THE EFFECTS OF THE NONVERBAL COMMUNICATION OF VALUES AND CONTEXT OF ANTICIPATED INTERACTION ON INTERPERSONAL ATTRACTION

by

Sheryl Brody

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

1973

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

January 4, 1974
date

Harold M. Proshansky
Chairman of Examining Committee

January 4, 1974
date

Florence L. Denmark
Executive Officer

Dr. Paul Secord

Dr. Norman Weissberg

Dr. William Oakes
Supervisory Committee

The City University of New York

ACKNOWLEDGEMENTS

My first exposure to Dr. Harold Proshansky occurred when I signed up for a course that he was teaching on "Impression Formation." My immediate appraisal of his many talents has been borne out by his precipitous professional ascent. The excitement stimulated by that course was the impetus for this study. While I could not characterize Dr. Proshansky's attitude as fatherly (he is far too young for such a label to be applied with any degree of realism), his kindness and chronic good humor were indefatiguable. I am grateful for his guidance.

I also appreciate the many helpful comments and suggestions of Dr. William Oakes, Dr. Herb Saltzstein, Dr. Paul Secord, and Dr. Norm Weissberg.

I am especially thankful for Goldilocks without whose sagacious grunts and contented coos this project might never have been completed. Finally, I would like to thank my husband for his unceasing encouragement and patience.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ILLUSTRATIONS

CHAPTER I

INTRODUCTION

At the beginning of every adult relationship is the impression that each person forms of the other when they meet for the first time. Even in the brief interval prior to overt interaction, characteristics of the other person are usually inferred from his appearance. It is the purpose of the present study to investigate the process by which such inferences are made, and how they vary as a function of the characteristics of the appearance of the stimulus person, the value orientation of the perceiver, and the situation within which the anticipated interaction takes place.

Investigations in which subjects have made personality inferences on the basis of information about a stimulus person are usually subsumed by the heading "Impression Formation." The classic research in this field was conducted by Solomon Asch in 1946. College students were asked to form an impression of a stimulus person described by a list of seven personality traits. Subjects indicated their impression by writing a brief description of the stimulus person, and by selecting personality traits that they thought would characterize the stimulus person. Asch found that most subjects formed an integrated, unified impression and that some stimulus traits had a greater effect on the total impression than others. Inclusion of these "central" stimulus traits had a profound effect on the way in which other stimulus traits were interpreted. These results were confirmed in a study by Kastenbaum (1951) in which vocal recordings were the

stimuli. According to Asch, whether or not a trait is central will depend on the stimulus traits with which it is presented. Asch found that "warm" and "cold" were central when presented with the list: "intelligent," "skillful," "industrious," "determined," "practical" and "cautious," but were not central when part of the list: "obedient," "weak," "shallow," "unambitious" and "vain."

Asch's experiment stimulated several lines of research. Investigators attempted to discover: (1) how impressions would be formed from inconsistent information; (2) whether the order in which traits were presented influenced the impressions formed (primacy vs. recency issue); (3) the influence on impressions of the relationship between stimulus traits and the traits used to indicate the impression (response traits); (4) how the favorability of individual stimulus traits is related to favorability of the total impression.

Studies by Haire and Grunes (1950), Dinnerstein (1951), Gollins (1954 and 1958), and Pepitone and Hayden (1955) found individual differences in techniques for coping with discrepant information about a stimulus person. Some subjects simply denied or ignored certain information; still others attempted to rationally explain the apparent contradiction. A third group made no attempt to integrate contradictory information, but simply described the stimulus person either by one or both sets of contradictory terms given by the experimenter.

Evidence is inconsistent concerning whether traits presented first are more or less influential than traits presented last in determining the overall impression. Both Asch (1946) and Luchins (1957b) contend that initial information provides a "set" by which later traits are interpreted, and for this reason initial information

is more influential. A primacy effect was found experimentally by both authors. Other experimenters have demonstrated that the instructions given to subjects will determine whether primacy or recency effects are found (Luchins, 1958; Anderson and Hubert, 1963; Gollin, 1958; Steward, 1965; Rosencrantz and Crockett, 1965). If subjects are asked not to form an impression until all of the traits are given, are warned that they will be requested to recall the stimulus traits at the end of the experiment, or are asked about their impression after each additional trait or group of traits, the primacy effect is eliminated.

Wishner (1960) investigated the relationship between traits by having undergraduates rate their instructors on the 53 adjectives used by Asch. Wishner then tabulated a correlation matrix by computing the correlation coefficient for each pair of traits. When he again replicated the Asch experiment he found that personality traits used as stimuli were central only if they had a high correlation coefficient with the traits on which subjects were asked to indicate their impressions (response traits); i.e., "warm" and "cold" were found to be central only when response traits such as "generosity," "happiness" and "sociability" or their opposites were used, but not central when response traits were used that did not correlate highly with "warm" or "cold." Thus it seems that centrality is not only determined by the relationships between stimulus traits, as Asch had believed, but by the selection of response traits as well.

Asch believed that impressions formed from several personality adjectives form a Gestalt which cannot be predicted on the basis of each trait considered individually. Several investigators have tried to do just that: predict the favorability of impressions on the basis

of the favorability of each personality trait used to form the impression. Triandis and Fishbein (1963) suggested that the favorability of an impression could be predicted from knowledge of the sum of the favorability ratings of each personality adjective. The impression could be presumably made more positive simply by the addition of favorable traits. An alternate model, proposed by Anderson (1962) was that the final impression is the average of the favorability ratings of the stimulus traits. According to this view, in order to make an impression more favorable it is necessary not simply to add more favorable traits, but to add traits whose average rating is more favorable than the average rating of traits already used for impression formation; i.e., if the trait "neat" has received a favorability rating of 1 (least favorable), and it is added to the list "cooperative" (rated 4), "intelligent (rated 3) and "aggressive" (rated 2), the predictions from these two models are different. The summation model predicts that the addition of "neat" should increase the favorability of impressions, but the averaging model would predict that the impression will become less favorable since the average favorability rating is lowered from 3 to 2.5. Anderson (1965) found that the averaging model was more successful for predicting impressions in the situation. However, if a trait whose favorability rating is the same as others in a group is added to that group of stimulus traits, the summation model provides the correct prediction. The summation model predicts that the impression will become more favorable, although the averaging model predicts that it will remain the same. Research of this type demonstrates that if a less favorable trait is added that the impression would have been more favorable than if the trait had not been added. To deal with this finding Anderson developed

a weighted average model which has successfully predicted the favorability of impressions in recent research (Anderson, 1965; Anderson and Jacobson, 1965).

The approach to the process of impression formation described thus far used personality traits as stimuli. It is the opinion of the writer that this method is of limited value because it has little to do with the process by which people usually form impressions of others outside of a laboratory setting. When people form first impressions of others in real life situations, they respond to a variety of cues: visual (both relatively permanent characteristics such as facial physiognomy, height, weight, body build, skin, hair and eye color, and more changeable traits such as dress, grooming, posture, gait, facial expression); auditory (voice, inflection, vocabulary, verbal facility, pronunciation, grammatical accuracy) and olfactory (any odors emitted). It is these cues and the mechanisms by which the perceiver interprets them that we consider to be a more valuable focal point of research in this area. It is an area about which we know little. We do know that if several people are asked their impressions of a standard stimulus person who is seen in a photograph or whose voice is heard in a recording, they will show considerable agreement in their judgments (Fay and Middleton, 1939; 1939; 1940; 1940; 1940; 1941; 1941; 1942; 1943; Secord and Bevan, 1956; Secord, Bevan and Dukes, 1953; Secord, Dukes and Bevan, 1954; Secord and Muthard, 1955). Although impressions of a stimulus person by different perceivers are not identical (Dornbusch, Hastorf, Richardson, Muzzy and Vreeland, 1965), let us consider the reasons for the fact that they are so often alike. What common experience has given each observer a similar way of

interpreting the stimulus pattern?

One explanation is, of course, acculturation. Part of the socialization process includes learning what attributes are, rightly or wrongly, thought to characterize members of different groups. In many cases the child learns stereotypes as well as the actual characteristics of groups.

Examination of stereotypes has largely been limited to conceptions about members of various racial, religious and national groups (i.e., Katz and Braly, 1933; Gilbert, 1951): memberships over which people have relatively little control. Comparatively little research has attempted to discover the inferred characteristics of a voluntary group that is part of a social movement and to which the individual can either belong or not belong. A case in point is the hippie movement. A peculiarity of membership in this group is that unlike becoming a Communist or member of the AMA, the hippie's group affiliation is far more externally visible, and creates an easy basis for his classification by others. In an era when many deviants shirk self-disclosure, the hippie wears his identity where it is most visible. We assume that the hippie stereotype has filtered down to the public in such a way that one of the characteristics associated with it most, long hair (see Table 1), evokes assumptions of acceptance of its liberal political philosophy. For this reason we have chosen the appearance associated with the hippie stereotype as the vehicle by which the process of impression formation was investigated.

In short, we suggest that the Asch approach, in which reactions to personality adjectives are used to study impression formation, is somewhat artificial and different from impressions as they are commonly

Table 1

Study #1

Adjectives Used Most Frequently to Describe Hippies

Appearance		Values		Personality Traits	
		Positively Valued			
Long-haired	72	Nature	19	Drug Using	28
*Dirty	31	Peace	15	*Sexually Free	20
Bearded	22	*Love	12	*Individualistic	18
Jeans	16	Change	12	*Nonconformist	11
Sandals	14	*Brotherhood	7	Rebellious	10
Beads	11	*Freedom	7	Friendly	10
Sloppy	11	*Communal Life Style	7	*Idealistic	9
Ragged Clothes	10	Personal Freedom	7	*No Values	8
Unusual Clothes	8	Life	5	Clannish	8
*Young	7	Music	5	Present-oriented	7
Caucasian	5			Escapist	7
Barefooted	5	Negatively Valued		Carefree	7
		*Establishment	34	*Radical, Revolutionary	6
		*War	26	Conforms to Hippie Norms	5
		*Materialism	18	Nonviolent	5
		*U.S. Government	14	Liberal	5
		9-5 Job	8	Pot-smoking	5
		*Violence	3	Outspoken	5
				Natural	5
				Passive	4

Number to the right of each trait is the number of respondents who used this trait in their description of a hippie.

Asterisked traits are those that were also included in Hinckle's description of the hippie subculture.

formed. We propose instead that the external cues involved in the appearance which one person presents to another when they meet for the first time more closely approximates the stimulus for impression formation.

It is further suggested that stereotypes provide one means by which these cues may be processed by the perceiver. The hippie stereotype has been chosen as the medium by which this process has been studied because of the consensus on external cues associated with membership in this group.

The origin of the hippie movement has been traced, by Warren Hinckle,[1] to the Beat Generation of the 1950's, a subculture which dabbled in the pacifistic humanism of Zen Buddhism, Communism, folk music, jazz, poetry and Civil Rights. Heroes included poets Allen Ginsberg, Lawrence Ferlinghetti, Kerouac, Gary Snyder and others. Centers for those of Bohemian inclinations were limited to San Francisco's North Beach and Greenwich Village in New York. Even at this time, two distinct factions were evident: (a) a belligerent fascist, nihilistic activist group, and (b) a new artistic school which challenged the complacency of the literary establishment. This latter group was in a majority. Although marijuana was commonly used, Hinckle considers the use of hallucinogens such as peyote and mescaline also to be a derivative of the Beat culture because of the experimentation of some of its leaders with these drugs. These two psychedelics were not available in any quantity until 1957-1958, when they were presumably received enthusiastically. LSD did not arrive

---

[1]H. Jaffe and T. Tytell, "A Social History of the Hippies," The American Experience (New York: Harper & Row, 1970), pp. 262-284.

on the scene until 1962 in New York and 1964 in California at which time it was given an extensive publicity campaign by Dr. Timothy Leary, who also published directions for its home manufacture. In 1966 the California legislature prohibited the use of LSD. It is the outlawing of drugs and subsequent police harassment to which Hinckle attributes the negative attitudes of hippies to those who make and enforce the laws.

Another important step in the transition from beat to hippie subcultures was the new musical style introduced by the Beatles, which displaced folk music. "Happenings," "be-ins," and rock festivals such as Woodstock are a part of the new communal style of the hippies. A revival of Tolkien's Lord of the Rings trilogy seems to be the most popular literary work of the subculture, perhaps because it is about hobbits: "hedonistic, happy little fellows who love beauty and pretty colors. Hobbits have their own scene and resent intrusion, pass the time eating three or four meals a day and smoke burning leaves of herbs in pipes of clay."[2] The commercial success of hippie shops in Haight Ashbury and New York's Village attest to the hippie influence on fashion and the popularity of handcrafted items. These bastions of free enterprise have been having competition as of late from a group called the Diggers who have been opening "cooperative" stores where food and clothes are given away.

In sum, the characteristics of the hippie subculture are as follows:

> boys and girls interact in a tribal love-seeking free-swinging acid-based type of society where. . . . They

---

[2] Op. cit., p. 280.

> talked about reducing governmental controls, the sanctity of the individual, the need for equality for all men. . . . The utopian sentiments of these hippies were not to be put down lightly. Hippies have a clear vision of the ideal community . . . where everyone is turned on and beautiful and happy, and floating free. But it is a vision that . . . necessarily embodies a radical political philosophy: communal life, drastic reduction of private property, rejection of violence, creativity before consumption, freedom before authority, de-emphasis of government, and traditional forms of leadership . . . all hippies have a political posture of unremitting opposition to the establishment which insists on branding them criminals because they take LSD and marijuana and hating them anyway, because they enjoy sleeping 9 in a room and 3 to a bed, seem to have free sex and guiltless minds and can raise healthy children in dirty clothes. The hippie choice of weapons is to love the Establishment to death rather than protest it or blow it up . . . rejected the structured nature of society--the foolscap ring of success, conformity and acceptance "normal" people must regularly jump through.[3]

The only physical attributes that Hinckle describes as characteristic of hippies are beads, beards, and bright colors.

It is of interest to compare Hinckle's description of hippies (see asterisked traits in Table 1) with the stereotype of hippies that was obtained from 110 undergraduates at Hunter College and the Borough of Manhattan Community College. These students responded in an open-ended fashion to the following questions: "What are the values and personality characteristics of a hippie? What does a hippie look like?" Unstructured questions of this type were chosen to minimize the possibility of the experimenter influencing the students' responses. In exploratory work where one is unsure what categories may prove relevant, it seems best to have the respondents reply in any way that they deem appropriate. Also, this permits expression of

---

[3] Op. cit., pp. 262-265.

both positive and negative aspects of the stereotype. The former are missed in studies of stereotypes. Results appear in Tables 1, A1, A2, and A3. Because of the large number of subjects (72) who considered long hair to be characteristic of hippies (the trait next in frequency was "beards," included by only 22 subjects), the two terms ("long-haired" and "hippie") are often used interchangeably.

A comparison of Hinckle's description with the stereotype held by the undergraduates tested shows that most of the traits Hinckle described as characteristic of hippies were included among the students' responses. The criterion of a stereotype (Secord and Backman; 1966 page 67) of "consensus on attributed traits" seems to be supported.

The notion that long-haired males are assumed to be more liberal than short-haired males is supported by additional research by the author. 34 Caucasian females enrolled in 2 Introductory Psychology courses at Hunter College judged the political philosophy of 4 different males whose photographs they received. Each set of 4 had been randomly selected from copies of 240 yearbook photographs of the male Caucasian 1970 graduates of Columbia University College of Arts and Sciences who did not wear a beard, a moustache, or glasses. As is shown in Table 2, a significant direct relationship was found between subjects' ratings of the length of the hair of stimulus persons and the liberalness of their political values. This relationship was as strong for the first stimulus person rated by each subject as it was for the fourth stimulus person rated. The length of the sideburns of each stimulus person, as rated by each subject, was not found to be significantly related to inferences of liberalism, although a

Table 2

Study #2

Relationship Between Ratings of Hair Length and Sideburn Length and Inferences of the Liberalism of Stimulus Persons

df	Relationship	r
31	Between rated hair length and rated political liberalism for Caucasian female subjects rating the first of four stimulus persons with which they were presented.	.57*
30	Between rated hair length and rated political liberalism for Caucasian female subjects rating the second of four stimulus persons with which they were presented.	.44*
29	Between rated hair length and rated political liberalism for Caucasian female subjects rating the third of four stimulus persons with which they were presented.	.01
29	Between rated hair length and rated political liberalism for Caucasian female subjects rating the fourth of four stimulus persons with which they were presented.	.53*
	The average of the above four correlation coefficients (using z transformations) is .42 (significant at .01 level for a one-sided test for df 29)	
30	Between rated sideburn length and rated political liberalism for Caucasian female subjects rating the first of four stimulus persons with which they were presented.	.48*
30	Between rated sideburn length and rated political liberalism for Caucasian female subjects rating the second of four stimulus persons with which they were presented.	.22
29	Between rated sideburn length and rated political liberalism for Caucasian female subjects rating the third of four stimulus persons with which they were presented.	.07
29	Between rated sideburn length and rated political liberalism for Caucasian female subjects rating the fourth of four stimulus persons with which they were presented.	.25

* = significant at $p \leq .01$ for one-sided test

tendency in this direction was discovered. This seems to confirm the assumption that the more similar to a long-haired hippie an individual is, the more others will assume that his values are also similar to those of hippies.

> Hypothesis 1: Subjects will evaluate stimulus persons possessing stereotyped ("hippie") characteristics as more politically liberal than stimulus persons who do not possess these characteristics.
>
> Hypothesis 2: Subjects will show considerable agreement when inferring political conservativism of "hippie" and "non-hippie" stimulus persons.

Although observers may agree with one another in assessing the values of a stereotyped stimulus person, we would not expect them to be equally attracted to the stimulus person. Exchange theory (Thibaut and Kelly, 1959; Homans, 1961) predicts that interpersonal attraction is a function of the rewards and costs of an interaction: people are most attracted to others who provide some positive outcome (of rewards minus costs) above a comparison level of what might otherwise be expected in that type of situation. One of many types of rewards which a person may provide for another is satisfaction of the need to validate one's conceptions of reality. In terms of congruity theory (Newcomb, 1961; Heider, 1946): individuals feel most attracted towards those people whose values are similar to their own. An extrapolation of balance theory to the impression formation situation suggests that individuals will feel most attracted to those strangers whose values they assume to be most like their own.

Although there has been little research which has investigated the relationship between inferences of value similarity and interpersonal attraction, there is a considerable body of research which

has studied the relationship between actual value similarity and interpersonal attraction. Newcomb (1943) studied the relationship between popularity and acceptance of group attitudes amongst Bennington college girls. Politics was an important issue at Bennington at the time, and "liberal" attitudes were the norm. Girls who were liberal were more popular than girls who were not. This finding was interpreted by Newcomb as demonstrating the relevance of adopting group attitudes for acceptance by a group, and vice-versa. His results may also be explained without invoking the concept of group norms. If "liberal" girls outnumbered "conservative" girls, and if people like most others who share their attitudes (balance theory), then this is sufficient to account for the greater popularity of "liberal" girls.

In another well-known study, Newcomb observed male undergraduates at the University of Michigan who lived together at the same dormitory (1956). He found that students who were most attracted towards one another were those whose attitudes were similar (as assessed before school started). It required several weeks before these stable friendships were formed, presumably because it took this long to discover others' attitudes. If Hypothesis one is correct and students' appearance accurately reflects their values, we might expect that the time required for this process to occur to be shortened significantly. If one can infer the values of others from their appearance, the time required to discover others whose values are similar to one's own is diminished considerably.

Byrne, London, and Reeves (1968) also report that people are most attracted to others with attitudes similar to their own. A

6-point, 12-item, pre-experimental attitude scale was filled out by 103 male and 102 female subjects. Later, each subject was presented with a photograph and a copy of the same attitude scale, ostensibly filled out by the person in the photograph. Attitude similarity between subject and stimulus person was varied by having either 10 out of the 12 responses, or 2 out of the 12 responses similar to the subject's initial attitude ratings. Each subject rated one stimulus person on seven point scales for likeability, desirability as a work partner, and four other categories. Ratings on likeability and desirability as a work partner were summed to obtain a measure of interpersonal attraction. As the authors had hypothesized, interpersonal attraction was found to be significantly related to attitude similarity. In a similar study by Stroebe, Insko, Thompson, and Layton (1971) attitude similarity was manipulated in much the same way as it had been by Byrne, et al., and was found to be significantly related to liking and attraction to the stimulus person as a potential co-worker, date and marriage partner.

When Fensterheim and Tresselt (1953) had 28 male college students rate themselves and 24 photographs (12 male and 12 female) on the relative importance of several values and on a "like-dislike" scale, they found a significant relationship between inferred value similarity and interpersonal attraction: persons assumed to have values like those of the subject were liked more than those with values assumed to be different. This study is most like the experiment conducted here because of the inferential nature of the attitude assessment by the subject. Unfortunately, no attempt was made by the authors to identify the characteristics of the stimulus persons that

were associated with inferences of greatest value similarity. Nor did they discuss whether the same stimulus persons were liked by most subjects, or whether the liked stimulus persons varied from subject to subject. Thus the process by which subjects made their judgments remains enigmatic.

An additional source of information concerning the relationships between value similarity and interpersonal attraction, and between inferred value similarity and interpersonal attraction comes from the literature on racial prejudice. A considerable body of research has emerged in response to the proposal by Rokeach, Smith and Evans in The Opened and Closed Mind (1960) that prejudice against minority group members is due to the assumption that these individuals have attitudes that are dissimilar to those of the perceiver. This contention was challenged by Triandis (1961), who contended that belief similarity may be relevant for making friendship choices, as Rokeach et al. (1960) had found, but not relevant to contexts involving large social distances. Triandis found that when a social distance measure was used to indicate interpersonal attraction, race was a much more potent determinant of interpersonal attraction than belief similarity, although both effects were significant.

In a subsequent study by Byrne and Wong (1962) subjects' responses to an attitude questionnaire were used to manipulate belief similarity, and interpersonal attraction was measured both in terms of feelings of friendliness toward and willingness to work with stimulus persons. Similarity of attitudes was found to be more strongly related to attraction than race. Similar results were obtained by Stein, Harkyck, and Smith (1965) and Stein (1966). A

strong relationship between value similarity and interpersonal attraction was found in a more realistic setting by Rokeach and Mezei (1966). They had subjects choose work partners and individuals that they would like to take a coffee break with from among white and black confederates who either agreed or disagreed with them. Further support for the contention that belief similarity is more important for friendship choices than race comes from research in which several samples were studied. Only in Louisiana, the southernmost sample included, was race the dominant factor.

Triandis and Davis (1965) explained the strong effects of value similarity found by many researchers by agreeing that value similarity is an important predictor of friendship choices, but contending that race is more relevant for selections involving greater social distance. They found that the more intimate the social context the more subjects responded in terms of race; belief similarity was more relevant for the less intimate situations. This contradicts the 1961 position of Triandis that belief similarity is important for friendship choices (which presumably involve small social distances), but that race is more important for determining interpersonal attraction in situations involving large social distances. Similar results were also found by Insko and Robinson (1967).

Several investigators found that when no information was provided about attitude similarity, whites tended to assume that blacks had attitudes that were different from their own (Byrne and Wong, 1962; Stein, Hardyck and Smith, 1965; and Stein, 1966).

