

THE EFFECTS OF EXPECTATIONS, BEHAVIORS AND BELIEFS
ON THE INTERPERSONAL JUDGMENTS YOUNG PEOPLE MAKE
ABOUT THE ELDERLY

by

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ABSTRACT

Results of research on attitudes toward the elderly indicate that generally people in this country hold negative attitudes toward old age and aging. However, there is some evidence in studies reported during the last ten years that in some circumstances old people are evaluated more positively than young people.

In four experiments four independent variables were manipulated: age, level of activity, similarity of beliefs and mode of presenting the stimulus person. In the principal experiment subjects saw a photograph of a 29- or a 69-year-old man, which was captioned by his name and age, read a profile describing an individual who was physically and socially active or non-active, and read a protocol of the target's attitudes on ten items which were either similar or dissimilar to those of the subject reading them. The other three experiments provided comparisons of one form or another to the principal experiment. Subjects evaluated the stimulus person on measures of social distance and personal attraction and also provided ratings on five supplementary measures of personal attributes.

As predicted, young subjects rated the older stimulus person more positively than the younger target in active, non-active, similar and dissimilar conditions. Also, as predicted the level of activity and similarity of beliefs

functioned alike as predictors of attraction. Active targets were always evaluated more positively than non-active targets and targets with beliefs which were similar to those of the subject were always evaluated more positively than those with dissimilar beliefs. Finally, it was clear that the level of activity was a more potent discriminator than similarity or belief and age was the least potent discriminator for the subjects of this study.

Results suggest that the notion of reciprocal rewards and punishments in interactions between ingroup and outgroup members provides a framework for understanding the personal attraction young people in this study expressed toward the elderly. However, results also indicated that the importance of the issues of relations and the expectations of the judges must be taken into consideration in predicting the differential liking toward young and old targets. The subjects held differential expectations for older and younger people regarding levels of activity and similarity of beliefs. When the issues of relation were important and those expectations were confirmed then evaluations were made on the basis of similarity as a determinant of attraction. In other words, regardless of the age of the target, if the expressed levels of activity were high, like those of young people, or attitudes were similar to those of the young judge, then the evaluations were more positive than for the non-active or dissimilar targets. However, when the expectations were

disconfirmed about important issues then evaluations of the disconfirming target were exaggerated. If a positive expectation was disconfirmed then the evaluation became more negative. If a negative expectation was disconfirmed the evaluation became more positive. In brief, differential expectations toward younger and older people resulted in differential exaggeration of evaluations with the consequence that the older individual was consistently evaluated more positively than the younger individual.

CHAPTER I

INTRODUCTION AND REVIEW OF THE LITERATURE

Objectives

The study reported here has examined the influence of three variables on the impressions younger people have about older people. Specifically, the study investigated the effects of attitude or belief system, age, and social and physical activity as aspects of personality, on measures of attraction and social distance. It focused on the differential expectations and evaluations younger people make when presented younger and older target persons.

Background

Rosenfeldt (1965) drew attention to what she called the "elderly mystique." It was described as a central set of negative ideas and attitudes that people in general, and young people in particular, maintain concerning the elderly. Butler (1969) refers to the notion of "ageism... (that) process of systematic stereotyping of, and discrimination against people because they are old." He maintains that, although stereotyping and myths surrounding old age may be explainable in part by lack of knowledge and insufficient contact with a wide variety of older people, this profound prejudice against the elderly is another powerful factor at work. He sees it as a form of bigotry, a negative prejudice by one age group

toward another age group which permits the young to see older people as different from themselves (Butler, 1975a, 1975b).

Such claims that negative stereotypes are pervasive in this society are not without support. Most of the research on attitudes toward the elderly over the last quarter century has produced results which indicate that by and large people generally hold negative attitudes toward old age and aging. Early studies (Tuckman & Lorge, 1953; Lorge, Tuckman, & Abrams, 1954; Tuckman & Lorge, 1958), indicated that subjects saw old age as a time of life characterized by inactivity, lack of interests, economic insecurity, ill health, failing mental and physical capacities, loneliness, resistance to change and loss of adult roles. Typically, such studies used a lengthy questionnaire such as the Old People Questionnaire (Tuckman & Lorge, 1953) consisting of statements which presented the common misconceptions and stereotypes about the elderly. Subjects were asked to indicate which statements expressed their own attitudes toward aging and the elderly. Later studies (Kogan, 1961; Tuckman, 1965; Kastenbaum & Durkee, 1964) tended to reconfirm those findings. At best (Lane, 1964) results showed that attitudes were overall unfavorable, with some neutral attitudes, while others were clearly negative and with no significant evidence of favorable or positive attitudes. There is even evidence (Hickey & Kalish, 1968) which suggests that the negative concepts of the elderly may develop very early in childhood. More contemporary reviews of the literature on attitudes toward

the elderly (McTavish, 1971; Bennett & Eckman, 1973) continue to support most of these findings. Most recently, the national sample survey by Louis Harris and Associates (1975) also reported that Americans generally see the life of the elderly in terms of negative qualities.

While views of the elderly are largely negative they are not exclusively and totally so and McTavish (1971) suggests that perhaps orientations toward aging and the elderly are in reality multidimensional. At least three different studies published in recent years provide evidence that in some circumstances older people are judged more positively than younger people. Bell and Stanfield (1973) had subjects evaluate a target person who was described as either 25 or 65 years old using the Tuckman-Lorge Stereotype Scale. The data indicate no significant differences in the ratings but, contrary to the bulk of previous findings, younger people tended to rate older people somewhat more positively than they rated their peers. They suggested that chronological age alone is insufficient to evoke a clear pattern of evaluations of a target person and they question research which reports predominantly negative attitudes of the young toward older people.

Weinberger and Milham (1975) first asked young people to express their attitudes toward a "representative" 70-year old and a "representative" 25-year-old. This resulted in the usual negative ratings for the elderly. Older people, compared to younger people, were seen as less satisfied with

life, possessing fewer positive personality characteristics and more negative ones, more dependent, and less well-adjusted. As a second step, the authors used a large subset of the original sample and asked them to judge personalized target persons who were presented through a brief autobiographical sketch and a photograph. The 70-year-old was now judged as more self-accepting, more satisfied with life, better adjusted and adaptable than the 25-year-old. These authors suggest that the "expression of belief statements toward a group is a separate response system from judgments of a particular member of that group." Hence, an individual can have positive and favorable attitudes toward a specific older person while maintaining negative attitudes toward the elderly generally.

Crockett, et al. (1977) note however, that the accounts of ageism cited in American society have been concerned in large part with discrimination against specific older people as individuals and not just the elderly in general. They hypothesized that when an old person contradicts stereotyped expectations, the perceivers "may be so impressed by this exceptional behavior that they over-react, forming an impression even more positive than one they would form of a younger person with the same qualities." They tested the explanation in a study which asked young people to read a biographical sketch of a woman labelled 36 and 76 years old, which presented positive and negative stereotypic behavior of older persons, and then asked them to write their

impressions of the target person and rate her on a series of scales. Their results showed that the older woman was rated significantly more favorably than the younger one in all conditions--even when her behavior corresponded to negative stereotypes of older persons. The older woman was judged to be less like the stereotype of the elderly than the younger woman. They reported that the content of the subjects' written impressions made it clear that the background information of the biography, drawn from the life of a real individual, had "contradicted the subjects' expectations about older women...The level of activity in the background information outweighed...(other) information" (p. 9-10). In their discussion they suggest a generalization: "When an older person is mentally alert, is actively involved in social affairs, or does and says things that are of interest to a younger person, that older person will be perceived as deviating from the stereotype and will be evaluated more positively than would somebody younger who showed the same level of activity" (p. 10). The study being reported here has attempted to address this issue.

REVIEW OF THE LITERATURE

Theoretical Considerations

In his discussion of interpersonal attraction Newcomb (1956) noted that "we acquire favorable or unfavorable attitudes toward persons as we are rewarded or punished by

them, and that the principles of contiguity, or reciprocal reward, and of complementarity have to do with the conditions under which rewards are most probable" (p. 577). Byrne (1961a), pursuing that frame of reference, has suggested that attraction between people is actually determined by four classes of variables: 1) structural properties of the environment which act to vary propinquity; 2) the strength of the characteristic affiliation needs of the individual; 3) generalizations from previous learning with respect to the overt stimulus properties of one another; 4) and the number of reciprocal rewards and punishments which occur during the interaction. He argues (Byrne & Wong, 1962) that the most inclusive independent variable of these four is the last, reciprocal reward and punishment. The other three classes of variables appear to Byrne to be relevant primarily as they relate to reward and punishment. Attraction depends on propinquity because environmental variables can facilitate or inhibit interaction, and without interaction rewards cannot be given or received. The motivation to form relationships, affiliation need, suggests that the expectancy of reward in interpersonal interactions is high. Similarly, generalizations from previous learning based on overt stimulus properties would seem indicative of expectancies for rewards or punishments in the interaction. Hence, attraction, or liking, between individuals appears to be a function of the extent to which reciprocal rewards are present. By the same token, repulsion, or dislike, would then be a function of

reciprocal punishments.

We have a learned drive to be logical and make a correct reporting of reality. It is crucial to everyday functioning in an adult world. To be deficient in this respect can earn a mature individual a label (usually unspoken) such as "uninformed," "misinformed," "ignorant," "stupid," even "psychotic" in the extreme case. Through mutual and consensual validation we daily determine whether we (or others) are correct, or incorrect, in interpreting environmental effects. Hence, any time that another person offers validation by indicating that his perceptions and constructs (e.g., his attitudes or belief system) are congruent with our own it constitutes a rewarding interaction and provides one element in forming a positive relationship. By the same token, when another person indicates dissimilarity it constitutes a punishing interaction and one element in forming a negative relationship. Perceived similarity and dissimilarity of another's attitudes or beliefs is the special case of reward and punishment of interest here (Byrne, 1961a).

A Research Paradigm

A productive research paradigm has emerged from a sizeable body of empirical work on attitudes and attraction and related variables. Various types of rewards and punishments have been used experimentally but by and large more contemporary attraction research has used similarity and

dissimilarity of attitudes, opinions, beliefs, and values as the stimulus. In his initial study dealing with the effects of attitude similarity on attraction' Byrne (1961a) found that the mean differences in attraction responses of the similar and dissimilar attitude groups were highly significant. The stimulus variable was a 26 item attitude scale which either agreed 100% with the subject's responses to the same scales or disagreed 100%. The dependent measure consisted of two rating scales which asked the two rather straight forward questions most frequently used in sociometric research. Each subject was asked to indicate whether he believed he would like or dislike the stimulus person and whether he believed he would like or dislike working with this person. The two variables were measured on a seven point scale, scored 1 to 7 and then summed to constitute the measure of attraction which ranges from 2 to 14. In order to disguise the major purpose of the experiment to some degree, and to lend credence to instructions concerning interpersonal judgments, the two attraction scales were embedded as the last two items in a six point Interpersonal Judgment Scale (IJS). The first four items called for evaluations of the stranger's intelligence, knowledge of current events, morality and adjustment. The manipulation was so powerful there was no overlap of responses from the two conditions. The most negative response in the similar attitude group was more positive than the most positive response in the dissimilar group. As a subsidiary finding in that initial study, equally

significant group differences were found on all four of the remaining evaluative scales of the IJS. Dissimilar strangers were rated as less intelligent, less knowledgeable about current events, less moral and less well-adjusted than similar strangers. For the sake of continuity and to provide connecting links across experiments, these same basic operations and procedures, or their empirically determined equivalents, were employed in subsequent research by Byrne and his colleagues (Byrne, 1969).

Those early results also showed that the subjects used in the study were essentially homogenous with respect to their opinions on the large majority of the items on the attitude scale. For example, subjects typically believed in God, liked sports, enjoyed science fiction, etc. It was only on a relatively few items of the scale that there was any considerable diversity in their responses. Hence a stranger in the similar condition not only agreed with the subject but also appeared to be a normal member of the undergraduate culture from which the sample had been drawn. Likewise a dissimilar stranger not only disagreed but could also be viewed as an abnormal individual who was extremely deviant in this culture. Hence, the stimulus for the attraction responses could logically have been either similarity-dissimilarity or conformity-deviancy. In a study designed to identify the stimulus more accurately (Byrne, 1962) the seven items of the original attitude scale which produced the greatest diversity of opinion were arranged in a seven

item attitude scale and the procedures were repeated. However, this time attitude similarity was varied from complete similarity on seven issues to complete dissimilarity on the seven issues, plus all of the variants of similarity-dissimilarity in between for a total of eight conditions. The target persons in this study would not also be presenting some degree of conformity-deviancy. Results showed that the main effect of attitude similarity was highly significant on both attraction scales of the IJS. Moreover, the relationship between the number of similar attitudes and attraction was linear. As the number of similar attitudes increased the degree of attraction increased. The degree of convergence between the beliefs of a stimulus stranger and those of the subject appeared to be the major determinant of attraction.

However, the eight experimental conditions in that second study could be conceptualized as representing three different stimulus variables: the number of similar attitudes, the number of dissimilar attitudes, and the relationship between these two expressed as a ratio or proportion. Each of these three varied across the experimental conditions and the attraction response could have been elicited by any one or more of them. Was it proportion, or simply the number, of similar items? Byrne and Nelson (1965) tested the proposition that attraction toward a stranger is a positive function of the proportion of positive reinforcements received from the stranger. Both the number and ratio of similar and dissimilar attitudes were varied independently through a series of

attitude scales of differing length. There were three conditions of absolute number of similar items (4, 8, 16) and each absolute number was varied in four different proportions of similarity/dissimilarity (1.00, .67, .50, .33). Results showed that the only significant effect was the proportion variable. With the stimulus thus defined as a proportion of similar attitudes, data was combined from a large group of related studies (including Byrne, 1961a; Byrne, 1961b; Byrne, 1962; Byrne & McGraw, 1964; Byrne & Wong, 1962). In each case attraction was the dependent variable and various proportions of similar attitudes served as the independent variable. A total of approximately 800 subjects and 11 different values of the proportion of the independent variables were represented. A plot of the mean attraction scores for the eleven points suggested linearity and a straight line function was fitted to the data by the least squares method.

Because the similarity or dissimilarity of a response could be specified in many ways further refinement was necessary. Each attitude item consisted of a six point scale with three points representing varying strengths of opinion in each direction from the neutral point. Similarity was defined as any response on the same side of the neutral point as the subject's response, where as dissimilarity was any response on the opposite side of the neutral point. However, the amount of discrepancy, that is, the number of points on the scale between the subject's response and the stranger's

response, could vary widely within these definitions. Nelson investigated the effects of this differential discrepancy, using a 12 item scale with either 100% similarity or 100% dissimilarity along with two magnitudes of response discrepancy (large or small) within each of them. Results showed that subjects apparently respond to the discrepancy factor as well as to the similarity/dissimilarity. This suggested that proportion of similar attitudes and discrepancy constitute two related, but partially independent stimulus dimensions. Byrne and his colleagues carried out further research designed to test that proposition (Byrne, Clore & Griffitt, 1967). Their results confirmed the hypothesis. These findings, taken together, led to the use of what they have called a constant-discrepancy pattern in which the discrepancy differences among similar items and among dissimilar items have been completely eliminated.

The stimulus person used to elicit attraction responses has been presented in a variety of ways by different investigators. For example Aronson and Linder (1965) asked subjects to respond to an individual who was actually a confederate, Altrocchi (1959) presented the target person in a specially prepared motion picture, Byrne and McGraw (1964) showed the subjects a photograph of the stimulus person while Jones (1965) presented the stimulus material on voice tape. However, no one of these investigators had determined the influence of mode of presentation on attraction. Byrne and Clore (1966) investigated the generality of the relationship

between attitude similarity and attraction across stimulus modes by examining the relationship under three different modes: a color movie with sound track, a taped voice recording, and written responses on a mimeographed attitude scale. Results showed that attitude similarity had a highly significant effect on attraction but neither the effect of the three stimulus modes nor that of the interaction were significant.

Other Populations

Most, if not all, of the research cited thus far has used undergraduate college students as subjects. However, there is a good deal of evidence that the attitude-attraction relationship has generality beyond the college sophomore.

Kraus (1966) used a 20 item attitude scale with female clerical employees of the Bell Telephone Laboratories and then asked them to evaluate a bogus fellow employee on the basis of fictitious responses to the same scale. Results showed significantly different responses on all six scales of the IJS. Byrne and Griffitt (1966) provided another test of the generality of the attitude attraction relationship in a study with young people who were significantly different from college undergraduates on several dimensions: age, intelligence, educational level and socioeconomic status. The subjects, ranging in age from 9 to 20 years old, each filled out an 8 item attitude scale and were then asked to rate a stranger "in the same grade and of the same sex" as themselves. Using

a version of the IJS which was modified slightly to accommodate vocabulary limitations of the subjects, analysis of variance indicated highly significant effects for attitude similarity and for age (the younger children gave more positive responses). However, all age groups responded to the similarity variable in the same linear fashion. A straight line function fitted to the data yielded constants very similar to those reported for college undergraduates and the total group's responses did not differ significantly from the values predicted by the formula derived by Byrne and Clore (1966). These authors concluded that the similarity-attraction relationship is as strongly operative by nine years of age as it is in young adulthood.

In a study by Byrne, Griffitt, Hudgins and Reeves (1969) the attitude-attraction paradigm was carried out with a population of Job Corps Trainees at the Gary Training Center in San Marcos, Texas. They used a 12 item attitude scale and the IJS following the usual procedures. The subjects were approximately equal numbers of black and white males ranging in age from 16 to 22 years with an educational level below that of undergraduate college students. It was found that attraction was significantly related to the proportion of similar attitudes attributed to the stranger. A goodness of fit analysis between the predictions of the Byrne and Clore (1966) formula and these data indicated that the predicted and obtained responses did not differ significantly. In the same report authors also presented data on attraction

experiments conducted with hospitalized male schizophrenics at the Austin State Hospital. The subjects were thirteen surgical patients and twenty-nine other men who had been hospitalized for alcoholism. They used an 8 item attitude scale with three proportions of agreement (.00, .50, and 1.00). The subjects were older, less well educated, and they represented a lower socioeconomic level than the average undergraduate population. Once again similarity was found to influence attraction significantly and a linear function was found.

