disagreement was defined as being 3 scale steps in the opposite direction of the S's response. The stranger's survey, the IJS, and instructions for completing the IJS were then mailed to the subject. Upon return of the IJS to the E the data were tabulated and analyzed as presented in the following chapter.

particular  
attitudes disagreed upon  
across  
groups  
equated?

## CHAPTER IV

### RESULTS

The Interpersonal Judgment Scale (IJS) attraction measures which were used in data analysis were the S's rating of how much he would enjoy working with the stranger and how much he would like the stranger. The correlation between these two measures was .76. The scale scores of the two measures were added together for each S to yield a single score ranging from 2 to 14. The mean of these scores for all Ss was 7.90 with a standard deviation of 2.99. The mean attraction ratings for each experimental condition are presented in Table 1, p. 23.

The analysis of variance completed on the data (Table 2, p. 24) yielded only one significant main effect, that of attitude similarity ( $p < .001$ ), and no significant interactions. No other main effects or interactions approached statistical significance.

The correlation between attitude similarity and attraction was found to be .61 indicating that as attitude similarity increased the attraction rating increased. The regression equation based on that correlation is  $Y = 8.90X + 3.45$ , Y being the attraction measure and X being the proportion of similar attitudes. Although a statistical comparison was not made, this regression line does not appear to differ appreciably from the regression line presented by Byrne and Clore (1965) for the

TABLE 1

MEAN IJS SCORES OF SUBJECTS REACTING TO LIKE-  
AND UNLIKE-SEXED STRANGERS OF DIFFERENT  
AGES AND PROPORTIONS OF  
SIMILAR ATTITUDES

Age	Proportion of Similar Attitudes					
	.25		.50		.75	
	Sex of Stranger		Sex of Stranger		Sex of Stranger	
	Like	Unlike	Like	Unlike	Like	Unlike
22	5.2	4.3	8.0	8.3	10.5	9.8
46	5.7	5.0	8.0	8.6	9.3	10.8
68	5.8	6.4	8.8	9.0	8.9	9.8

relationship between attitude similarity and attraction in a college age population (Figure 1, p. 25).

Comparisons employing t tests were made of male and female subject's attraction ratings in the various similarity conditions, but significant differences were not found. Neither were there significant differences between male and female subjects as to their ratings of male and female strangers.

TABLE 2

SUMMARY OF ANALYSIS OF VARIANCE OF SUBJECTS'  
RESPONSES TO HYPOTHETICAL STRANGERS

Source	SS	df	MS	F
A: Proportion of Similar Attitudes	621.3	2	310.65	54.89 <sup>a</sup>
B: Age of Stranger	5.6	2	2.80	.49
C: Sex of Stranger	1.8	1	1.80	.32
A x B	26.6	4	6.65	1.17
A x C	6.7	2	3.35	.59
B x C	9.1	2	4.55	.80
A x B x C	10.9	4	2.73	.48
Within	916.2	162	5.66	