It is difficult to compare these studies to one another because of the different samples used, different techniques used to manipulate

belief similarity and prejudice, and lack of information on the importance to subjects of the beliefs used. The evidence does suggest that (1) both belief similarity and minority group membership are relevant for predicting racial prejudice, and that (2) in the absence of information about belief similarity, individuals tend to assume that the values of those persons whom they are prejudiced against are different from their own.

This is of special importance for the research proposed here, for if interpersonal attraction (prejudice) influences inferences of value similarity, it gives credence to the possibility that the reverse is also true (inferences of value similarity influence interpersonal attraction).

Other studies which have found a significant relationship between value similarity and interpersonal attraction include Richardson (1940); Precker (1952); Broderick (1956); Byrne and Baylock (1963); and Byrne, Nelson, and Reeves (1964).

The research discussed thus far has predominantly dealt with the relationship between value similarity and interpersonal attraction, although a few studies touched on the relationship of inferred value similarity and attraction. An initial attempt by the author to demonstrate the latter was unsuccessful. 31 Caucasian female Hunter college psychology students answered several questions about themselves (including political orientation) and then judged the political orientation and physical attractiveness of four different stimulus persons whose photographs were randomly chosen from those 1970 Caucasian graduates of Columbia University College of Arts and Sciences who did not wear a beard, moustache or glasses. They also indicated their

attraction to each stimulus person as potential dating partners and as candidates for college class president. The failure to demonstrate a relationship between inferred value similarity and interpersonal attraction (see Table 3) was attributed to (1) the strong effect of the physical attractiveness of the stimulus persons on interpersonal attraction as is shown by the significant relationships between interpersonal attraction and the physical attractiveness of stimulus persons for both interaction contexts (voting and dating) in Table 3, and (2) the fact that there was relatively little variation in hair length amongst stimulus persons (since stimulus persons were randomly chosen from the 1970 Columbia yearbook photographs, with the qualification already mentioned, most had "average" hair length).

In two later studies ("Study #3" and "Study #4") these weaknesses were eliminated and substantial relationships between inferred value similarity and interpersonal attraction were found (see Tables 4, 5 and 6). Caucasian females between the ages of 16 and 24 enrolled in Psychology courses at Hunter College rated their attraction to each of 4 male stimulus persons (two with long hair and two with short hair), and ranked the four in terms of which was liked most, second best, etc. Each subject saw 4 stimulus persons that were of approximately equal physical attractiveness as determined earlier by ratings of another group of Caucasian female Hunter College Psychology students. Ranked attraction to the 2 short-haired stimulus persons was averaged, as was attraction to the two long-haired stimulus persons, to minimize the effects of peculiarities of any given stimulus person. Peculiarities of specific stimulus persons were further minimized by using many different stimulus persons. The order in which subjects saw long- and

Table 3

Study #2

Relationship Between Interpersonal Attraction and Other Variables Investigated

	Interpersonal Attraction	
	Dating Context	Class President
Inferred Value Similarity:	No relationship	No relationship
Physical Attractiveness:		
Stimulus persons rated 1st	r = .57*(df = 30)	r = .70*(df = 30)
Stimulus persons rated 2nd	r = .58*(df = 30)	r = .45*(df = 29)
Stimulus persons rated 3rd	r = .51*(df = 28)	r = .49*(df = 27)
Stimulus persons rated 4th	r = .64*(df = 29)	r = .43*(df = 28)
Facial Expression (whether or not stimulus person is smiling)	Chi Square not significant	Chi Square not significant

* = significant at the .01 level (for a one-sided test)
** = significant at the .05 level (for a one-sided test)

Table 4

Study #3

The Effect of Inferred Value Similarity on Interpersonal Attraction

The Difference Between Attraction of Conservative Subjects Towards Short-haired and Long-haired Stimulus Persons

Dating Situation	Voting Situation	Cooperative Task Situation
t = 1.46*	t = .91	t = .78

* significant at $p \leq .072$

Table 5

Study #3

The Strength of the Relationship Between Inferred Value Similarity and Interpersonal Attraction as a Function of the Context of Anticipated Interaction

Comparison of Attraction of Conservative Subjects Towards Stimulus Persons in Different Contexts

	Dating vs. Task	Dating vs. Voting	Voting vs. Task
Attraction Towards Short-haired Stimulus Persons	t = 1.35	t = .65	t = .11
Attraction Towards Long-haired Stimulus Persons	t = 4.68**	t = 2.44*	t = 2.38*

* significant at $p \leq .05$ (2 tailed)
** significant at $p \leq .001$ (2 tailed)

Table 6

Results of Study #4

The relationship between subjects' political conservativism and average ranked attraction to two short-haired stimulus persons

	Date	Class President	Work Partner
Context Effects	$X^2 = 8.95$ df = 4	$X^2 = 6.80$ df = 4	$X^2 = 9.40$ df = 4

	1st Context Evaluated	2nd Context Evaluated	3rd Context Evaluated
Order Effects	$X^2 = 11.59$ df = 4	$X^2 = 13.5$ df = 4	$X^2 = 4.6$ df = 4

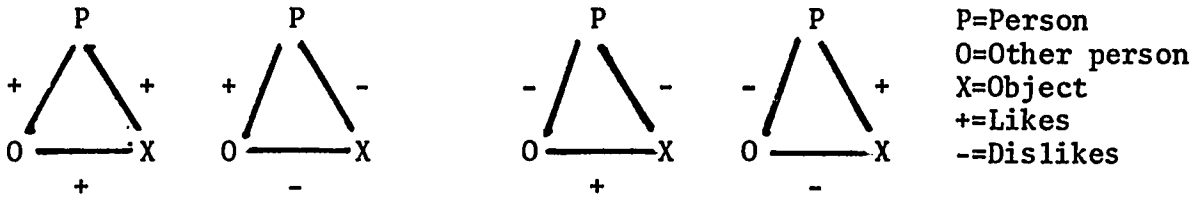
* = significant at $p \leq .01$
** = significant at $p \leq .05$

short-haired stimulus persons was randomly varied. A strong trend was found in Study #3 (see Tables 4 and 5) and a significant relationship was found in Study #4 (see Table 6) between the subjects' political philosophy and attraction to short- or long-haired stimulus persons: the more conservative the subjects, the more they preferred the short-haired stimulus persons and rejected the long-haired stimulus persons and the more liberal the subjects, the more they preferred the long-haired stimulus persons and rejected the short-haired stimulus persons.

The cumulative results of the above investigations suggest:

> Hypothesis 3a: Stimulus persons assumed to have values similar to those of the perceiver by virtue of a common stereotype that relates such values to their physical appearance, will be liked more by the perceiver than those assumed to have different values, as expressed by a different appearance.

Balanced States



P Likes O P Dislikes O

As is shown in the above diagrammatic representation of balance theory (Heider, 1946), people are expected to like others who are assumed to share their attitude towards an object, and to dislike others whom they assume do not share their attitude. Little has been said about the exact nature of such "liking," other than it is some favorable predisposition towards another person.

We would expect that such a favorable predisposition towards another person would influence the evaluation of a stimulus person in

terms of (1) those characteristics for which there are no objective criteria, and (2) which are relevant for determining the desirability of a person. Let us explain.

(1) Traits differ in terms of the ambiguity of the criteria by which they are assessed, and, therefore, the degree of consensus that would be found among different raters. Most raters would agree with one another, for example, when judging the eye color or height (short, average, tall) of most stimulus persons. We might refer to such traits as objectively determined.

There are other traits for which the criteria are much less clear. Physical attractiveness is an example of such a trait. When four seniors at the University of Minnesota (Walster et. al., 1966) judged the physical attractiveness of over 200 freshmen, interrater correlations varied from between .49 and .58, suggesting considerable variation in ratings. Physical attractiveness would, therefore, be a subjectively determined trait.

(2) Traits also vary according to how salient they are to judgments of the desirability of a stimulus person. For example, it would probably make little difference, relatively speaking, in our evaluation of a person whether his ear lobes were connected to, or disconnected from his head. Since this trait would presumably result in similar ratings for all who judged it, it would be a non-evaluative, objectively determined trait. An example of a non-evaluative subjectively determined trait might be symmetry of facial features, for it is difficult to assess but irrelevant to the evaluation process.

How friendly a stimulus person was judged to be would probably be very relevant for assessing desirability. Because there is no clear-cut formula for separating people who are friendly from those who are

not, this trait is a subjectively determined, evaluative trait. Height is an example of an evaluative, objectively determined trait, because it is easily rated and will evoke high interrater agreement, and because it is related to evaluation (it is more desirable to be tall than to be short: in every Presidential election, the taller of the two candidates won; female and male models are all tall, etc.). Physical attractiveness, as we have already discussed, is a trait that is rated subjectively. It is also an evaluative trait: stimulus persons who were physically attractive were preferred to those who were not in a variety of situations (Walster et al., 1966; Byrne et al., 1968; and Stroebe et al., 1971) including an investigation by the author ("Study #2") in which significant relationships were found (see Table 3, page 20) between ratings of the physical attractiveness of stimulus persons and the attraction subjects felt towards the stimulus persons.

It is the view of the writer that a favorable (or unfavorable) predisposition, such as is predicted by balance theory in given situations, will influence the rating of a stimulus person on evaluative, subjectively determined characteristics. With no objective criteria to force the judgment in one direction or another, the subject will be influenced by his own needs in the situation. We have suggested that physical attractiveness is a characteristic that is both subjectively determined and which has an evaluative connotation. We therefore expect a "favorable predisposition" towards a stimulus person, due to inferred value similarity, to enhance the favorableness of judgments on this dimension.

Hypothesis 3b: Stimulus persons assumed to have values similar to those of the perceiver, by virtue of a common stereotype that relates such values to physical appearance, will be rated as more physically attractive than stimulus persons assumed to have values that are not similar to those of the perceiver.

As we have seen, the hippie stereotype includes both favorable attributes such as "individualistic," "friendly" and "idealistic" and unfavorable characteristics such as "conforming," "clannish" and "escapistic." For the same reasons that we have already described in detail, we expect subjects to have a generally more favorable image of stimulus persons whose values they assume to be similar to their own than of stimulus persons whose values are assumed to be different from their own. We would expect liberal subjects to use more of the positive adjectives to describe stimulus persons with "hippie appearance" than conservative subjects responding to the same stimulus persons.

Hypothesis 3c: Stimulus persons assumed to have values that are similar to those of the perceiver, by virtue of a common stereotype that relate such values to their physical appearance, will be rated as having more favorable personality traits than stimulus persons assumed to have values that are different from those of the perceiver.

Hypothesis 3d: Stimulus persons assumed to have values that are similar to those of the perceiver, by virtue of a common stereotype that relates such values to their physical appearance, will not be rated significantly differently on "neutral" traits than stimulus persons assumed to have values that are different from those of the perceiver.

To summarize the several parts of Hypothesis 3, we predict that individuals will feel greater attraction to stimulus persons whose values they assume to be similar to their own than to stimulus persons whose values are assumed to be dissimilar to their own and that this

will also affect evaluations of the physical attractiveness of stimulus persons, and attribution of favorable and unfavorable personality traits but not judgments of neutral personality traits.

It is possible that the above hypotheses may be confirmed for reasons other than the mechanism described (inferred value similarity). For example, a subject may simply find long hair aesthetically pleasing, and see stimulus persons with long hair as more attractive than stimulus persons with short hair regardless of the values it may connote. A subject may perceive long hair as "stylish" rather than as connoting a radical lifestyle, and evaluate the stimulus person positively for this reason. In order to test for this possibility, the political implications of the hippie stereotype will be counteracted by having the stimulus person wear a button with a slogan on it which contradicts the implications of appearance. If hypotheses 3a, 3b, and 3c are confirmed for reasons other than the mechanism theorized, then having the stimulus person wear a button which contradicts the political implications of the appearance of the stimulus person should have no effect on subjects' responses. We would expect them to be identical to reactions to the stimulus persons when not wearing the buttons. If, however, as we expect, interpersonal attraction, ratings of physical attractiveness, and attributed personality characteristics are related to inferred value similarity, then having subjects wear buttons which contradict the implications of their appearance should, to some extent, counteract the effects of the implications of their appearance.

> Hypothesis 4a: Stimulus persons who are assumed to have values similar to those of the perceiver, but who wear a button which contradicts such assumptions, will be

liked significantly less than the same stimulus persons without the button.

Hypothesis 4b: Stimulus persons who are assumed to have values similar to those of the perceiver, but who wear a button which contradicts such assumptions, will be judged as significantly less physically attractive than the same stimulus person without the button.

Hypothesis 4c: Stimulus persons who are assumed to have values similar to those of the perceiver, but who wear a button which contradicts such assumptions, will be judged to possess significantly fewer favorable personality characteristics as the same stimulus person without the button.

It is difficult to imagine just how subjects will interpret these contradictory stimulus persons. One would assume that, as with the results of Gollin's (1954) study of contradictory stimuli, some subjects will integrate the discrepant information, others will deny the implications of one of the cues (simplifiers), and a third group will make no attempt to integrate the contradictory qualities, but simply accept the implications of both. It is only for subjects of the second type who deny the political implications of physical appearance, and subjects of the first type where the stimulus persons are interpreted as being of a different political orientation than they would have been without the button, that we would expect a significant difference between responses to stimulus persons with and without the contradictory button. For subjects who deny the message of the button (also group 2) or for whom the button does not affect their interpretation of the political values of the stimulus person (group 3) we would expect no difference in their reaction to a stimulus person with or without the button. For this reason these subjects (group 2--simplifiers who deny the button message--and group 3) cannot be used to test Hypotheses 4a,

4b and 4c. Only those subjects who incorporate the message of the button into their interpretation of the political philosophy of the stimulus person can be used to test hypotheses 4a, 4b and 4c. Credible button-stimulus person combinations will be used to minimize the need to deny part of the discrepant information (we assume that denial is greatest if contradiction is large).

We should also consider another possible way in which subjects may interpret contradictory stimulus persons. The button may suggest to some subjects that the experimenter is interested in demonstrating an effect of the political orientation of the stimulus person on evaluations of the stimulus person ("demand characteristics," see Orne, 1962). This possibility, its likelihood, and consequences are described in the "Discussion of Results" section of this paper.

If inferred value similarity is related to interpersonal attraction, it is important to learn under what conditions this is the case. It is here that exchange theory (Thibaut and Kelly, 1959; Homans, 1961) can aid our inquiry. Exchange theory predicts that interpersonal attraction is a direct function of the rewards that one person provides for another during interaction. We would expect that the reinforcing power of specific types of need satisfaction will vary with the relative strength of different needs in different types of situations. Thus attraction to a stimulus person should vary in different situations with the ability of the stimulus person to satisfy the needs that are most salient in that situation.

One type of situation in which value similarity is salient is when one is deciding on a candidate for political office. Presumably, such a candidate would have the power, if he is elected, to make

decisions which will affect the voter. In this situation we would expect the voter to be anxious to select a candidate that will be responsive to his values, when making such decisions. Thus this would be a situation in which inferred value similarity would be expected to be strongly related to interpersonal attraction. In other situations, the importance of inferred value similarity seems to be at a minimum. Walster et al. (1966) found physical attractiveness to be the only variable relevant for predicting interpersonal attraction in a dating situation. It seems as if, in a dating situation, need satisfaction is obtained from the stimulus person as an end in itself, whereas the political candidate is important in terms of making decisions that will affect other types of need satisfaction (i.e., economic, maintenance of inter-group harmony, etc.).

Stroebe et al. (1971) used a similarity manipulation similar to the one used by Byrne et al. (1968) to assess the effects of attitude similarity in a variety of situations. He found a significant relationship between attitude similarity and "liking," "marrying," "dating" and "working" in that order. No attempt was made by the authors to explain this finding. However, it does point to the importance of context for assessing interpersonal attraction.

The results of two studies by the author also demonstrate the importance of the context in which observers judge stimulus persons. When female Caucasian Hunter College Introductory Psychology students evaluated 4 male stimulus persons ("Study #2"), the relationship between the physical attractiveness of the stimulus persons and the subjects' attraction towards the stimulus persons was greater when the stimulus person was evaluated as a potential date than when he was

evaluated as a candidate for class president (see Table 3, page 20). In a later investigation ("Study #4") in which the order in which contexts were rated by each subject was carefully controlled, inferred value similarity was found to be related to attraction more strongly when the stimulus person was evaluated as a potential class president than when the stimulus person was evaluated as a potential date (see Table 6).

For these reasons we expect that

Hypothesis 5: Interpersonal attraction will be more strongly related to inferred value similarity when voting for a political candidate than when selecting a partner for a date.

CHAPTER II

SUMMARY OF HYPOTHESES

1. Subjects will evaluate stimulus persons possessing stereotyped ("hippie") characteristics as more politically liberal than stimulus persons who do not possess these characteristics.

2. Subjects will show considerable agreement when inferring political conservativism of "hippie" and "non-hippie" stimulus persons.

3a. Stimulus persons assumed to have values similar to those of the perceiver (by virtue of a common stereotype that relates such values to their physical appearance) will be liked more by the perceiver than stimulus persons assumed to have different values, as expressed by a different appearance.

3b. Stimulus persons assumed to have values similar to those of the perceiver (by virtue of a common stereotype that relates such values to their physical appearance) will be rated as more physically attractive than stimulus persons assumed to have values that are not similar to those of the perceiver.

3c. Stimulus persons assumed to have values that are similar to those of the perceiver (by virtue of a common stereotype that relates such values to their physical appearance) will be rated as having more favorable personality characteristics than stimulus persons assumed to have values that are different from those of the perceiver.

3d. Stimulus persons assumed to have values that are similar to those of the perceiver (by virtue of a common stereotype that relates such values to their physical appearance) will not be rated significantly differently on "neutral" traits than stimulus persons assumed to have values that are different from those of the perceiver.

4a. Stimulus persons assumed to have values similar to those of the perceiver (by virtue of a common stereotype that relates such values to their physical appearance), but who wear a button which contradicts such assumptions, will be liked less than the same stimulus persons when they do not wear the button.

4b. Stimulus persons assumed to have values similar to those of the perceiver (by virtue of a common stereotype that relates such values to their physical appearance), but who wear a button which contradicts such assumptions, will be judged less physically attractive than the same stimulus persons when they do not wear the button.

4c. Stimulus persons assumed to have values similar to those of the perceiver (by virtue of a common stereotype that relates such values to their physical appearance), but who wear a button which contradicts such assumptions, will be judged as possessing fewer favorable personality characteristics than the same stimulus persons when they do not wear the button.

5. Interpersonal attraction will be more strongly related to inferred value similarity when voting for a political candidate than when selecting a partner for a date.

CHAPTER III

METHOD AND PROCEDURE

Methodology

Overview of Procedure

Although a more detailed description of the procedure appears in later sections, it seems judicious to present an outline of the general procedure at this point. Undergraduate Psychology students responded to the Kerlinger Social Attitudes Scale as part of a spurious study of astrology. It was on the basis of these responses that they were categorized in terms of their political orientation. Approximately one month later subjects were presented with photographs of six male Caucasian stimulus persons: two "hippie," two "non-hippie," one contradictory, and one neutral. After being asked to provide some background information about themselves, subjects were requested to rate and rank each stimulus person in terms of dating desirability, physical attractiveness, voting desirability, and to rate them on a number of personality dimensions. The order in which these evaluations were made was varied randomly from subject to subject.

Subjects

Subjects were 186 female Caucasian undergraduate students enrolled in Psychology courses at Hunter College of the City University of New York, or at Brooklyn College of the City University of New York, during the 1972 summer session.

Experimental Design

The research reported here has a 2x2x2x2 factorial design, with the effects of these variables tested on three dependent variables. The independent variables are as follows:

1. The political orientation of the subject was categorized, on the basis of the Kerlinger Social Attitudes Scale, into conservative or liberal, for those subjects who indicated that political philosophy was a matter of some importance to them (others were excluded from the study).

2. The physical appearance of the stimulus person was of two types, in terms of manipulable characteristics of appearance: hippie and non-hippie.

3. There were two types of stimulus persons: those presented with contradictory buttons, and those presented without the buttons.

4. There were two contexts of anticipated interaction between subject and stimulus person: dating and voting.

The effects of these conditions were considered in terms of the following dependent variables: interpersonal attraction of subjects towards stimulus persons, how physically attractive subjects found stimulus persons, and what personality traits subjects attributed to each stimulus person.

Use of Repeated Measures Designs and Rankings

Rather than have each subject respond to stimulus persons for just one independent condition, they responded to both levels of each condition, wherever possible (i.e., evaluated both long- and short-haired stimulus persons, in both dating and political contexts, both with contradictory buttons and without). In addition, subjects were asked to rank the stimulus persons relative to one another. There are several reasons for following these procedures: (1) to minimize the confounding effects of peculiarities of individual subjects; i.e., some subjects might respond positively or negatively to a stimulus person regardless of the qualities of that stimulus person. By having subjects rate both long- and short-haired stimulus persons, subjects were used as their own controls. (2) control for individual differences in interpretation of the meaning of the different values on the scales that are being used. Again, subjects served as their own controls. (3) control for extraneous variables in the stimulus persons; i.e., a subject might feel negatively about the prospect of dating a stimulus person whom she infers is of a religion that is different from her own; if she is forced to choose between several stimulus persons that all appear to belong to the same religious group, this variable will no longer affect her response. (4) subjects may rate several stimulus persons identically, and yet prefer some to others. These preferences may not be revealed unless they are forced to rank their attraction to the several stimulus persons presented to them.

Selection of Photographs

Thirty-five Caucasian females between the ages of 16 and 24 enrolled in two randomly selected Introductory Psychology courses at Hunter College were used to select the photographs that served as stimuli in the experiment. Each received the question booklet that appears in Appendix B and photographs of 16 male Caucasian graduates of the Columbia University College of Arts and Sciences June 1970 and June 1971 classes. Each set of photographs was randomly selected from 110 yearbook photographs of those individuals who had neither beards nor moustaches and who did not wear glasses. The decision to have each subject rate sixteen stimulus persons was based on the assumption that this would probably be the maximum number of ratings that could be made in one class period. Because thirty-five individuals each rated sixteen stimulus persons approximately 560 such ratings were made and each of the 110 photographs was rated by at least five judges.

The first consideration in photograph selection was to choose stimulus persons that were consistently given extreme ratings on political orientation: 12 "conservative" and 12 "liberal." Since each subject in the actual study saw two "conservative" and two "liberal" stimulus persons, this meant that six totally different sets of photographs were available, and ensured that the relationships found could not be attributed to special qualities of a single stimulus person.

A second consideration in photograph selection was the physical attractiveness of stimulus persons. The physical attractiveness of stimulus persons has been found to have a profound effect on interpersonal attraction both in research by this writer (see Table 3) and

by Walster et al. (1966), and Byrne et al. (1969). For this reason an effort was made to select photographs of stimulus persons of similar physical attractiveness. Of all the stimulus persons who received extreme ratings on political orientation only those who received average ratings on physical attractiveness (with high interrater agreement for these ratings) were selected. By having all stimulus persons of equal attractiveness, they could then be grouped randomly into sets to which subjects responded.