One report of a study using the attitude-attraction relationship with the elderly was uncovered in this review of the literature. Griffitt, Nelson and Littlepage (1972) reported on experiments designed to examine: 1) interpersonal attraction between the young and old when subjects from each age group are provided specific information concerning the attitudes of a representative of the non-peer age group; 2) comparisons of peer-peer and peer-non-peer evaluative responses based on comparable attitudinal information, and 3) the generality of the similarity-attraction relationship in a sample of older-age individuals. The subjects were 40 male and female students in introductory psychology and 40 retired (4 male and 36 female) members of a local golden age club. A 12 item attitudinal scale was used with two proportions of similarity (.18 and .82). In a factorial design young or old subjects evaluated either a same-age peer or a different age non-peer. The peer for young

subjects was described as a "same-sex stranger...another introductory psychology student" while the non-peer was presented as a "same-sex stranger...a person 65 years of age living in the local community." Similar descriptions were used for the older subjects. In no case was the "stranger" personalized. The IJS was used as the dependent measure of attraction. Results indicated that the attraction responses were more positive in the similar attitude condition (.82 agreement) than in the dissimilar condition (.18 agreement), regardless of the age of the subject or the age of the stranger. They found a significant three way interaction between the age of the subject, age of the stranger, and proportion of similar attitudes. Further analysis revealed that in the dissimilar condition both young and old subjects responded more favorably to peer than to non-peers, whereas in the similar condition young subjects tended to respond more positively to the older target than to their peers when older subjects responded to peer and non-peer alike. In their discussion of those results they suggested that perhaps in the absence of information concerning an individual's actual attitudes, attraction may be positively related to the assumed degree of attitudinal similarity between the judge and the target. Then, when actual attitudinal information is explicitly supplied, the assumed similarity-attraction relationship is supplanted by an actual similarity-attraction relationship. In order to examine the possibility that stereotypic expectations influence

evaluative responses to non-peers in the absence of actual attitudinal information a second experiment was carried out.

An additional sample of ten male and ten female subjects was selected. Half of the subjects were asked to rate a hypothetical same-sex college peer on the IJS on the basis of sex and age information only, while the remaining subjects were asked to rate a hypothetical same-sex person of 65 years of age from the local community on the basis of sex and age information. They proposed that, if in fact, initially negative stereotypes influence attraction responses, evaluations of old-age strangers would be more negative than evaluations of college-age peers when no additional information concerning the strangers was provided. The analysis of their results on this second experiment showed that male subjects responded to peer and non-peers more negatively than female subjects. However, neither the peer--non-peer main effects or the interaction effects were significant. Their findings did not demonstrate that young people evaluate old people in a stereotypically negative or prejudicial way in the absence of attitudinal information. Their prediction that such prejudicial responses would result was based on the hypothesis that young people assume that older people maintain opinions more dissimilar to their own than do their college-age peers. They examined this latter assumption more closely in a third experiment of the study reported.

A new sample of ten male and ten female students were selected and were pretested using the 12 item attitude

questionnaire. At a later time these subjects were asked to predict on a blank attitude questionnaire the attitudinal responses for either a same-sex college peer or a same-sex person of 65 years of age living in the local community. Each subject's predicted responses were then compared with his or her own responses to the same questionnaire and scored for number of predicted agreements as well as the total absolute discrepancy between the subject's and the stranger's attitudinal responses. They hypothesized that the number of predicted agreements would be lower and that the total discrepancy scores would be higher for the old-age stranger than for the peer stranger. The separate analysis of variance for predicted agreement and the discrepancy scores revealed no significant differences due to either sex of subject or peer--non-peer target person, or the interaction between the two. They indicated however, that the differences for both variables were in the predicted direction.

Other Stimulus Variables

Lay and Cummin (1972) found, in their review of the literature, that components of target information such as social status, sex, religion, age and occupation, when examined along with race and belief information, had consistently been shown to be of minor concern to the judges. They speculated that personality would be an important component of information, either singly, or in combination with ethnic

origin or belief information, since ethnic stereotypes are typically expressed in terms of personality characteristics. They manipulated all three, ethnic origin, beliefs, and personality. A target person was presented as either English-speaking or French-speaking Canadian along with four attitude statements which were either pro or con capital punishment and the harsh treatment of criminals with which the target person had supposedly agreed. The personality information was presented in the form of four statements to which the target had supposedly responded true. There were two true-keyed and two false-keyed items selected from both the order scale and the cognitive structure scale of the Personality Research Form, representing the high and low target conditions respectively. All combinations of these conditions were presented to form eight distinct target persons. The judges were non-French-speaking Canadian students who had identified themselves as anti-capital punishment and anti-harsh treatment of criminals and as low on order and cognitive structure by means of a mailed questionnaire they had each completed thirty days earlier. Each judge rated one target for liking on a single scale and indicated his willingness to interact with that person on eleven different scales indicating social situations.

The analysis of their results showed a significant main effect for beliefs on all but three of the social distance scales and in each case the difference was consistent with the similarity hypothesis. The personality factor produced

a significant main effect only on the liking measure. These authors concluded that belief information is more important to a judge than personality information in the process of making evaluations of a target person. A three way interaction on the liking measure and on the close personal friend scale of the social distance measure is notable. When the outgroup members are dissimilar to the judge in both personality and attitude they are disfavored. Yet, when either one of these variables are similar to the judge then the outgroup target is favored over the ingroup target, as though there is an overcompensation. Again, when both variables are similar to the judge then ingroup and outgroup are rated alike, as though there is some ceiling operating. These authors speculated that the judges expected the outgroup member to be dissimilar to himself. When the expectancy was disconfirmed there was an overcompensation or elevating of the outgroup target person.

Smith, Williams and Willis (1967) in an investigation of the effects of race, sex and belief on friendship acceptance in northern, border, and southern states, found that for all samples except one (the southernmost white sample in Louisiana) belief congruence was more important for acceptance than similarity of race. Race in turn was more important than similarity of sex. In the Louisiana sample, race was slightly more important than belief and sex remained last in importance. One "renegade" interaction was interesting in that in all of the black samples, members of the racial

ingroup were consistently penalized more for disagreeing than were members of the outgroup.

Stein, Hardyck and Smith (1965) concluded from their data that both variables, race and belief, affect attraction and in the absence of specific information about beliefs then race becomes the predominant influence. But given clear and specific data on attitudes or beliefs, then the belief variable accounts for by far the larger portion of the variance. As individuals we make judgments about others on the basis of all the information that is available to us. If little information is available to us and a judgment is demanded it is made on the basis of assumptions, inferences from past experiences, or information obtained from others. Hence group memberships and institutionalized prejudices can easily guide such forced judgments.

Byrne and Wong (1962) showed that regardless of the racial prejudices of the subject, or the race of the stranger, similarity of attitudes resulted in positive ratings and dissimilarity of attitudes resulted in negative ratings. Within the confines of their design it appeared that attitude similarity was of greater strength than either racial prejudice or the race of the target person. However, they interpreted their results as support for the position that one of the concomitants of racial prejudice is an unwarranted assumption of dissimilarity with respect to the target person.

Koulack and Cummin (1973), using a Canadian analogue

of black-white relations in the United States, investigated the effects of ethnicity and beliefs on acceptance and rejection. They found that a minority group member was more accepted by the majority than his majority counterpart when they both expressed high intensity beliefs similar to those of the majority. Moreover, a minority group member was less rejected by the majority than a majority group member when they both expressed high intensity beliefs dissimilar to those of the majority. However, when both expressed dissimilar low intensity beliefs majority group judges found the majority group member more acceptable than the minority group counterpart. These authors saw these findings as consistent with the notion that prejudice and social distance are based on assumptions of dissimilarity between different groups and that when such dissimilarities are disconfirmed the outgroup member becomes more acceptable. By the same token, there is an assumption of similarity of beliefs between ingroup members, and an ingroup member who disconfirms this expectation necessarily is more rejected while the outgroup member's social distance remains the same.

Hypotheses and Rationale

Most of the earlier research on attitudes toward the elderly produced results indicating that people generally hold negative attitudes toward old age and aging (Kastenbaum & Durkee, 1964; Kogan, 1961; Tuckman & Abrams, 1954; Tuckman & Lorge, 1953; Tuckman & Lorge, 1958, among others).

However, contemporary reviews of more current research (Bennet & Eckman, 1973; McTavish, 1971) suggest that orientations toward the elderly may well be multidimensional and that the use of chronological age as the only factor may be insufficient to evoke a clear pattern of evaluations (Bell & Stanfield, 1973). In some circumstances young people tend to evaluate older people more positively than they rate their peers (Crockett, et al., 1977; Griffitt, et al., 1972; Weinberger & Milham, 1975).

There is a wealth of evidence from the work of Byrne and his colleagues that, the similarity of the beliefs or attitudes of a stimulus stranger and those of a subject, can function as a major determinant of interpersonal attraction (Byrne, 1961a, 1969; Byrne & Clore, 1966; Byrne, Clore, & Griffitt, 1967; Byrne & Nelson, 1965; among others). The attitude-similarity hypothesis has been supported in diverse populations (Byrne & Griffitt, 1966; Byrne, et al., 1969; Griffitt et al., 1972; Kraus, 1966) and it seems clear that people usually tend to like others who hold attitudes similar to their own and to dislike others who hold dissimilar attitudes. Attitudes or beliefs have been crossed with other independent variables in a variety of multi-factor designs: race and beliefs (Byrne & Wong, 1962; Stein, et al., 1965); race, beliefs and racial prejudice (Byrne & Wong, 1962); race, sex and beliefs (Smith, Williams & Willis, 1967); ethnicity, belief similarity and belief intensity (Koulack & Cummin,

1973); ethnic origins, beliefs and personality (Lay & Cummin, 1972); and, age and beliefs (Griffitt, et al., 1972).

Generally, belief similarity appears to be a more potent discriminator for measures of attraction and social distance when compared to these other factors.

Stein, et al., (1965) concluded from their data that in the absence of specific information about beliefs, race predominates and the subject makes judgments based on (among other things) his assumptions about the beliefs of the target person. Byrne and Wong (1962) concluded that one of the concomitants of prejudice is an unwarranted assumption of dissimilarity about outgroup strangers. Koulack and Cummin (1973) and Smith, et al., (1967) reasoned from their results that when a target person disconfirms a judge's expectations the evaluations of attraction or social distance is exaggerated. The continuities, or lack thereof, which run through these patterns of results provide the stimulus for the research questions of this study.

Age and confirmation or disconfirmation of expectations.

Crockett, et al., (1977) suggested from their results that when an older person is alert, actively involved in social affairs, and does or says things that are of interest to a younger person, then that older person will be perceived as deviating from the stereotype and will be evaluated more positively than would somebody younger who showed the same level of activity. Griffitt, et al., (1972) produced results

which support that statement. However, the Griffitt study also showed that in the dissimilar condition young judges evaluated their peers more positively than the older target person. This last finding disagrees with Koulack and Cummin (1973) who found that when important issues are involved dissimilar ingroup targets are penalized for disconfirming the expectations held for them. In that study the outgroup target was judged more positively than the ingroup target when both expressed beliefs which were dissimilar to the subjects. This study will address this discrepancy in results through the first hypothesis.

Hypothesis 1:

- a) An older person who displays socially and physically active behaviors, or expresses beliefs similar to those of a young judge, will be evaluated more positively than a younger person who displays the same behaviors.
- b) A young person who is socially and physically inactive, or expressed beliefs dissimilar to those of a young judge, will be evaluated less positively than an older person who displays the same behaviors.

Similarity and activity vs. dissimilarity and non-activity. On the basis of evidence from the many studies using the attitude-attraction paradigm, it is expected that belief similarity will function as a determinant of attraction in this study as well. However, drawing on the results of Crockett, et al., it is also expected that activity will also function as a determinant of attraction much the same as similarity of beliefs.

Hypothesis 2:

Active targets, or targets with beliefs which are similar to those of the subject will be evaluated more positively than non-active targets or those whose beliefs are dissimilar to those of the subject.

Relative potency of the independent variables. Results from studies which crossed belief similarity with other factors showed that beliefs are almost universally a more potent discriminator for judges making evaluations of personal attraction and social distance. The results of Crockett, et al., suggest that social and physical activity may be especially salient as an attribute of the target person evaluated by young people. Certainly "belonging," "being involved," and "doing things" are all important to young people, to the extent that many find themselves overextended much of the time. Moreover, the extremes of these same characteristics are notably less apparent as individuals grow older. Although there has been no evidence presented here to suggest that social and physical activity will be more potent discriminators for the subjects in this study, it is perhaps on the basis of hunch that such a result is expected.

Hypothesis 3:

The level of activity displayed by the stimulus person will be a more potent discriminator than belief similarity and the age factor will be the least important of the three.

CHAPTER II

RESEARCH METHOD

Design

The study manipulated four factors using different two-way and three-way factorial designs in four separate experiments. The principal experiment varied three factors: the target person's age, active or non-active personality and similarity of beliefs or attitudes. Three other experiments provided comparisons of one form or another to the principal experiment. The data, all independent observations with no repeated measures or repeated use of any observation across designs, was collected simultaneously to fill the cells of the four designs. Figure 2.1 presents the four designs showing the relationship of the independent variables within each design.

In Experiment 1 age, activity level and belief similarity were each varied at two levels in a 2^3 factorial design. In Experiment 2, in order to test the effects of eliminating information about beliefs, age and activity level were varied in a 2^2 factorial design. In Experiment 3 age and belief similarity were each varied in two conditions for a 2^2 factorial design, eliminating the effects of activity level. Finally, in Experiment 4 the effects of age and personalizing the character of the target person were varied in a 2^2 factorial design, the second factor of which was the inclusion

FIGURE 2.1
 Experimental Designs
 All Experiments

Experiment 1

	Young		Old	
	Active	Non-Active	Active	Non-Active
Similar				
Dissimilar				

Experiment 2

	Young	Old
Active		
Non-Active		

Experiment 3

	Young	Old
Similar		
Dissimilar		

Experiment 4

	Young	Old
Prsnalized		
Typical		

or absence of a photograph of the target.

Subjects

A sample of 238 subjects were used for the study. They were male and female volunteers from the subject pool of undergraduate students in Speech Communication and Human Relations at the University of Kansas during the Spring semester of 1979. The subjects received credit in their academic programs for their participation in the study. Five of the subjects used in the study were foreign students with little experience in the United States and an incomplete grasp of the English language. The data from those subjects, along with that from a sixth subject whose information booklets for the experimental session were faulty, was not used in the analysis for the study. The remaining 232 subjects were distributed rather evenly with eleven or twelve per cell with the exception of two cells having thirteen subjects each. The mean age for all subjects was between nineteen and twenty years. The number of hours of academic work completed prior to that Spring semester ranged from zero to 132, while the mean was 36.27. A few of the subjects grew up in families where relatives other than their parents, brothers and sisters lived in the home with them for some time. However, the vast majority, 214 of all subjects, experienced only the members of their immediate family during their childhood and adolescent years. There were sixteen subjects who experienced their grandparents in their homes while only two lived with their great-grandparents.

Independent Variables

The independent variables were all supposedly attributes of the target person of the study. The target, a fictitious person, was called Joseph Handley for the subjects in all but two of the cells of Experiment 4. In those two cells the target was unnamed. The target's age was presented as either 29 years old or 69 years old. The photographs used to present Joseph Handley were selected so as to be equally attractive according to ratings from an earlier pretest of materials. Likewise, the biographical and attitudinal data was fictitious, having been assembled specifically for this study.

Age. This factor was presented in two ways: a 3½" x 5" photograph and/or a simple written statement of the person's age. The photographs (Appendix A) were captioned with the fictitious name and age of the stimulus person. In the first pretest of materials for this study a group of 53 photographs of older and younger men were evaluated for attractiveness on a nine point scale. From that initial group two photographs were chosen: an older man (attractiveness mean = 5.6) and a younger man (attractiveness mean = 5.8). In both cases the photos are of men dressed the same, wearing a dress shirt, tie and coat, and the pictures are full frontal view which includes the full head and upper bust of each man. In a second pretest subjects saw each of these photographs in each of two behavior conditions. Each photo was judged for: a) most probable age, b) oldest possible age, c) youngest possible age. Results showed that the younger man was judged

most probably between 21 and 41 years of age (mean = 30.82). The youngest possible age assigned to that photograph ranged from 20 to 35 years (mean = 26.18) and the oldest possible age ranged from 25 to 45 years (mean = 35.32). The older man was judged most probably between 50 and 73 years of age (mean = 60.0). The youngest possible age assigned to that photograph ranged from 45 to 70 years (mean = 53.36) and the oldest possible age ranged from 55 to 84 (mean = 68.09). The age of the younger man was stated as 29 for this study while the age of the older man was shown as 69.

Activity level. The manipulation of this variable was carried out through personal profiles representing an individual who was physically and socially 'active' or 'non-active' (Appendix B). In a pretest subjects read a two page personal profile, supposedly a transcript of an interview in which a man describes where he grew up and went to school, his family, interests, etc. In the active profile he enjoys swimming, hiking, working on political campaigns, and taking adult education courses. In the non-active profile he enjoys reading the daily newspaper and novels, browsing in a library, watching television, and correspondence with friends. Subjects read these profiles when viewing either a photo of a younger man or a photo of an older man. Results showed that subjects saw these two personalities as significantly different on the activity dimension ($p = .001$) but the main effect for age was not significant and there

was no significant interaction between the two factors.

Belief similarity. This variable was manipulated by a protocol of ten attitude items. Each item was presented in the form used by Byrne (1961a):

Political parties (check one)

- I am a strong supporter of the Democratic Party.
- I prefer the Democratic Party.
- I have a slight preference for the Democratic Party.
- I have a slight preference for the Republican Party.
- I prefer the Republican Party.
- I am a strong supporter of the Republican Party.

In a pretest of materials, 71 attitude topics were judged by subjects who viewed the two photographs in the two behavioral conditions. Each subject saw only one photo in one condition and was then asked what additional information about the stimulus person's beliefs and attitudes would be helpful in making accurate impressions and evaluations. Each topic was judged by all subjects on a nine point scale for importance. The ten attitude topics were selected on the basis of the following criteria:

- a) Overall mean for all subjects greater than 5.00.
- b) Mean greater than 5.00 in each condition.
- c) No significant difference between conditions.
- d) No topic conflict with personal profile content.