<sup>a</sup><sub>p</sub> < .01



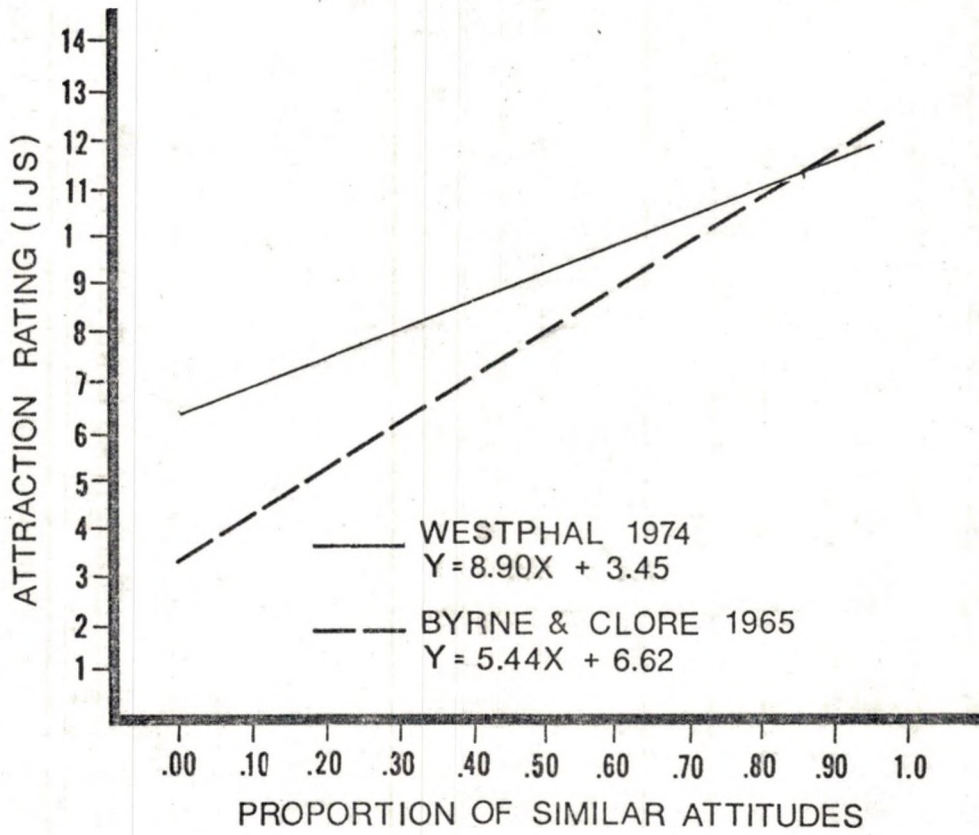


Fig. 1. A comparison of the regression slopes for senior citizens and non-senior citizens.

## CHAPTER V

### DISCUSSION OF RESULTS

The results of the analysis of variance give strong support to the conclusions of Griffitt, et al. (1972) that attitude similarity is a significant variable in the attraction of older subjects to a hypothetical stranger. Failure to find significant main effects on either of the other two variables, stranger's age and sex, or on any of the interactions among variables strongly suggests that these variables have very little impact on the attraction process in senior citizens, contrary to the original hypothesis.

Therefore, older subjects appear to be very much like younger subjects in their reaction to a hypothetical stranger. Although the above results are considered to be due primarily to lack of significant contributions by the stranger's age and sex variables, the measuring instrument itself may serve to emphasize the findings. A large proportion of the material presented on the "Survey of Attitudes" is directly concerned with the stranger's attitudes while the stranger's age and sex are represented by two small blanks containing that information. The task requires that the subject spend considerably more time attending to the stranger's attitudes than to the stranger's age or sex.

The correlation between attitude similarity and attraction, and the corresponding regression line constructed to represent that

correlation, support the conclusions of Griffitt, et al. (1972) that senior citizen subjects do not differ from younger subjects in the relationship between attitude similarity and attraction.

The correlation between the dependent variables found in this study (.76) is lower than the correlation between the same variables reported by Byrne and Nelson (1965) to be .85. Byrne and Nelson's correlation is based on a younger population which may interpret the enjoyment of working with stranger measure differently than a retired population interprets it. It is quite possible that retired persons may be responding to the question of working as much as to the question of working with a particular stranger.

The failure to find differences between men and women subjects' responses to the IJS supports the hypothesis of Griffitt, et al. (1972) that the attraction process operates in the same fashion for both men and women, regardless of age.

The results of this research strongly support Griffitt, et al. (1972) conclusion that the strong effect of attitude similarity can be generalized to a senior citizen population. The present research also indicates that, as with younger populations, the age and sex of the stranger have no significant effect on senior citizen's attraction toward a stranger.

The suitability of the paper and pencil technique for use with older subjects is still in question. While there have been shown to be no significant differences between the paper and pencil technique and other techniques when used with younger subjects (Byrne, 1969), it seems questionable to assume that there would be no differences among

techniques when employing older subjects. College students would seem to have more experience with various rating scales and surveys than senior citizens. Further research may answer the question of whether senior citizens respond to an attitude survey representing a stranger's attitudes in the same way they would respond to a live stranger representing the same attitudes.