A third factor which determined which photographs were selected was the inferences made concerning the religious affiliation of the individual in each photograph. A relationship was found in Study #2 (see Table 7) between conservativism and religion: Catholic subjects were found to be most conservative, Jewish subjects more liberal, and atheists or agnostics most liberal. It was important, therefore, to control any inferences subjects made about the religion of the stimulus persons. Otherwise it is possible that differences in interpersonal attraction which we attributed to inferences of value similarity could instead be due to inferences of religious similarity: conservative Catholic subjects might prefer conservative looking stimulus persons because they infer that they are also Catholic. In this preliminary investigation subjects rated stimulus persons on what they thought the religion of the stimulus person was. Only photographs of stimulus persons whose religious affiliation was not strongly suggested by their appearance (photographs which yielded low interrater agreement for ratings of religious affiliation) were selected to be used in the study. Thus, of those stimulus persons who received the most extreme ratings on political orientation (with highest interrater agreement), and who

Table 7

Study #2

Relationships Between Subjects' Ratings of Their Political Philosophy And Their Responses to Several Other Measures

df	Relationship	Statistic
8	Between subjects' religious preference and self-reported rating of liberalism	Chi Square: 14.04***
32	Between liberalism and rating of the importance of politics (question 16)	r = +.39**
32	Between liberalism and membership in political organizations (question 17)	Chi Square 1
31	Between liberalism and the frequency of attendance of religious services (question 5)	r = -.42**
32	Between liberalism and ethnic group membership (Irish, Italian, Jewish and other) (question 6)	Chi Square 1
32	Between liberalism and year at college (freshman, sophomore, junior, etc.) (question 7)	Chi Square 1
32	Between liberalism and intended major (question 8)	Chi Square 1
33	Between liberalism and satisfaction with college (question 9)	r = -.26
32	Between liberalism and how much college should be changed (question 10)	r = +.50*
32	Between liberalism and subjects' college grade point average (question 11)	r = +.10
32	Between liberalism and whether subjects felt that grades should be eliminated (question 12)	r = .13
33	Between liberalism and how favorable subjects felt towards the Open Admissions policy (question 13)	r = +.34**
33	Between liberalism and how favorable subjects felt towards the idea of students being responsible for hiring	r = +.45*

Table 7--Continued

df	Relationship	Statistic
	faculty (question 14)	

* = significant at the .01 level of probability
** = significant at the .05 level of probability
*** = significant at the .10 level of probability

also received average ratings on physical attractiveness (with high interrater agreement), only those whose appearance did not strongly suggest membership in any religious group (as demonstrated by low interrater agreement on ratings of religion) were selected to be the stimuli for this study.

Contradictory stimulus persons were produced by photographing the same portraits used in the other conditions in this study, but with the addition of circular buttons with "Nixon" or "McGovern" printed on them.

Selection of Personality Adjectives That Were Used for Evaluations of Stimulus Persons

Anderson (1968) has published a list of 555 personality adjectives which have been evaluated in terms of their favorability by 100 male and 100 female college students. These ratings have been found to have very high reliability in replications by Edwards (1966) at Ohio State University and by Schmidt and Rosenbaum (1965) at the University of Iowa. Using Anderson's list in conjunction with the personality traits obtained in pilot work in response to the question "What are the personality characteristics of hippies?" (Tables A2 and A3), a group of 8 traits were selected which were relevant to the hippie stereotype, which received extremely positive evaluations (ranked at least 455th out of 555 traits) or extremely negative evaluations (ranked less than 100 out of 555 traits) and high interrater agreement (low variance) from Anderson's subjects. An attempt was also made to select an equal number of positive and negative traits (according to Anderson's research) which subjects in pilot research indicated were characteristic of hippies. Three "neutral" traits were

also selected from Anderson's list.

The order of presentation of these traits was determined in the following manner:

(1) A counterbalanced design was used. It was necessary to determine the order of presentation of neutral traits and favorable and unfavorable characteristics of the hippie stereotype for the first six scales and then to reverse the order for the last six scales.

(2) In order to control position effects, it was important to randomly vary whether a positive (or negative) trait appeared on the right or left hand side of each rating scale.

(3) The scale used to indicate the inferred political orientation of stimulus persons (conservative-radical) was placed last, in the hopes of minimizing the degree to which responses to this scale would influence responses to the other scales. To balance placing this scale last, a neutral trait was randomly selected from among the three neutral scales and placed first.

The following procedure was used to satisfy the aforementioned conditions: a neutral trait was randomly selected to appear first on the list; the next trait was randomly selected from among two randomly selected traits that were favorable characteristics of the hippie stereotype, two that were unfavorable and two neutral. The third, fourth, fifth and sixth traits were selected using the same procedure with the remaining categories of traits. The type of traits selected to appear seventh through eleventh reversed the order from the type appearing second through sixth. Specific traits were once again selected randomly from those remaining in the appropriate category.

Once the order of presentation of the trait scales was established it was still necessary to determine which of the two traits in each scale would appear first: the positive or negative one (or which of the two neutrals). This too was counterbalanced and determined by random procedures.

The order in which traits that were either favorable or unfavorable characteristics of the hippie stereotype were presented was as follows (using F for favorable, U for unfavorable, N for neutral, and C for the conservativism scale: NFNUUFFUUNFC. Thus, for example, the first trait was a randomly selected neutral one. The cautious-bold dimension was selected to appear first. The favorable characteristic of hippies that was selected to appear second on the list was the broad-minded - narrow-minded dimension. From the second selection procedure it was determined that for the scales with favorable and unfavorable traits the order for which traits appeared on the left side was: FFUUUUFF. This meant that, for example, for the broad-minded narrow-minded scale, the favorable trait (broad-minded) came first (on the left side of the scale) and the unfavorable trait (narrow-minded) was presented on the right side of the scale.

The above procedures produced the following:

cautious	_____	bold
broad-minded	_____	narrow-minded
deliberate	_____	impulsive
productive	_____	unproductive
lazy	_____	ambitious
unfriendly	_____	friendly
selfish	_____	unselfish
immature	_____	mature
responsible	_____	irresponsible
quiet	_____	talkative
honest	_____	dishonest

Assessment of Subjects' Political Orientation

All subjects were asked to respond to the Kerlinger Social Attitudes Scale (1965). It was on this basis that they were classified as either liberal or conservative. The scale was administered approximately one month before the remaining sections of the experiment, by a different investigator, for the purported purpose of comparing the personalities of individuals who are born under different astrological signs. For this reason they were asked to indicate their date of birth, and astrological sign, if they knew it. The date of birth of each subject was also requested in the later portion of the experiment for the purpose of pairing responses of individual subjects. The Kerlinger Scale was selected because it is more recent than most, and has excellent split-half reliability (.78 - .79) and construct validity (as indicated by the fact that liberalism and conservativism fell in different factors when responses to the scale were factor analyzed).

A second measure of subjects' political orientation was obtained by asking subjects to indicate their political orientation on a rating scale.

Measurement of Subjects' Evaluations of Stimulus Persons

Each subject received a booklet with the same instructions and initial twelve questions that appeared in the questionnaire used for photograph selection (see Appendix B). In addition, subjects also responded to the following:

(DATING CONTEXT: INTERPERSONAL ATTRACTION DEPENDENT VARIABLE)

LOOK CAREFULLY AT THE ACCOMPANYING PHOTOGRAPHS AND TRY TO IMAGINE THAT YOU COULD HAVE A DATE WITH EACH OF THE INDIVIDUALS IN THE PHOTOGRAPHS. ALTHOUGH IT MAY BE DIFFICULT BECAUSE OF THE LIMITED INFORMATION AT YOUR DISPOSAL, INDICATE HOW MUCH YOU THINK THAT YOU WOULD LIKE TO HAVE A DATE WITH EACH INDIVIDUAL.

13. Would you like to have a date with the individual in photograph A?
1) Definitely yes 2) Probably yes 3) Possibly yes 4) Unsure
5) Possibly not 6) Probably not 7) Definitely not

14. - 18. Answer the same question for photographs B, C, D, E & F
(in question booklet this was repeated for each photograph)

Select the person whom you would like to date the most. Place a 1 in the space next to that photograph that appears below. Next, select the person whom you would like to date least, and place a 6 in the space next to that photograph. Proceed in this fashion until you have ranked all of the photographs from 1 to 6. Be sure that you have used the numbers from 1 to 6 once and only once.

_____ Photograph A
_____ Photograph B
_____ Photograph C
_____ Photograph D
_____ Photograph E
_____ Photograph F

(VOTING CONTEXT: INTERPERSONAL ATTRACTION DEPENDENT VARIABLE)

LOOK CAREFULLY AT THE ACCOMPANYING PHOTOGRAPHS AND TRY TO IMAGINE THAT THE INDIVIDUALS IN THE PHOTOGRAPHS ARE CANDIDATES FOR NEW YORK STATE CONGRESSMAN. ALTHOUGH IT MAY BE DIFFICULT BECAUSE OF THE LIMITED INFORMATION AT YOUR DISPOSAL, INDICATE WHETHER YOU THINK YOU WOULD VOTE FOR EACH OF THESE INDIVIDUALS.

13. Do you think you would vote for the individual in photograph A?
1) Definitely yes 2) Probably yes 3) Possibly yes 4) Unsure
5) Possibly not 6) Probably not 7) Definitely not

14. - 18. Answer the same question for photographs B, C, D, E & F
(in the question booklet, this question was repeated for each photograph)

Select the person whom you would like to vote for the most. Place a 1 in the space next to the photograph that appears below. Next, select the person whom you would like to vote for least and place a 6 in the space next to that photograph. Proceed in this fashion until you have ranked all of the photographs from 1 to 6. Be sure that you have used the numbers from 1 to 6 once and only once.

_____ Photograph A
_____ Photograph B
_____ Photograph C
_____ Photograph D
_____ Photograph E
_____ Photograph F

(PHYSICAL ATTRACTIVENESS DEPENDENT VARIABLE)

LOOK CAREFULLY AT THE ACCOMPANYING PHOTOGRAPHS AND TRY TO DECIDE HOW PHYSICALLY ATTRACTIVE YOU FIND EACH OF THE INDIVIDUALS IN THE PHOTOGRAPHS. ALTHOUGH IT MAY BE DIFFICULT BECAUSE OF THE QUALITY OF THE REPRODUCTIONS, INDICATE HOW PHYSICALLY ATTRACTIVE YOU FIND THE INDIVIDUALS IN EACH OF THE PHOTOGRAPHS.

13. How physically attractive do you find the individual in Photograph A? 1) Extremely attractive 2) Very attractive 3) Somewhat attractive 4) Average 5) Somewhat unattractive 6) Very unattractive 7) Extremely unattractive

14. - 18. Do the same for photographs B, C, D, E and F
(in question booklet this was repeated for each photograph)

Select the person whom you find most physically attractive and put a 1 in the space next to that photograph that appears below. Next, select the person whom you find the least physically attractive and place a 6 in the space next to that photograph. Proceed in this fashion until you have ranked all of the photographs from 1 to 6. Be sure that you have used the numbers from 1 to 6 once and only once.

(PERSONALITY TRAIT DEPENDENT VARIABLE)

LOOK CAREFULLY AT THE ACCOMPANYING PHOTOGRAPHS AND TRY TO IMAGINE WHAT THE PERSONALITY OF EACH OF THE INDIVIDUALS IN THE PHOTOGRAPHS IS LIKE. ALTHOUGH IT MAY BE DIFFICULT BECAUSE OF THE LIMITED INFORMATION AT YOUR DISPOSAL, TRY AND PREDICT THE PERSONALITY OF EACH INDIVIDUAL IN TERMS OF THE FOLLOWING CHARACTERISTICS.

Indicate what you think the personality of the individual in Photograph A might be like by placing an X in the appropriate box on the scales below:

	Unusually	Very	Slightly	Neutral	Slightly	Very	Unusually	
cautious								bold
broad-minded								narrow-minded
deliberate								impulsive
productive								unproductive
lazy								ambitious
unfriendly								friendly
selfish								unselfish
immature								mature
irresponsible								responsible
quiet								talkative
honest								dishonest

Favorability scores were computed by obtaining the sum of the favorable traits chosen (+3 for unusually, +2 for very, +1 for slightly) and subtracting from it the sum of unfavorable traits similarly computed. Photographs were ranked according to this score.

Subjects were asked to respond to the other photographs in a similar way.

Each subject was also asked to evaluate each stimulus person in terms of the following:

19. Which of the following would you imagine that the individual in photograph A is? a) professional b) skilled worker c) semi-skilled worker d) unskilled worker e) student

20. - 24. Do the same for photographs B, C, D, E and F

CHAPTER IV

RESULTS

186 female Caucasian undergraduate Psychology students attending summer session at Hunter College or Brooklyn College completed the Kerlinger Social Attitudes Scale, rated themselves on several dimensions including political conservativism, and evaluated "hippie," "non-hippie," neutral and contradictory stimulus persons in terms of the latter's voting desirability, dating desirability, physical attractiveness, and on several personality dimensions.

Hypothesis 1

In order to demonstrate that the hippie stereotype exists, is communicated by the physical aspects of appearance, and includes assumptions of political orientation, it was necessary to show that different evaluations of the political orientation of "hippie" and "non-hippie" stimulus persons would be made.

A conservativism measure was included at the end of the list of 11 personality dimensions on which each subject rated each stimulus person. Evaluations in this respect of the two long-haired stimulus persons by each subject were averaged and compared to the average conservativism rating of the two short-haired stimulus persons, using a t-test for correlated measures. The results of this test appear in Table 8 and Figure 1. As was anticipated, "hippie" stimulus persons were assumed to be significantly more politically liberal than "non-hippie" stimulus persons.

Table 8

Political Conservativism Inferences of "Hippie," "Non-Hippie," and Contradictory Stimulus Persons

	Mean	Standard Deviation	N
"Hippie" stimulus persons	3.38	1.83	176
"Non-hippie" stimulus persons	4.89	1.82	176
Contradictory "hippie" stimulus persons	4.52	1.60	89
Contradictory "non-hippie" stimulus persons	4.10	.94	84

These ratings were made on a 7-point scale.

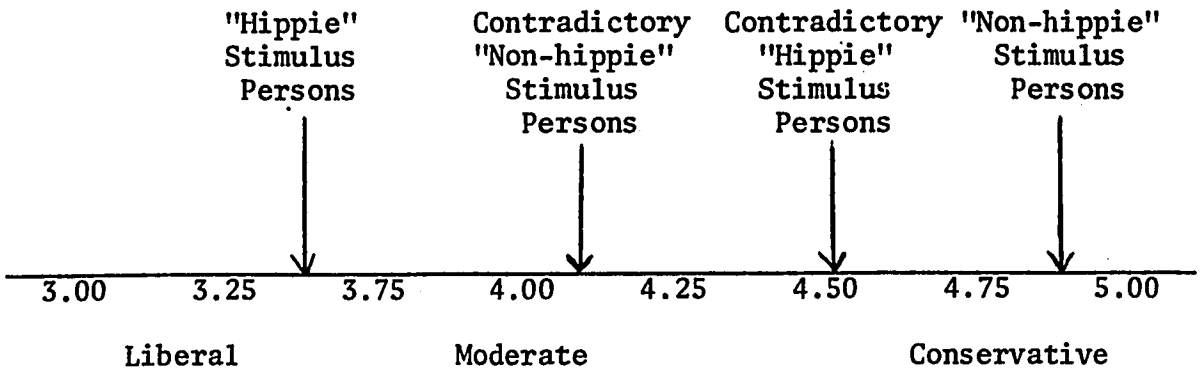
The smaller the number the more liberal the stimulus person was assumed to be; the larger the number the more conservative the stimulus person was assumed to be.

Comparisons of Political Conservativism Inferences of "Hippie," "Non-Hippie," and Contradictory Stimulus Persons

Type of comparison	t score	df	p
Inferred conservativism of "hippie" and "non-hippie" stimulus persons	15.23*	175	.001
Inferred conservativism of contradictory "hippie" and "hippie" stimulus persons	4.82*	88	.001
Inferred conservativism of contradictory "non-hippie" and "non-hippie" stimulus persons	4.72*	83	.001

Figure 1

Political Conservativism Inferences of "Hippie," "Non-Hippie," Contradictory "Hippie" and Contradictory "Non-Hippie" Stimulus Persons



In order to test a subsequent hypothesis as to whether political orientation inferences about stimulus persons were responsible for attraction to stimulus persons, subjects also judged stimulus persons wearing a button which contradicted the implications of the rest of their appearance. Each subject judged the political orientation of a "hippie" stimulus person who wore a Nixon button or a "non-hippie" stimulus person who wore a McGovern button. Because of the temporal proximity of this investigation (summer of 1972) to the national Presidential election, the probability of viewing individuals wearing buttons of this type was not too unlikely.

The purpose of having subjects respond to contradictory stimuli of this type was to determine whether or not inferences concerning the political attitudes of stimulus persons were responsible for the attraction of liberal subjects for "hippie" stimulus persons and of conservative subjects for "non-hippie" stimulus persons. If it were found that conservative subjects were found to be attracted to "non-hippie" stimulus persons when not wearing a contradictory button, but not when wearing a McGovern button (and liberal subjects attracted to "hippie" stimulus persons when not wearing a button, but not attracted when they were wearing a contradictory button), this would support the notion that inferred value similarity was the mediator of attraction. A basic underlying assumption for the above line of reasoning is that subjects will be influenced in their evaluations of the political values of stimulus persons by these contradictory buttons. Confirmation of this assumption is provided by tests in which political orientation inferences of stimulus persons with and without contradictory buttons were compared.

An examination of the mean conservativism ratings given contradictory stimulus persons (see Table 8) reveals that (1) "hippie" stimulus persons were assumed to be less liberal when they wore a Nixon button than when they did not, and "non-hippie" stimulus persons were assumed to be less conservative when they wore a McGovern button than when they did not, suggesting that the button messages did influence political orientation evaluations; (2) inferred conservativism scores for the contradictory stimuli were less extreme than for stimulus persons without contradictory buttons, suggesting that the contradictory stimuli (buttons and hair length) did, to some extent, "neutralize" each other; (3) "hippie" stimulus persons wearing Nixon buttons were assumed to be more conservative than "non-hippie" stimulus persons with McGovern buttons, suggesting that the buttons were a more influential stimulus than the physical aspects of appearance (perhaps because buttons are less ambiguous than appearance is).

T-tests for correlated measures were used to compare the political values that stimulus persons were assumed to have when they did or did not wear contradictory buttons. The results of these tests also appear in Table 8. "Non-hippie" stimulus persons were assumed to be significantly less conservative when they wore McGovern buttons than when they did not; "hippie" stimulus persons were rated as significantly less liberal when wearing a Nixon button than when they did not wear the button.

We can conclude from the tests of Hypothesis 1 that one condition necessary for establishing the existence of the "hippie" stereotype has been met: it was found that "hippie" stimulus persons were assumed to

be less conservative than "non-hippie" stimulus persons. In addition it has been shown that these inferences can be counteracted by having the stimulus persons wear buttons which contradict the implications of their appearance.

Hypothesis 2

In order to establish the existence of a "hippie" stereotype it is not only necessary to show that short-haired stimulus persons are judged to be more conservative than long-haired stimulus persons, but also that these inferences are universal (evoke high interrater agreement). As Secord and Backman (1966, page 67) have stated it, it is necessary to demonstrate "consensus on attributed traits." It is possible that the significantly different political orientations attributed to long- and short-haired stimulus persons that were found for the test of Hypothesis 1 were due to the extreme ratings of a relatively small number of subjects. If this was the case, then no stereotype would exist. Kendall's coefficient of concordance (W) (Edwards, 1967) was computed to ascertain if there was significant interrater agreement for these judgments. The results appear in Table 9. Significant interrater agreement was found, successfully completing the second requirement necessary to establish the existence of the hippie stereotype.

Hypothesis 3

Hypothesis 3 predicts that when one infers that another individual has values similar to one's own, on the basis of stereotyped characteristics possessed by that individual, one is more likely to be attracted to that individual than when one infers that the values of

Table 9

Interrater Agreement for Inferences of Political Conservativism of "Hippie," "Non-Hippie," and Contradictory Stimulus Persons

	W	F	df	p
Interrater agreement for conservativism inferences of "hippie" and "non-hippie" stimulus persons	.56	220.58	1/176	.001
Interrater agreement for conservativism inferences of "hippie" and contradictory "hippie" stimulus persons	.18	19.10	1/87	.001
Interrater agreement for conservativism inferences of "non-hippie" and contradictory "non-hippie" stimulus persons	.13	12.70	1/85	.001

the other individual are different from one's own. Attraction was measured in voting and dating contexts and with ratings of physical attractiveness and personality traits.

Two-way analyses of variance with unequal group sizes and repeated measures on 1 factor (subjects rated both "hippie" and "non-hippie" stimulus persons) were used (Winer, 1962) to test the relationship between inferred value similarity and the four measures of attraction described above. Both scores on the Kerlinger Social Attitudes Scale and self-ratings of political conservativism were used (in separate analyses) as the bases for categorizing the conservativism of each subject. Kerlinger scores and self-ratings are found to have a correlation coefficient of $r = .511$ with $df = 154$ (not all subjects completed both measures). This was significant at a $p \ll .01$ level.

Subjects were divided into conservative and liberal groups (and into conservative, moderate and liberal groups) in such a way as would provide two (or three) groups that came closest to being of equal size. For example, of the 45 subjects who evaluated stimulus persons as political candidates before rating them on other attraction measures, 19 rated themselves as slightly conservative, conservative or very conservative, 13 rated themselves as liberal, and 13 rated themselves as very liberal or radical. In addition to making an analysis of variance according to these three subdivisions, another analysis was made in which the "liberals," "very liberals" and "radicals"were combined forming two groups of 19 and 26 each.

Results of Hypothesis 3a (voting context)

A significant interaction was found between subjects' conservativism and ratings of the voting desirability of "hippie" and "non-hippie" stimulus persons. This was true whether conservativism was determined on the basis of responses to the Kerlinger Social Attitudes Scale or from subjects' evaluations of their own political conservativism. This was also true both when subjects were divided into two groups on the basis of conservativism (conservatives and liberals) or into three (conservatives, moderates and liberals). The results of these comparisons appear in Tables 10, A4, A5, and A6.

These significant interactions mean that the difference in the attraction of conservative subjects to "hippie" and "non-hippie" stimulus persons was significantly different from the difference in attraction of liberal subjects to "hippie" and "non-hippie" stimulus persons. This does not, however, tell us about the direction of these differences. For this information it is necessary to examine the mean attraction scores of each group (Tables 10 and A4). It can be seen that conservative subjects prefer to vote for "non-hippie" stimulus persons rather than "hippie" stimulus persons and liberal subjects prefer to vote for "hippie" stimulus persons rather than "non-hippie" stimulus persons. T-tests confirm that these differences are significant (Table 10). In addition, conservative subjects were found to be more attracted to "non-hippie" stimulus persons than liberal subjects were, and liberal subjects were more attracted to "hippie" stimulus persons than conservatives were.

An examination of the results when subjects were divided into three groups on the basis of Kerlinger scores (Tables A5 and A6) and

Table 10

Test of Hypothesis 3A(1): Attraction of Politically Conservative and Liberal Subjects (Categorized on the Basis of Kerlinger Scores) to "Hippie" and "Non-Hippie" Stimulus Persons as Political Candidates

	Mean Attraction	
	To "Hippie" Stimulus Persons	To "Non-hippie" Stimulus Persons
Of conservative subjects (n=23)	8.87	7.17
Of liberal subjects (n=19)	6.68	8.63

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater attraction.)