In an early segment of the experimental sessions each subject was asked to complete these attitude scales expressing his or her own beliefs in a questionnaire titled Survey of Opinions (Appendix C) which was also used to gather general demographic data. Then, unknown to the subjects, a protocol representing the attitudes of a target person was constructed for each subject in those conditions where attitude information

was called for. These stimulus protocols, supposedly representing the actual responses of the target person, were constructed to be either similar or dissimilar to the subject's own responses. A similar protocol showed 100% of the responses on the same side of the midpoint as the subject's responses with a discrepancy of plus or minus one scale point. The dissimilar protocol had 100% of the responses on the opposite side of the midpoint with a discrepancy of plus or minus three scale points as shown in Table 2.1. This is the constant-discrepancy pattern established for much of the later work using Byrne's attitude-attraction paradigm (Nelson, 1965; Byrne, Clore & Griffitt, 1967).

Mode of presenting target person. This variable was manipulated by presenting the target person in two different modes: 'personalized' or 'typical.' In the personalized mode the target was presented by means of a photograph captioned with the name and age of the individual. In the typical mode the target person was presented as a typical or representative 29 year old or 69 year old male who was not named (Appendix D). Subjects were asked to imagine a typical individual of that limited description. All subjects in the first three experiments were presented with stimulus materials which included a photograph.

Dependent Variables

The instrument used to gather the primary data of this study was titled Interpersonal Judgment Questionnaire

TABLE 2.1
Constant-Discrepancy Response Pattern

Subject Responses	Stranger Responses	
	Similar	Dissimilar
1	2	4
2	1 or 3	5
3	2	6
4	5	1
5	4 or 6	2
6	5	3

(Appendix E). It was composed of three segments:

- 1) Items 1 through 10--social distance scales.
- 2) Items 11 through 22--personal impression measures:
 - a) Manipulation and control checks--items 11, 12, 13, 21, 22.
 - b) Personal attraction scales--items 17, 18.
 - c) Screening measures--items 13, 15, 16, 19, 20.
- 3) Unnumbered questions collecting demographic data.

The two primary measures of this study are social distance and personal attraction.

Social distance. The social distance measure was developed out of the scales used by Lay and Cumin (1972). Ten scales were used, each of which presented a social situation in which the subject could choose to involve himself with the target person. For example:

I would be willing to have this person as one of my speaking acquaintances.

Extremely
unwilling

Extremely
willing

One of the scales in the original Lay and Cumin instrument asked for subject willingness to date the target person's brother or sister. This item was eliminated to accommodate the major difference between the two age conditions of the target person of this study (29 years old or 69 years old) and the probable age of the subjects (first or second year undergraduate students). The social distance measure used in the analyses is the mean of the raw scores from the ten scales.

Personal attraction. The personal attraction measure of this study used the same two scales originally employed by Byrne in his Interpersonal Judgment Scale. That original instrument consisted of six separate scale items but the attraction measure itself is composed of the two questions most frequently used to measure attraction in sociometric research. Each subject was asked: a) whether he or she would like or dislike the target person, and b) whether he or she would like or dislike working with that person. These two variables were measured as a two item response on seven point scales in the original instrument and it was found that the measure had a split half reliability of .85 (Byrne & Nelson, 1965). In the present study the two variables were measured on nine point scales. The personal attraction measure used in the analyses for the study is the mean of the raw scores from these two scales.

In order to disguise the major purpose of the experiment to some degree and to lend credence to the instructions concerning interpersonal judgments, the two attraction scales were originally embedded as the last two items of the six item instrument. The first four items called for evaluations of the stranger's intelligence, knowledge of current events, morality and social adjustment. Because the non-active personality profile in this study presents an individual who reads a great deal, the scales for intelligence and knowledge of current events were eliminated. Nine new scales were introduced to screen the attraction measures, serve as a check

on the manipulation and control, and provide additional information on impressions.

Expectations. In Experiment #4 none of the subjects were presented either the personality profiles or the attitude protocols attributed to the stimulus person. Those subjects received either a photograph captioned only by name and age or a simple statement that the stranger was a 29 or 69 year old male. In these four conditions subjects provided their predictions of the stranger's responses on the attitude scale and they were specifically asked to provide their impressions of the individual based on the expectations they held having limited data with which to work (Appendix F).

Procedures

When the subjects reported for the experimental sessions they were asked to read and sign the standard consent form used for such experiments (Appendix G). In order to disguise the relationship between the stimulus materials and the dependent measures the experimental sessions were broken into three segments. The subjects were advised that they were to participate in a series of three different and unrelated studies. Each of the three segments was presented separately with a separate cover story. The materials for each segment were provided in separate workbooks which were handed out at the start of each segment and after the materials from the preceding segment had been completed and collected. Essentially the same demographic data was collected on the questionnaire of each of the three

booklets to support the notion of three separate studies and to assure proper assignment of responses from the three segments to the correct subjects. The opening instructions and all of the cover stories used can be found in Appendix H.

In the first segment the subjects were asked to complete the ten item attitude scale expressing their own personal attitudes and beliefs. The study was described in a straightforward manner as a survey that was simply gathering background data on the attitudes of college students at the end of the 1970s. The cover of the questionnaire booklet was titled National Sample Survey (Appendix I).

The second segment was simply a task that was unrelated to the present study. It was used to separate segments one and three, thereby providing time to generate the 'similar' and 'dissimilar' attitude protocols attributed to the bogus stranger which would be presented with the other stimulus materials in segment three. It also served to stimulate the subjects' focus on the impressions they form about others. This unrelated task was presented as a study being carried out in conjunction with the drama department. Subjects were asked to describe people they had known whom they liked or disliked.

The last segment represents the principal part of this study in that at this time the stimulus materials for the varying experimental conditions were presented to the subjects. This part was described as a study that was concerned

with how people process information in forming impressions and opinions about others whom they meet. Depending on the condition being presented subjects received: 1) a photograph of the younger man or the older man captioned by his name and age, and/or 2) a personal profile depicting the target person as an active or a non-active individual, and/or 3) the ten item attitude protocol supposedly completed by the stranger, which, in reality, was either similar or dissimilar to the subject's own responses on the scales, and/or 4) a statement asking the subject to imagine a typical or representative 29 year old or 69 year old male. Subjects were told that each had either different sets of information on the same stranger or sets of information on different strangers. After the stimulus materials were studied for the same length of time by all subjects in the sessions the Interpersonal Judgment Questionnaire was provided for all of them at the same time.

When all participants in each session had completed the questionnaires and the materials had been collected, a debriefing session was held to describe the background of the study, the research questions addressed, and the relationship of the three segments of the session (Appendix J). Care was taken during each debriefing to ask if any participant had suspected a connection between their own attitudes expressed in segment one (the national sample survey of opinions) and the attitude scales attributed to the target person. A few subjects stated that they had felt some

curiosity about the similarity or the dissimilarity but, on further questioning in each case, no subject had suspected that the bogus protocols had actually been constructed specifically for his or her individual participation. In other words, the cover stories had been convincing enough to protect the manipulation.

Data Analysis

The raw data from the 232 subjects used in the analysis of this study were coded and punched into data processing cards. These data cards were then entered by batch and their contents stored in a permanent disc file in the Honeywell 66/60 computer system at the University of Kansas Academic Computer Center using the center's proprietary program KSL01A. That permanent file was then readily accessible through either batch or time sharing to conduct all subsequent analysis using the full system.

The primary analysis planned and carried out for the study was the appropriate two-way and three-way analysis of variance for each of the dependent variables. A multivariate analysis of variance was performed on the primary dependent measures jointly for each design. The program used was Multivariate version 5.2 (October, 1974) as distributed by International Educational Services of Chicago, Illinois and modified appropriately for use on the Honeywell system. Each of the primary and supplementary measures were analyzed by analysis of variance using program BMDP2V version 2.0A

(February 13, 1976) as distributed by the University of California at Los Angeles and modified appropriately.

A preliminary one-way analysis of variance was run on all dependent variables to test for differences due to the sex of subjects in all cells and across all designs. The analysis was performed using program BMDP9D version 2.3A (January 28, 1977) as distributed by the University of California and modified appropriately. The same program was used to produce all marginal means for main effects and interactions in each design.

CHAPTER III

RESULTS

Preview

This chapter reports the results of the analyses conducted in this study. Results of a check on the effectiveness of the manipulation of the independent variables will be presented first, followed by results on the check of a controlled variable. The next four sections present the significant results, the implications of those results for the hypotheses, and the supporting tabular data for the four experiments. The final section will briefly summarize the results across designs. The summary tables for all analyses of variance are presented in Appendix K. Preliminary tests for the effects due to sex of subject produced so few differences the analyses of variance reported here were performed collapsing data across that variable.

Success of Manipulations

In an effort to see if the intended manipulations of target person attributes were perceived by the subjects, checks were built into the questionnaire for those three independent variables.

Age. Although all subjects were given a specific statement of the target person's age in every condition of the study, when asked to recall the age they had read in the

stimulus material some variation of perceived age was reported. The younger man's age was reported ranging from 19 years at the youngest to 35 years at the oldest. There were 17 subjects reporting the younger target's age as less than 29, 93 subjects reported the age stated in the stimulus material, and 6 subjects reported the target's age as more than 29. The older man's age was reported as ranging from 49 years old to 79 years old. There were 16 subjects reporting the older target's age as less than 69, 94 subjects reported the age stated in the stimulus material, and 3 subjects reported the target's age as more than 69.

Of these 41 misperceptions of the target person's age, 20 of the reports were made by subjects in the eight conditions of Experiment 1. The misperceived ages in that experiment ranged from 20 to 35 (mean = 28.91) for the younger man and from 49 to 79 (mean = 67.86) for the older man. This range represented virtually the entire range of misperception and 50% of the reports across all four designs. Separate analyses of variance for each of the young and old conditions of Experiment 1 were conducted to test that variation more closely. There were no significant differences in the cell means for perceived age of the target person in that experiment.

Activity level. Subjects in all experiments were asked to rate the target person on two dimensions, activity and passiveness; these were embedded as two separate items among the scales of the questionnaire. This personality variable

was manipulated with two conditions, active and non-active, in Experiments 1 and 2. In both of these experiments subjects rated the active target person significantly higher on the activity dimension than the non-active target (Experiment 1: $F = 273.12$, $df = 1,85$; $p \leq .001$. Experiment 2: $F = 97.61$, $df = 1,43$; $p \leq .001$). Marginal means appear in Table 3.1.

Likewise, in both experiments, subjects perceived the active target person as significantly less passive than the non-active target (Experiment 1: $F = 62.83$, $df = 1,84$; $p \leq .001$. Experiment 2: $F = 13.14$, $df = 1,43$; $p \leq .001$). The marginal means are presented in Table 3.2.

In Experiment 1, but not in Experiment 2, the activity dimension also showed a significant main effect for age ($F = 5.43$, $df = 1, 85$; $p = .05$), and a significant main effect for belief ($F = 4.18$, $df = 1,85$; $p \leq .05$). The marginal means for these main effects are presented in Table 3.3.

Belief similarity. Subjects in all experiments were asked to estimate the similarity between their own attitudes and those of the target person. The belief variable was manipulated as an independent variable with two conditions, similar and dissimilar, in Experiments 2 and 3. In both experiments subjects rated the similar target significantly higher on attitude similarity than the dissimilar target (Experiment 1: $F = 42.15$, $df = 1,85$; $p \leq .001$. Experiment 2: $F = 23.63$, $df = 1,43$; $p \leq .001$). The marginal means for these main effects are presented in Table 3.4.

TABLE 3.1

Marginal Means--Main Effects for Activity
Experiments 1 and 2

Manipulation Check: Activity

	Experiment 1*	Experiment 2*
Active	7.90	7.61
Non-Active	2.20	2.33

*p = .001

TABLE 3.2

Marginal Means--Main Effects for Activity
Experiments 1 and 2

Manipulation Check: Passiveness

	Experiment 1*	Experiment 2*
Active	3.72	4.70
Non-Active	7.70	6.96

*p = .001

TABLE 3.3

Marginal Means--Main Effects for Age and Belief
Experiment 1

Manipulation Check: Activity

Age*		Beliefs*	
Young	Old	Similar	Dissimilar
4.76	5.51	5.52	4.73

*p = .05

TABLE 3.4

Marginal Means--Main Effects for Belief
Experiments 1 and 3

Manipulation Check: Attitude Similarity

	Experiment 1*	Experiment 3*
Similar	6.37	6.71
Dissimilar	3.27	3.09

*p = .001

In Experiment 1 there was also a main effect for activity level on the attitude similarity dimension ($F = 5.08$, $df = 1,85$; $p \leq .05$). The active target person was rated higher than the non-active target. Marginal means are presented in Table 3.5.

Physical Attractiveness

The physical attractiveness of the target person was supposedly held constant across ages by the use of photographs which had been rated at essentially the same level of attractiveness in a pretest of materials. As a check of that variable all subjects were asked to rate the physical attractiveness of the target person on a scale embedded in the questionnaire. In Experiment 1 subjects rated the older target significantly more attractive than the younger target ($F = 17.87$, $df = 1,85$; $p \leq .01$). Marginal means for this main effect due to age are shown in Table 3.6.

In Experiments 2 and 3 there were no significant effects on this measure. However, in Experiment 4 there was a significant interaction between age and the mode of presenting the target person ($F = 5.30$, $df = 1,42$; $p \leq .05$). Further analysis of this interaction was carried out using t-tests to compare cell means. Subjects expected a typical young man to be much more attractive than the younger target person who was personalized by the photograph ($t = 2.42$, $df = 21$; $p \leq .05$). Although the difference reversed for older targets it was not significant. There were no significant differences

TABLE 3.5

Marginal Means--Main Effects for Activity
Experiment 1

Manipulation Check: Attitude Similarity

Active	5.39
Non-Active	4.31

TABLE 3.6

Marginal Means--Main Effect for Age
Experiment 1

Control Check: Physical Attractiveness

Young	4.48
Old	5.91

p = .01

in the ratings between the young and old targets in this interaction effect. Cell means are presented in Table 3.7.

Results for Experiment 1

In this experiment three factors were manipulated: age, level of activity and belief similarity.

Primary measures. Every subject gave ratings on his or her willingness to be involved with the target person in ten different social settings. The mean of the raw scores of those ten scale items became the social distance measure for each subject. Moreover, each subject rated their personal attraction to the target person on two separate scales. The mean of the raw scores from the two scales became the personal attraction measure for each subject.

In Experiment 1 the multivariate analysis of variance on these two measures showed significant main effects for all three factors: age ($F = 3.95$, $df = 2,84$; $p \leq .05$); personality ($F = 6.67$, $df = 2,84$; $p \leq .01$); and, beliefs ($F = 3.68$, $df = 2,84$; $p \leq .05$).

The univariate analysis of variance for social distance showed that subjects expressed a greater willingness (i.e., a higher social distance score) to be involved with the older target person than with the younger target, although the difference was not significant. However, subjects expressed a significantly greater willingness to be involved with an active target person than with a non-active target ($F = 4.61$, $df = 1,85$; $p \leq .05$). They were also more willing to be

TABLE 3.7

Cell Means--Interaction Effects of Age x Mode
Experiment 4

Control Check: Physical Attractiveness

	Young	Old
Personalized	4.83 _a	5.73 _{Aa}
Typical	6.45 _a	5.17 _{Aa}

A--Cell means in the same column which do not differ significantly have the same upper case letter subscript.

a--Cell means in the same row which do not differ significantly have the same lower case letter subscript.

involved with a target person whose beliefs were similar to their own than with the dissimilar target ($F = 4.00$, $df = 1,85$; $p \leq .05$). Marginal means for these significant main effects on the social distance measure are presented in Table 3.8.

The univariate analysis of the personal attraction measure disclosed that subjects reported a significantly lower personal attraction to the younger target person than to the older target ($F = 6.18$, $df = 1,85$; $p \leq .05$). Consistent with the social distance scores they also reported greater personal attraction to the active target as opposed to the non-active target person ($F = 13.18$, $df = 1,85$; $p \leq .001$), and preferred the similar target person to the dissimilar target ($F = 7.75$, $df = 1,85$; $p \leq .01$). Marginal means for these main effects are presented in Table 3.9.

Within this experiment the mean square for any factor represents the amount of the total variance in the design which may be attributed to that factor. The proportion of the mean square for each factor to the total variance can provide the basis for a rank order of the relative strength of each factor in the design in accounting for the total variance. In Experiment 1, on both the social distance dimension and the personal attraction dimension, the level of activity accounted for the greatest proportion of the variance, beliefs were the second most powerful factor and age of the target person was the least potent of the three factors. These proportions of total variance are presented

TABLE 3.8

Marginal Means--
Main Effects for Activity and Belief
Experiment 1

Primary Measure: Social Distance*

Activity**		Beliefs**	
Active	Non-Active	Similar	Dissimilar
6.05	5.37	6.03	5.40

* Higher score indicates greater willingness to participate with target.

**p = .05

TABLE 3.9

Marginal Means--
Main Effects for Age, Activity and Belief
Experiment 1

Primary Measure: Personal Attraction

Age (p = .05)		Activity (p = .001)		Beliefs (p = .01)	
Young	Old	Active	Non-Active	Similar	Dissimilar
5.35	6.25	6.44	5.13	6.30	5.28

in Table 3.10.

Implications for hypotheses. Hypothesis 1 predicted that the older target would be evaluated more positively than the younger target in four conditions: 1) when both displayed the high level of activity; 2) when both displayed beliefs similar to those of the subject; 3) when both displayed the low level of activity; and, 4) when both displayed beliefs dissimilar to those of the subject. All of the significant main effects on both primary measures in Experiment 1 support this hypothesis. The only expected effect which was not obtained was the main effect for age on the social distance measure. In that case the difference was in the expected direction but it did not reach significance.

Hypothesis 2 predicted that targets with beliefs similar to those of the subject would be evaluated more positively than targets with dissimilar beliefs and that active targets would be evaluated more positively than non-active targets. Experiment 1 produced all of these expected effects for belief similarity and level of activity and all differences were significant.

Hypothesis 3 predicted that the level of activity would be the most potent discriminator for the subjects in this study and that age would be the least potent, whereas beliefs would fall between the other two. Results on both primary measures for Experiment 1 produced a rank order of proportion of variances for the three factors as predicted.

TABLE 3.10
Proportions of Total Variance
Experiment 1

<u>Primary Measures</u>			
	Age	Activity	Belief
Social Distance	.04	.32	.28
Personal Attraction	.54	1.2	.68

Supplementary measures. The questionnaire included five scales which asked the subjects to rate the target person on a variety of personal attributes to provide supplementary information about the subjects' impressions. The five dimensions were: morality, personality attractiveness, social adjustment, social desirability, and typicalness.