APPENDIX A  
SURVEY OF ATTITUDES

Attitude Survey

Enclosed is the attitude survey which you recently agreed to complete.

This inventory consists of statements of opinion which one may agree or disagree with in varying degrees. Please indicate your degree of agreement or disagreement with each statement by marking the space from "strongly disagree" to "strongly agree" that best indicates your own opinion.

We realize that some of the items are very "touchy," so your response will be kept strictly confidential. If you feel that you would prefer not to fill out some of the items on the survey, please feel perfectly free to omit those items.

Please indicate your age and sex on the form and return it in the enclosed envelope. You will receive the second part of the survey in three to four weeks.

Thank you for your cooperation.

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## Survey of Attitudes

AGE: \_\_\_\_\_

SEX: \_\_\_\_\_

## 1. Birth Control (check one)

- \_\_\_\_\_ I am very much in favor of most birth control techniques.  
 \_\_\_\_\_ I am in favor of most birth control techniques.  
 \_\_\_\_\_ I am mildly in favor of most birth control techniques.  
 \_\_\_\_\_ I am opposed to most birth control techniques.  
 \_\_\_\_\_ I am very much opposed to most birth control techniques.

## 2. Discipline of Children (check one)

- \_\_\_\_\_ I strongly believe that the father should discipline the children in the family.  
 \_\_\_\_\_ I believe that the father should discipline the children in the family.  
 \_\_\_\_\_ I feel that perhaps the father should discipline the children in the family.  
 \_\_\_\_\_ I feel that perhaps the mother should discipline the children in the family.  
 \_\_\_\_\_ I believe that the mother should discipline the children in the family.  
 \_\_\_\_\_ I strongly believe that the mother should discipline the children in the family.

## 3. Group Opinion (check one)

- \_\_\_\_\_ I feel that people should ignore group opinion if they disagree with it.  
 \_\_\_\_\_ I feel that people should usually ignore group opinion if they disagree with it.  
 \_\_\_\_\_ I feel that people should often ignore group opinion if they disagree with it.  
 \_\_\_\_\_ I feel that people should often go along with group opinion if they disagree with it.  
 \_\_\_\_\_ I feel that people should usually go along with group opinion even if they disagree with it.  
 \_\_\_\_\_ I feel that people should always go along with group opinion even if they disagree with it.

## 4. Smoking (check one)

- \_\_\_\_\_ In general, I am very much in favor of smoking.  
 \_\_\_\_\_ In general, I am in favor of smoking.  
 \_\_\_\_\_ In general, I am mildly in favor of smoking.  
 \_\_\_\_\_ In general, I am mildly against smoking.  
 \_\_\_\_\_ In general, I am against smoking.  
 \_\_\_\_\_ In general, I am very much against smoking.

## 5. War (check one)

I strongly feel that war is sometimes necessary to solve world problems.

I feel that war is sometimes necessary to solve world problems.

I feel that perhaps war is necessary to solve world problems.

I feel that perhaps war is never necessary to solve world problems.

I feel that war is never necessary to resolve world problems.

I strongly feel that war is never necessary to resolve world problems.

## 6. Family Finances (check one)

I strongly believe that the man in the family should handle the finances.

I believe that the man in the family should handle the finances.

I feel that perhaps the man in the family should handle the finances.

I feel that perhaps the woman in the family should handle the family finances.

I feel that the woman in the family should handle the finances.

I strongly believe that the woman in the family should handle the finances.

## 7. Men's Adjustment to Stress (check one)

I strongly believe that men adjust to stress better than women.

I believe that men adjust to stress better than women.

I feel that perhaps men adjust better to stress than women.

I feel that perhaps women adjust to stress better than men.

I believe that women adjust to stress better than men.

I strongly believe that women adjust to stress better than men.

## 8. Bussing (check one)

Bussing in public schools is a mistake, and I am very much against it.

Bussing in public schools is a mistake, and I am against it.

Bussing in public schools is a mistake, and I am mildly against it.

Bussing in public schools is a good plan, and I am mildly in favor of it.

Bussing in public schools is a good plan, and I am in favor of it.