Difference in attraction to "hippie" and "non-hippie" stimulus persons:

For conservative subjects: $t = 3.10^*$ $df = 22$
For liberal subjects : $t = 3.75^*$ $df = 18$

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	2.755	1	2.755	-
Subj. w. groups	274.031	40	6.851	
Within				
B	.048	1	.048	-
AB	69.044	1	69.044	23.129**
B x subj. w. gr.	119.408	40	2.985	

* = $p \leq .01$
** = $p \leq .001$

self-ratings of political conservativism lends further support for this hypothesis. Conservatives were attracted to the "non-hippie" stimulus persons more than the moderates and moderates were attracted to the "non-hippie" stimulus persons more than the liberals. Similarly, liberal subjects were attracted to "hippie" stimulus persons more than moderates, and moderates were attracted to "hippie" stimulus persons more than conservatives. Conservative subjects were attracted to "non-hippie" stimulus persons more than "hippies" and liberal subjects were attracted to "hippie" stimulus persons more than "non-hippies." These results are consistent with the explanation of attraction as due to inferred value similarity as has been hypothesized.

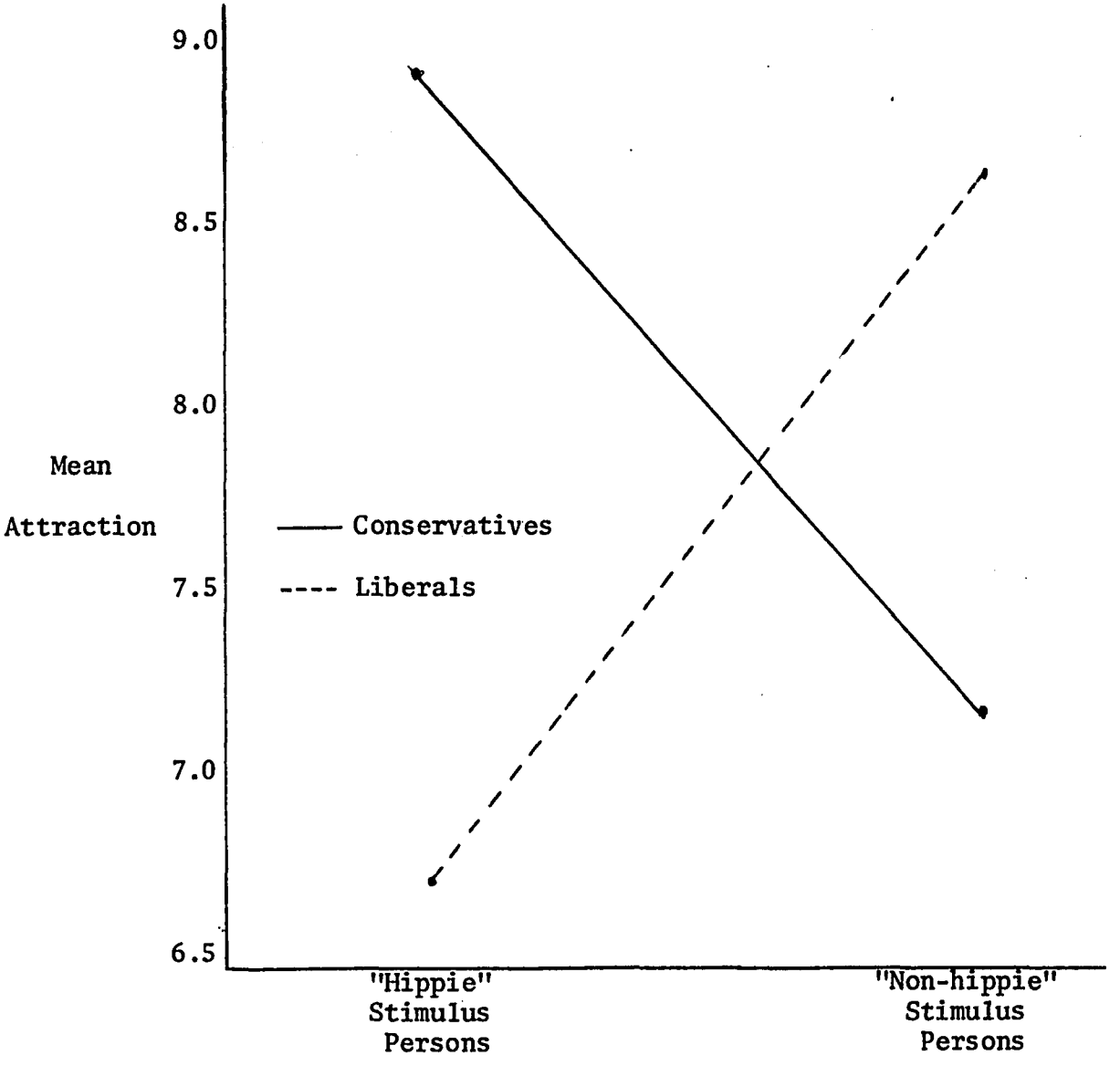
Further clarification of the nature of the interaction can be obtained by representing it graphically (see Figure 2). As can be seen the lines representing the responses of conservative and liberal subjects are not parallel as they would be if there were no significant interaction.

Results of Hypothesis 3a (dating context)

A second test of hypothesis 3a was made by measuring the effects of inferred value similarity on interpersonal attraction in a dating context. A significant interaction was found between subjects' political conservativism and their rating of the dating desirability of "hippie" and "non-hippie" stimulus persons. This was true both when subjects' conservativism was measured on the basis of scores on the Kerlinger Social Attitudes Scale and when subjects' ratings of their own political conservativism were used. Dividing the subjects into both two groups (conservative and liberal) and three groups

Figure 2

Attraction of Conservative and Liberal Subjects to "Hippie" and "Non-Hippie" Stimulus Persons in a Voting Context



(conservative, moderate, and liberal) similarly yielded significant interaction effects (see Tables 11, A7, A8, and A9).

Comparison of the mean dating attraction of conservative and liberal subjects (categorized either on the basis of Kerlinger scores or self-ratings) to "hippie" and "non-hippie" stimulus persons (Tables 11 and A7 and Figure 3) reveals that, once again, conservative subjects prefer to date "non-hippie" stimulus persons rather than "hippies" and that liberal subjects prefer to date "hippie" stimulus persons rather than "non-hippies." The t-test applied to the responses of conservative subjects shows that their dating preference for "non-hippie" stimulus persons rather than "hippies" is significant. Although liberal subjects preferred "hippies" to "non-hippies" this difference was not significant. The means also show that conservatives were attracted to "non-hippies" more than liberals were and that liberals were attracted to "hippies" more than conservative subjects were.

Division of subjects into three groups (conservative, moderate and liberal) yielded the expected results when subjects were categorized on the basis of Kerlinger scores, but did not give the expected results when they were divided on the basis of self-ratings of political conservativism.

When divided on the basis of Kerlinger scores, conservatives preferred to date "non-hippie" stimulus persons rather than "hippie" stimulus persons and liberals preferred to date "hippie" stimulus persons more than "non-hippie" stimulus persons. Conservative subjects were attracted to "non-hippie" stimulus persons more than moderate subjects were and moderates were attracted to "non-hippie"

Table 11

Test of Hypothesis 3A(2): Attraction of Politically Conservative and Liberal Subjects (Categorized on the Basis of Kerlinger Scores) to "Hippie" and "Non-Hippie" Stimulus Persons as Dating Partners

	Mean Attraction	
	To "Hippie" Stimulus Persons	To "Non-hippie" Stimulus Persons
Of conservative subjects (n=22)	10.55	8.55
Of liberal subjects (n=14)	9.00	9.50

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater attraction.)

Difference in attraction to "hippie" and "non-hippie" stimulus persons:

For conservative subjects: $t = 2.66^{**}$ df = 21
For liberal subjects : $t = .66$ df = 13

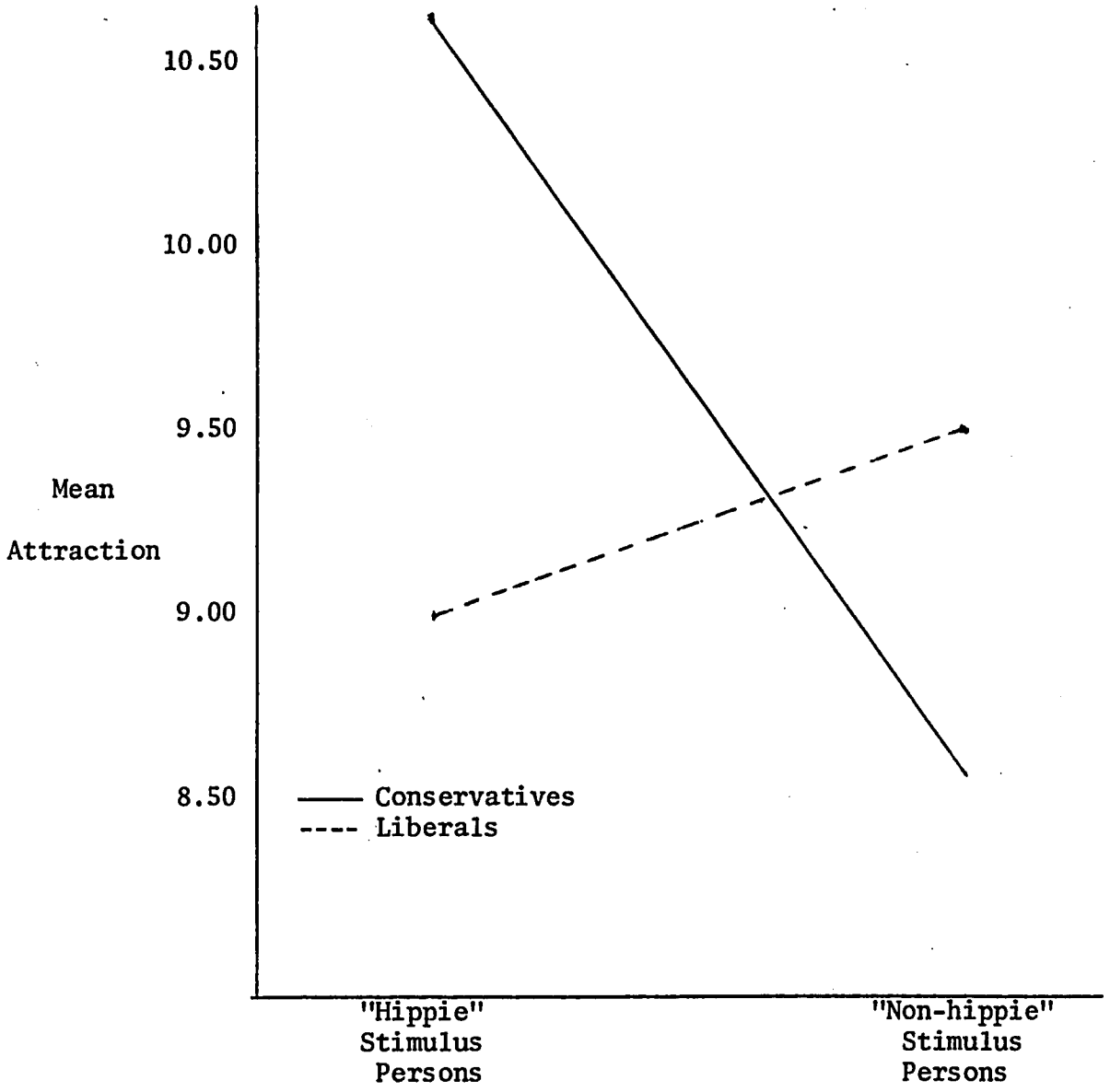
Summary of ANOVA

Source	SS	df	MS	F
Between				
A	1.494	1	1.494	-
Subj. w. groups	416.659	34	12.255	
Within				
B	19.014	1	19.014	3.518
AB	26.736	1	26.736	4.947*
B x subj. w. gr.	183.750	34	5.404	

* = $p \leq .05$ (1 sided)
** = $p \leq .01$ (1 sided)

Figure 3

Attraction of Conservative and Liberal Subjects to "Hippie" and "Non-Hippie" Stimulus Persons In A Dating Context



stimulus persons more than liberals. Liberal subjects were attracted to "hippie" stimulus persons more than moderates and moderates were attracted to "hippies" more than conservatives. These results are as predicted.

However, when divided into three groups on the basis of self-ratings of political conservativism, the results were not entirely as predicted. As was expected, conservative subjects preferred to date "non-hippie" stimulus persons more than "hippies" and liberal subjects preferred to date "hippies" more than "non-hippies." Conservatives preferred to date "non-hippie" stimulus persons more than moderates and moderates preferred to date "non-hippie" stimulus persons more than liberals. Contrary to expectation, although liberals preferred to date "hippies" more than conservatives, moderates preferred to date "hippies" even more than liberals. Perhaps we are dealing with a curvi-linear relationship. It may be more exciting to date someone whose values are a little different from one's own than to date someone whose values are very similar to, or very different from one's own. Or these results may simply be due to a random fluctuation in responses. Or it may be that self-ratings are not an adequate technique for measuring political conservativism. It may provide accurate gross divisions (between conservatives and liberals) but not be accurate for the finer distinction between conservatives, moderates, and liberals.

Hypothesis 3b

This hypothesis predicts that subjects will evaluate most favorably the physical attractiveness of stimulus persons whose values they assume to be similar to their own. Confirmation of this prediction comes from Analyses of Variance that were made when subjects'

conservativism was determined on the basis of responses to the Kerlinger Social Attitudes Scale and from subjects' ratings of their own political conservativism. When subjects were divided into two groups (conservatives and liberals) significant interactions were obtained between subjects' conservativism and evaluations of the physical attractiveness of "hippie" and "non-hippie" stimulus persons. A significant interaction was also found when subjects were divided into three groups (conservative, moderate, and liberal) on the basis of self-ratings of conservativism, but not on the basis of Kerlinger scores. This might be due to the small number of subjects in each group when the subjects are divided into three groups.

Inspection of the mean ratings of physical attractiveness of "hippie" and "non-hippie" stimulus persons (Tables 12, A10, A11 and A12 and Figure 4) by conservative and liberal subjects reveals that conservatives considered the "non-hippies" to be more physically attractive than "hippies" and that liberals considered the "hippies" to be more attractive than the "non-hippies." This was true both when Kerlinger scores were used to categorize subjects and when self-ratings were used. T-tests applied to the responses of conservative and liberal subjects (categorized on the basis of Kerlinger scores) resulted in significance for liberal subjects but not for conservative subjects. Liberal subjects evaluated "hippie" stimulus persons as significantly more attractive than "non-hippies"; the more favorable evaluation of "non-hippie" stimulus persons by conservative subjects was not significant. In addition, the physical attractiveness of "non-hippie" stimulus persons was evaluated more favorably by conservative subjects than liberals (categorized either on the basis

Table 12

Test of Hypothesis 3B: Physical Attractiveness Evaluations of "Hippie" and "Non-Hippie" Stimulus Persons by Politically Conservative and Liberal Subjects (Categorized on the Basis of Kerlinger Scores)

	Mean Attractiveness Rating	
	Of "Hippie" Stimulus Persons	Of "Non-hippie" Stimulus Persons
By conservative subjects (n=16)	8.75	7.88
By liberal subjects (n=19)	7.63	8.63

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater attractiveness.)

Difference in attraction to "hippie" and "non-hippie" stimulus persons:

For conservative subjects: $t = 1.53$ $df = 15$
For liberal subjects : $t = 2.52^*$ $df = 18$

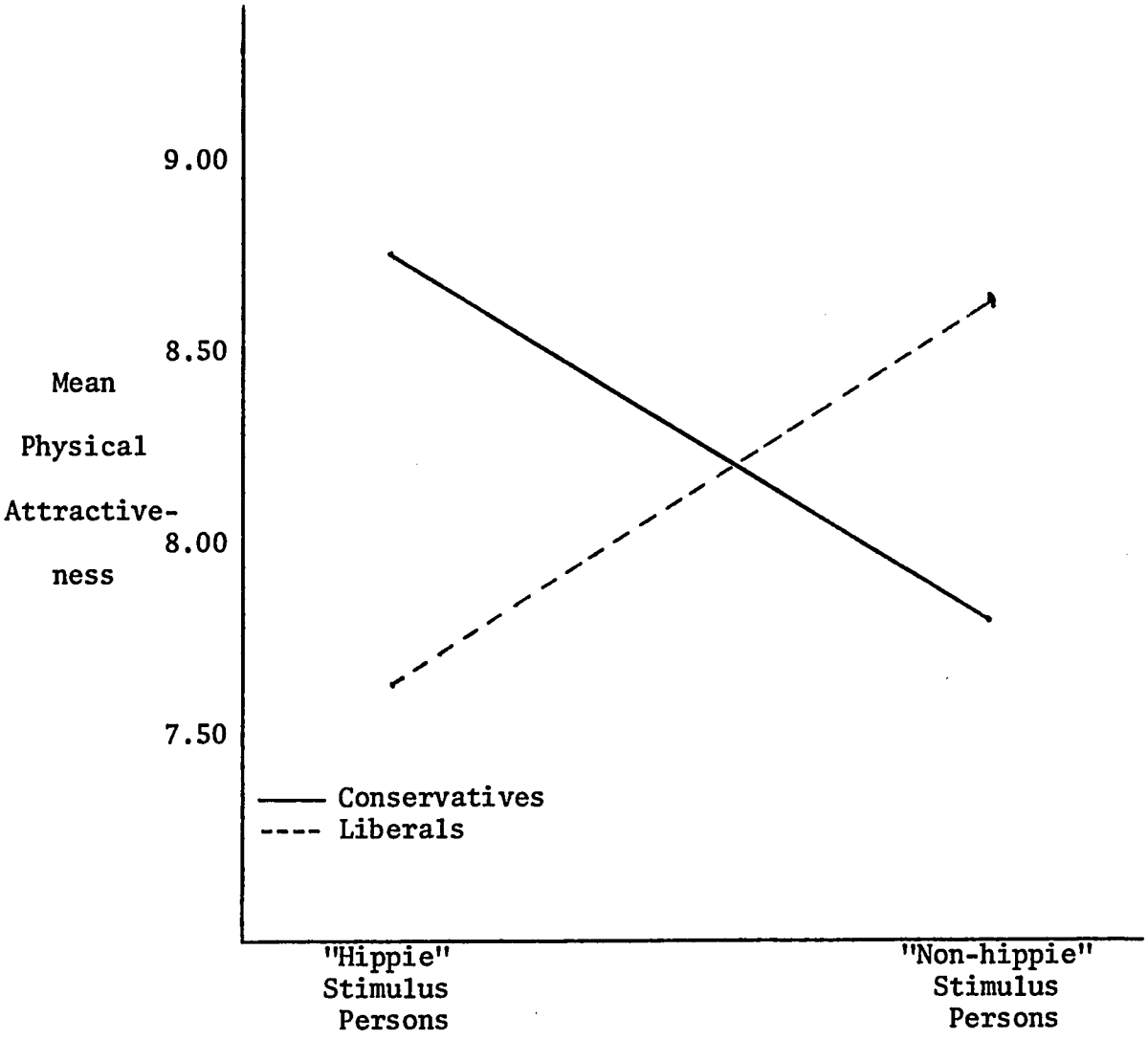
Summary of ANOVA

Source	SS	df	MS	F
Between				
A	.569	1	.569	-
Subj. w. groups	114.714	33	3.476	
Within				
B	.357	1	.357	-
AB	15.268	1	15.268	7.534*
B x subj. w. gr.	66.875	33	2.065	

* = $p \leq .05$ (1 sided)

Figure 4

Physical Attractiveness Evaluations of "Hippie" and "Non-Hippie" Stimulus Persons by Conservative and Liberal Subjects



of Kerlinger scores or self-ratings) and the physical attractiveness of "hippies" was evaluated more favorably by liberals than by conservatives.

An examination of responses when subjects were divided into three groups (conservatives, moderates and liberals) on the basis of Kerlinger scores and self-ratings reveals that, as expected, conservative subjects considered "hippies" to be less attractive than "non-hippies," liberal subjects considered "hippies" to be more attractive than "non-hippies," liberals evaluated the physical attractiveness of "hippies" more favorably than conservatives, and conservatives evaluated the physical attractiveness of "non-hippies" more favorably than liberals. The responses of moderates, however, did not always fall between those of liberals and conservatives, as was expected. Moderates (categorized on the basis of Kerlinger scores) evaluated the physical attractiveness of "non-hippies" more favorably than liberals, but almost identically to the conservatives. These same subjects evaluated the physical attractiveness of "hippies" identically to the way it was rated by liberal subjects. Moderates (categorized on the basis of self-ratings) rated the physical attractiveness of "hippie" stimulus persons more favorably than conservatives and less favorably than liberals, as was expected. However, the evaluations of the physical attractiveness of "non-hippies" by these subjects was not only less favorable than by the conservatives but also less favorable than the evaluations of "non-hippies" by liberals. Once again, we may account for these results by observing the small number of subjects in some groups (i.e., only 8 liberals categorized by self-ratings), the limitations of the techniques used

to measure subjects' conservativism, and suggesting the possibility of a curvilinear relationship.

Hypothesis 3c

A significant interaction was found between subjects' political conservativism, as evaluated by Kerlinger scores, and the favorability of personality adjectives they attributed to "hippie" and "non-hippie" stimulus persons. No such significant interactions were discovered when self-ratings were used to measure subjects' political conservativism, or when subjects were divided into three groups (conservatives, moderates and liberals) on the basis of Kerlinger scores (see Tables 13, A13, A14, and A15). A graphic representation of this interaction appears in Graph 5.

When divided into two groups on the basis of either Kerlinger scores or self-ratings, conservative subjects evaluated "hippie" stimulus persons more favorably than liberals and liberals evaluated "non-hippies" more favorably than conservatives. Conservative subjects evaluated "hippies" more favorably than "non-hippies" and liberals evaluated "hippies" more favorably than "non-hippies." T-tests applied to the responses of subjects categorized on the basis of Kerlinger scores found that the evaluations by conservative subjects of "non-hippie" stimulus persons were significantly more favorable than their evaluations of "hippie" stimulus persons. Evaluations of "hippies" by liberal subjects were more favorable than their evaluations of "non-hippies," but not significantly so (Tables 13, A13 and Figure 5).

Table 13

Test of Hypothesis 3C: Favorability of Personality Adjectives Attributed to "Hippie" and "Non-Hippie" Stimulus Persons by Politically Conservative and Liberal Subjects (Categorized on the Basis of Kerlinger Scores)

	Mean Favorability Score	
	Of "Hippie" Stimulus Persons	Of "Non-hippie" Stimulus Persons
By conservative subjects (n=19)	3.68	11.21
By liberal subjects (n=14)	10.07	8.36

(Larger numbers indicate greater favorability.)