There were no significant main effects on the measures of morality or typicalness. However, there were significant main effects for age on three dimensions: personality attractiveness ($F = 11.78$, $df = 1,85$; $p \leq .001$); social adjustment ($F = 4.91$, $df = 1,85$; $p \leq .05$); and, social desirability ($F = 7.82$, $df = 1,85$; $p \leq .01$). In each case subjects rated the older target person higher on the dimension than the younger target. The marginal means for these effects are presented in Table 3.11.

Likewise there were significant main effects for activity level on the same three dimensions: personality attractiveness ($F = 14.27$, $df = 1,85$; $p \leq .001$); social adjustment ($F = 12.88$, $df = 1,85$; $p \leq .001$); and, social desirability ($F = 17.49$, $df = 1,85$; $p \leq .001$). Again, consistent in their responses, subjects rated the active target person higher on each dimension than the non-active target. The marginal means for these main effects for personality are presented in Table 3.12.

There was also a significant main effect for similarity of beliefs on the dimension of personality attractiveness ($F = 9.47$, $df = 1,85$; $p \leq .01$). Subjects rated the similar

TABLE 3.11

Marginal Means--Main Effects for Age
Experiment 1

Supplementary Measures: Personality Attractiveness, Social
Adjustment, and Social Desirability

	Young	Old	p
Personality Attractiveness	4.93	6.32	.001
Social Adjustment	6.24	7.02	.05
Social Desirability	5.41	6.36	.01

TABLE 3.12

Marginal Means--Main Effects for Activity
Experiment 1

Supplementary Measures: Personality Attractiveness, Social
Adjustment, and Social Desirability

	Active	Non-Active	p
Personality Attractiveness	6.35	4.87	.001
Social Adjustment	7.25	5.98	.001
Social Desirability	6.58	5.16	.001

target person higher than the target with dissimilar beliefs. The marginal means for this main effect due to beliefs are presented in Table 3.13.

Finally, there was a significant interaction in Experiment 1 between age and activity on the typicalness dimension ($F = 5.33$, $df = 1,85$; $p \leq .05$). Further analysis through the use of t-tests to compare cell means showed that subjects saw a non-active younger man as less typical than a non-active older man ($t = 2.23$, $df = 43$; $p \leq .05$), while the non-active older man was rated as more typical than the active older man ($t = 2.23$, $df = 45$; $p \leq .05$). This interaction is displayed in the cell means presented in Table 3.14.

Table 3.15 presents the proportions of total variance for the supplementary measures in this experiment. On the morality dimension the belief similarity was the most powerful of the three factors with activity level next and age the least potent. The next three dimensions, personality attractiveness, social adjustment and social desirability, all produced the same rank order for proportion of variance. Level of activity was the most potent discriminator for the subjects regarding these dimensions, while age was next and belief similarity was least important. Finally, on the typicalness dimension the rank order was the exact opposite of that obtained for morality. Subjects relied mostly on the age of the target to make their judgments on this measure, next on level of activity and least of all on beliefs.

TABLE 3.13

Marginal Means--Main Effects for Beliefs
Experiment 1

Supplementary Measure: Personality Attractiveness

	Similar	Dissimilar	p
Personality Attractiveness	6.25	4.98	.01

TABLE 3.14

Cell Means--
Interaction Effects of Age x Activity
Experiment 1

Supplementary Measure: Typicalness

	Young	Old
Active	5.79 _{Aa}	5.12 _a
Non-Active	5.09 _A	6.52 _a

A--Cell means in the same column which do not differ significantly have the same upper case letter subscript.

a--Cell means in the same row which do not differ significantly have the same lower case letter subscript.

TABLE 3.15
 Proportions of Total Variance
 Experiment 1

Supplementary Measures			
	Age	Activity	Beliefs
Morality	.03	.04	.07
Personality Attractiveness	1.28	1.55	1.03
Social Adjustment	.33	.87	.00
Social Desirability	.62	1.39	.01
Typicalness	.11	.07	.02

Implications for hypotheses. The results for Experiment 1 on the supplementary measures provide strong support for Hypotheses 1 and 2 of the study. All of the significant effects for personality attractiveness, social adjustment, and social desirability were in the expected direction. Moreover, the expected effects that were not significant on these measures were obtained in the expected direction. Although the typicalness measure was not specifically relevant to these hypotheses, the significant interaction obtained on this measure in Experiment 1 supports the other results of the study. This will be discussed further in the next chapter.

Hypothesis 3 received only moderate support from the results of the supplementary measures in Experiment 1. There are three possible comparisons of proportions of variance for each measure, hence a total of fifteen comparisons must be considered. Eight of the fifteen comparisons support the predictions of Hypothesis 3. Overall it appears that level of activity is the more important discriminator, whereas age is the next most important and beliefs is the least important.

Results for Experiment 2

This experiment manipulated only two independent variables: age and level of activity.

Primary measures. In this design the multivariate analysis of variance for the two primary measures produced only

a significant main effect for level of activity ($F = 3.55$, $df = 2,42$; $p \leq .05$). When the two measures were analyzed individually results showed a significant main effect for activity on each of the primary measures. The main effects due to age were not significant in the multivariate analysis.

The univariate analysis on the social distance measure showed a significant main effect for activity ($F = 5.11$, $df = 1,43$; $p \leq .05$). Subjects indicated that they were more willing to participate with an active target person than with a non-active target. On the personal attraction dimension there was also a main effect for activity with subjects reporting less attraction to the non-active target ($F = 6.96$, $df = 1,43$; $p \leq .01$). The marginal means for the main effects on both of these measures are presented in Table 3.16.

Although the multivariate analysis did not produce a significant main effect for age the importance of that result must be weighed carefully. Since the two primary measures are not conceptualized as equivalent and completely parallel dimensions, the univariate analysis of each is relevant and important in its own right. The univariate analysis on the personal attraction measure obtained a significant main effect for age ($F = 4.11$, $df = 1,43$; $p \leq .05$). Subjects were more attracted to the older target person than to the young target. The marginal means for this effect are presented in Table 3.17. The univariate main effect for age did not reach significance on the social distance

TABLE 3.16

Marginal Means--Main Effects for Activity
Experiment 2

Primary Measures: Social Distance* and Personal Attraction

	Active	Non-Active	p
Social Distance	6.30	5.27	.05
Personal Attraction	6.74	5.50	.01

* Higher score indicates greater willingness to participate with target.

TABLE 3.17

Marginal Means--Main Effects for Age
Experiment 2

Primary Measure: Personal Attraction

	Young	Old
	5.62	6.61

p = .05

measure, but the difference was in the expected direction.

Finally, the proportion of total variance for the two factors, age and activity level, are presented in Table 3.18. The main effects for activity account for a greater proportion of total variance than those for age on both of the primary measures.

Implications for hypotheses. In Experiment 2 Hypothesis 1 predicts main effects for age which would indicate that subjects rate older targets more positively than younger targets. The results obtained show that all significant differences are in the expected direction to support this hypothesis. Moreover, the non-significant difference due to the age of the target on the social distance measure was in the expected direction.

Hypothesis 2 predicts a main effect for level of activity that indicates more positive ratings for active targets than for non-active targets. The results of both primary measures fully support this expectation.

Hypothesis 3 predicts that age would be less potent as a discriminator for the subjects in this experiment than level of activity. The rank order of proportion of variances provides strong support for the prediction. Activity level was the more powerful factor on both primary measures.

Supplementary measures. In this Experiment, since there was no manipulation of the beliefs of the target person the manipulation check for belief similarity served as an

TABLE 3.18
Proportions of Total Variance
Experiment 2

<u>Primary Measures</u>		
	Age	Activity
Social Distance	.36	.68
Personal Attraction	.51	.86

additional supplementary measure providing further data on the impressions formed by the subjects. There was a significant main effect for activity level on the attitude similarity dimension ($F = 23.63$, $df = 1,43$; $p \leq .001$). Subjects rated the active target as more similar to themselves than the non-active target. The marginal means for this main effect are shown in Table 3.19.

There were no significant main effects on either the morality dimension or the typicalness dimension. There were, however, significant main effects for age on two dimensions; personality attractiveness ($F = 5.02$, $df = 1,43$; $p \leq .05$); and, social desirability ($F = 6.35$, $df = 1,43$; $p \leq .05$). Subjects rated the older target person higher on both dimensions than the younger target. Marginal means for these main effects are presented in Table 3.20.

There was also a main effect for activity level on three dimensions in this experiment: personality attractiveness ($F = 13.49$, $df = 1,43$; $p \leq .001$); social adjustment ($F = 8.01$, $df = 1,43$; $p \leq .01$); and, social desirability ($F = 10.30$, $df = 1,43$; $p \leq .01$). In all three cases subjects rated the active target higher on the attribute than the non-active target person. The marginal means for these main effects are presented in Table 3.21.

In this experiment there was again the same significant interaction found in Experiment 1 between age and personality on the typicalness measure ($F = 19.72$, $df = 1,43$; $p \leq .001$).

TABLE 3.19

Marginal Means--Main Effects for Activity
Experiment 2

Supplementary Measure: Attitude Similarity

	Active	Non-Active
	6.17	3.21

p = .001

TABLE 3.20

Marginal Means--Main Effects for Age
Experiment 2

Supplementary Measure: Personality Attractiveness and
Social Desirability

	Young	Old	p
Personality Attractiveness	5.21	6.48	.05
Social Desirability	5.08	6.52	.05

TABLE 3.21

Marginal Means--Main Effects for Activity
Experiment 2

Supplementary Measure: Personality Attractiveness, Social
Adjustment, and Social Desirability

	Active	Non-Active	p
Personality Attractiveness	6.83	4.88	.001
Social Adjustment	7.48	5.92	.01
Social Desirability	6.70	4.92	.01

Using the t-tests between the cell means disclosed that subjects saw the young active target as more typical than both old active target person ($t = 3.21$, $df = 21$; $p \leq .01$) and the young non-active target ($t = 3.58$, $df = 22$; $p \leq .01$). Likewise, the old active target was rated less typical than the old non-active target ($t = 2.72$, $df = 21$; $p \leq .05$), but more typical than the young non-active target ($t = 3.08$, $df = 22$; $p \leq .01$). The cell means for this interaction of age and personality are presented in Table 3.22.

The proportion of variance accounted for by each of the independent variables, age and activity, on each of the supplementary measures, are presented in Table 3.23. On the morality dimension the results indicate that the subject depended more on the age factor as a discriminator than they did on the level of activity. However, on all of the remaining supplementary measures the level of activity was the more potent discriminator in this experiment.

Implications for hypotheses. The results obtained on the supplementary measures of Experiment 2 provide universally strong support for Hypotheses 1 and 2. The pattern of results virtually replicates the pattern of the relevant results in Experiment 1. All significant differences on the supplementary measures support both hypotheses and the non-significant main effects for age on the social adjustment and attitude similarity dimensions showed differences in the expected direction. Again, although the typicalness

TABLE 3.22

Cell Means--
Interaction Effects of Age x Activity
Experiment 2

Supplementary Measure: Typicalness

	Young	Old
Active	7.18	4.83
Non-Active	4.61	6.82

A--Cell means in the same column which do not differ significantly have the same upper case letter subscript.

a--Cell means in the same row which do not differ significantly have the same lower case letter subscript.

TABLE 3.23

Proportions of Total Variance
Experiment 2

Supplementary Measures

	Age	Activity
Morality	.06	.00
Personality Attractiveness	.83	2.24
Social Adjustment	.39	1.16
Social Desirability	1.16	1.88
Typicalness	.00	.05
Attitude Similarity	.49	7.59

measure is not particularly relevant to these hypotheses all of the differences within the significant interaction between age and activity on that measure support the other results of this study.

Hypothesis 3 received strong support from the results of this experiment. Six of the seven comparisons are in the expected direction, a very strong indication that the level of activity served as a more potent discriminator than age for the subjects of this study.

Results for Experiment 3

This experiment manipulated only two independent variables: age and similarity of beliefs.

Primary measures. The multivariate analysis of the two primary measures in this design showed a significant main effect for belief similarity ($F = 9.13$, $df = 2,41$; $p \leq .001$). The univariate analysis of variance disclosed that on the social distance measure subjects were more willing to have greater involvement with the similar target person than with the dissimilar target ($F = 9.27$, $df = 1,42$; $p \leq .01$). The marginal means for this univariate main effect are presented in Table 3.24.

Consistent with the results reported above the univariate analysis on the personal attraction measure disclosed a significant main effect for belief similarity ($F = 18.67$, $df = 1,42$; $p \leq .001$). Marginal means for this main effect due to beliefs are presented in Table 3.25.

TABLE 3.24

Marginal Means--Main Effects for Beliefs
Experiment 3

Primary Measure: Social Distance*

Similar	Dissimilar	p
5.98	4.67	.01

* Higher score indicates greater willingness to participate with target person.

TABLE 3.25

Marginal Means--Main Effects for Beliefs
Experiment 3

Primary Measure: Personal Attraction

Similar	Dissimilar
6.73	4.54

*p = .001

Although the effects for age were not significant in the multivariate analysis the results of the univariate analysis are reported here. They are important to an understanding of the effects on each of the two primary measures. On the personal attraction dimension subjects evaluated the older target more positively than the young target ($F = 5.17$, $df = 1,42$; $p \leq .05$). The marginal means for this effect are shown in Table 3.26. The univariate effects for age were not significant on the social distance measure.

Finally, Table 3.27 presents the proportions of variance for each of the independent variables on both primary measures. On both dimensions the effects for belief similarity were stronger than those for the age of the target person. In this experiment subjects used belief similarity as a more potent discriminator.

Implications for hypotheses. Overall these results on the primary measures provide very strong support for the hypotheses. Hypothesis 1 predicted that there should be main effects for age and that subjects would evaluate older target persons more positively than young targets. The significant results of this experiment support this expectation completely. The non-significant difference for the main effect of age on the social distance measure was in the expected direction.

Hypothesis 2 predicted that subjects would always evaluate a similar target person more positively than a

TABLE 3.26

Marginal Means--Main Effects for Age
Experiment 3

Primary Measure: Personal Attraction

	Young	Old
	5.11	6.26

p = .05

TABLE 3.27

Proportions of Total Variance
Experiment 3

Primary Measures

	Age	Beliefs
Social Distance	.15	1.39
Personal Attraction	.92	3.31

dissimilar target. The support for this hypothesis was complete from both the multivariate and the univariate analysis of variance. All differences, on both of the primary measures, were significant and in the expected direction.

Hypothesis 3 predicted that in Experiment 3 belief similarity would serve the subjects as a more potent discriminator than age as they made their evaluations. Results showed that the rank order of factor proportion of total variance for each of the primary measures has supported this prediction.

Supplementary measures. In this experiment the manipulated variables were age and belief similarity of the target person. Consequently, the scores for two dimensions, activity and passiveness, do not serve as a check of the manipulation of the level of activity. Rather, they provide, along with the original five supplementary measures, additional insights into the impressions formed by the subjects. There was a main effect for beliefs on the activity dimension ($F = 4.49$, $df = 1,42$; $p \leq .05$). Subjects rated the similar target person higher on activity than the target with dissimilar beliefs. The marginal means for these main effects are presented in Table 3.28. There were no significant effects on the passiveness measure.

There were no significant main effects on measures of either morality or typicalness in this experiment. There was,

TABLE 3.28

Marginal Means--Main Effects for Beliefs
Experiment 3

Supplementary Measure: Activity

Similar

Dissimilar

5.37

4.14

p = .05

however, a significant main effect of age on two dimensions: social adjustment ($F = 9.62$, $df = 1,42$; $p \leq .01$); and, social desirability ($F = 16.43$, $df = 1,42$; $p \leq .001$). On these two dimensions subjects rated the older target person as having more of the attributes. The marginal means for these main effects due to age are shown in Table 3.29.

There was also a main effect for belief similarity on two dimensions: personality attractiveness ($F = 20.61$, $df = 1,42$; $p \leq .001$); and, social adjustment ($F = 9.62$, $df = 1,42$; $p = .001$). On these dimensions subjects again rated similar target persons higher than targets with dissimilar beliefs. The marginal means for these main effects due to beliefs are presented in Table 3.30.

There was one significant interaction in the experiment which occurred between age and beliefs on the social desirability dimension ($F = 4.06$, $df = 1,42$; $p \leq .05$). Comparison of cell means by t-tests disclosed that subjects perceived the young target with similar beliefs as more desirable than the young target with dissimilar beliefs ($t = 2.50$, $df = 21$; $p \leq .05$). At the same time they seemed to expect an older person to have dissimilar beliefs because they rated the older dissimilar target more desirable than the younger dissimilar target ($t = 4.20$, $df = 20$; $p \leq .001$). The cell means for these interaction effects of age and belief are presented in Table 3.31.

The proportions of total variance attributable to each

TABLE 3.29

Marginal Means--Main Effects for Age
Experiment 3

Supplementary Measure: Social Adjustment and Social
Desirability

	Young	Old	p
Social Adjustment	5.30	6.61	.01
Social Desirability	4.74	6.52	.001

TABLE 3.30

Marginal Means--Main Effects for Beliefs
Experiment 3

Supplementary Measures: Personality Attractiveness and
Social Adjustment

	Similar	Dissimilar	p
Personality Attractiveness	6.55	3.95	.001
Social Adjustment	7.17	4.64	.001

TABLE 3.31

Cell Means--
Interaction Effects of Age x Beliefs
Experiment 3

Supplementary Measure: Social Desirability

	Young	Old
Similar	5.50 _a	6.42 _{Aa}
Dissimilar	3.91	6.64 _A

A--Cell means in the same column which do not differ significantly have the same upper case letter subscript.

a--Cell means in the same row which do not differ significantly have the same lower case letter subscript.

of the independent variables, age and belief similarity, on all of the supplementary measures in Experiment 3 are presented in Table 3.32. On four of these measures, morality, social desirability, typicalness and passiveness, results showed that age was more important as a discriminator in this experiment. On the remaining dimensions belief similarity was the more potent discriminator.

Implications for hypotheses. The results obtained on the supplementary measures in Experiment 3 have provided strong support for Hypotheses 1 and 2. Once again, the pattern of results is very near that reported for the results on these measures in Experiment 1. All of the significant main effects are in the predicted direction. Of the non-significant main effects all were in the predicted direction except the main effect for belief similarity on the typicalness dimension where the marginal means were equal. Within the significant interaction effect on the social desirability measure one significant comparison of cell means did not support these hypotheses.