Bussing in public schools is a good plan, and I am very much in favor of it.

## 9. Property Tax for Senior Citizens (check one)

I am very much opposed to a property tax for senior citizens.

I am opposed to a property tax for senior citizens.

I am mildly opposed to a property tax for senior citizens.

I am mildly in favor of a property tax for senior citizens.

I am in favor of a property tax for senior citizens.

I am very much in favor of a property tax for senior citizens.



## 10. Extramarital Sex Relations (check one)

- \_\_\_\_\_ In general, I am very much opposed to extramarital sex relations.  
 \_\_\_\_\_ In general, I am opposed to extramarital sex relations.  
 \_\_\_\_\_ In general, I am mildly opposed to extramarital sex relations.  
 \_\_\_\_\_ In general, I am mildly in favor of extramarital sex relations.  
 \_\_\_\_\_ In general, I am in favor of extramarital sex relations.  
 \_\_\_\_\_ In general, I am very much in favor of extramarital sex relations.

## 11. Drinking (check one)

- \_\_\_\_\_ In general, I am very much in favor of people drinking alcoholic beverages.  
 \_\_\_\_\_ In general, I am in favor of people drinking alcoholic beverages.  
 \_\_\_\_\_ In general, I am mildly in favor of drinking alcoholic beverages.  
 \_\_\_\_\_ In general, I am mildly opposed to people drinking alcoholic beverages.  
 \_\_\_\_\_ In general, I am opposed to people drinking alcoholic beverages.  
 \_\_\_\_\_ In general, I am very much opposed to people drinking alcoholic beverages.

## 12. Existence of God

- \_\_\_\_\_ I strongly believe that there is a God.  
 \_\_\_\_\_ I believe that there is a God.  
 \_\_\_\_\_ I believe that there might be a God.  
 \_\_\_\_\_ I believe that there probably is not a God.  
 \_\_\_\_\_ I believe that there is no God.  
 \_\_\_\_\_ I strongly believe that there is not a God.

## 13. Impeachment of President Nixon

- \_\_\_\_\_ I strongly believe that President Nixon should be impeached.  
 \_\_\_\_\_ I believe that President Nixon should be impeached.  
 \_\_\_\_\_ I believe that President Nixon probably should be impeached.  
 \_\_\_\_\_ I believe that President Nixon probably should not be impeached.  
 \_\_\_\_\_ I believe that President Nixon should not be impeached.  
 \_\_\_\_\_ I strongly believe that President Nixon should not be impeached.

## 14. Daylight Savings Time

- \_\_\_\_\_ I am very much in favor of daylight savings time.  
 \_\_\_\_\_ I am in favor of daylight savings time.  
 \_\_\_\_\_ I am mildly in favor of daylight savings time.  
 \_\_\_\_\_ I am mildly opposed to daylight savings time.  
 \_\_\_\_\_ I am opposed to daylight savings time.  
 \_\_\_\_\_ I am very much opposed to daylight savings time.

## 15. Violence on Television

- \_\_\_\_\_ I strongly feel that there is too much violence on television.  
 \_\_\_\_\_ I feel that there is too much violence on television.  
 \_\_\_\_\_ I feel that perhaps there is too much violence on television.  
 \_\_\_\_\_ I feel that there probably is not too much violence on television.  
 \_\_\_\_\_ I feel that there is not too much violence on television.  
 \_\_\_\_\_ I strongly feel that there is not too much violence on television.

## 16. X-Rated Movies

\_\_\_\_\_ I am strongly opposed to the showing of X-rated movies in my hometown.

\_\_\_\_\_ I am opposed to the showing of X-rated movies in my hometown.

\_\_\_\_\_ I am mildly opposed to the showing of X-rated movies in my hometown.

\_\_\_\_\_ I am mildly in favor of the showing of X-rated movies in my hometown.

\_\_\_\_\_ I am in favor of the showing of X-rated movies in my hometown.

\_\_\_\_\_ I am strongly in favor of the showing of X-rated movies in my hometown.

APPENDIX B  
CHARACTERISTICS RATINGS



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