Difference in attraction to "hippie" and "non-hippie" stimulus persons:

For conservative subjects: $t = 3.02^{**}$ $df = 18$
For liberal subjects : $t = .63$ $df = 13$

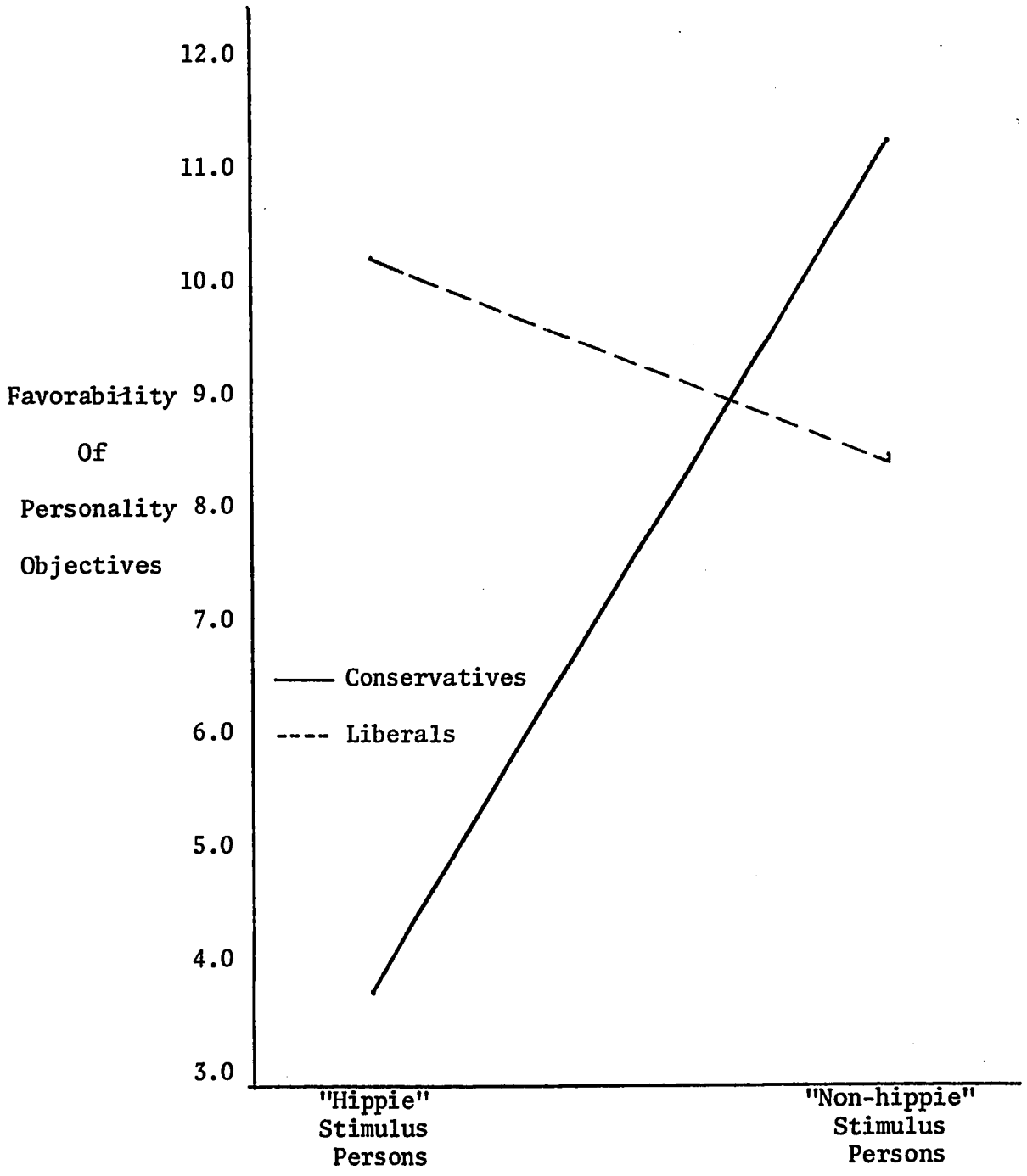
Summary of ANOVA

Source	SS	df	MS	F
Between				
A	241.461	1	241.461	1.575
Subj. w. groups	4904.421	32	151.263	
Within				
B	191.117	1	191.117	2.281
AB	441.335	1	441.335	5.268*
B x subj. w. gr.	2680.783	32	83.774	

* = $p \leq .05$ (1 sided)
** = $p \leq .01$ (1 sided)

Figure 5

Favorability of Personality Adjectives Attributed to "Hippie" and "Non-Hippie" Stimulus Persons by Politically Conservative and Liberal Subjects



When subjects were divided into three groups (conservatives, moderates and liberals) on the basis of Kerlinger scores, evaluations of "non-hippie" stimulus persons were approximately the same for all three groups of subjects (Table A14). Evaluations of "hippies" were most favorable when made by liberals, less favorable when made by moderates, and least favorable when made by conservatives. When divided into three groups on the basis of self-ratings, evaluations of "non-hippies" were most favorable when made by conservatives, less favorable when made by moderates, and least favorable when made by liberals. Evaluations of "hippie" stimulus persons were not as we would predict. Although conservatives evaluated "hippies" less favorably than liberals, moderates evaluated them even less favorably than conservatives (Table A15). We would account for this by suggesting the possibility of a curvilinear relationship, and by noting the small number of subjects in each group when the subjects are divided into three groups.

Hypothesis 3d

The purpose of this hypothesis was to ascertain if it was the evaluative element in the personality traits used to test Hypothesis 3c that was responsible for confirmation of this hypothesis. Subjects that rated stimulus persons on evaluative traits also rated them on traits low in evaluative connotation. No significant interaction was found between subjects' political orientation and their judgments of the degree to which "hippie" and "non-hippie" stimulus persons possessed these traits (see Tables 14, A16, A17, and A18).

Summary of Hypothesis 3

The application of balance theory to the impression formation process is the central focus of this hypothesis. Specifically, we have been concerned with testing the notion that when one infers that another has values similar to one's own, on the basis of stereotyped characteristics possessed by that other individual, one is more likely to be attracted to that individual than when one infers that the values of the other individual are different from one's own. The prediction that inferred value similarity would affect interpersonal attraction in voting and dating contexts, and evaluations of the physical attractiveness of stimulus persons, was supported, regardless of whether subjects' conservativism was measured by scores on the Kerlinger Social Attitudes Scale or self-ratings. Inferred value similarity was found to affect the favorability of evaluative personality traits attributed to stimulus persons but only when subjects were categorized on the basis of Kerlinger test scores. No such significant interaction was found (for either technique for categorizing subjects' conservativism) when subjects judged stimulus persons on non-evaluative personality traits. This suggests that it was the evaluative nature of the initial traits that was responsible for the relationships found.

When subjects were divided into three groups (conservatives, moderates, and liberals) on the basis of Kerlinger scores or self-ratings of political conservativism, inferred value similarity was found to significantly affect judgments of voting desirability and dating desirability. In addition, when subjects were divided into three groups on the basis of self-ratings, a significant interaction

was found between subjects' conservativism and judgments of the physical attractiveness of stimulus persons. When stimulus persons were evaluated in a voting context (and subjects' conservativism was evaluated either by Kerlinger scores or self-ratings) or a dating context (and conservativism was evaluated on the basis of Kerlinger scores), the means for these significant interactions were in the predicted direction: conservatives evaluated "non-hippies" more favorably than moderates, moderates evaluated "non-hippies" more favorably than liberals and the reverse was true for "hippie" stimulus persons.

However, this linear relationship was not found for attraction in a dating context when conservativism was evaluated by subjects' self-ratings, for evaluations of physical attractiveness (when conservativism was evaluated on the basis of Kerlinger scores or self-ratings), and for the favorability of personality traits attributed to stimulus persons (when conservativism was evaluated either on the basis of Kerlinger scores or self-ratings).

Hypothesis 4

Each subject evaluated stimulus persons both with and without a button containing a message which contradicted the political implications of their appearance. It was anticipated that if short-haired stimulus persons were preferred by conservative subjects (and long-haired stimulus persons were preferred by liberal subjects) because of inferences concerning their political attitudes, this mediation process could be demonstrated by counteracting the process. This was done by having long-haired stimulus persons wear Nixon buttons and short-haired stimulus persons wear McGovern buttons. If the previously mentioned interpretation of the mediation process (inferred value similarity)

Table 15

Summary of Results of Tests of Hypotheses 3A1, 3A2, 3B and 3C

		Hypothesis 3A1 (Voting)		Hypothesis 3A2 (Dating)		Hypothesis 3B (Physical Attractiveness)		Hypothesis 3C (Evaluative Personality Traits)	
		3 groups	2 groups	3 groups	2 groups	3 groups	2 groups	3 groups	2 groups
KERLINGER SCORES	A (Subjects' Conservativism)	1	1	1	1	1	1	1	F = 1.575 df = 1/32
	B (Type of stimulus person)	1	1	F = 3.847 df = 1/33	F = 3.518 df = 1/34	1	1	F = 2.093 df = 1/29	F = 2.281 df = 1/32
	AB	F = 12.070*** df = 2/39	F = 23.129*** df = 1/40	F = 4.791* df = 2/33	F = 4.947* df = 1/34	F = 1.031 df = 2/32	F = 7.534* df = 1/33	F = 2.596 df = 2/29	F = 5.268* df = 1/32
SELF RATINGS	A (Subjects' Conservativism)	1	F = 1.851 df = 1/43	F = 1.987 df = 2/43	1	F = 2.344 df = 2/41	F = 2.198 df = 1/42	1	1
	B (Type of stimulus person)	F = 2.174 df = 1/42	F = 1.990 df = 1/43	F = 2.093 df = 1/43	F = 2.129 df = 1/44	1	1	F = 1.102 df = 1/44	F = 1.127 df = 1/45
	AB	F = 12.890*** df = 2/42	F = 19.041*** df = 1/43	F = 5.233** df = 2/43	F = 10.383*** df = 1/44	F = 5.038* df = 2/41	F = 10.260** df = 1/42	1	1

*p ≤ .05 **p ≤ .01 ***p ≤ .001

was correct, it was predicted that liberal subjects would prefer long-haired stimulus persons (and conservative subjects, short-haired stimulus persons) only if they were not wearing contradictory buttons.

To test this contention, separate analyses of variance were performed for each of the four measures of interpersonal attraction, and for both techniques of categorizing subjects' conservativism (Kerlinger scores and self-ratings). It was also necessary to perform separate analyses for subjects who viewed contradictory "hippie" stimulus persons and for those who judged contradictory "non-hippie" stimulus persons (each subject viewed one or the other, to minimize demand characteristics). Had a significant interaction been found between subjects' conservativism and relative attraction to "hippie" and "non-hippie" stimulus persons without buttons, but none found when contradictory stimulus persons were used (for "hippie" vs. contradictory "non-hippie" comparisons and contradictory "hippie" vs. "non-hippie" comparisons), this might have been due to the differences in group size: approximately 35 different subjects rated "hippie" and "non-hippie" stimulus persons in each context, but since each rated either a contradictory "hippie" or contradictory "non-hippie" stimulus person, the responses of only 18 subjects could be used for "hippie" vs. contradictory "non-hippie" comparisons or for contradictory "hippie" vs. "non-hippie" comparisons. For this reason responses of subjects who viewed contradictory "hippie" stimulus persons were analyzed separately from responses of subjects who viewed contradictory "non-hippie" stimulus persons.

Results of Hypothesis 4a(1) (Voting Context)

Kerlinger Score Assessment of Political Conservativism

Both for subjects who viewed contradictory "hippie" stimulus persons and for subjects who viewed contradictory "non-hippie" stimulus persons, a significant interaction was found between subjects' conservativism and voting preference for "hippie" and "non-hippie" stimulus persons: conservatives preferred to vote for "non-hippies" more than "hippies" and liberals preferred to vote for "hippies" more than "non-hippies." No significant interactions were found for comparisons involving contradictory stimulus persons: conservatives no longer showed a significant preference for "non-hippies" over "hippies" when the former wore McGovern buttons and liberals no longer showed a significant preference for "hippies" over "non-hippies" when the "hippies" wore Nixon buttons (see Tables 16, 17, 18 and 19).

Self-ratings of Political Conservativism

A significant interaction was found for subjects who viewed contradictory "non-hippie" stimulus persons, between subjects' political conservativism and voting preferences for "hippie" and "non-hippie" stimulus persons. A similar trend (p .06) was found for subjects who viewed contradictory "hippie" stimulus persons. In both cases, as was expected, conservatives preferred "non-hippie" stimulus persons and liberals preferred the "hippies." These effects were negated by having stimulus persons wear contradictory buttons. Both for subjects who viewed contradictory "hippie" stimulus persons and for those who viewed contradictory "non-hippie" stimulus persons the interaction of the political conservativism of the subject and the relative attraction of

Table 16

Hypothesis 4A(1): Attraction in a Voting Context of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=9)	9.11	7.33
By liberal subjects (n=7)	6.29	7.57

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	13.179	1	13.179	5.501*
Subj. w. groups	33.540	14	2.396	
Within				
B	1.532	1	1.532	-
AB	19.476	1	19.476	4.507*
B x subj. w. gr.	60.492	14	4.321	

*p = $\leqslant$ .05

Table 17

Hypothesis 4A(1): Attraction in a Voting Context of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Attraction to Contradictory "Hippie" and "Non-Hippie" Stimulus Persons

		Mean Evaluation	
		Of Contradictory "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects	(n=9)	10.89	7.33
By liberal subjects	(n=7)	9.00	7.57

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	5.365	1	5.365	-
Subj. w. groups	86.135	14	6.152	
Within				
B	55.125	1	55.125	10.364**
AB	8.907	1	8.907	1.675
B x subj. w. gr.	74.468	14	5.319	

**p = $\leqslant$ .01

Table 18

Hypothesis 4A(1): Attraction in a Voting Context of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and "Non-Hippie" Stimulus Persons

Evaluations of "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=16)	8.19	7.50
By liberal subjects (n=10)	7.10	9.20

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	1.154	1	1.154	-
Subj. w. groups	270.769	24	11.282	
Within				
B	1.923	1	1.923	-
AB	23.901	1	23.901	6.364*
B x subj. w. gr.	90.168	24	3.757	

*p = $\leqslant$.05

Table 19

Hypothesis 4A(1): Attraction in a Voting Context of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and Contradictory "Non-Hippie" Stimulus Persons

	Mean Evaluation Of "Hippie" Stimulus Persons	Mean Evaluation Of Contradictory "Non-Hippie" Stimulus Persons
By conservative subjects (n=16)	8.19	8.13
By liberal subjects (n=10)	7.10	8.00

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	4.523	1	4.523	-
Subj. w. groups	459.169	24	19.132	
Within				
B	1.230	1	1.230	-
AB	2.852	1	2.852	-
B x subj. w. gr.	131.918	24	5.497	

subjects to both types of stimulus persons ("hippie" vs. contradictory "non-hippie" and contradictory "hippie" vs. "non-hippie") was not significant (see Tables A19, A20, A21 and A22).

In short, there were four tests comparing the voting preferences of liberals and conservatives for "hippie" and "non-hippie" stimulus persons: two in which subjects' conservativism was categorized on the basis of Kerlinger scores and two in which it was categorized on the basis of self-ratings, two for subjects who viewed contradictory "hippie" stimulus persons and two for subjects who viewed contradictory "non-hippie" stimulus persons. Of these four tests, significant interactions were found for three, in the predicted direction. The fourth approached significance ($p \leq .06$). This preference of liberals for voting for "hippie" stimulus persons and of conservatives for voting for "non-hippie" stimulus persons was successfully counteracted by the use of contradictory buttons. No significant interactions were found for the tests which compared voting preference for "hippie" or contradictory "non-hippie" stimulus persons or for those comparing voting preference for contradictory "hippie" or "non-hippie" stimulus persons.

These results add credence to the previously stated interpretation of the results of the third hypothesis: that conservatives prefer to vote for "non-hippie" candidates and liberals prefer "hippie" candidates because they infer that these individuals have political values similar to their own. When additional cues were added (contradictory buttons) so that the inferences of value similarity could no longer be made, these preferences no longer occur.

Results of Hypothesis 4a(2) (Dating Context)

Kerlinger Score Assessment of Political Conservativism

Significant interactions were found between subjects' political conservativism and the attraction subjects felt towards "hippie" and "non-hippie" stimulus persons as potential dating partners, both for subjects who viewed contradictory "hippie" stimulus persons and those that viewed contradictory "non-hippie" stimulus persons. Conservatives preferred to date "non-hippie" stimulus persons more than "hippie" stimulus persons, and the opposite was true of liberals. These preferences disappeared when subjects were confronted with stimulus persons wearing buttons which contradicted the implications of their appearance. No significant interactions were found either for subjects who viewed contradictory "hippie" stimulus persons or those who viewed contradictory "non-hippie" stimulus persons (see Tables 20, 21, 22 and 23).

Self-ratings of Political Conservativism

A significant interaction was found, for subjects who viewed contradictory "non-hippie" stimulus persons, between the subjects' conservativism and dating preference for "hippie" and "non-hippie" stimulus persons. Specifically, conservatives preferred to date "non-hippies" more than "hippies" and liberals preferred to date "hippies" more than "non-hippies." A similar interaction which approached significance ($p \leq .06$) was found for subjects who viewed contradictory "hippie" stimulus persons. For both of these groups of subjects no significant interaction between subjects' conservativism and dating preference for "hippie" or "non-hippie" stimulus persons was found when

Table 20

Hypothesis 4A(2): Attraction in a Dating Context of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of Contradictory "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=8)	11.50	8.50
By liberal subjects (n-12)	11.00	10.83

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	1.504	1	1.504	-
Subj. w. groups	208.771	18	11.598	
Within				
B	11.025	1	11.025	2.350
AB	36.038	1	36.038	7.683*
B x subj. w. gr.	84.437	18	4.691	

*$p \leq .05$

Table 21

Hypothesis 4A(2): Attraction in a Dating Context of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Attraction to Contradictory "Hippie" and "Non-Hippie" Stimulus Persons

		Mean Evaluation	
		Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects	(n=8)	11.88	8.50
By liberal subjects	(n=12)	10.33	10.83

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	8.067	1	8.067	-
Subj. w. groups	214.833	18	11.935	
Within				
B	16.900	1	16.900	2.560
AB	19.266	1	19.266	2.918
B x subj. w. gr.	118.834	18	6.602	

Table 22

Hypothesis 4A(2): Attraction in a Dating Context of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=10)	9.18	7.00
By liberal subjects (n=6)	7.42	8.92

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	.065	1	.065	-
Subj. w. groups	358.652	21	17.079	
Within				
B	.782	1	.782	-
AB	38.900	1	38.900	10.613**
B x subj. w. gr.	76.470	21	3.665	

**$p \leq .01$

Table 23

Hypothesis 4A(2): Attraction in a Dating Context of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and Contradictory "Non-Hippie" Stimulus Persons

		Mean Evaluation	
		Of "Hippie" Stimulus Persons	Of Contradictory "Non-Hippie" Stimulus Persons
By conservative subjects	(n=10)	9.18	7.00
By liberal subjects	(n=6)	7.42	8.92

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	1.680	1	1.680	-
Subj. w. groups	363.777	21	17.323	
Within				
B	.783	1	.783	-
AB	21.940	1	21.940	3.662
B x subj. w. gr.	125.777	21	5.989	

one of the stimulus persons wore a button which contradicted the implications of his appearance. These results appear in Tables A23, A24, A25 and A26.

These results, then, are very similar to what was found in the voting context. The dating preference of conservatives for "non-hippie" stimulus persons and of liberals for "hippie" stimulus persons was "neutralized" by having stimulus persons wear contradictory buttons. These results support the contention that inferences of value similarity are responsible for the fact that conservatives preferred to date "non-hippies" and liberals preferred to date "hippies."

Results of Hypothesis 4b (Physical Attractiveness Evaluations)

Kerlinger Score Assessment of Political Conservativism

A significant interaction between subjects' conservativism and evaluations of the physical attractiveness of "hippie" and "non-hippie" stimulus persons was found for subjects who viewed contradictory "hippie" stimulus persons (Table 24). Conservative subjects evaluated "non-hippie" stimulus persons as more physically attractive than "hippie" stimulus persons and the opposite was true for liberal subjects. Similar results were found for subjects who viewed contradictory (Table 26) "non-hippie" stimulus persons, but for this group the interaction was not statistically significant. No such significant interactions were found for tests involving responses to (Tables 25 and 27) contradictory stimulus persons. Conservatives did not judge "non-hippies" to be significantly more attractive than "hippies" when the "hippies" wore Nixon buttons; liberals did not evaluate "hippies" as

Table 24

Hypothesis 4B: Physical Attractiveness Evaluations of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Evaluations of "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=8)	9.13	8.25
By liberal subjects (n-13)	7.46	8.77

(Smaller numbers denote greater attractiveness)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	3.242	1	3.242	-
Subj. w. groups	100.091	19	5.268	
Within				
B	2.381	1	2.381	1.517
AB	11.797	1	11.797	7.516
B x subj. w. gr.	29.822	19	1.570	

*p = $\leq$ .05

Table 25

Hypothesis 4B: Physical Attractiveness Evaluations of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Evaluations of Contradictory "Hippie" and "Non-Hippie" Stimulus Persons

		Mean Evaluation	
		Of Contradictory "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects	(n=8)	7.00	8.25
By liberal subjects	(n=13)	9.38	8.77

(Smaller numbers denote greater attractiveness)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	20.880	1	20.880	3.943
Subj. w. groups	99.396	19	5.242	
Within				
B	.095	1	.095	-
AB	8.616	1	8.616	2.296
B x subj. w. gr.	71.289	19	3.752	

Table 26

Hypothesis 4B: Physical Attractiveness Evaluations of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Evaluations of "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	"Of Non-Hippie" Stimulus Persons
By conservative subjects (n=8)	8.38	7.88
By liberal subjects (n=6)	8.00	8.33

(Smaller numbers denote greater attractiveness)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	.012	1	.012	-
Subj. w. groups	29.417	12	2.451	
Within				
B	2.594	1	2.594	-
AB	1.191	1	1.191	-
B x subj. w. gr.	11.666	12	3.722	

Table 27

Hypothesis 4B: Physical Attractiveness Evaluations of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Evaluations of "Hippie" and Contradictory "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of Contradictory "Non-Hippie" Stimulus Persons
By conservative subjects (n=8)	8.38	8.50
By liberal subjects (n=6)	8.00	7.33

(Smaller numbers denote greater attractiveness)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	4.019	1	4.019	-
Subj. w. groups	109.160	12	9.100	
Within				
B	.322	1	.322	-
AB	1.130	1	1.130	-
B x subj. w. gr.	52.048	12	4.337	

significantly more attractive than "non-hippies" when the "non-hippies" wore McGovern buttons.

Self-ratings of Political Conservativism

Both for subjects who viewed contradictory "hippie" stimulus persons and for subjects who viewed contradictory "non-hippie" stimulus persons, significant interactions were found between subjects' political conservativism and evaluations of the physical attractiveness of "hippie" and "non-hippie" stimulus persons. However, the more favorable evaluations of "non-hippie" stimulus persons by conservatives (and of "hippie" stimulus persons by liberals) were no longer found when comparisons were made with contradictory stimulus persons. "Hippie" stimulus persons wearing Nixon buttons were not considered to be more physically attractive than "non-hippie" stimulus persons by liberal subjects. "Non-hippie" stimulus persons wearing McGovern buttons were not judged to be significantly more physically attractive than "hippie" stimulus persons by conservative subjects. These results appear in Tables A27, A28, A29 and A30.