Hypotheses 3 received only mild support in Experiment 3. Only three of the seven comparisons of proportion of total variance supported the predicted results. However, in those three cases where belief similarity was the more potent discriminator they were far more powerful than the age factor.

TABLE 3.32

Proportions of Total Variance
Experiment 3

Supplementary Measures		
	Age	Belief
Morality	.34	.02
Personality Attractiveness	.1	4.9
Social Adjustment	1.13	4.12
Social Desirability	2.38	.34
Typicalness	.26	.00
Activity	.12	1.44
Passiveness	.21	.02

Results for Experiment 4

In this experiment two independent variables were manipulated: age and the mode of presenting the target person.

Primary measures. The multivariate analysis of variance on the two primary measures showed no significant results. Moreover, the univariate analysis of each of these measures also produced no significant results.

Supplementary measures. Since neither level of activity or belief similarity were manipulated in this experiment the three measures, activity, passiveness and attitude similarity, were considered as supplementary measures. There were no significant effects on the passiveness and attitude similarity dimensions in this design.

There was a significant main effect due to the age of the target person on the activity measure ($F = 4.71$, $df = 1,42$; $p \leq .05$). This result showed that subjects rated the younger target person higher on activity than the older target person. There was also a main effect for the mode of presentation with results indicating higher activity expectations for the typical target than for the personalized target ($F = 6.99$, $df = 1,42$; $p \leq .01$). Moreover, there was a significant interaction between age and mode of presentation on the activity dimension ($F = 4.59$, $df = 1,42$; $p \leq .05$). It provides some understanding of the exceptional main effect for age. Using t-tests to compare cell means

disclosed two significant differences. Subjects expected a typical young man to be more active than a typical older man ($t = 3.05$, $df = 21$; $p \leq .01$). At the same time the personalized younger man was viewed as significantly less active than the expectation for the typical young male ($t = 3.38$, $df = 21$; $p \leq .01$). However, the personalized young target and the personalized older target were rated with virtually equal cell means. Consequently, the main effect due to age is attributable to the higher expectation of activity for the typical young male. The cell and marginal means main effects and interaction effects are presented in Table 3.33.

In this design there were also significant main effects for age on three additional measures: morality ($F = 18.80$, $df = 1,42$; $p \leq .001$); social adjustment ($F = 6.46$, $df = 1,42$; $p \leq .05$); and social desirability ($F = 6.19$, $df = 1,42$; $p \leq .05$). Subjects rated the older target higher than the younger target on all three of these dimensions. The marginal means for these main effects are presented in Table 3.34.

There was a significant interaction on the personality attractiveness measure ($F = 6.94$, $df = 1,42$; $p \leq .05$). Subjects rated the younger personalized target person as less attractive than either the older personalized target ($t = 3.27$, $df = 21$; $p \leq .01$), or the typical young male ($t = 3.26$, $df = 21$; $p \leq .01$). The cell means for these interaction effects are presented in Table 3.35.

TABLE 3.33

Cell and Marginal Means--
Effects for Age and Mode
Experiment 4

Supplementary Measure: Activity

	Young	Old	Marginal (p = .05)
Personalized	4.83 _a	4.82 _{Aa}	4.83
Typical	7.36	5.08 _A	6.17
Marginal (p = .01)	6.04	4.96	

A--Cell means in the same column which do not differ significantly have the same upper case letter subscript.

a--Cell means in the same row which do not differ significantly have the same lower case letter subscript.

TABLE 3.34

Marginal Means--Main Effects for Age
Experiment 4

Supplementary Measure: Morality, Social Adjustment and
Social Desirability

	Young	Old	p
Morality	5.61	7.35	.001
Social Adjustment	5.48	7.00	.05
Social Desirability	5.26	6.56	.05

TABLE 3.35

Cell Means--
Interaction Effects of Age x Mode
Experiment 4

Supplementary Measure: Personality Attractiveness

	Young	Old
Personalized	5.33	7.27 _A
Typical	7.27 _a	7.00 _{Aa}

A--Cell means in the same column which do not differ significantly have the same upper case letter subscript.

a--Cell means in the same row which do not differ significantly have the same lower case letter subscript.

Finally, there was a significant interaction effect on the social desirability measure ($F = 10.19$, $df = 1,42$; $p \leq .01$). Here again subjects rated the personalized young target as less desirable than the personalized older target ($t = 4.01$, $df = 21$; $p \leq .001$), and also less desirable than their expectations for the typical young male ($t = 2.89$, $df = 21$; $p \leq .01$). Cell means for these interaction effects are presented in Table 3.36.

The typicalness measure was considered inappropriate for this experiment since half of the subjects were being asked to judge a target person who was presented as 'typical.' Although the question appeared on the questionnaire as it did in all of the designs, it was purposely placed virtually at the end of the dependent measures to insure that any confusion which might arise from the question could not affect responses on other measures.

Implications for hypotheses. Experiment 4 was not designed to address the specific hypotheses. The relevance of these results will be related to the study as a whole in the next chapter.

Summary

In general, the study has provided strong support for all hypotheses. The results of the analysis on the most important measures, social distance and personal attraction, provided virtually complete support for Hypotheses 1 and 2. All significant differences were in the predicted direction.

TABLE 3.36

Cell Means--
Interaction Effects of Age x Mode
Experiment 4

Supplementary Measure: Social Desirability

	Young	Old
Personalized	4.25	7.18 _A
Typical	6.36 _a	6.00 _{Aa}

A--Cell means in the same column which do not differ significantly have the same upper case letter subscript.

a--Cell means in the same row which do not differ significantly have the same lower case letter subscript.

The few predicted main effects which were not significant were obtained in the predicted direction. Moreover, there were no significant interaction effects providing contrary evidence.

The results of the supplementary measures clearly provided the same strong support for Hypotheses 1 and 2, if however, not quite so complete. All significant effects were in the predicted direction with the exception of one comparison in a significant interaction. Furthermore, virtually all predicted main effects which were not significant were in the expected direction.

Results also provide total support for Hypothesis 3 on the primary measures. The rank order of potency of the three independent variables occurred as predicted in every comparison. However, the support for Hypothesis 3 is somewhat less complete on the supplementary measures. It seems generally clear that the factor, level of activity, was a more potent discriminator for subjects than either belief similarity or age. However, results did not provide such conclusive evidence that belief similarity is in turn more potent than age.

CHAPTER IV

DISCUSSION

Review

In brief, there were four experiments carried out for this study. Experiment 1 manipulated three factors. The age of the target person was presented in a personalized mode at two levels by a photograph of either a younger or older male which was captioned by name and age. The same two photographs were used across all four experiments. Behavioral aspects of personality were presented as two levels of activity through profiles which described a physically and socially active or non-active individual. Finally, the design manipulated the belief similarity of the target person through protocols which were constructed to be either similar or dissimilar to the beliefs of the subject reading the protocol.

Experiment 2 manipulated only two factors, the age and activity level of the target person. The manipulations were accomplished using the same procedures employed in the first experiment. Belief similarity of the target person was excluded in this design to more clearly investigate the influence of the age and personality variables with no possibility of influence from the belief factor.

Experiment 3 also manipulated two factors. However, in this design, the independent variables were age and belief similarity, while activity level was excluded. The manipulations were accomplished using the same procedures as in Experiment 1. This design was a replication of the general attitude-attraction paradigm Byrne and his colleagues employed; it investigates the relative influence of age and beliefs without the possibility of influence from the personality factor.

Experiment 4 manipulated two factors, age and the mode of presenting the target person. The latter was either personalized, in which the target was presented by the photographs or, typical, in which it was simply stated that the target person was an unnamed male, either 29 or 69 years old, described only as 'typical' for his age.

Age was the only independent variable which was manipulated in all four designs. The personalized mode was used in all four designs, but the mode of presentation was manipulated as an independent variable only in Experiment 4. The same dependent variables were used in all four designs.

There was no evidence from subjects' comments in the debriefing that followed each experimental session that the manipulation had been discovered before the questionnaires were completed. The analysis of the data for the manipulation checks provided strong support to indicate that the manipulations were successful. On the controlled variable,

physical attractiveness, subjects rated the young target person significantly less attractive than the older target in Experiment 1. This effect was not obtained in Experiments 2 and 3 yet the pattern of results on both primary and supplementary measures was consistent across all three designs. It was concluded that this apparent partial failure to hold physical attractiveness constant did not confound the effects of the independent variables.

The support for the hypotheses of the study is consistent across the appropriate experiments. Each hypothesis will be discussed individually and the supporting evidence will be presented in summary tables of significant results across the designs of the study. The summary tables appear at the end of this chapter.

Some Basic Assumptions

There are conflicting research results reported in the literature regarding the stereotype of the elderly and its differential effects on the impressions and judgments formed about older people. This study has made some assumptions about the stereotypes that the subjects in the study, undergraduate university students, have about other people. It has assumed that the subjects, themselves young people, subscribe to a stereotype of the elderly which carries a negative valence. It depicts older people as socially and physically inactive and as characterized by beliefs and attitudes which would tend to be different from those of

young people. Consequently, it also assumes that the subjects subscribe as well to a stereotype of young people that is generally the opposite on these dimensions, and generally more positive.

Finally, the study has assumed that these opposing stereotypes give rise to opposing expectations in young people and thereby elicit differential impressions and judgments about younger and older people they meet. The results reported in summary Table 4.1 on the activity dimension in Experiment 4 support this assumption about subjects' expectations. There was a significant main effect both for age and for mode of presentation. That is, subjects expected a younger person to be more active than an older person and they expected a typical young person to be even more active than the young person presented in the photograph of this study. Inspection of the cell means in Table 3.33 discloses that, in fact, the entire difference between the ages was due to the expectations for typical men. In the personalized mode the ratings for young and old were equal.

On the attitude similarity measure there were no significant differences in Experiment 4. However, all of the differences between cell and marginal means were in the same direction as those reported for the activity dimension. Subjects tend to expect a younger man to have beliefs and attitudes that are more similar to their own than an older man would have.

The ratings for typicalness in Experiments 1, 2 and 3 lend a great deal of additional support to this view of expectations held by the subjects. The study has assumed that the expectations for younger and older are opposite. That is, young men are expected to be active and similar to the subjects in beliefs, whereas older men are expected to be non-active and dissimilar to the subjects. If that assumption is correct then there should be no significant main effects on the typicalness measure for age, activity level or belief similarity in the first three experiments. The difference between the opposing conditions would be averaged out across the opposing conditions of either one of the other factors. However, there should be a significant interaction effect if the assumption about the subjects' expectations is correct.

In fact, there are no significant main effects on the typicalness measure in any of the first three experiments (Table 4.1). However, there are significant interaction effects between age and activity level on the typicalness measure in Experiments 1 and 2 (Table 4.2). In both interactions the old target person is rated significantly less typical in the active condition than in the non-active condition, and the young non-active target is rated significantly less typical than the old non-active target. Moreover, in Experiment 2 the support is complete. The younger active target is rated significantly more typical than the

younger non-active target and also more typical than the older active target. The two non-significant differences in Experiment 1 are both in the correct direction to support the pattern of results and the hypothesis. In Experiment 3 the interaction between age and belief similarity approached significance ($p = .06$) for the typicalness measure. Moreover, it is noteworthy that the direction of differences for all comparisons within the interaction are correct to support the assumptions of this study.

All of these significant and non-significant interaction effects of the study provide clear evidence that the subjects did have opposing expectations about the activity level of younger and older men. The results also suggest that subjects tend to have these same opposing expectations with respect to the belief similarity of the targets. However, while all of the differences were in the correct direction to support this part of the assumptions none of those effects reached significance. This suggests that either the expectations about belief similarity are not as different for young and old men as those for activity are, or the issue of beliefs may not have become important enough to the subjects that their expectations were a salient factor influencing the evaluations.

Hypothesis 1

- a) An older person who displays socially and physically active behaviors, or expresses beliefs similar to

those of a young judge, will be evaluated more positively than a younger person who displays the same behaviors.

- b) A young person who is socially and physically inactive, or expresses beliefs dissimilar to those of a young judge, will be evaluated less positively than an older person who displays the same behaviors.

The work by Schachter (1951) on deviation and rejection suggests the presumption that if an individual is rewarded for disconfirming a negative expectation then, by implication, he would be punished for disconfirming a positive expectation. The first half of Hypothesis 1 predicts that an older person will be judged more positively than a younger person when both are in the active or similar conditions of the study. The second half of the hypothesis predicts that a younger person will be judged less positively than an older person when both are in the non-active or dissimilar conditions of the study. Stated in more direct terms, in all conditions, whether active or non-active, similar or dissimilar, the older target person should always be rated higher than the younger target. For half of the cases, active and similar, the older person should get the higher ratings because he has disconfirmed a negative stereotype while the younger person has simply performed as expected. For the other half of the cases, non-active and dissimilar, the older target person is again rated higher, but this time it is because his opposite number, the younger target person, has disconfirmed a positive stereotype while

the older person is simply performing as expected.

Hypothesis 1 taken as a whole predicts that the main effects should consistently favor the older target person. It also predicts that there should be no significant interactions between age and either one of the other two factors.

As shown in the summary of significant main effects (Table 4.1) and the summary of significant interactions (Table 4.2) all of the significant effects for age in Experiments 1, 2, and 3 support Hypothesis 1. The expected main effects were in the correct direction, but did not reach significance, on: the social distance and morality measures in Experiments 1, 2 and 3; the social adjustment measure in Experiment 2; and, on the personality attractiveness measure in Experiment 3. It seems especially important to explain this result on the social distance dimension since it was one of the critical dependent variables of the study.

Personal attraction and social distance were not conceptualized as either equivalent or completely parallel dimensions of interpersonal relationships. The attraction measure is viewed as an expression of the personal liking one individual feels for another. That is quite distinct from a generalized willingness to be involved in social situations with another person. The expectations we hold for a lunch partner, or the person sitting next to us at a meeting, or even a neighbor in the same apartment building,

are quite different from those we hold for someone we like as a personal friend and close working partner. We are undoubtedly much more demanding with respect to the latter because we feel much more strongly about personal relationships that go far beyond the casual interactions of common social situations. Hence, the expectations we have toward people we encounter in social situations are more than likely less extreme and less strongly felt, and consequently, probably much less differentiated with respect to age groups.

In other words, it seems likely that the subjects of this study were equally willing to be involved in various social situations with either target, young or old, because there may be a good deal of overlap in the expectations toward individuals from different age groups when the relationship anticipated by the judges is far less demanding. The social distance measure used in this study was a composite of ten scales which have been used in research on race and ethnic relations. It may be that many of these scales are insensitive to the differing expectations we hold toward others in distinctly different age groups. When weakly felt expectations are the basis of such a comprehensive measure many of the effects are undoubtedly averaged out within the resulting composite measure which then lacks the capacity to discriminate. However, when the judgments called for are relevant to the expectations

which are salient to the anticipated relationship then the impact of the expectations will be reflected in the evaluation.

Framed in this way, the results on the morality dimension can also make sense. Either the subjects do not have different expectations about morality for younger and older men, or when asked to rate a target person on morality as a personal quality, but with no anticipated relationship at stake, the judge's expectations are not salient to the judgment being made. In the first case, if the expectations are salient there is sufficient overlap with relation to the two target persons that the measure is unable to discriminate. In the second case the expectations are not salient enough to influence the evaluation. The results for the remaining measures, social adjustment and and personality attractiveness can be understood in the same way, however, it is not readily apparent why the result occurred in only one experiment for each of them unless it was simply an erratic artifact of the designs.

The results of this study agree with those found by Koulack and Cummin (1973) and perhaps provide a basis for understanding the discrepancy between their findings and those of Griffitt, et al., (1972). The Griffitt study found that young people evaluated their peers less positively than an older person when both targets expressed similar beliefs. However, in the dissimilar condition,

subjects reversed their judgments and evaluated their peers more positively than an older person.

The judgments made by young people about their peers and older people can be viewed as judgments which are made within the social norms of ingroup-outgroup relations. It was from that point of view that Koulack and Cummin did their study on acceptance and rejection as a function of ethnicity, belief similarity and belief intensity. They found that concerning attitudes about which the majority group judges felt strongly, they evaluated minority (outgroup) targets more positively than the majority (ingroup) targets when both expressed attitudes similar to the judges. That agrees with the Griffitt finding. However, Koulack and Cummin also found that in the dissimilar condition the same results prevailed; the outgroup target was again evaluated more positively than the ingroup counterpart. This disagrees with the Griffitt findings. Koulack and Cummin replicated their procedures for low intensity beliefs about which the judges did not feel strongly. In that condition their results agreed with the Griffitt results in both conditions of belief similarity and belief dissimilarity.

When the issues involved are important to the judges then the expectations which the judges hold toward a given target person become salient and they will influence evaluations on relevant measures. The report of results for

the Griffitt study did not indicate that the attitude items had been rated for importance. The authors concluded that there was little support for the notion that young people maintain stereotypic expectations toward older people which would influence evaluations. The results of this present study suggest that the items on the Griffitt attitude scale were perhaps not important enough overall to elicit the differential expectations toward the elderly in their first experiment. The attitude scale items used in the study reported here were pretested for importance. Only those items which were rated above the midpoint on a nine point scale for importance were used in this study.

Hypothesis 2

Active targets, or targets with beliefs which are similar to those of the subject will be evaluated more positively than non-active targets or those whose beliefs are dissimilar to those of the subject.

Studies using the attitude-attraction paradigm have consistently demonstrated that belief similarity is a determinant of interpersonal attraction and liking. Hypothesis 2 predicts that level of activity and similarity of attitudes will function in the same way as predictors of attraction and liking.

As shown by the summary of significant main effects in Table 4.1 this hypothesis has received virtually total support for all of the primary and supplementary measures in Experiments 2 and 3, where the hypothesis was tested

on each of the factors independently. The patterns were virtually replicated in Experiment 1 where the hypothesis was tested when the two factors were both manipulated at the same time. The results for main effects on the supplementary measures is strong, though not complete, in all three experiments. There are no significant main effects on any measures which produced contrary evidence. There was only one significant interaction (Table 4.2) and all significant comparisons within that effect which relate to this hypothesis were in the correct direction.

Two additional main effects provide another form of evidence that activity level and belief similarity functioned alike for the subjects of this study. In Experiment 2 belief similarity was not manipulated. Hence the attitude similarity measure was not a manipulation check but simply another of the supplementary variables giving insight into subjects' impressions. The results showed a main effect for activity on that dimension indicating that subjects judged active targets as significantly more similar than non-active targets. Likewise in Experiment 3 there was no manipulation of level of activity and the activity measure was treated as a supplementary measure. The main effects for belief similarity show that subjects rated the similar target as significantly higher on activity than the dissimilar targets. These results were replicated in Experiment 1 where both level of activity and belief

similarity were manipulated within the same design. The activity measure served as a manipulation check and subjects rated the active target significantly more active than the non-active target with $p \leq .001$ (Table 3.1). On that measure subjects also rated the similar targets significantly more active than dissimilar targets with $p \leq .05$ (Table 3.3). In the same experiment the attitude similarity measure served as a manipulation check and subjects rated similar targets as significantly more similar in beliefs than dissimilar targets with $p \leq .001$ (Table 3.4). On that measure subjects also rated active targets as significantly more similar in beliefs than non-active targets with $p \leq .05$ (Table 3.5). The impact of these two independent variables on the two measures is exactly the opposite within the same experiment. These results imply that subjects have inferred attitude similarity from the level of activity displayed and, conversely, they have also inferred that an individual who displays beliefs similar to their own will be more like them in the level of activity they would display. Hence, an individual who appears as non-active would probably not only confirm or disconfirm expectations about activity but would also confirm or disconfirm expectations about similarity of attitudes. The reverse would also be true for a target expressing dissimilar beliefs.

Hypothesis 3

The level of activity displayed by the stimulus person will be a more potent discriminator than

belief similarity and the age factor will be the least important of the three.

Table 4.3 presents the summary of proportions of variance attributable to each of the independent variables within each of the first three experiments on the primary and supplementary measures. Hypothesis 3 received complete support on the results for the primary measures. Without exception every comparison met the expectation.

The support from the results on the supplementary measures is not so clear. There are five comparisons between the relative strengths of activity level and belief in Experiment 1. The proportion of total variance accounted for by activity is greater than that for belief similarity in four of the five comparisons. Moreover, there are ten comparisons between the relative strengths of activity level and age; five are in each of Experiments 1 and 2. The proportion of total variance accounted for by level of activity is greater than that for age in eight of the ten comparisons. Clearly, level of activity served as a more potent discriminator than either belief similarity or age for the subjects of this study. However, of the ten parallel comparisons between belief similarity and age in Experiments 1 and 3, age accounted for a greater proportion of variance than belief in seven comparisons. Hence, beliefs were not as important as age when subjects were making discriminations on some of the supplementary measures. Also shown in Table 4.3 is the proportion of

total variance for each independent variable averaged across the primary measures and also averaged across the supplementary measures. Viewed in this way the results indicate that only for the supplementary measures of Experiment 1 is there evidence contrary to the prediction of Hypothesis 3. For those measures activity is more potent than age or belief but age is more potent than belief.

Overall, the results have provided strong support for Hypothesis 3. Where judgments of liking or personal attraction and social distance are concerned, subjects relied first on the information regarding the level of activity displayed, next they drew on data regarding beliefs and the age factor was the least important of the three. However, when it comes to judgments about the characteristics or attributes of a stranger, while the subjects again relied on the level of activity as the most important source of information, beliefs appeared to be less important than age in Experiment 1.

Conclusions

The study presented here has provided support for the notion that interpersonal evaluations can be profitably viewed in the theoretical framework of reciprocal rewards and punishments underlying the attraction research pursued by Byrne and others. However, these results also indicate

that both the importance of the issues around which the judge relates to the target, and the expectations which the judge holds with respect to the target, should be taken into account. If the issues of relation are of little concern, or irrelevant to judgments that are to be made, then the expectations of the judge toward the target will be less likely to become salient and the evaluations will be made on the basis of simple agreement or disagreement. However, if the issues of relation are a matter of importance to the judge and the judge has preconceived expectations toward the target then his judgments will probably also reflect how well the expectations have been met. If his expectations are confirmed then, again, he will most likely respond on the basis of simple agreement or disagreement, rewarding agreement with a positive response and punishing disagreement by a negative response. However, if the expectations have been disconfirmed then the responses will be heightened or exaggerated becoming more positive or more negative. For example, if someone disagrees when agreement was expected, the judge will respond more negatively than if he had expected disagreement in the first place. By the same token when someone agrees when disagreement was expected, then the judge will like him the better for it and respond much more positively than if he had expected agreement in the first place. When two different individuals, the object of a judge's differing

expectations, display the same behaviors, the evaluation of the one disconfirming the expectation will be exaggerated.

The results of this study also offer support for the notion that attitudes toward the elderly are most likely multi-dimensional and that differences in chronological age alone are insufficient to evoke clear patterns of interpersonal attraction between younger and older people. Further, they suggest that the notion of ingroup-outgroup acceptance and rejection provides a constructive conceptual framework for understanding these relationships and for explaining the apparent contradictions in discrimination toward the elderly.

Young people view older people differently than they view their age peers and they expect different behaviors from the two age groups. They expect young people to be more active than older people and they tend to expect older people to have attitudes and beliefs that are dissimilar to those of young people on issues that are important to the young. When young people compare young and old counterparts, the older person will usually fare better than he would otherwise if he can disconfirm any negative expectations held by the young person doing the comparing. If the interpretation placed on these findings applies to people generally then an older person, or anyone else for that matter, may well find he must suit his repertoire of

behaviors to the audience. His own older-aged peers probably have different values from those of young people, and thereby, expectations toward him which are different from those which young people have.

Young people value an active life and they are especially sensitive to the involvement of other people they meet. There is some evidence that they are more sensitive to physical and social activity as a measure of a person than they are to the similarity of their beliefs or their age. The older person who is able to show a full range of activities in his life is likely to be valued more highly by young people than a younger person doing the same things. If he can make those activities apparent to the young people around him he could well find greater acceptance and inclusion in their world than if he simply agrees with all of their attitudes. But if he can agree with them on issues which are important to them he will also find he has greater value in their eyes and it would probably not be detrimental to disagree on things of little importance to them.

Suggestions for Further Research

The conclusions of this study are tentative, as they are with most experimental research, illuminating more questions needing research than it has answered. This study used only two photographs which leave the results and conclusions very specific. It should be generalized

by replications using additional photographs of both male and female targets to extend the findings. Within such a study it might also be possible to investigate the impact of physical attractiveness more closely and explain the significant main effect found on that dimension in Experiment 1 of this study.

The personal profiles used here were not pretested to measure their relative stimulus strength against the belief similarity protocols. In order to generalize about the relative potency of activity and belief similarity as discriminators used by subjects in making their judgments about a target person, the stimulus strength of the two factors should first be equated with respect to capacity to elicit the relevant expectations held by the subjects. Both factors should also be equated for their importance as issues of relation between the judges and the target.

A new social distance measure should be constructed which is based on scales that are designed to reflect the differential expectations the judges hold for different age groups.

In this study the expectations which the judges held toward the young targets had a positive valence while those held toward the older targets had negative valences. Further research should extend the generality of these findings by manipulating the valence of the expectations along with the age of the targets. This could even be done

while also manipulating the age of the subjects in an attempt to further extend these results to other populations.

TABLE 4.1

Summary of Significant Main Effects--All Independent Variables
All Experiments

All Dependent Measures

	Experiment 1			Experiment 2		Experiment 3		Experiment 4	
	Age	Activity	Beliefs	Age	Activity	Age	Beliefs	Age	Mode
<u>Primary:</u>									
Multivariate	.05	.01	.05		.05		.001		
Social Distance (Univariate)		A > N .05	S > D .05		A > N .05		S > D .01		
Personal Attraction (Univariate)	Y < O .05	A > N .001	S > D .01	Y < O .05	A > N .01	Y < O .05	S > D .001		
<u>Supplementary:</u>									
Morality								Y < O .001	
Personality Attractiveness	Y < O .001	A > N .001	S > D .01	Y < O .05	A > N .001		S > D .001		
Social Adjustment	Y < O .05	A > N .001			A > N .01	Y < O .01	S > D .001	Y < O .05	
Social Desirability	Y < O .01	A > N .001		Y < O .05	A > N .01	Y < O .001		Y < O .05	

Continued next page--

TABLE 4.1 (continued)

All Dependent Measures

	Experiment 1			Experiment 2		Experiment 3		Experiment 4	
<u>Supplementary (con):</u>	Age	Activity	Beliefs	Age	Activity	Age	Beliefs	Age	Mode
Typicalness									
Activity	Y < O .05	Man Ck A > N .001	S > D .05		Man Ck A > N .001		S > D .05	Y > O · P < T .05	.01
Passiveness		Man Ck A < N .001			Man Ck A < N .001				
Attitude Similarity		A > N .05	Man Ck S > D .001		A > N .001		Man Ck S > D .001		
Physical Attractiveness	Y < O .01								

TABLE 4.2

Summary of Significant Interaction Effects
All Experiments

All Dependent Measures*

	Experiment 1	Experiment 2	Experiment 3	Experiment 4
Activity				Age x Mode $p \leq .05$ YT > OT; $p \leq .01$ YP < YT; $p \leq .01$ YP = OP; n.s. OP < OT; n.s.
Physical Attractiveness				Age x Mode $p \leq .05$ YP < YT; $p \leq .05$ YP < OP; n.s. OP > OT; n.s. YT < OT; n.s.
Personality Attractiveness				Age x Mode $p \leq .05$ YP < OP; $p \leq .01$ YP < YT; $p \leq .01$ OP > OT; n.s. OT < YT; n.s.
Social Desirability			Age x Belief $p \leq .05$ YD < OD; $p \leq .001$ YS > YD; $p \leq .05$ YS < OS; n.s. OS < OD; n.s.	Age x Mode $p \leq .01$ YP < OP; $p \leq .001$ YP < YT; $p \leq .01$ OP > OT; n.s. OT < YT; n.s.
(continued next page)				

TABLE 4.2 (continued)

All Dependent Measures*

	Experiment 1	Experiment 2	Experiment 3	Experiment 4
Typicalness	Age x Activity $p \leq .05$ OA < ON; $p \leq .01$ YN < ON; $p \leq .05$ YA > OA; n.s. YA > YN; n.s.	Age x Activity $p \leq .001$ OA < ON; $p \leq .05$ YN < ON; $p \leq .01$ YA > OA; $p \leq .01$ YA > YN; $p \leq .01$		

*Dependent variables not included on this table produced no significant interaction effects.

TABLE 4.3

Summary of Proportions of Total Variance
Experiments 1, 2 and 3

Primary and Supplementary Measures

	Experiment 1			Experiment 2		Experiment 3	
	Age	Activity	Belief	Age	Activity	Age	Belief
<u>Primary Measures:</u>							
Social Distance	.04	.32	.28	.36	.68	.15	1.39
Personal Attraction	.54	1.2	.68	.51	.86	.92	3.31
<u>Supplementary Measures:</u>							
Morality	.03	.04*	.07*	.06*	.00*	.34*	.02*
Personality Attractiveness	1.28*	1.55	1.03*	.83	2.24	.1	4.9
Social Adjustment	.33*	.87	.00*	.39	1.16	1.13	4.12
Social Desirability	.62*	1.39	.01*	1.16	1.88	2.38*	.34*
Typicalness	.11*	.07*	.02*	.00	.05	.26*	.00*

*Indicates two proportions in reverse order from that predicted by Hypothesis 3.
(continued next page)

TABLE 4.3 (continued)

Primary and Supplementary Measures--Averages

	Experiment 1	Experiment 2	Experiment 3
Averages across Primary Measures:	Activity > Belief > Age .76 .48 .29	Activity > Age .77 .44	Belief > Age 2.35 .54
Average across Supplementary Measures:	Activity > Age > *Belief* .78 .47 .23	Activity > Age 1.07 .49	Belief > Age 1.88 .84

*Indicates two proportions in reverse order from that predicted by Hypothesis 3.

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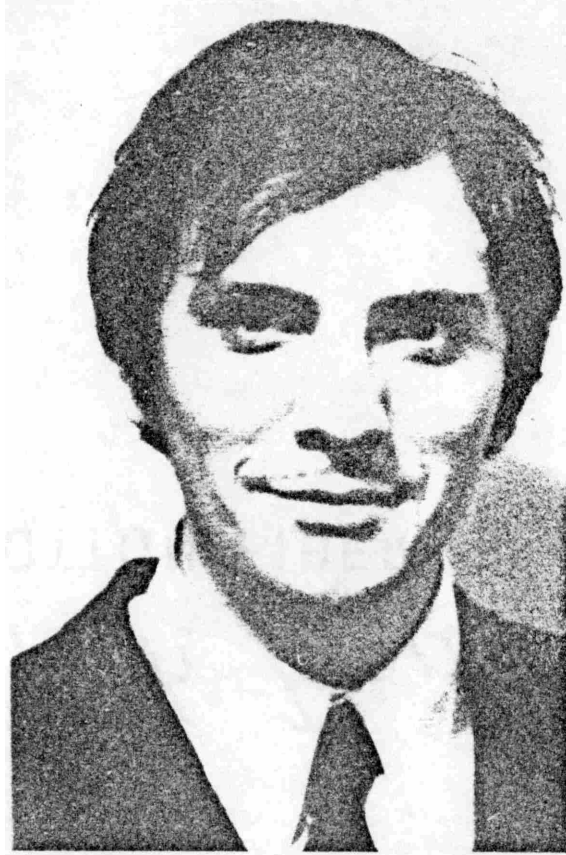
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APPENDIX A

Photographs of Target Person

Joseph Handley -- Age 29



(A glossy black and white photograph was used for the study)

Joseph Handley -- Age 69



(A glossy black and white photograph was used for the study)

APPENDIX B

Personal Profiles

Joseph A. Handley, interview transcript, page 1

(The following are selected segments of an interview with Mr. Joseph Handley, which have been organized here for brevity and clarity.)

My name is Joseph Handley. People call me Joe. When I was in college they called me "Hands" because my hands were always bigger than anybody else's. That was at KU. I went to KU after I graduated from High School in Salina. Now I live in Kansas Ci...Well, in the Kansas City area. We moved here from Lawrence.

I was born in Trinidad, Colorado but we moved around a lot while I was growing up. We moved from Trinidad to Glenwood Springs, Colorado, and that's where I started school. We lived there for six or seven years. A thing I remember well about Glenwood was hiking in the mountains...I was always very active. Another thing I remember was the big swimming pool. They had a very large pool that was fed by natural hot springs. It was some kind of mineral water that made it easy to float. I've loved swimming ever since. Our house was on the edge of town, kind of in some foot hills, as well as I can remember. I grew up hiking and playing in those hills, somewhere nearly every day. That's still a favorite pasttime of mine. I still swim a little all year round but every year I really look forward to our hiking trip in the mountains with family or friends.

When we moved to Albuquerque, that's where we lived next, I couldn't get into the mountains so often and I had to get involved in a lot of other activities. But once in a while I'd get my father to take me up around Santa Fe or Taos for a weekend of camping. We only lived there about three or four years.

We had to move around a lot because of my father's work. He worked for the soil conservation service. It was a federal job. From Albuquerque we moved to Salina, Kansas and that was quite a change for me. It sure seemed flat after living in and around mountains all my life. My mother always said she could "see Wichita on a clear day...and Denver on a bright one." It was in Salina that I had a paper route. I didn't mind the early hours and all the walking--except maybe a little in the winter. It was my first opportunity to earn my own money. It was through that paper route that I got my first experience with politics.

We lived in Salina the longest. (Chuckle) I think my mother just put her foot down...hard! All of a sudden she settled down and refused to move anymore. That's what happened,

I'm sure. Dad would travel all he could. He'd pack her up and they'd come to see Joanie and me. Joan is my wife. We met at KU. Well...actually, we met first on a trail in Colorado and later discovered each other again at the University. We met the second time in the library. So my folks would come to see us and the kids. If it wasn't for our kids I think Mom would probably have stayed home more often. In that way, I guess I'm more like my father. I need a lot of activity in my life.

But anyway...in Salina I had this paper route and after a year or so people got to know me. I was about fourteen when a neighbor ran for some local office and he hired me to go door to door, with handbills to give to people or leave in their door. Well, you know, he won that election. I did it again for him another time before I left for college and got a little more involved in his campaign. Then later he ran for some minor state office. I was in Lawrence at the time but called him up and asked if I could work on his campaign. Well, he lost that one and dropped out of politics. But it only caused me to get more interested. I still like to work on political campaigns. I met a lot of people during the last National elections. I like to get out and mix with people. It's my interest in politics that got me started taking some adult education courses--the non-credit evening classes. I usually take a class or two every year or so... Political Science, Government, and even Public Speaking. I think I've enjoyed political history the most. Maybe I'm what you'd call an amateur politician. I really like meeting people...going out and seeing what other people think and being involved in activities with others.

Joseph P. Handley, interview transcript, page 1

(The following are selected segments of an interview with Mr. Joseph Handley which have been organized here for brevity and clarity.)

My name is Joseph Handley. People call me Joe. When I was in college they called me "Hands" because my hands were always bigger than anybody else's. That was at KU. I went to KU after I graduated from High School in Salina. Now I live in Kansas Ci...Well, in the Kansas City area. We moved here from Lawrence.

I was born in Trinidad, Colorado but we moved around a lot while I was growing up. We moved from Trinidad to Glenwood Springs, Colorado and that's where I started school. We lived there for six or seven years. The thing I remember well about Glenwood was the big swimming pool. They had a very large pool that was fed by a natural hot spring. But I wasn't a swimmer. I never was and still don't care for it. I guess I'm not the active type. It was in Glenwood that I first discovered reading in that little city library with a corner full of children's books. I think I read everything they had for my age. By the time we moved to Albuquerque--that's where we lived next--I was ready for more. I found three different libraries there that I could get to. I'd spend hours in them. It's still a favorite pasttime. I often spend a whole Saturday just browsing around through a good library, reading a whole variety of things. I like to read newspapers almost every day, and I usually have a couple of good books going all the time at home. I read mostly fiction. We only lived in Albuquerque about three or four years, but it was during that time that I began establishing a pattern in my life. I began choosing quieter kinds of things rather than a lot of activities out of doors.

We had to move around a lot because of my father's work. He worked for the soil conservation service. It was a federal job. From Albuquerque we moved to Salina, Kansas and that was quite a change for me. It sure seemed flat after living in and around mountains all my life. My mother always said that she could "see Wichita on a clear day...and Denver on a bright one." It was in Salina that I had a paper route. I hated all that walking, but I was earning my own money for the first time. That was when I began reading the newspaper. It opened up a whole lot of new interests for me.