Thus we see that for evaluations of physical attractiveness conservatives tend to judge "non-hippie" stimulus persons more favorably than "hippies" and liberals tend to judge "hippie" stimulus persons more favorably than "non-hippies." The hypothesis that inferences of value similarity were responsible for these results is supported by the finding that these preferences disappeared when stimulus persons wore buttons which contradicted the implications of their appearance. Subjects' conservativism did not significantly affect evaluations of physical attractiveness for tests comparing ratings of "hippie" with

contradictory "non-hippie" stimulus persons and tests comparing ratings of contradictory "hippie" stimulus persons with "non-hippie" stimulus persons.

Results of Hypothesis 4c (Favorability of Personality Trait Attribution)

Kerlinger Score Assessment of Subjects' Political Conservativism

For subjects who judged contradictory "hippie" stimulus persons a significant interaction was found between subjects' political conservativism and the favorability of personality traits attributed to "hippie" and "non-hippie" stimulus persons. "Hippies" were judged to have more favorable personality traits than "non-hippies" by liberal subjects and "non-hippies" were assumed to have more favorable personality traits than "hippies" by conservative subjects. No such significant interaction was found for subjects who viewed contradictory "non-hippie" stimulus persons. Interactions involving tests with contradictory stimulus persons were not significant: liberals did not evaluate "hippies" significantly more favorably than "non-hippies" who wore McGovern buttons nor did they evaluate "hippies" who wore Nixon buttons significantly more favorably than "non-hippies"; conservatives did not evaluate "non-hippies" significantly more favorably than "hippies" who wore Nixon buttons nor did they evaluate "non-hippies" who wore McGovern buttons significantly more favorably than "hippie" stimulus persons. However, the effectiveness of the buttons in negating inferences of value similarity was to no avail, since the effects of inferred value similarity on favorability of personality trait attribution was not initially established for the group of subjects who saw

contradictory "non-hippies" (no significant interaction was found). These results appear in Tables 28, 29, 30 and 31.

Self-ratings of Political Conservativism

No significant interactions were found between subjects' political conservativism and the favorability of personality traits attributed to "hippie" and "non-hippie" stimulus persons either for the group of subjects who judged contradictory "hippie" stimulus persons or for the group that judged contradictory "non-hippie" stimulus persons. Liberal subjects did not attribute significantly more favorable personality traits to "hippies" than to "non-hippies" and conservative subjects did not attribute significantly more favorable personality traits to "non-hippies" than to "hippies." For this reason, the fact that no such interactions were found for comparisons involving contradictory stimulus persons becomes meaningless. The purpose of presenting contradictory stimulus persons was to negate the effects of inferred value similarity on judgments concerning the personality traits stimulus persons possessed. It was of no value to negate this process, because it was not initially established (for these groups) that inferred value similarity did influence judgments of personality traits.

We must conclude then that our attempt to demonstrate the process that was responsible for the results reported earlier, concerning the effects of inferred value similarity on the favorability of personality trait attribution, was unsuccessful. Inferred value similarity was not found to significantly affect judgments of the personality traits of stimulus persons, and so it was meaningless to "negate" a relationship which was not found (Tables A31, A32, A33 and A34).

Table 28

Hypothesis 4C: Favorability of Personality Traits Attributed to Stimulus Persons by Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Kerlinger Scores Were Used To Categorize Subjects' Conservativism

Favorability of Traits Attributed to "Hippie" and "Non-Hippie" Stimulus Persons

		Mean Evaluation	
		Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects	(n=11)	.09	13.18
By liberal subjects	(n=8)	10.38	6.50

(Larger numbers denote more favorable traits)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	30.051	1	30.051	-
Subj. w. groups	3023.528	17	177.855	
Within				
B	336.026	1	336.026	4.210
AB	666.582	1	666.582	8.351*
B x subj. w. gr.	1356.892	17	79.817	

*p = $\leq$ .05

Table 29

Hypothesis 4C: Favorability of Personality Traits Attributed To Stimulus Persons By Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Kerlinger Scores Were Used To Categorize Subjects' Conservativism

Favorability of Traits Attributed to Contradictory "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of Contradictory "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=11)	15.09	13.18
By liberal subjects (n=8)	6.50	6.50

(Larger numbers denote more favorable traits)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	540.172	1	540.172	3.183
Subj. w. groups	2885.091	17	169.711	
Within				
B	11.605	1	11.605	-
AB	8.441	1	8.441	-
B x subj. w. gr.	1205.454	17	70.909	

Table 30

Hypothesis 4C: Favorability of Personality Traits Attributed To Stimulus Persons by Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Favorability of Traits Attributed to "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=13)	10.33	11.67
By liberal subjects (n=11)	7.73	7.64

(Larger numbers denote more favorable traits)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	51.906	1	51.906	-
Subj. w. groups	1362.595	12	113.550	
Within				
B	.322	1	.322	-
AB	2.390	1	2.390	-
B x subj. w. gr.	188.788	12	15.732	

Table 31

Hypothesis 4C: Favorability of Personality Traits Attributed To Stimulus Persons by Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Kerlinger Scores Were Used to Categorize Subjects' Conservativism

Favorability of Traits Attributed to "Hippie" and Contradictory "Non-Hippie" Stimulus Persons

		Mean Evaluation	
		Of "Hippie" Stimulus Persons	Of Contradictory "Non-Hippie" Stimulus Persons
By conservative subjects	(n=13)	10.33	6.67
By liberal subjects	(n=11)	7.73	13.18

(Larger numbers denote more favorable traits)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	18.045	1	18.045	-
Subj. w. groups	884.445	12	73.705	
Within				
B	85.786	1	85.786	1.362
AB	98.017	1	98.017	1.556
B x subj. w. gr.	755.697	12	62.975	

Summary of Results of Hypotheses 4a(1), 4a(2), 4b and 4c

The results of statistical tests of Hypotheses 4a(1), 4a(2), and 4b (Table 32) are interpreted as supporting the notion that inferences of value similarity were responsible for the significant interactions between subjects' conservativism and attraction to "hippie" and "non-hippie" stimulus persons found for tests of Hypothesis 3. Specifically, conservative subjects tended to evaluate "hippie" stimulus persons less favorably than "non-hippie" stimulus persons (and the opposite was true of liberal subjects) as political candidates, potential dating partners and in terms of their physical attractiveness. However, when "hippie" stimulus persons wore Nixon buttons, and "non-hippie" stimulus persons wore McGovern buttons, the previously described relationships were no longer found. These results suggest that the initial evaluations of stimulus persons (without buttons) were due to inferences on the part of the subjects concerning the political values of the stimulus persons ("hippies" were assumed to be liberal and "non-hippies" assumed to be conservative). When these inferences were no longer tenable, because subjects wore buttons which contradicted them, the previously described preferences were no longer found. This process could not be demonstrated for personality traits because the effect of inferred value similarity on the favorability of personality traits attributed to "hippie" and "non-hippie" stimulus persons was not found.

Hypothesis 5

Two 3-way analyses of variance with repeated measures on 1 factor (Winer, 1962) were used to test the proposition that the

Table 32

Summary of Tests of Hypothesis 4

KERLINGER SCORES	Voting Context Subjects who judged CH		Voting Context Subjects who judged CN		Dating Context Subjects who judged CH		Dating Context Subjects who judged CN		Physical Attractiveness Subjects who judged CH		Physical Attractiveness Subjects who judged CN		Personality Traits Subjects who judged CH		Personality Traits Subjects who judged CN	
	H-N	CH-N	H-N	H-CN	H-N	CH-N	H-N	H-CN	H-N	CH-N	H-N	H-CN	H-N	CH-N	H-N	H-CN
A (Subjects' Conservativism)	F= 5.501* df= 1/14	1	1	1	1	1	1	1	1	F= 3.943 df= 1/19	1	1	1	F= 3.183 df= 1/17	1	1
B (Type of Stimulus Person)	1	F= 10.364** df= 1/14	1	1	F= 2.350 df= 1/18	F= 2.560 df= 1/18	F= 1.449 df= 1/14	1	F= 1.517 df= 1/19	1	1	1	F= 4.210 df= 1/17	1	1	F= 1.362 df= 1/12
AB	F= 4.517* df= 1/14	F= 1.675 df= 1/14	F= 6.364* df= 1/24	1	F= 7.683* df= 1/18	F= 2.918 df= 1/18	F= 9.030** df= 1/14	F= 1.376 df= 1/14	F= 7.516* df= 1/19	F= 2.296 df= 1/19	1	1	F= 8.351* df= 1/17	1	1	F= 1.556 df= 1/12

H = "Hippie" Stimulus Persons
N = "Non-Hippie" Stimulus Persons
CH = Contradictory "Hippie" Stimulus Persons
CN = Contradictory "Non-Hippie" Stimulus Persons

* = significant at $p \leq .05$
** = significant at $p \leq .01$
+ = significant at $p \leq .06$

Table 32--Continued

		Voting Context: Subjects who judged CH				Voting Context: Subjects who judged CN				Dating Context: Subjects who judged CH				Dating Context: Subjects who judged CN			
		H-N	CH-N	H-N	H-CN	H-N	CH-N	H-N	H-CN	H-N	CH-N	H-N	H-CN	H-N	CH-N	H-N	H-CN
SELF RATING	A (Subjects' Conservativism)	1	1	F= 3.768 df= 1/24	1	1	1	1	1	F= 1.055 df= 1/23	F= 4.250 df= 1/23	F= 1.445 df= 1/17	1	1	F= 3.921 df= 1/25	1	F= 2.271 df= 1/17
	B (Type of Stimulus Person)	F= 2.067 df= 1/17	F= 26.285** df= 1/17	1	1	F= 1.749 df= 1/20	F= 1.318 df= 1/20	1	1	1	1	1	1	F= 4.450* df= 1/25	1	F= 1.159 df= 1/17	F= 1.646 df= 1/17
	AB	F= 5.194* df= 1/17	F= 3.189 df= 1/17	F= 3.840+ df= 1/24	1	F= 3.919+ df= 1/20	1	F= 10.613** df= 1/21	F= 3.662 df= 1/21	F= 5.047* df= 1/23	1	F= 5.130* df= 1/17	1	F= 2.917 df= 1/25	F= 4.304* df= 1/25	1	F= 2.186 df= 1/17

H = "Hippie" Stimulus Persons
N = "Non-Hippie" Stimulus Persons
CH = Contradictory "Hippie" Stimulus Persons
CN = Contradictory "Non-Hippie" Stimulus Persons

* = significant at $p \leq .05$
** = significant at $p \leq .01$
\+ = significant at $p \leq .06$

relationship between inferred value similarity and interpersonal attraction would be greater when stimulus persons were evaluated as political candidates than when they were judged as potential dating partners. In one of the analyses, subjects' political conservativism was assessed by using their scores on the Kerlinger Social Attitudes Scale. For the other subjects' self-ratings of their own political conservativism were used. In neither case was the predicted significant 3-way interaction found (see Table 33). A significant 2-way interaction between subjects' conservativism and attraction to "hippie" and "non-hippie" stimulus persons was again obtained in the predicted direction (for both techniques for categorizing subjects according to their conservativism). Also in both analyses significant differences were found for evaluations of potential dating partners and political candidates. Potential dates were evaluated significantly less favorably than the political candidates. There was also a tendency for "non-hippie" stimulus persons to be evaluated more favorably than "hippie" stimulus persons.

Table 33

Test of Hypothesis 5: Strength of Relationship Between Inferred Value Similarity and Interpersonal Attraction in Voting and Dating Contexts

When subjects' conservativism categorized according to Kerlinger scores

Summary of ANOVA

Source	SS	df	MS	F
Between				
A (Context)	61.361	1	61.361	5.699*
B (Subj. cons.)	.444	1	.444	
AB	12.250	1	12.250	1.138
Subj. w. gr.	732.167	68	10.767	
Within				
C (Stimulus person)	16.000	1	16.000	3.649
AC	14.694	1	14.694	3.351
BC	69.445	1	69.445	15.838**
ABC	4.695	1	4.695	1.071
C x subj w. gr.	298.166	68	4.385	

* significant at p .05
** significant at p .01

When subjects' conservativism categorized according to self-ratings.

Summary of ANOVA

Source	SS	df	MS	F
Between				
A (Context)	88.526	1	88.526	10.012**
B (Subj. conserva.)	9.500	1	9.500	1.074
AB	.948	1	.948	
Subj. w. gr.	636.605	72	8.842	
Within				
C (stimulus person)	17.790	1	17.790	4.468*
AC	1.289	1	1.289	
BC	94.736	1	94.736	23.795**
ABC	.027	1	.027	
C x subj w. gr.	286.658	72	3.981	

*significant at $p \leq .05$
**significant at $p \leq .01$

CHAPTER V

DISCUSSION OF RESULTS

The Formation of First Impressions

A major purpose of this study was to offer a procedural model for the investigation of the impression formation process and to demonstrate its efficacy for predicting both impressions and interpersonal attraction. This approach is viewed as approximating what transpires in real life situations more closely than the personality trait list technique initiated by Asch (1946) and used so extensively for several decades. Although the impression that one person forms of another may be described by assigning personality traits to the person that is viewed, the stimulus for the impression (contrary to Asch) is always information from our senses, especially how the person looks, sounds, and perhaps smells. This data is available even before behavioral exchange occurs. Vision is of prime importance for man. Therefore, the appearance of another individual plays an especially crucial role in impression formation and this investigation.

Photographs of stimulus persons provided a less complex stimulus than what usually occurs in a face-to-face interaction (i.e., postural cues, gestures, transitory facial expressions, etc), and for this reason this investigation is viewed as merely a first step in investigating this process. Although some aspects of appearance are unalterable or changed only with difficulty (i.e., stature, physiognomy, coloring), others are easily manipulated (clothing, grooming, etc.). It was the supposition of this research that the manipulable aspects of

appearance provide an important basis by which individuals form impressions of one another.

This contention is supported by the results of this research. The confirmation of the "hippie" stereotype suggests that to the extent that an individual adopts the physical attributes of a stereotyped group (long hair), he will be assumed to possess the stereotyped personality characteristics of that group (political liberalism). Thus we may suggest that the initial steps in forming an impression are (1) making inferences as to group membership on the basis of physical appearance; (2) assigning probable personality characteristics on the basis of group membership. Although the study reported here did not offer unambiguous proof that this process occurs in the way that we have suggested, it did offer some supportive evidence. Long hair was the trait considered to be characteristic of "hippies" far more than any other (Tables 1 and A1). Liberal and radical political philosophies were also found to characterize "hippies" (Tables 1 and A1) and long-haired stimulus persons (Table 8) as well.

The applicability of this model extends far beyond the "hippie" stereotype and beyond stereotypes of racial, religious, or ethnic groups. Inferences as to social class, age, and sex provide important information, although these judgments are not always unambiguous (i.e., long hair is no longer synonymous with female). If a given stimulus person is assumed to belong to two groups which are assumed to have similar personality traits (i.e., "rich" and "old" may both connote conservativism) inferences may be made with greater confidence than when a stimulus person belongs to two groups for which the inferred personality characteristics are contradictory (i.e., rich Chicano).

Inferences are not, of course, limited to political conservativism. Any personality trait associated with group membership may be inferred. The more strongly a given trait is associated with group membership in the mind of the perceiver, the more confidence one is likely to display when making inferences about that trait. Although it is not always the case that individuals agree with one another when making inferences of this kind, responses to "hippie" stimulus persons in this study demonstrated that there may be a great deal of agreement.

This study of the "hippie" stereotypes differs from other research on stereotyped groups in several important respects. We have found favorable, neutral, and unfavorable personality characteristics which are associated with group membership. In the past most studies of stereotypes have stressed negative inferences. In addition, the aspects of appearance by which group members are identified (long hair, messy, blue jeans, etc.) are qualities which an individual is capable of assuming or removing easily. The voluntary nature of this kind of group membership is especially important because of the active rejection of established values associated with it (Tables 1 and A2). Unlike the traits of many other stereotyped groups, which are viewed as being congenital, the traits of the "hippie" are interpreted by the observer as being an act of will. The "hippie" rejects many of the values of the larger society in which he lives (and, we may suppose, the observer, if he accepts these values) despite the fact that he has some choice in the matter and might choose differently. Thus the appearance of the "hippie" may be interpreted by the conservative observer as active rejection of the latter's own view of the world, and may be interpreted by the liberal observer as tacit acceptance of his

liberal position. Not only does the conservative observer believe that the "hippie" has chosen to reject the observer's values, but as Heider has commented, the "hippie" is aware that the conservative observer knows he (the "hippie") has chosen to reject the observer's values, and the observer knows that the "hippie" knows. . . .

As is the case with many stereotypes, we have found that stimulus persons whose appearance includes characteristics which are the opposite of those of the stereotyped group, are assumed to possess personality characteristics which are the opposite of those assumed to be possessed by the stereotyped group. Where "hippies," identifiable by long hair, were assumed to be politically liberal, stimulus persons with short hair ("non-hippies") were assumed to be politically conservative. This phenomenon is similar to stereotypes based on race. Unfavorable traits are most often attributed to those races and nationalities with dark skin, and eyes and dark, curly hair (i.e., blacks, American Indians, Puerto Ricans, Jews, and Chicanos). The only group which considered itself to be a "superior" race were the Aryan "Ubermensch" identifiable by light eyes and straight, blond hair.

Determinants of Interpersonal Attraction

Despite the commonality of inferences that were made regarding the political values of "hippie" and "non-hippie" stimulus persons, it was not expected that all subjects would be equally attracted to these two types of stimulus persons. It was anticipated that subjects would prefer stimulus persons whom they inferred would provide satisfaction (yield some positive value of rewards minus costs above a comparison level of other available alternatives) of needs that were important for

them in a given interaction context. The desire to have one's perception of reality validated by having others agree with it is one such type of need satisfaction. Results of this research confirmed the expectation that subjects would prefer stimulus persons whose values they assumed to be similar to their own. In both dating and voting contexts liberal subjects preferred "hippie" stimulus persons to "non-hippie" stimulus persons and conservative subjects preferred "non-hippie" stimulus persons to "hippie" stimulus persons. When subjects were divided into three groups on the basis of political conservativism, the results were again in the predicted direction: liberals were attracted to "hippie" stimulus persons more than moderates and moderates were attracted to "hippies" more than conservatives; conservatives were attracted to "non-hippie" stimulus persons more than moderates and moderates were attracted to "non-hippie" stimulus persons more than liberals.

This study is very different from most previous research which has investigated the effects of value similarity on interpersonal attraction (i.e., Newcomb, 1943; Newcomb, 1956; Byrne, London and Reeves, 1968; and Stroebe et al., 1971). Newcomb's work has concentrated on the effects of value similarity as it affects long-term relationships, rather than initial impressions. The studies of Byrne et al. and Stroebe et al. have manipulated value similarity by having the viewer consider an attitude checklist to which the stimulus person was supposed to have responded. In real life we are rarely privy to such information. It is apparent from the present research that it is unnecessary to know or be told the actual value orientation of another, or to be told the ability of another to provide some

positive outcome of rewards minus costs above a comparison level (by validating one's conception of reality), to predict interpersonal attraction. Information concerning anticipated positive outcomes or inferred value similarity is sufficient for these predictions. In the first impression situation, where one does not usually have knowledge of this type at one's disposal, it is these inferences and expectation that govern interpersonal attraction.

The relationship between inferred value similarity and interpersonal attraction is relevant to the controversy that has existed for several years concerning the basis for racial prejudice: Rokeach has suggested that it is caused by assumptions of value dissimilarity, whereas Triandis and others contend that identification of a stimulus person as a member of a minority racial or religious group is sufficient to cause prejudice in situations involving large social distances.

Our research provides a model for describing the mechanism by which value similarity inferences are likely to be transmitted in an actual face-to-face interaction. In reality, one is rarely presented with information concerning the beliefs of, and minority group membership of, another individual and asked to weigh and compare the effects of both (as is done in so much of the research in this area). What is far more likely to occur is that one will discern minority group status and infer the values of another from that knowledge as well as many additional cues (i.e., dress, grooming, speech, gait, physiognomy, etc.). An individual's race or religion is never presented to us in isolation. When forming impressions we respond to the entire pattern of cues before us. The inferences drawn from these cues will to some extent be dependent on the individual processing techniques

of the perceiver.

Interpersonal attraction, as we have suggested, will be determined by the supposition of the perceiver of the reinforcement value of the stimulus person in terms of the amount of reward (minus costs) above some comparison level that will be received, for needs that are important to the perceiver in a given interaction context. As has also been suggested, these inferences are initially made on the basis of cues from physical appearance. Thus, in order to predict interpersonal attraction when an individual meets another for the first time (or prejudice) it would seem to be necessary to know (1) the needs that are salient for an individual in a given interaction context; (2) the perceiver's judgment of the ability of the stimulus person to provide satisfaction of those needs. It would seem meaningless to say a priori that either race or value similarity is more important for predicting prejudice in a given social situation. One may only say that for certain types of individuals, in certain types of situations, race or value similarity will be interpreted as being more or less relevant for determining greatest satisfaction of salient needs, and therefore, more or less relevant, respectively, for interpersonal attraction.

Another reason for contradictory research results in this area may stem from the type of values that were used for the value similarity manipulation. The importance of value similarity for interpersonal attraction will be minimal if the values that are similar are ones that are of little concern to the perceiver. In the study described here the importance of the values being manipulated was insured by only considering subjects who indicated an interest in politics. Similar provisions should have been made in the studies on

racial prejudice, but were not.

Contradictory results on the importance of race and value similarity for prejudice in situations involving different social distances may also be due to the sample of subjects used in each study. If many racially prejudiced individuals were included in a given sample, race, rather than value similarity, would inevitably be found to be most important. If many individuals low in prejudice were included in a study, value similarity would be found to be important for interpersonal attraction regardless of the social distance involved. When attempting to predict interpersonal attraction it is always necessary to know the enduring needs that are important for the individuals involved.

Demand characteristics provide an additional consideration that should be taken into account when trying to reconcile the contradictory results of research on racial prejudice. Subjects make inferences as to what types of responses they believe the researchers in a given experiment would like them to make, and then comply. Also subjects may be concerned with providing responses that will be interpreted by the experimenter as being favorable to themselves. Especially in the Northeastern part of this country, most of us have been exposed to authority figures who denigrate prejudicial attitudes and indoctrinate us concerning the virtues of brotherhood. Subjects who failed to be influenced in their responses by the race of a stimulus person may simply have been responding in the way they had learned would please authority figures (the researchers). Subjects who were not influenced by the race of a stimulus person may have been responding in the way they had been taught that one should respond, rather than the way that

they really felt and really would react in real life situations.

Consequences of Interpersonal Attraction

Thus far we have discussed the determinants of interpersonal attraction when two individuals meet for the first time. It has been suggested that inferences are made concerning the favorability of personality traits of the other person on the basis of physical appearance. Attraction will depend upon the degree to which the other is assumed to be capable of satisfying needs that are salient (in terms of rewards minus costs) in the given interaction context (as compared to alternative levels). One such need is to have others agree with one's values. In this study, for both dating and voting contexts stimulus persons whose values were assumed to be similar to those of the perceiver were preferred to stimulus persons whose values were assumed to be different from those of the perceiver.