We lived in Salina the longest. (Chuckle) I think my mother just put her foot down...hard! All of a sudden she settled down and refused to move any more. That's what happened I'm sure. Dad would travel all he could. He'd pack her up and they'd come to see Joanie and me. Joan is my wife. We met at KU. Well, actually, we first met in a library

in Salina. Later we discovered each other again at the University. We met the second time in the library too. So my folks would come to see us and the kids. If it wasn't for our kids I think Mom would probably have stayed home more often. In that way, I guess I'm more like my mother. I don't like a whole lot of activity going on in my life.

But anyway...in Salina I started reading the newspaper. I could spend all afternoon with the Sunday...lying on the floor with the paper spread out in front of me. They had a section, or maybe just an occasional article or column on pen pals. That's when I started writing letters. I wrote to people all over the country. I guess my interests have changed because I don't do that much any more. Oh, I always answer then someone writes to me. But what I enjoy more now is having friends over to visit for an evening--just a time to sit and talk. There's always plenty to talk about. I also enjoy television...especially the continuing stories. It's kind of like reading a good book. If I add it all up, that is the free time I spend on evenings and weekends, I suppose I spend it mostly watching TV, reading, and sitting, talking with friends...and occasionally I'll write a letter or two. I've kind of settled my life into things I like and I don't really feel I need to look for anything new.

APPENDIX C

Survey of Opinions

SURVEY OF OPINIONS

Instructions:

You have been selected to participate as a subject in a national survey of opinions among college students. Part I of the questionnaire simply asks for basic personal background information. However, you should not write your name on any of these pages. All information will be collected anonymously. Part II asks for your personal opinion on a variety of topics. Please read the topic item and each statement about the topic carefully. Then check one statement only for each topic.

PLEASE COMPLETE ALL QUESTIONS.....LEAVE NO BLANKS

Part I--Personal Background Data

Age: _____

Sex: Male _____ Female _____

Hours completed in your academic program prior to this semester: _____

Your intended major if you have decided (leave blank if undecided): _____

State where you were born (country if not in the U.S.): _____

State (country) where you now have permanent residence: _____

Part II--Survey of Opinions

Acting on impulse vs. careful consideration of alternatives (check one):

- _____ I feel that it is better if people always act on impulse.
- _____ I feel that it is better if people usually act on impulse.
- _____ I feel that it is better if people often act on impulse.
- _____ I feel that it is better if people often consider alternatives carefully.
- _____ I feel that it is better if people usually consider alternatives carefully.
- _____ I feel that it is better if people always consider alternatives carefully.

Discipline of children (check one):

- I strongly believe that the father should discipline the children.
 I believe that the father should discipline the children.
 I feel that perhaps the father should discipline the children.
 I feel that perhaps the mother should discipline the children.
 I believe that the mother should discipline the children.
 I strongly believe that the mother should discipline the children.

Marijuana laws (check one):

- I am strongly opposed to the marijuana laws now in effect.
 I am opposed to the marijuana laws now in effect.
 I am mildly opposed to the marijuana laws now in effect.
 I am mildly in favor of the marijuana laws now in effect.
 I am in favor of the marijuana laws now in effect.
 I am strongly in favor of the marijuana laws now in effect.

The Women's Rights Movement (check one):

- I am strongly opposed to supporting the Women's Rights Movement.
 I am opposed to supporting the Women's Rights Movement.
 I am only mildly opposed to supporting the Women's Rights Movement.
 I am only mildly in favor of supporting the Women's Rights Movement.
 I am in favor of supporting the Women's Rights Movement.
 I am strongly in favor of supporting the Women's Rights Movement.

Creative work (check one):

- I enjoy doing creative work very much.
 I enjoy doing creative work.
 I enjoy doing creative work to a slight degree.

- I dislike doing creative work to a slight degree.
- I dislike doing creative work.
- I dislike doing creative work very much.

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 sometimes 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 solve world problems.
- I strongly feel that war is never necessary to solve world problems.

Strict discipline (check one):

- I am very much against strict disciplining of children.
- I am against strict disciplining of children.
- I am mildly against strict disciplining of children.
- I am mildly in favor of strict disciplining of children.
- I am in favor of strict disciplining of children.
- I am very much in favor of strict disciplining of children.

College education (check one):

- I strongly believe it is very important for a person to have a college education in order to be successful.
- I believe it is very important for a person to have a college education in order to be successful.
- I believe that perhaps it is very important for a person to have a college education in order to be successful.
- I believe that perhaps it is not very important for a person to have a college education in order to be successful.
- I believe that it is not very important for a person to have a college education in order to be successful.
- I strongly believe that it is not very important for a person to have a college education in order to be successful.

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

Equal Rights Amendment (ERA) (check one):

- I am strongly opposed to the Equal Rights Amendment.
- I am opposed to the Equal Rights Amendment.
- I am mildly opposed to the Equal Rights Amendment.
- I am mildly in favor of the Equal Rights Amendment.
- I am in favor of the Equal Rights Amendment.
- I am strongly in favor of the Equal Rights Amendment.

APPENDIX D

Stimulus material for 'typical' mode of presentation

Stimulus material for typical young target:

Imagine a typical 29 year old man. Think about him. What would he be like? How would you describe him? What would he believe in and what kinds of attitudes would he have? How would he be different from you and your own beliefs? What kinds of things would he do? What kinds of things would he involve himself in? How would he spend his days? What would be his typical activities? Try to get some impression of what the "typical" 29 year old man would be like and how you would feel about him and how you would feel about being with him.

Stimulus material for typical old target:

Imagine a typical 69 year old man. Think about him. What would he be like? How would you describe him? What would he believe in and what kinds of attitudes would he have? How would he be different from you and your own beliefs? What kinds of things would he do? What kinds of things would he involve himself in? How would he spend his days? What would be his typical activities? Try to get some impression of what this "typical" 69 year old man would be like and how you would feel about him and how you would feel about being with him.

APPENDIX E

Interpersonal Judgment Questionnaire

INTERPERSONAL JUDGMENT QUESTIONNAIRE

Everyone has his own preferences about the people he wants to associate with. There probably are some people with whom you would be willing to be very good friends, and others whom you'd just as soon not spend much time with. We would like for you to indicate below how close a relationship you think you would be willing to have with the "stranger" you just met on the basis of what you know about him so far. Please indicate on the scale under each social situation how you feel about this person.

1. I would be willing to have this person as one of my speaking acquaintances.

Extremely
unwilling

Extremely
willing

2. I would be willing to live in the same apartment house with this person and his family.

Extremely
willing

Extremely
unwilling

3. I would be willing to go to a party to which this person was invited.

Extremely
willing

Extremely
unwilling

4. I would be willing to invite this person home to dinner.

Extremely
unwilling

Extremely
willing

5. I would be willing to belong to the same organization with this person.

Extremely
willing

Extremely
unwilling

6. I would be willing to have this person as a member of my social group.

Extremely
unwilling

Extremely
willing

7. I would be willing to eat lunch with this person.

Extremely unwilling _____ _____ _____ _____ Extremely willing

8. I would be willing to sit next to this person in meetings or other places.

Extremely willing _____ _____ _____ _____ Extremely unwilling

9. I would be willing to have this person as a personal friend.

Extremely willing _____ _____ _____ _____ Extremely unwilling

10. I would be willing to work on a project with this person.

Extremely unwilling _____ _____ _____ _____ Extremely willing

Listed below are a number of items that provide ways to describe and/or evaluate people according to the way we see them. Please indicate on the scale your perceptions and feelings about the "stranger" you have just learned about.

11. Physical attractiveness:

Extremely unattractive _____ _____ _____ _____ Extremely attractive

12. Activity:

Extremely active _____ _____ _____ _____ Extremely non-active

13. Morality:

Extremely moral _____ _____ _____ _____ Extremely immoral

14. Passiveness:

Extremely non-passive _____ _____ _____ _____ Extremely passive

15. Personality attractiveness:

Extremely attractive _____ _____ _____ _____ Extremely unattractive

16. Social adjustment:
 Extremely maladjusted Extremely well adjusted
17. Personal feelings of liking:
 I would probably dislike him very much I would probably like him very much
18. Work partner:
 I would probably like working with him very much I would probably dislike working with him very much
19. Typical for his age:
 Extremely typical Extremely untypical
20. Social desirable to most people:
 Extremely undesirable Extremely desirable
21. Has attitudes and beliefs similar to your own:
 Extremely similar Extremely dissimilar
22. How old was the stranger? (Give his age as close as you can.): _____

Finally, we would like just a little background information on you. As stated earlier, all information is provided anonymously. Do not sign your name anywhere on the questionnaire.

Age: _____

Sex: Male: _____ Female: _____

State (country where you were born): _____

State (country where you now have permanent residence): _____

Hours completed in your academic program prior to this semester: _____

Your intended major if you have decided (leave blank if undecided): _____

Generations of your family living in your home while you were growing up:

____ Great Grandparents

____ Raised by brother or sister only

____ Grandparents

____ Other (explain)

____ Parents

PLEASE LOOK BACK THROUGH THE QUESTIONNAIRE QUICKLY (THE LAST THREE PAGES) TO BE SURE YOU HAVE ANSWERED ALL QUESTIONS

APPENDIX F

Estimate of Opinions

ESTIMATE OF OPINIONS

On the basis of what you know about the "stranger" just introduced to you, no matter how much or how little information you have, please indicate on the opinions scales that follow your estimate of how that person might answer each question himself. Show what you expect his opinions might be on these topics.

Equal Rights Amendement (ERA) (check one):

- He is strongly opposed to the Equal Rights Amendment.
- He is opposed to the Equal Rights Amendment.
- He is mildly opposed to the Equal Rights Amendment.
- He is mildly in favor of the Equal Rights Amendment.
- He is in favor of the Equal Rights Amendment.
- He is strongly in favor of the Equal Rights Amendment.

Family finances (check one):

- He strongly believes that the man in the family should handle the finances.
- He believes that the man in the family should handle the finances.
- He feels that perhaps the man in the family should handle the finances.
- He feels that perhaps the woman in the family should handle the finances.
- He believes that the woman in the family should handle the finances.
- He strongly believes that the woman in the family should handle the finances.

College education (check one):

- He strongly believes it is very important for a person to have a college education in order to be successful.
- He believes it is very important for a person to have a college education in order to be successful.
- He believes that perhaps it is very important for a person to have a college education in order to be successful.
- He believes that perhaps it is not very important for a person to have a college education in order to be successful.

- ___ He believes that it is not very important for a person to have a college education in order to be successful.
- ___ He strongly believes that it is not very important for a person to have a college education in order to be successful.

Strict discipline (check one):

- ___ He is very much against strict disciplining of children.
- ___ He is against strict disciplining of children.
- ___ He is mildly against strict disciplining of children.
- ___ He is mildly in favor of strict disciplining of children.
- ___ He is in favor of strict disciplining of children.
- ___ He is very much in favor of strict disciplining of children.

War (check one):

- ___ He strongly feels that war is sometimes necessary to solve world problems.
- ___ He feels that war is sometimes necessary to solve world problems.
- ___ He feels that perhaps war is sometimes necessary to solve world problems.
- ___ He feels that perhaps war is never necessary to solve world problems.
- ___ He feels that war is never necessary to solve world problems.
- ___ He strongly feels that war is never necessary to solve world problems.

Creative work (check one):

- ___ He enjoys doing creative work very much.
- ___ He enjoys doing creative work.
- ___ He enjoys doing creative work to a slight degree.
- ___ He dislikes doing creative work to a slight degree.
- ___ He dislikes doing creative work.
- ___ He dislikes doing creative work very much.

The Women's Rights Movement (check one):

- He is strongly opposed to supporting the Women's Rights Movement.
- He is opposed to supporting the Women's Rights Movement.
- He is only mildly opposed to supporting the Women's Rights Movement.
- He is only mildly in favor of supporting the Women's Rights Movement.
- He is in favor of supporting the Women's Rights Movement.
- He is strongly in favor of supporting the Women's Rights Movement.

Marijuana laws (check one):

- He is strongly opposed to the marijuana laws now in effect.
- He is opposed to the marijuana laws now in effect.
- He is mildly opposed to the marijuana laws now in effect.
- He is mildly in favor of the marijuana laws now in effect.
- He is in favor of the marijuana laws now in effect.
- He is strongly in favor of the marijuana laws now in effect.

Discipline of children (check one):

- He strongly believes that the father should discipline the children.
- He believes that the father should discipline the children.
- He feels that perhaps the father should discipline the children.
- He feels that perhaps the mother should discipline the children.
- He believes that the mother should discipline the children.
- He strongly believes that the mother should discipline the children.

Acting on impulse vs. careful consideration of alternatives (check one):

- He feels that it is better if people always act on impulse.
- He feels that it is better if people usually act on impulse.
- He feels that it is better if people often act on impulse.
- He feels that it is better if people often consider alternatives carefully.
- He feels that it is better if people usually consider alternatives carefully.
- He feels that it is better if people always consider alternatives carefully.

APPENDIX G

Consent Form

CONSENT FORM

The Department of Speech Communication and Human Relations supports the proposition that participants in studies should be informed about the nature of the studies in which they participate. The following information is provided so you can decide whether you wish to participate in the present research. You should recognize that even if you agree to participate, you are free to withdraw at any time.

This is research into college students' attitudes and about impressions that they form about other people. You will be asked to record your opinions on a number of issues. Then you will be asked to describe a set of other people. Finally, you will be given information about a stranger and will be asked to describe your impression of that person.

Your responses will be identified by a code number only. Your name will not be associated with the research findings in any way. Your participation is solicited, but it is strictly voluntary. Do not hesitate to ask any questions about the study.

There is almost no chance at all of physical injury attendant to this study. However, in order to comply with DHEW regulations, we are required to add the following information to the consent forms. "In the event of physical injury resulting from the research procedures, no medical treatment or monetary compensation is provided by the University. In a very limited number of cases, workers compensation could be available to University employees injured while participating as subjects. However, generally participants must look to their own health insurance policies or to the Kansas Legislature for compensation for their injuries."

Sincerely,

James A. Bossert
Principal Investigator

Signature of person agreeing to participate

APPENDIX H

Instructions to Participants and Cover Stories

INSTRUCTIONS TO PARTICIPANTS

Introduction

Today you will participate in three different research projects. They are unrelated and quite different from each other. I'll tell you what to do as we start each one. We will spend only 10 or 15 minutes on each of them and you will be completely finished in about 50 to 60 minutes. If you have questions about procedures as we go through each of these feel free to ask them. At the end, just before you leave, I'll explain the background of each study so you can write your report to your instructor.

Segment One

The first task is part of a national sample survey to find out what college students feel is important today as we near the end of the decade of the seventies. Young people of each decade find different things important to them it seems. Different values surface and new social changes appear. In the fifties rock and roll music hit the world of young people and began to affect their life styles. In the sixties the Vietnam War brought protest and rebellion against the establishment and the hippie lifestayle emerged as an alternative way of life. The seventies have seen the spreading influence of drugs, some radical returns to establishment values and a return to the soil among other things. What else arose? Surveys of this type have been conducted periodically for many years. In the first round just a few basic questions are asked which have been altered slightly to suit the current events of the time. This survey simply asks you to express your own attitudes and opinions about ten topics. On the basis of the responses on these ten items from a wide variety of people a larger study will be designed for the second round of the survey next year.

Segment Two

This is a 'character building' study that is being carried out in conjunction with the drama department. People writing scripts for plays, movies and television programs need background data on what real people are like, as seen by other people. When they create a character they want to create one who is believable and who comes to life for the audience. So we are gathering data about men and women of different ages. The questionnaire for this study simply asks you to describe four different people whom you know: one man and one woman whom you like, and one man and one woman whom

you dislike. You are asked to describe them in terms of their habits, beliefs, mannerisms, relationships to others, or any other characteristics or attributes you can think of. Complete instructions on procedures are included on the questionnaire.

Segment Three

In this last study we are interested in how people process information in forming impressions and opinions about other people whom they meet. We took some photographs of different people. We interviewed them and transcribed and condensed the interviews for readability. We segmented the interviews into several different parts. We also gave them a very long questionnaire on attitudes, opinions and beliefs which included the questions of the National Sample Survey that you completed earlier. It was only one part of five or six sections. We segmented the questionnaire into eight or ten pieces.

These people on whom we have this data are the 'target persons' or 'strangers' whom you will learn about from the sheets I've handed out to you. You will each have different information about a single person, and you will not all have the same target person. Some may have more information than others. Some will get a photograph and others will not. Some will receive parts of the questionnaire but no interview information, and so on. All of the information is accurate but none of you will have all of it.

We are interested in your own impressions based on just the information you have, no matter how much or how little we've given you. Please ignore the materials that others near you have and do your best to get in touch with what you think and how you feel about the 'stranger' you learn about.

APPENDIX I

National Sample Survey Booklet Cover

NATIONAL SAMPLE SURVEY

PROJECT #68-3011079-537
Area Code #742596
Identifier KUL

Undergraduate Sample
State: Kansas
School: University of Kansas
Campus: Lawrence

APPENDIX J

Debriefing Statement

DEBRIEFING STATEMENT

This is an impression formation study that is investigating the impressions young people form about others. You were told that you were participating in three separate studies today. In actuality that story was devised to help permit more spontaneous responses to the critical questions of the study. There is only one study with two parts. It is focused on the influence four variables have on the judgments young people make about others. Those variables are age, active vs. non-active behaviors, attitude similarity or dissimilarity, and the mode of presentation of the target person.

This research is concerned with several basic questions which can best be studied by looking at the spontaneous responses of people when they are confronted with information about a stranger. 1) Do young people make different judgments about the elderly than they do about other young people? 2) Does attitude similarity affect those judgments? 3) Does the amount of social and physical activity displayed by the stranger make a difference in the judgments made? All three of these are related to a fourth question: If we have certain expectations of people, especially older people, such as "they are normally not very physically or social active," or "they usually disagree with young people," would you like the older person more if in fact he disconfirmed your expectations? Moreover, would you like him more than a younger person who displayed exactly the same amount of agreement or disagreement and the same amount of activity?

There is a good deal of evidence that we like people who hold attitudes or opinions that agree with our own, more than we like people who disagree with us. That's also just a matter of common sense. In Part I you were asked to express your opinions on ten topics. In Part III some of you read what was described as "part of a longer questionnaire" completed by a stranger, Mr. Joseph Handley. In actuality, during Part II, an assistant made up a bogus opinion statement for Mr. Handley which was either similar to your own or dissimilar.