It is not surprising that inferences as to the political values of another are important when we are deciding whom to vote for. But the finding that inferred value similarity is important for attraction in a dating context is strange. If asked about the characteristics that they find desirable in a dating partner, most people would not include similar political orientation near the top of their list. Yet whether they are aware of it or not, the need to have one's values confirmed is operative in this situation. One reason that may account for its importance is the fact that it is a characteristic which can be readily inferred from appearance.

The fact that inferred value similarity was related to interpersonal attraction in a dating context also seems to contradict the

research of Walster et al. (1966). Of the many variables investigated only physical attractiveness was found to be related to dating preferences. However, Walster did not evaluate the political conservativism of her subjects. Even if this had been done, it is not certain that inferred value similarity would have been found to be related to interpersonal attraction. For one thing, there may have been little heterogeneity in the political values of her subjects. Even if there were considerable variation in the political values of subjects, there may have been little variation in the hair length of male stimulus persons. It seems as if the hair length of male college students did not vary as much in 1965 (when the Walster research was done) as much as it did in 1972 (when this study was done). Moreover, inferred value similarity would only be expected to be related to interpersonal attraction if one can choose between several individuals who vary in terms of the similarity assumed to exist between their values and those of the perceiver. This was the procedure used in the study reported here, but was not the case for Walster's subjects. They indicated attraction only to the one individual with whom they were paired for a blind date.

Perhaps most importantly, in the study reported here, stimulus persons were equated for physical attractiveness. Naturally, this was not the case in Walster's research. In initial pilot research by the writer when the physical attractiveness of stimulus persons was not controlled, inferred value similarity was not found to affect interpersonal attraction. One can only speculate that in real life, where people are free to choose dating partners from among many individuals who vary both in physical attractiveness and inferred value similarity,

both of these parameters are influential, if the latter can be inferred from appearance or symbols, i.e., a political button. If value similarity is not known, as was the case in Newcomb's research, then it takes longer for the relationship between value similarity and interpersonal attraction to become apparent.

The question arises as to what the attraction found for stimulus persons really means. As has been suggested, it implies more than liking. It includes a predisposition to evaluate others in a favorable way. We have previously expressed the opinion that judgments of traits that are subjectively determined and have an evaluative component would be most strongly influenced by this attraction. The results have shown that inferred value similarity is an important determinant of judgments of one such subjectively determined, evaluative trait: physical attractiveness. Liberals evaluated "hippies" as more physically attractive than "non-hippies" and conservatives evaluated "non-hippies" as more physically attractive than "hippies."

Similarly, when categorized on the basis of Kerlinger scores, liberal subjects attributed more favorable personality traits to "hippie" stimulus persons than to "non-hippie" stimulus persons and conservative subjects attributed more favorable personality traits to "non-hippie" stimulus persons than to "hippie" stimulus persons. The latter was not found, however, when subjects were categorized on the basis of self-ratings of political conservativism. There are several reasons why this might have occurred.

(1) The list of personality traits may have been too lengthy. Each subject judged each of the six stimulus persons on twelve 7-point scales. The process was undoubtedly fatiguing and could easily have

caused subjects to respond randomly to stimulus persons and traits that appeared at the end. The large order effects discovered in pilot research would tend to support this possibility.

(2) There was a very large variance for these ratings. Favorability scores for each stimulus person would range from -3 to +3 for each trait, or from -24 to +24 for each stimulus person. Even consistent evaluations in the predicted direction (favorable for inferred value similarity and unfavorable for inferred value dissimilarity) would not yield significant interactions unless they were of sizable magnitude.

(3) The Kerlinger scores may be a more accurate way of measuring political conservativism than self-ratings. Some subjects may not really understand what is meant by political conservativism, or may not be aware of the proper terms to describe their own attitudes. For these subjects the Kerlinger scores would be a more valid method of evaluating political conservativism.

The fact that inferred value similarity was found to affect evaluations of the physical attractiveness of stimulus persons and the favorability of personality traits attributed to them (when subjects were categorized on the basis of Kerlinger scores) is interpreted as providing additional information for the model of interpersonal attraction for initial impressions previously described. As has been stated earlier, when an individual is assumed, on the basis of his physical appearance, to possess characteristics which are capable of providing satisfaction (rewards minus costs) of needs salient to the perceiver in a given interaction context (as compared to available alternatives), the perceiver will be attracted to that individual. We can now add that this attraction includes a tendency to judge the

stimulus person favorably in terms of traits that are subjective and evaluative.

Contradictory Stimuli

In an attempt to discover whether inferences of value similarity were responsible for the attraction of liberals to "hippie" stimulus persons and conservatives to "non-hippie" stimulus persons, each subject evaluated a stimulus person who wore a button which contradicted the implications of their appearance. It was expected that the attraction of liberals for "hippies" and of conservatives for "non-hippies" would no longer occur when they wore buttons which contradicted the implications of their appearance. Results of these tests supported the contention that value similarity inferences were responsible for interpersonal attraction.

Interpretations of these contradictory stimuli are reminiscent of the research in the Asch tradition by Haire and Grunes (1950), Dinnerstein (1951), Gollins (1954) and (1958) and Pepitone and Hayden (1955) in which subjects indicated their impressions of a stimulus person described with contradictory personality traits. As in these studies, some subjects were found to ignore one or the other contradictory stimuli (hair length of stimulus person or button message) and some gave a "compromise" interpretation suggesting an integration of both types of information. However, there were relatively few who ignored the button message totally, as is apparent from the fact that "hippie" stimulus persons were judged to be significantly mor conservative when they wore the Nixon button than when they did not (and "non-hippie" stimulus persons were judged to be significantly less

conservative when they wore McGovern buttons).

The Context of Interaction

The situation in which two people meet will have important implications for the needs that are salient to the individuals involved. If an individual goes for an interview for a job, the need most salient will probably be to favorably impress the interviewer. It was expected that the need to have one's political values confirmed by having another agree with them would be much more important in a voting context than a dating context. It was assumed that a political candidate would have the power to make choices that would affect the voter and that the voter would prefer a candidate that he assumed would make these choices according to his (the voter's) preferences. It was further expected that the need for value validation would be much less salient in a dating situation, where there were many additional types of satisfaction possible. However, no significant difference was found for the importance of inferred value similarity in voting and dating contexts. While it was true that this interaction was stronger in the voting context (significance was found at the .001 level) than in the dating context (significance was found at the .01 level), the strength of these interactions was not significantly different. Logically, it must either be because inferred value similarity is less important in the voting context than had been anticipated, or more important in the dating context.

Inferred value similarity may have been less important in the voting situation than had been anticipated because other needs may have competed with it. Perhaps there was a need to select a candidate

that one can identify with, either because he comes from the same background or ethnic group. Or, some may pick a candidate on the basis of charisma, charm, or sex appeal.

Since a strong relationship between inferred value similarity and interpersonal attraction was found in the voting context, it seems more likely to assume that the relationship between inferred value similarity and interpersonal attraction in a dating context was stronger than had been expected. There are several reasons why this might have been the case.

(1) The intimacy of the dating situation involves direct person-to-person interaction in a way that voting does not. Inferred value similarity may be important in any interaction where individuals deal with one another in this person-to-person fashion.

(2) Dating may be perceived by the female subjects participating in this study as a preliminary sorting process for a more intimate or enduring type of relationship. It is easy to see why value similarity would be very rewarding in the case.

(3) As we have discovered, inferred value similarity influences judgments of physical attractiveness. Since physical attractiveness has been shown to have a very powerful effect on attraction in a dating situation (Walster et al., 1966), it may be that subjects preferred to date others whose values they assumed to be like their own because these cues make the stimulus persons more physically attractive in the eyes of the perceiver.

(4) Inferred value similarity may have been strongly related to interpersonal attraction in the dating context because of the paucity of other alternative cues upon which these judgments could be based.

Inasmuch as stimulus persons were equated for physical attractiveness, judgments could not be made on that basis. Similarly age, race and ethnic group membership were also controlled. No knowledge was available to subjects as to the interests or professional aspirations of stimulus persons and the only information about personality characteristics was what could be deduced on the basis of appearance. In this limited situation, inferences of value similarity may have been the only relevant information available to subjects.

Demand Characteristics

The possibility must be considered that the results of this research are due not to the model of interpersonal attraction proposed earlier, but caused by the desire of subjects to respond in a way that they believe will please the experimenter and confirm experimental hypotheses. The writer considers this possibility to be unlikely. Several precautions were taken to ensure that subjects were not aware of the purpose of the study. Assessment of political conservativism with the Kerlinger scale was presented as part of a different experiment, with a considerable time interval between its administration and subjects' exposure to the stimulus persons. The self-ratings of political conservativism were hidden in a questionnaire that contained over a dozen diverse items. In addition to using "hippie" and "non-hippie" stimulus persons, neutral stimulus persons were also included, so that subjects would not be alerted to this dimension. At the conclusion of the study subjects were asked to describe what they believed the true purpose of the research to be. Only two of the approximately 150 subjects came even close to describing even one of

the many hypotheses being tested, and their responses were eliminated. Because of these many precautions the writer considers an explanation of these results in terms of demand characteristics or evaluation apprehension to be untenable.

The research conducted here poses as many questions as it answers. Only one of a large number of possible ways in which values can be communicated was touched upon. At this point we know very little about the specific cues that people present to others to inform them of their values, or of the ways that individuals process this information. In this research political values were studied, but certainly there must be many other values that are communicated in similar ways and which also influence attraction. The four measures of attraction used in this research are very few compared to the large numbers of ways in which attraction accruing from inferences of value similarity may affect judgments about a stranger. Inferences were also made concerning characteristics of strangers which are relevant for satisfaction of needs other than value validation, i.e., warmth, intelligence, efficiency, etc. We know little about the way these traits are communicated, and about the individual differences in techniques of self-presentation and methods of processing this information. The communication of values and other characteristics will vary with the age, sex, race, and socio-economic background of the stimulus person and these factors may affect the way these cues are interpreted, as well. The type of interaction will affect the needs that are salient. We have much to learn about what needs are salient in different types of interactions, and how these salient

needs may not only affect interpersonal attraction but the process of impression formation itself.

APPENDIX A

Table A1

Study #1

Adjectives Used to Describe "Hippies" (Grouped According to Similarity)

Numbers in parentheses are the number of respondents who used the trait in their description

Appearance

Hair: long (72), short (1), stringy (2), straight (2), uncombed (1), loose (1), natural (1), shaved head (1)

bearded (22), unshaved (6), hairy (3), moustache (1)

Clothes: jeans (16), girls wear pants (1)

t-shirts (3), sweatshirts (1), polo shirts (1), undershirts (1)

army jackets (1)

bra-less (1), no underwear (1)

ragged clothes (10), old clothes (6), shabby (5), unfashionable clothes (1), no Mod clothes (1), bumlike (1), inexpensive clothes (1)

simple dress (5), casual dress (5), comfortable clothes (2)

Mod clothes (4), bell-bottoms (2), expensively dressed (1), maxi-skirts (1), antique clothes (1), Eastern garb (1), gypsy-like (1), peasant clothes (1), unusual clothes (1)

colorful clothes (2), bright clothes (1), adorned clothes (1)

Shoes: sandals (14), barefoot (5), sneakers (4), boots (2), mocassins (1)

beads (11), peace buttons (3), bands (1), bells (1), rings (1), necklaces (1)

dirty (31), sloppy (11), messy (5), smelly (5), unkempt (5), disheveled (2), unwashed (2), untidy (1), slovenly (1)

unusual clothes (8), freaky (1), strangelooking (1), haggard (1), animal-like (1), disgusting (1), improperly dressed (1), clean cut (1), feminized male (1)

Nonmanipulable Characteristics: young (7), white (5), Negro (1)

Table A2

Study #1

Adjectives Used to Describe "Hippies" Grouped According to Similarity

---

Numbers in parentheses are the number of respondents who used the trait in their description

Values

Positively Evaluated:

love (12), Civil rights (7), people (4), life (3), brotherhood (1), relationships (1) Total: 28

change (12), radical revolution (6), protest (1), strikes (1), against changing society from within (1) Total: 21

nature (16), ecology (2), rural areas (1), natural foods (1) Total: 20

freedom (12), personal freedom (7) Total: 19

communal life style (7), simplicity (3), simple life style (1), a counter society (1), diffuse nonspecific roles (1), sharing of wealth (1) Total: 14

peace (15) Total: 15

music (5), literature and the arts (4) Total: 9

Negatively Evaluated:

establishment (34), government (1), laws (1), Nixon and Agnew (1), police (1), authority (1) Total: 40

war (19) and violence (3) Total: 22

materialism (18), capitalism (1) Total: 19

work (8), responsibilities (1), sacrifice (1) Total: 10

prejudice (2), bigotry (1), hypocricy (1) Total: 4

people (1), life (1), love (1), brotherhood (1) Total: 4

pollution (1)

religion (1)

Table A3

Study #1

Adjectives Used to Describe "Hippies" Grouped According to Similarity

---

Numbers in parentheses are the number of respondents who used the trait in their description

Personality

friendly (10), loves people (5), loving (4), warm (3), sociable (3), congenial (1), outgoing (1), loves children (1), believes in the worth of the individual (1), pleasant (1), good conversationalist (1), good listener (1) Total: 32 (anti-social (3); solitary (1))

altruistic (4), helpful (3), generous (3), unselfish (2), concerned (2), nice (2), concerned about others (1), kind (1), considerate (1), shares (1), good (1) Total: 21 (self-centered (3))

easy-going (9), uncompetitive (2), flexible (2), relaxed (2), serene (1), mild-tempered (1), calm (1), "live and let live" (1), good-natured (1), understanding (1), permissive (1) Total: 22

natural (5), sincere (4), honest (3), straight forward (2), open (1), openly expresses emotions (1), down to earth (1) Total: 17

liberal (5), unprejudiced (2), free-thinking (2), open-minded (1), not class conscious (1), concerned about the poor (1) Total: 12

Total for above "nice-guy" image: 104

drug-using (28), free love (20), pot smoking (5), many girlfriends (3), hedonistic (2), dazed (1), slow moving (1), tuned in (1) Total: 61

individualistic (18), free (12), nonconformist (11), unconventional (5), unusual (4), independent (4), non-establishment (2), doesn't let others interfere (2), self-reliant (1), disregards social norms (1), rejects society (1), disdains society (1), separate from society (1), free from society's demands (1), different (1), weird (1), hitchikes (1), begs (1) Total: 68

carefree (7), present-oriented (7), careless (3), happy (3), fun-loving (2), unrestricted (2), irresponsible (2), free of responsibilities (2), thrill-seeking (1), happy-go-lucky (1), optimistic (1), unstructured life style (1), impulsive (1), uninhibited (1), undisciplined (1), rootless (1), lazy (1) Total: 37

rebellious (10), alienated (2), dissatisfied with society (1)

Table A4

Test of Hypothesis 3A(1): Attraction of Politically Conservative, and Liberal Subjects (Categorized on the Basis of Self-Ratings) to "Hippie" and "Non-Hippie" Stimulus Persons as Political Candidates

	Mean Attraction	
	To "Hippie" Stimulus Persons	To "Non-Hippie" Stimulus Persons
Of conservative subjects (n=19)	8.63	6.58
Of liberal subjects (n=26)	7.81	8.54

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	7.079	1	7.079	1.851
Subj. w. groups	164.521	43	3.826	
Within				
B	4.444	1	4.444	1.990
AB	42.524	1	42.524	19.041***
B x subj. w. gr.	96.032	43	2.233	

*** $p \leq .001$

Table A5

Test of Hypothesis 3A(1): Attraction of Politically Conservative, Moderate and Liberal Subjects (Categorized on the Basis of Kerlinger Scores) to "Hippie" and "Non-Hippie" Stimulus Persons as Political Candidates

		Mean Attraction	
		To "Hippie" Stimulus Persons	To "Non-Hippie" Stimulus Persons
Of conservative subjects	(n=23)	8.87	7.17
Of moderate subjects	(n=8)	7.00	8.25
Of liberal subjects	(n=11)	6.46	8.91

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A (Subjects' conservativism)	2.785	2	1.393	-
Subj. w. groups	274.001	39	7.025	
Within				
B (Type of stimulus person)	.048	1	.048	-
AB	71.830	2	35.915	12.070***
B x subj. w. gr.	116.048	39	2.976	

*** $p \leq .001$

Table A6

Test of Hypothesis 3A(1): Attraction of Politically Conservative, Moderate and Liberal Subjects (Categorized on the Basis of Self-Ratings) to "Hippie" and "Non-Hippie" Stimulus Persons as Political Candidates

		Mean Attraction	
		To "Hippie" Stimulus Persons	To "Non-Hippie" Stimulus Persons
Of conservative subjects	(n=19)	8.63	6.58
Of moderate subjects	(n=13)	8.31	8.15
Of liberal subjects	(n=13)	7.31	8.92

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	7.252	1	3.626	-
Subj. w. groups	164.348	42	3.913	
Within				
B	4.444	1	4.444	2.174
AB	52.697	2	26.349	12.890***
B x subj. w. gr.	85.859	42	2.044	

*** $p \leq .001$

Table A7

Test of Hypothesis 3A(2): Attraction of Politically Conservative and Liberal Subjects (Categorized on the Basis of Self-Ratings) to "Hippie" and "Non-Hippie" Stimulus Persons as Dating Partners

	Mean Attraction	
	To "Hippie" Stimulus Persons	To "Non-Hippie" Stimulus Persons
Of conservative subjects (n=24)	10.42	8.25
Of liberal subjects (n=22)	8.96	9.86

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	.135	1	.135	-
Subj. w. groups	474.803	44	10.791	
Within				
B	11.134	1	11.134	2.129
AB	54.290	1	54.290	10.383***
B x subj. w. gr.	230.076	44	5.229	

*** $p \leq .001$

Table A8

Test of Hypothesis 3A(2): Attraction of Politically Conservative, Moderate and Liberal Subjects (Categorized on the Basis of Kerlinger Scores) to "Hippie" and "Non-Hippie" Stimulus Persons as Dating Partners

		Mean Attraction	
		To "Hippie" Stimulus Persons	To "Non-Hippie" Stimulus Persons
Of conservative subjects	(n=10)	11.30	7.80
Of moderate subjects	(n=12)	9.92	9.17
Of liberal subjects	(n=14)	9.00	9.50

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	.495	2	.248	-
Subj. w. groups	416.658	33	12.626	
Within				
B	19.014	1	19.014	3.847
AB	47.361	2	23.681	4.791*
B x subj. w. gr.	163.125	33	4.943	

* $p \leq .05$

Table A9

Test of Hypothesis 3A(2): Attraction of Politically Conservative, Moderate and Liberal Subjects (Categorized on the Basis of Self-Ratings) to "Hippie" and "Non-Hippie" Stimulus Persons as Dating Partners

		Mean Attraction	
		To "Hippie" Stimulus Persons	To "Non-Hippie" Stimulus Persons
Of conservative subjects	(n=24)	10.42	8.25
Of moderate subjects	(n=13)	8.31	8.92
Of liberal subjects	(n=9)	9.89	11.22

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	40.173	2	20.087	1.987
Subj. w. groups	434.765	43	10.111	
Within				
B	11.134	1	11.134	2.093
AB	55.660	2	27.830	5.233**
B x subj. w. gr.	228.706	43	5.319	

** $p \leq .01$

Table A10

Test of Hypothesis 3B: Physical Attractiveness Evaluation of "Hippie" and "Non-Hippie" Stimulus Persons By Politically Conservative and Liberal Subjects (Categorized on the Basis of Self-Ratings)

	Mean Attractiveness Rating	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=15)	8.47	7.00
By liberal subjects (n=29)	7.83	9.00

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater attractiveness)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	9.155	1	9.155	2.198
Subj. w. groups	174.936	42	4.165	
Within				
B	1.636	1	1.636	-
AB	34.429	1	34.429	10.260**
B x subj. w. gr.	140.935	42	3.355	

** $p \leq .01$

Table A11

Test of Hypothesis 3B: Physical Attractiveness Evaluations of "Hippie" and "Non-Hippie" Stimulus Persons by Politically Conservative, Moderate, and Liberal Subjects (Categorized on the Basis of Kerlinger Scores)

		Mean Attractiveness Rating	
		Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects	(n=10)	8.70	8.10
By moderate subjects	(n=13)	7.92	8.08
By liberal subjects	(n=12)	7.92	8.67

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater physical attractiveness)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	2.028	2	1.014	-
Subj. w. groups	113.258	32	3.539	
Within				
B	.357	1	.357	-
AB	4.971	2	2.486	1.031
B x subj. w. gr.	77.171	32	2.412	

Table A12

Test of Hypothesis 3B: Physical Attractiveness Evaluations of "Hippie" and "Non-Hippie" Stimulus Persons by Politically Conservative, Moderate, and Liberal Subjects (Categorized on the Basis of Self-Ratings)

	Mean Attractiveness Rating	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=15)	8.47	7.00
By moderate subjects (n=21)	8.05	9.29
By liberal subjects (n=8)	7.25	8.25

(Numbers are from a scale of 2 to 14; smaller numbers indicate greater attractiveness)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	18.891	2	9.446	2.344
Subj. w. groups	165.200	41	4.029	
Within				
B	1.636	1	1.636	-
AB	34.593	2	17.297	5.038*
B x subj. w. gr.	140.771	41	3.433	

* $p \leq .05$

Table A13

Test of Hypothesis 3C: Favorability of Personality Adjectives Attributed to "Hippie" and "Non-Hippie" Stimulus Persons by Politically Conservative and Liberal Subjects (Categorized on the Basis of Self-Ratings)

	Mean Favorability Score	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=37)	6.65	9.62
By liberal subjects (n=10)	9.50	7.90

(Larger numbers indicate greater favorability)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	5.023	1	5.023	-
Subj. w. groups	7260.849	45	161.352	
Within				
B	94.000	1	94.000	1.127
AB	77.434	1	77.434	-
B x subj. w. gr.	3752.686	45	83.393	

* $p \leq .05$ (one-sided)
** $p \leq .01$ (one-sided)

Table A14

Test of Hypothesis 3C: Favorability of Personality Adjectives Attributed to "Hippie" and "Non-Hippie" Stimulus Persons by Politically Conservative, Moderate and Liberal Subjects (Categorized on the Basis of Kerlinger Scores)

	Mean Favorability Score	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=11)	2.09	10.00
By moderate subjects (n=11)	7.36	10.09
By liberal subjects (n=11)	9.73	9.91

(Larger numbers indicate greater favorability)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	297.605	32	148.803	-
Subj. w. groups	4848.277	29	167.182	
Within				
B	191.117	1	191.117	2.093
AB	474.127	2	237.064	2.596
B x subj. w. gr.	2647.991	29	91.310	

* $p \leq .05$ (one-sided)
** $p \leq .01$ (one-sided)

Table A15

Test of Hypothesis 3C: Favorability of Personality Adjectives Attributed to "Hippie" and "Non-Hippie" Stimulus Persons by Politically Conservative, Moderate, and Liberal Subjects (Categorized on the Basis of Self-Ratings)

		Mean Favorability Score	
		To "Hippie" Stimulus Persons	To "Non-Hippie" Stimulus Persons
By conservative subjects	(n=14)	7.00	9.93
By moderate subjects	(n=23)	6.44	9.44
By liberal subjects	(n=10)	9.50	7.90

(Larger numbers indicate greater favorability)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	9.903	2	4.952	-
Subj. w. groups	7255.969	44	164.908	
Within				
B	94.000	1	94.000	1.102
AB	92.336	2	46.168	-
B x subj. w. gr.	3752.664	44	85.287	