Some of you read a personality profile, supposedly from an interview with Mr. Handley. There were two profiles generated. One described an active man who liked to swim and hike and who enjoyed working in political campaigns and taking adult education courses. The other profile depicted a non-active individual who liked to read and browse through libraries, watch television and write to friends.

Some of you saw a photograph of a young man while others saw a photo of an older man. Still others in this study saw

no photo at all. The photographs were chosen from an earlier study based on their ratings for attractiveness, the style of dress of the men pictured and their physical presentation in the photo.

A central question underlying the basic research questions outlined above is the whole issue of stereotypes. Do you treat people, young or old, on the basis of your stereotype about the groups to which they belong, such as "Black American" or "Chicano" or "old people" or "foreigners" or "Catholics?" Or do you take the time to really see the individual, get to know him or her and then make your judgments about them? It is at the level of stereotypes that we can relate this research to daily issues in communication and human relations. If we can learn how and why people rely on their stereotypes of others, rather than their personal experience of the people they meet then we have learned a lot.

Does anyone have any questions about this study?
(DISCUSSION PERIOD)

I have a couple of questions for you. Did any of you suspect there was a connection between Part I and Part III, that is, the "first study" and the "third study?" If so, what connection did you finally decide on? (DISCUSSION PERIOD)

Thank you for participating. I hope you've learned something of value to you and I hope you've enjoyed your part in the study. This research will be carried out with more groups during the coming weeks so we ask you to not talk about it with others. If the study design is known ahead of time by the participants their answers will lack the spontaneity and the data will be unusable. Thank you again.

APPENDIX K

Analysis of Variance Summary Tables

TABLE K.1

Analysis of Variance
Experiment 1

Manipulation Check: Target Person's Age--Young

Source	df	MS	F
Activity	1	3.05	0.75
Belief	1	0.45	0.11
Activity x Belief	1	3.23	0.79
Error	42	4.07	

TABLE K.2

Analysis of Variance
Experiment 1

Manipulation Check: Target Person's Age--Old

Source	df	MS	F
Activity	1	2.13	0.10
Belief	1	3.21	0.15
Activity x Belief	1	29.03	1.40
Error	40	20.77	

TABLE K.3

Analysis of Variance
Experiment 1

Manipulation Check: Activity

Source	df	MS	F
Age	1	15.04	5.42*
Activity	1	757.72	273.21***
Belief	1	11.59	4.18*
Age x Activity	1	1.69	0.61
Age x Belief	1	0.01	0.002
Activity x Belief	1	0.21	0.08
Age x Activity x Belief	1	4.81	1.73
Error	85	2.77	

* $p < .05$

*** $p < .001$

TABLE K.4

Analysis of Variance
Experiment 1

Manipulation Check: Passiveness

Source	df	MS	F
Age	1	8.38	2.25
Activity	1	260.02	62.83***
Belief	1	5.44	1.46
Age x Activity	1	0.39	0.11
Age x Belief	1	1.09	0.29
Activity x Belief	1	0.98	0.26
Age x Activity x Belief	1	8.48	2.28
Error	84	3.72	

*** $p < .001$

TABLE K.5

Analysis of Variance
Experiment 1

Manipulation Check: Attitude Similarity

Source	df	MS	F
Age	1	8.82	1.68
Activity	1	26.61	5.08*
Belief	1	220.77	42.15***
Age x Activity	1	0.12	0.02
Age x Belief	1	3.67	0.70
Activity x Belief	1	0.80	0.15
Age x Activity x Belief	1	0.03	0.005
Error	85	5.24	

* $p < .05$

*** $p < .001$

TABLE K.6

Analysis of Variance
Experiment 1

Control Check: Physical Attractiveness

Source	df	MS	F
Age	1	49.24	17.87***
Activity	1	1.86	0.68
Belief	1	8.00	2.91
Age x Activity	1	0.53	0.19
Age x Belief	1	0.77	0.28
Activity x Belief	1	1.54	0.56
Age x Activity x Belief	1	4.08	1.48
Error	85	2.75	

*** $p < .001$

TABLE K.7

Analysis of Variance
Experiment 1

Primary Measure: Social Distance

Source	df	MS	F
Age	1	1.22	0.54
Activity	1	10.39	4.61*
Belief	1	9.03	4.01*
Age x Activity	1	2.26	1.004
Age x Belief	1	1.28	0.57
Activity x Belief	1	1.86	0.83
Age x Activity x Belief	1	1.87	0.83
Error	85	2.25	

*p \leq .05

TABLE K.8

Analysis of Variance
Experiment 1

Primary Measure: Personal Attraction

Source	df	MS	F
Age	1	18.63	6.18*
Activity	1	39.74	13.18***
Belief	1	23.39	7.75**
Age x Activity	1	2.65	0.88
Age x Belief	1	6.08	2.02
Activity x Belief	1	5.99	1.99
Age x Activity x Belief	1	3.41	1.13
Error	85	3.02	

* p \leq .05

** p \leq .01

***p \leq .001

TABLE K.9

Analysis of Variance
Experiment 1

Supplementary Measure: Morality

Source	df	MS	F
Age	1	1.71	1.49
Activity	1	1.94	1.69
Belief	1	3.57	3.12
Age x Activity	1	0.58	0.51
Age x Belief	1	0.01	0.01
Activity x Belief	1	3.17	2.77
Age x Activity x Belief	1	0.05	0.04
Error	85	1.14	

TABLE K.10

Analysis of Variance
Experiment 1

Supplementary Measure: Personality Attractiveness

Source	df	MS	F
Age	1	42.53	11.78***
Activity	1	51.53	14.27***
Belief	1	34.19	9.47**
Age x Activity	1	1.15	0.32
Age x Belief	1	0.03	0.009
Activity x Belief	1	0.23	0.06
Age x Activity x Belief	1	0.0006	0.0002
Error	85	3.61	

** $p < .01$

*** $p < .001$

TABLE K.11

Analysis of Variance
Experiment 1

Supplementary Measure: Social Adjustment

Source	df	MS	F
Age	1	14.42	4.91*
Activity	1	37.82	12.88***
Belief	1	0.39	0.13
Age x Activity	1	2.04	0.69
Age x Belief	1	1.00	0.34
Activity x Belief	1	3.05	1.04
Age x Activity x Belief	1	3.55	1.21
Error	85	2.94	

* $p < .05$

*** $p < .001$

TABLE K.12

Analysis of Variance
Experiment 1

Supplementary Measure: Social Desirability

Source	df	MS	F
Age	1	21.85	7.82**
Activity	1	48.85	17.49***
Belief	1	0.57	0.20
Age x Activity	1	0.06	0.02
Age x Belief	1	1.66	0.59
Activity x Belief	1	7.85	2.81
Age x Activity x Belief	1	0.71	0.26
Error	85	2.79	

** $p < .01$

*** $p < .001$

TABLE K.13

Analysis of Variance
Experiment 1

Supplementary Measure: Typicalness

Source	df	MS	F
Age	1	3.89	0.84
Activity	1	2.51	0.54
Belief	1	0.79	0.17
Age x Activity	1	24.57	5.33*
Age x Belief	1	7.47	1.62
Activity x Belief	1	0.14	0.03
Age x Activity x Belief	1	1.81	0.39
Error	85	4.61	

*p \leq .05

TABLE K.14

Analysis of Variance
Experiment 2

Manipulation Check: Activity

Source	df	MS	F
Age	1	2.10	0.64
Activity	1	321.37	97.61***
Age x Activity	1	1.07	0.33
Error	43	3.29	

***p \leq .001

TABLE K.15

Analysis of Variance
Experiment 2

Manipulation Check: Passiveness

Source	df	MS	F
Age	1	0.71	0.16
Activity	1	59.03	13.14***
Age x Activity	1	0.002	0.0004
Error	43	4.49	

***p \leq .001

TABLE K.16

Analysis of Variance
Experiment 2

Control Check: Physical Attractiveness

Source	df	MS	F
Age	1	1.09	0.31
Activity	1	0.68	0.19
Age x Activity	1	0.32	0.09
Error	43	3.48	

TABLE K.17

Analysis of Variance
Experiment 2

Primary Measure: Social Distance

Source	df	MS	F
Age	1	6.14	2.75
Activity	1	11.43	5.11*
Age x Activity	1	0.04	0.02
Error	43	2.24	

*p \leq .05

TABLE K.18

Analysis of Variance
Experiment 2

Primary Measure: Personal Attraction

Source	df	MS	F
Age	1	9.55	4.11*
Activity	1	16.18	6.96**
Age x Activity	1	0.86	0.37
Error	43	2.32	

* p < .05

**p \leq .01

TABLE K.19

Analysis of Variance
Experiment 2

Supplementary Measure: Attitude Similarity

Source	df	MS	F
Age	1	6.44	1.52
Activity	1	99.99	23.63***
Age x Activity	1	0.97	0.23
Error	43	4.23	

***p \leq .001

TABLE K.20

Analysis of Variance
Experiment 2

Supplementary Measure: Morality

Source	df	MS	F
Age	1	1.37	0.73
Activity	1	0.15	0.08
Age x Activity	1	1.73	0.92
Error	43	1.88	

TABLE K.21

Analysis of Variance
Experiment 2

Supplementary Measure: Personality Attractiveness

Source	df	MS	F
Age	1	15.10	5.01*
Activity	1	40.61	13.49***
Age x Activity	1	6.98	2.32
Error	43	3.01	

* $p < .05$
 *** $p \leq .001$

TABLE K.22

Analysis of Variance
Experiment 2

Supplementary Measure: Social Adjustment

Source	df	MS	F
Age	1	8.87	2.67
Activity	1	26.57	8.005**
Age x Activity	1	0.02	0.007
Error	43	3.32	

** $p \leq .01$

TABLE K.23

Analysis of Variance
Experiment 2

Supplementary Measure: Social Desirability

Source	df	MS	F
Age	1	20.62	6.35*
Activity	1	33.45	10.30**
Age x Activity	1	0.33	0.10
Error	43	3.25	

* $p < .05$

** $p < .05$

TABLE K.24

Analysis of Variance
Experiment 2

Supplementary Measure: Typicalness

Source	df	MS	F
Age	1	0.06	0.02
Activity	1	0.99	0.32
Age x Activity	1	60.55	19.72***
Error	43	3.07	

*** $p < .001$

TABLE K.25

Analysis of Variance
Experiment 3

Manipulation Check: Attitude Similarity

Source	df	MS	F
Age	1	3.96	1.05
Belief	1	150.20	39.88***
Age x Belief	1	2.91	0.77
Error	42	3.77	

***p \leq .01

TABLE K.26

Analysis of Variance
Experiment 3

Control Check: Physical Attractiveness

Source	df	MS	F
Age	1	9.81	3.39
Belief	1	8.41	2.91
Age x Belief	1	0.76	0.26
Error	42	2.89	

TABLE K.27

Analysis of Variance
Experiment 3

Primary Measure: Social Distance

Source	df	MS	F
Age	1	2.18	1.03
Belief	1	19.59	9.27**
Age x Belief	1	0.19	0.09
Error	42	2.11	

**p \leq .01

TABLE K.28

Analysis of Variance
Experiment 3

Primary Measure: Personal Attraction

Source	df	MS	F
Age	1	15.17	5.17*
Belief	1	54.74	18.67***
Age x Belief	1	0.04	0.01
Error	42	2.93	

* p \leq .05

***p \leq .001

TABLE K.29

Analysis of Variance
Experiment 3

Supplementary Measure: Activity

Source	df	MS	F
Age	1	1.42	0.36
Belief	1	17.61	4.49*
Age x Belief	1	0.12	0.03
Error	42	3.92	

*p \leq .05

TABLE K.30

Analysis of Variance
Experiment 3

Supplementary Measure: Passiveness

Source	df	MS	F
Age	1	2.45	0.44
Belief	1	0.21	0.04
Age x Belief	1	4.54	0.82
Error	42	5.53	

TABLE K.31

Analysis of Variance
Experiment 3

Supplementary Measure: Morality

Source	df	MS	F
Age	1	7.90	3.31
Belief	1	0.57	0.24
Age x Belief	1	0.07	0.03
Error	42	2.39	

TABLE K.32

Analysis of Variance
Experiment 3

Supplementary Measure: Personality Attractiveness

Source	df	MS	F
Age	1	1.49	0.43
Belief	1	71.96	20.61***
Age x Belief	1	0.88	0.25
Error	42	3.49	

***p \leq .001

TABLE K.33

Analysis of Variance
Experiment 3

Supplementary Measure: Social Adjustment

Source	df	MS	F
Age	1	20.17	9.62**
Belief	1	73.49	35.04***
Age x Belief	1	2.78	1.33
Error	42	2.10	

** $p < .01$

*** $p < .001$

TABLE K.34

Analysis of Variance
Experiment 3

Supplementary Measure: Social Desirability

Source	df	MS	F
Age	1	38.10	16.43***
Belief	1	5.40	2.33
Age x Belief	1	9.41	4.06*
Error	42	2.32	

* $p < .05$

*** $p < .001$

TABLE K.35

Analysis of Variance
Experiment 3

Supplementary Measure: Typicalness

Source	df	MS	F
Age	1	4.38	1.00
Belief	1	0.001	0.0003
Age x Belief	1	16.55	3.77
Error	42	4.39	

TABLE K.36

Analysis of Variance
Experiment 4

Control Check: Physical Attractiveness

Source	df	MS	F
Age	1	0.45	0.17
Mode	1	3.23	1.25
Age x Mode	1	13.66	5.30*
Error	42	2.58	

*p \leq .05

TABLE K.37

Analysis of Variance
Experiment 4

Primary Measure: Social Distance

Source	df	MS	F
Age	1	0.13	0.06
Mode	1	6.79	3.24
Age x Mode	1	0.51	0.24
Error	42	2.10	

TABLE K.38

Analysis of Variance
Experiment 4

Primary Measure: Personal Attraction

Source	df	MS	F
Age	1	1.08	0.44
Mode	1	0.04	0.02
Age x Mode	1	7.47	3.05
Error	42	2.45	

TABLE K.39
 Analysis of Variance
 Experiment 4

Supplementary Measure: Activity

Source	df	MS	F
Age	1	15.12	4.71*
Mode	1	22.42	6.99
Age x Mode	1	14.72	4.59*
Error	42	3.21	

*p \leq .05

TABLE K.40
 Analysis of Variance
 Experiment 4

Supplementary Measure: Passiveness

Source	df	MS	F
Age	1	4.32	1.46
Mode	1	0.15	0.05
Age x Mode	1	11.13	3.76
Error	42	2.96	

TABLE K.41

Analysis of Variance
Experiment 4

Supplementary Measure: Attitude Similarity

Source	df	MS	F
Age	1	11.22	2.96
Mode	1	6.26	1.65
Age x Mode	1	1.30	0.34
Error	42	3.79	

TABLE K.42

Analysis of Variance
Experiment 4

Supplementary Measure: Morality

Source	df	MS	F
Age	1	35.00	18.80***
Mode	1	0.30	0.16
Age x Mode	1	0.20	0.11
Error	42	1.86	

***p \leq .001

TABLE K.43

Analysis of Variance
Experiment 4

Supplementary Measure: Personality Attractiveness

Source	df	MS	F
Age	1	7.97	3.94
Mode	1	7.97	3.94
Age x Mode	1	14.04	6.94*
Error	42	2.02	

*p \leq .05

TABLE K.44

Analysis of Variance
Experiment 4

Supplementary Measure: Social Adjustment

Source	df	MS	F
Age	1	25.18	6.46*
Mode	1	10.05	2.58
Age x Mode	1	10.47	2.58
Error	42	3.90	

*p \leq .05

TABLE K.45
 Analysis of Variance
 Experiment 4

Supplementary Measure: Social Desirability

Source	df	MS	F
Age	1	18.92	6.19*
Mode	1	2.49	0.81
Age x Mode	1	31.16	10.19**
Error	42	3.06	

* $p \leq .05$

** $p \leq .01$

APPENDIX L

Cell and Marginal Means

All Experiments

Primary Measures

TABLE L.1

Cell and Marginal Means
Experiment 1

Primary Measure: Social Distance

	Young (5.60)		Old (5.84)		Marginal
	Active	Non-Active	Active	Non-Active	
Similar	5.92	6.13	6.51	5.25	(6.03)
Dissimilar	5.62	4.70	6.12	5.14	(5.40)
Marginal	Active (6.05)		Non-Active (5.37)		

TABLE L.2

Cell and Marginal Means
Experiment 1

Primary Measure: Personal Attraction

	Young (5.35)		Old (6.25)		Marginal
	Active	Non-Active	Active	Non-Active	
Similar	6.12	6.04	7.23	5.71	(6.30)
Dissimilar	5.50	3.64	6.86	5.09	(5.28)
Marginal	Active (6.44)		Non-Active (5.13)		

TABLE L.3

Cell and Marginal Means
Experiment 2

Primary Measure: Social Distance

	Young	Old	Marginal
Active	5.89	6.67	(6.30)
Non-Active	4.96	5.63	(5.27)
Marginal	(5.39)	(6.17)	

TABLE L.4

Cell and Marginal Means
Experiment 2

Primary Measure: Personal Attraction

	Young	Old	Marginal
Active	6.41	7.04	(6.74)
Non-Active	4.96	6.14	(5.50)
Marginal	(5.62)	(6.61)	

TABLE L.5

Cell and Marginal Means
Experiment 3

Primary Measure: Social Distance

	Young	Old	Marginal
Similar	5.82	6.13	(5.98)
Dissimilar	4.39	4.95	(4.67)
Marginal	(5.14)	(5.57)	

TABLE L.6

Cell and Marginal Means
Experiment 3

Primary Measure: Personal Attraction

	Young	Old	Marginal
Similar	6.12	7.33	(6.73)
Dissimilar	4.00	5.09	(4.54)
Marginal	(5.11)	(6.26)	

TABLE L.7

Cell and Marginal Means
Experiment 4

Primary Measure: Social Distance

	Young	Old	Marginal
Personalized	5.48	5.80	(5.63)
Typical	6.46	6.36	(6.41)
Marginal	(5.95)	(6.09)	

TABLE L.8

Cell and Marginal Means
Experiment 4

Primary Measure: Personal Attraction

	Young	Old	Marginal
Personalized	5.75	6.86	(6.28)
Typical	6.50	6.00	(6.24)
Marginal	(6.11)	(6.41)	