* $p \leq .05$ (one-sided)
** $p \leq .01$ (one-sided)

Table A16

Hypothesis 4A(1): Attraction in a Voting Context of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=13)	8.77	6.70
By liberal subjects (n=6)	6.67	8.00

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	1.297	1	1.297	-
Subj. w. groups	56.282	17	3.411	
Within				
B	9.500	1	9.500	2.067
AB	23.872	1	23.872	5.194*
B x subj. w. gr.	78.128	17	4.596	

* $p \leq .05$

Table A17

Hypothesis 4A(1): Attraction in a Voting Context of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Attraction to Contradictory "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of Contradictory "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=13)	10.93	6.70
By liberal subjects (n=6)	9.67	8.00

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	.006	1	.006	-
Subj. w. groups	87.205	17	5.130	
Within				
B	111.185	1	111.185	26.285***
AB	13.494	1	13.494	3.189
B x subj. w. gr.	71.820	17	4.225	

*** $p \leqslant .001$

Table A18

Hypothesis 4A(1): Attraction in a Voting Context of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=11)	8.36	6.82
By liberal subjects (n=15)	7.87	9.13

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	10.490	1	10.490	3.768
Subj. w. groups	66.818	24	2.784	
Within				
B	.077	1	.077	-
AB	25.092	1	25.092	3.840+
B x subj. w. gr.	156.831	24	6.534	

+$p \leq .06$

Table A19

Hypothesis 4A(1): Attraction in a Voting Context of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and Contradictory "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of Contradictory "Non-Hippie" Stimulus Persons
By conservative subjects (n=11)	8.36	7.82
By liberal subjects (n=15)	7.87	8.27

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	.007	1	.007	-
Subj. w. groups	335.685	24	13.987	
Within				
B	.000	1	.000	-
AB	2.836	1	2.836	-
B x subj. w. gr.	133.164	24	5.549	

Table A20

Hypothesis 4A(2): Attraction in a Dating Context of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=13)	11.46	9.31
By liberal subjects (n=9)	10.22	11.00

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	.545	1	.545	-
Subj. w. groups	214.932	20	10.747	
Within				
B	10.022	1	10.022	1.749
AB	22.854	1	22.854	3.988*
B x subj. w. gr.	114.624	20	5.731	

*$p \leq .05$

Table A21

Hypothesis 4A(2): Attraction in a Dating Context of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Attraction to Contradictory "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of Contradictory "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=13)	10.85	9.31
By liberal subjects (n=9)	11.11	11.00

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	10.186	1	10.186	
Subj. w. groups	287.291	20	14.365	
Within				
B	10.022	1	10.022	1.318
AB	5.418	1	5.418	-
B x subj. w. gr.	152.060	20	7.603	

Table A22

Hypothesis 4A(2): Attraction in a Dating Context of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=11)	9.30	7.10
By liberal subjects (n=12)	7.33	9.00

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	.008	1	.008	-
Subj. w. groups	118.867	14	8.491	
Within				
B	4.500	1	4.500	1.449
AB	28.034	1	28.034	9.030**
B x subj. w. gr.	43.466	14	3.105	

** $p \leq .01$

Table A23

Hypothesis 4A(2): Attraction in a Dating Context of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Attraction to "Hippie" and Contradictory "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of Contradictory "Non-Hippie" Stimulus Persons
By conservative subjects (n=11)	9.30	8.80
By liberal subjects (n=12)	7.33	9.33

(Smaller numbers denote greater attraction)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	3.852	1	3.852	-
Subj. w. groups	117.117	14	8.366	
Within				
B	1.532	1	1.532	-
AB	11.718	1	11.718	1.376
B x subj. w. gr.	119.250	14	8.518	

Table A24

Hypothesis 4B: Physical Attractiveness Evaluations of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Evaluations of "Hippie" and "Non-Hippie" Stimulus Persons

		Mean Evaluation	
		Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects	(n=8)	8.25	7.00
By liberal subjects	(n=17)	7.88	8.76

(Smaller numbers denote greater attractiveness)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	5.309	1	5.309	1.055
Subj. w. groups	115.691	23	5.030	
Within				
B	.500	1	.500	-
AB	12.867	1	12.867	5.047*
B x subj. w. gr.	58.633	23	2.549	

* $p \leq .05$

Table A25

Hypothesis 4B: Physical Attractiveness Evaluations of Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Evaluations of Contradictory "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of Contradictory "Hippie Stimulus Persons	Of "Non-Hippie Stimulus Persons
By conservative subjects (n=8)	8.00	7.00
By liberal subjects (n=17)	8.94	8.76

(Smaller numbers denote greater attractiveness)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	19.915	1	19.915	4.250
Subj. w. groups	107.765	23	4.685	
Within				
B	2.180	1	2.180	-
AB	1.844	1	1.844	-
B x subj. w. gr.	112.236	23	4.880	

Table A26

Hypothesis 4B: Physical Attractiveness Evaluations of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Evaluations of "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=7)	8.71	7.00
By liberal subjects (n=12)	7.75	9.08

(Smaller numbers denote greater attractiveness)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	2.768	1	2.768	1.445
Subj. w. groups	32.548	17	1.915	
Within				
B	.421	1	.421	-
AB	20.532	1	20.532	5.130*
B x subj. w. gr.	68.047	17	4.003	

* $p \leq .05$

Table A27

Hypothesis 4B: Physical Attractiveness Evaluations of Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Evaluations of "Hippie" and Contradictory "Non-Hippie" Stimulus Persons

		Mean Evaluation	
		Of "Hippie" Stimulus Persons	Of Contradictory "Non-Hippie" Stimulus Persons
By conservative subjects	(n=7)	8.71	8.57
By liberal subjects	(n=12)	7.75	8.00

(Smaller numbers denote greater attractiveness)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	5.214	1	5.214	-
Subj. w. groups	118.839	17	6.991	
Within				
B	.106	1	.106	-
AB	.340	1	.340	-
B x subj. w. gr.	28.554	17	1.680	

Table A28

Hypothesis 4C: Favorability of Personality Traits Attributed To Stimulus Persons By Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Self-Ratings Were Used To Categorize Subjects' Conservativism

Favorability of Traits Attributed to "Hippie" and "Non-Hippie" Stimulus Persons

		Mean Evaluation	
		Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects	(n=19)	3.16	11.64
By liberal subjects	(n=8)	9.25	7.88

(Larger numbers denote more favorable personality traits)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	15.354	1	15.354	-
Subj. w. groups	4173.016	25	166.921	
Within				
B	416.600	1	416.600	4.450*
AB	273.094	1	273.094	2.917
B x subj. w. gr.	2340.306	25	93.612	

* $p \leq .05$

Table A29

Hypothesis 4C: Favorability of Personality Traits Attributed To Stimulus Persons by Subjects Who Viewed Contradictory "Hippie" Stimulus Persons When Self-Ratings Were Used To Categorize Subjects' Conservativism

Favorability of Traits Attributed to Contradictory "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of Contradictory "Hippie" Stimulus Persons	Of "Non-Hippie: Stimulus Persons
By conservative subjects (n=19)	14.85	11.64
By liberal subjects (n=8)	2.25	7.88

(Larger numbers denote more favorable personality traits)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	752.342	1	752.342	3.921
Subj. w. groups	4796.806	25	191.872	
Within				
B	4.741	1	4.741	-
AB	219.743	1	219.743	4.304*
B x subj. w. gr.	1276.516	25	51.061	

* $p \leq .05$

Table A30

Hypothesis 4C: Favorability of Personality Traits Attributed To Stimulus Persons by Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Favorability of Traits Attributed to "Hippie" and "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of "Non-Hippie" Stimulus Persons
By conservative subjects (n=10)	8.70	6.60
By liberal subjects (n=9)	9.56	6.89

(Larger numbers denote more favorable personality traits)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	3.102	1	3.102	-
Subj. w. groups	1616.161	17	95.068	
Within				
B	53.289	1	53.289	1.159
AB	.526	1	.526	-
B x subj. w. gr.	781.450	17	45.968	

Table A31

Hypothesis 4C: Favorability of Personality Traits Attributed To Stimulus Persons By Subjects Who Viewed Contradictory "Non-Hippie" Stimulus Persons When Self-Ratings Were Used to Categorize Subjects' Conservativism

Favorability of Traits Attributed to "Hippie" and Contradictory "Non-Hippie" Stimulus Persons

	Mean Evaluation	
	Of "Hippie" Stimulus Persons	Of Contradictory "Non-Hippie" Stimulus Persons
By conservative subjects (n=10)	8.70	8.40
By liberal subjects (n=9)	9.56	16.67

(Larger numbers denote more favorable personality traits)

Summary of ANOVA

Source	SS	df	MS	F
Between				
A	197.088	1	197.088	2.271
Subj. w. groups	1475.228	17	86.778	
Within				
B	97.921	1	97.921	1.646
AB	130.085	1	130.085	2.186
B x subj. w. gr.	1011.494	17	59.500	

APPENDIX B

THE SOCIAL ATTITUDES SCALE

Given below are statements on various social problems about which we all have beliefs, opinions and attitudes. We all think differently about such matters, and this scale is an attempt to get you to express your beliefs and opinions. There are no right or wrong answers. Please respond to each of the items as follows:

Agree very strongly	+3	Disagree very strongly	-3
Agree strongly	+2	Disagree strongly	-2
Agree	+1	Disagree	-1

For example, if you agree very strongly with a statement, you would write +3 in the left margin beside the statement, but if you should happen to disagree with it, you would put -1 in front of it. Respond to each statement as best you can. Go rapidly but carefully. Do not spend too much time on any one statement; try to respond and then go on. Don't go back once you have marked a statement.

____ 1. Individuals who are against churches and religion should not be allowed to teach in colleges.
____ 2. Large fortunes should be taxed fairly heavily over and above income taxes.
____ 3. Both public and private universities and colleges should get generous aid from both state and federal governments.
____ 4. Science and society would both be better off if scientists took no part in politics.
____ 5. Society should be quicker to throw out old ideas and traditions and to adopt new thinking and customs.
____ 6. To ensure adequate care of the sick, we need to change radically the present system of privately controlled medical care.
____ 7. If civilization is to survive, there must be a turning back to religion.
____ 8. A first consideration in any society is the protection of property rights.
____ 9. Government ownership and management of utilities leads to bureaucracy and inefficiency.
____ 10. If the United States takes part in any sort of world organization, we should be sure that we lose none of our power and influence.
____ 11. Funds for school construction should come from state and federal government.
____ 12. Inherited racial characteristics play more of a part in the achievement of individuals and groups than is generally known.
____ 13. Federal Government aid for the construction of schools is

long overdue, and should be instituted as a permanent policy.

____ 14. Our present economic system should be reformed so that profits are replaced by useful work.

____ 15. Public enterprises like railroads should not make profits: they are entitled to fares sufficient to enable them to pay only a fair interest on the actual cash capital they have invested.

____ 16. Government laws and regulations should be such as first to ensure the prosperity of business since the prosperity of all depends on the prosperity of business.

____ 17. All individuals who are intellectually capable of benefiting from it should get college education, at public expense if necessary.

____ 18. The well-being of a nation depends mainly on its industry and business.

____ 19. True democracy is limited in the United States because of the special privileges enjoyed by business and industry.

____ 20. The gradual social ownership of industry needs to be encouraged if we are ever to cure some of the ills of our society.

____ 21. There are too many professors in our colleges and universities who are radical in their social and political beliefs.

____ 22. There should be no government interference with business and trade.

____ 23. Some sort of religious education should be given in public schools.

____ 24. Unemployment insurance is an inalienable right of the working man.

____ 25. Individuals with the ability and foresight to earn and accumulate wealth should have the right to enjoy that wealth without government interference and regulations.

____ 26. The United Nations should be whole-heartedly supported by all of us.

Questionnaire Used for Selection of Photographs

This is a study of how people form impressions of strangers, and how accurately they can predict characteristics of others, based only on what they look like in a photograph.

This booklet contains a number of fill-in and multiple-choice type questions. Indicate the answer that you select by either darkening the appropriate space or filling in your answer directly in this booklet. If there is any question that you cannot answer, leave it blank, and explain why you have done so, next to that question.

As you probably realize, we are not interested in the responses of any single individual, but in the patterns of responses of groups of people. For this reason, your answers will be anonymous: do not write your name on this booklet. It is important that you answer all of the questions in order, without looking ahead or going back to change an answer on a page that you have completed.

1. What is your date of birth?
2. What is your sex? (a) Male (b) Female
3. Which of the following best characterizes you?
   a) white b) black c) Oriental d) Latin American e) none of the above (if you have chosen response (e), explain what group you do identify yourself with here _____)
4. What is your religious affiliation? a) Protestant
   b) Catholic c) Jewish d) Agnostic or Atheist e) Other
   (if (e), specify what, here _____)
5. What is the religious affiliation of your mother? a) Protestant
   b) Catholic c) Jewish d) Agnostic or Atheist e) Do not know
   f) Other (specify what, here _____)
6. What is the religious affiliation of your father? a) Protestant
   b) Catholic c) Jewish d) Agnostic or Atheist e) Do not know
   f) Other (specify what, here _____)
7. Which of the following ethnic groups characterizes you?
   a) Italian b) Irish c) Polish d) Jewish e) none of these
   f) Other (specify what, here _____)
8. How important is politics to you? a) Very important
   b) Somewhat important c) Average d) Somewhat unimportant
   e) Very unimportant
9. Which of the following most closely approximates your political orientation? a) Very conservative b) Moderately conservative
   c) Slightly conservative d) Moderate e) Slightly liberal
   f) Very liberal g) Radical

10. Which of the following would you prefer to vote for for President in the next election? a) George Wallace (Governor of Alabama) b) Vice President Agnew c) President Nixon d) Senator McGovern e) Senator Muskie f) Mayor John Lindsay g) Congresswoman Shirley Chisholm
11. What is your marital status? a) Single b) Married c) Divorced or separated d) Widowed
12. What would you estimate the combined annual income of your parents to be (if you are over 30, use yours and that of your spouse, if you have one)? a) $0 - $5,000 b) $5,000 - $10,000 c) $10,000 - $15,000 d) $15,000 - $25,000 e) over $25,000

LOOK CAREFULLY AT THE INDIVIDUAL IN THE ABOVE PHOTOGRAPH AND RATE HIM IN TERMS OF THE CHARACTERISTICS BELOW. ALTHOUGH THIS MAY BE DIFFICULT FOR YOU TO DO BECAUSE OF THE LIMITED INFORMATION AT YOUR DISPOSAL, DO THE BEST YOU CAN AND WORK AS QUICKLY AS POSSIBLE.

13. How physically attractive is the individual? a) Unusually attractive b) Somewhat attractive c) Slightly more attractive than average d) Average e) Slightly less attractive than average f) Somewhat unattractive g) Very unattractive
14. What would you guess the religious affiliation of this individual to be? a) Protestant b) Catholic c) Jewish d) Agnostic or Atheist e) Other (specify what _____)
15. How politically conservative do you imagine this individual is? a) Very conservative b) Conservative c) Slightly conservative d) Moderate e) Slightly liberal f) Very liberal g) Radical
16. How old do you imagine this individual is? a) 16 or under b) 17 or 18 c) 19 or 20 d) 21 or 22 e) 23 or 24 f) 25 or 26 g) 27 or older

BIBLIOGRAPHY

Anderson, N. H. "Application of an Additive Model to Impression Formation," Science, CXXXVIII (1962), 817-818.

_____. "Averaging Versus Adding as a Stimulus-Combination Rule in Impression Formation," Journal of Experimental Psychology, LXX (1965), 394-400.

Anderson, N. H., and Hubert, S. "Effects of Concomitant Verbal Recall on Order Effects in Personality Impression Formation," Journal of Verbal Learning and Verbal Behavior, II (1963), 379-391.

Anderson, N. H., and Jacobson, Ann. "Effect of Stimulus Inconsistency and Discounting Instructions in Personality Impression Formation," Journal of Personality and Social Psychology, II (1965), 531-539.

Asch, S. E. "Forming Impressions of Personality," Journal of Abnormal and Social Psychology, XLI (1946), 258-290.

Byrne, D., and Blaylock, B. "Similarity and Assumed Similarity of Attitudes Between Husbands and Wives," Journal of Abnormal and Social Psychology, LXVII (1963), 636-640.

Byrne, D., London, O., and Reeves, K. "The Effects of Physical Attractiveness, Sex and Attitudes Similarity on Interpersonal Attraction," Journal of Personality, XXXVI, No. 2 (1968), 259-271.

Byrne, D., and Nelson, D. "Attraction as a Linear Function of the Proportion of Positive Reinforcements," Journal of Personality and Social Psychology, I (1965), 659-663.

Byrne, D., and Wong, T. J. "Racial Prejudice, Interpersonal Attraction and Assumed Dissimilarity of Attitudes," Journal of Abnormal and Social Psychology, LXV (1962), 246-252.

Dornbusch, S. M., Hastorf, A. H., Richardson, S. A., Muzzy, R. E., and Vreeland, Rebecca S. "The Perceiver and Perceived: Their Relative Influence on Categories of Interpersonal Perception," Journal of Personality and Social Psychology, I (1965), 434-440.

Edwards, Allen L. Statistical Methods. Second edition. New York: Holt, Rinehart, and Winston, Inc., 1967.

Fay, P., and Middleton, W. "Judgment of Spranger Personality Types From the Voice as Transmitted Over a Public Address System," Character and Personality, VIII (1939), 144-155.

_____. "Judgment of Occupation from the Voice as Transmitted Over a Public Address System," Journal of Applied Psychology, XXIII (1939), 586-601.

_____. "Judgment of Kretschmerian Body Types from the Voice as Transmitted Over a Public Address System," Journal of Social Psychology, XII (1940), 151-162.

_____. "The Ability to Judge the Rested or Tired Condition of a Speaker from his Voice as Transmitted Over a Public Address System," Journal of Applied Psychology, XXIV (1940), 645-650.

_____. "Judgment of Intelligence from the Voice as Transmitted Over a Public Address System," Sociometry, III (1940), 186-191.

_____. "The ability to Judge Sociability from the Voice as Transmitted Over a Public Address System," Journal of Social Psychology, XIII (1941), 303-309.

_____. "Rating a Speaker's Natural Voice When Heard Over a Public Address System," Quarterly Journal of Speech, XXVII (1941), 120-124.

_____. "The Ability to Judge Truth Telling or Lying From the Voice as Transmitted Over a Public Address System," Journal of General Psychology, XXIV (1941), 211-215.

_____. "Judgment of Introversion From the Transcribed Voice," Quarterly Journal of Speech, XXVIII (1942), 226-228.

_____. "Judgment of Leadership From Transmitted Voice," Journal of Social Psychology, XVII (1943), 99-102.

Fensterheim, H., and Tresselt, M. E. "The Influence of Value Systems on the Perception of People," Journal of Abnormal and Social Psychology, XLVIII (1953), 93-98.

Gilbert, G. M. "Stereotype Persistence and Change Among College Students," Journal of Abnormal and Social Psychology, XLVI (1951), 245-254.

Gollin, E. S. "Forming Impressions of Personality," Journal of Personality, XXIII (1954), 65-76.

Haire, M., and Grunes, Willa F. "Perceptual Defenses: Processes Protecting an Organized Perception of Another Personality," Human Relations, III (1950), 403-412.

Heider, F. "Attitudes and Cognitive Organization," Journal of Psychology, XXI (1946), 107-112.

Homans, G. C. Social Behavior: Its Elementary Forms. New York: Harcourt, Brace and World, 1961.

Insko, C. A., and Robinson, J. E. "Belief Similarity Versus Race as Determinants of Reactions to Negroes by Southern White Adolescents: A Further Test of Rokeach's Theory," Journal of Personality and Social Psychology, VII, No. 2 (1967), 216-221.

Katz, D., and Braley, K. W. "Racial Stereotypes of One Hundred College Students," Journal of Abnormal and Social Psychology, XXVIII (1933), 280-290.

Luchins, A. S. Experimental Attempts to Minimize the Impact of First Impressions. In The Order of Presentation in Persuasion, ed. C. Hovland. New Haven, Conn.: Yale University Press, 1957(b).

_____. "Definiteness of Impression and Primacy-Recency in Communications," Journal of Social Psychology, XLVIII (1958), 275-290.

Newcomb, T. M. Personality and Social Change: Attitude Formation in a Student Community. New York: Holt, Rinehart, and Winston, Inc., 1943.

_____. "The Prediction of Interpersonal Attraction," American Psychologist, XI (1956), 575-586.

_____. The Acquaintance Process. New York: Holt, Rinehart, and Winston, Inc., 1961.

Pepitone, A., and Hayden, R. "Some Evidence for Conflict Resolution in Impression Formation," Journal of Abnormal and Social Psychology, LI (1955), 302-307.

Precker, J. A. "Similarity of Values as a Factor in Selection of Peers and Near Authority Figures," Journal of Abnormal and Social Psychology, XLVII (1952), 406-414.

Richardson, Helen. "Community of Values as a Factor in Friendships of College and Adult Women," Journal of Social Psychology, XI (1940), 303-312.

Rokeach, M. The Open and Closed Mind. New York: Basic Books, 1960.

Rokeach, M., Smith, P. W., and Evans, R. I. "Two Kinds of Prejudice or One?" In M. Rokeach, The Open and Closed Mind. New York: Basic Books, 1960.

Secord, P. F., and Backman, Carl W. Social Psychology. New York: McGraw-Hill Book Company, 1964.

Secord, P. F., and Bevan, W. "Personalities in Faces: III. A Cross-Cultural Comparison of Impressions of Physiognomy and Personality in Faces," Journal of Social Psychology, XLIII (1956), 283-288.

Secord, P. F., Bevan, W., and Dukes, W. F. "Occupational and Physiognomic Stereotypes in the Perception of Photographs," Journal of Social Psychology, IIIVII (1953), 261-270.

Secord, P. F., Dukes, W. F., and Bevan, W. "Personalities in Faces: I. An Experiment in Social Perceiving," Genetic Psychological Monographs, XL (1954), 231-279.

Secord, P. F., and Muthard, J. E. "Personalities in Faces: IV. A Descriptive Analysis of the Perception of Women's Faces and the Identification of Some Physiognomic Determinants," Journal of Psychology, XXXIX (1955), 269-278.

Smith, C. R., Williams, L., and Willis, R. H. "Race, Sex, and Belief as Determinants of Friendship Acceptance," Journal of Personality and Social Psychology, V, No. 2 (1967), 127-137.

Stein, D. D. "The Influence of Belief Systems on Interpersonal Preference," Psychological Monographs, LXXX (1966), 1-9.

Stein, D. D., Hardyck, J. A., and Smith, M. B. "Race and Belief: An Open and Shut Case," Journal of Personality and Social Psychology, I (1965), 281-289.

Stewart, R. "Effect of Continuous Responding on the Order Effect in Personality Impression Formation," Journal of Personality and Social Psychology, I (1965), 161-165.

Thibaut, J. W., and Kelley, H. H. The Social Psychology of Groups. New York: Wiley and Sons, 1959. Pp. 89-99.

Triandis, H. C. Cultural Influences Upon Cognitive Processes. In Advances in Experimental Social Psychology, ed. L. Berkowitz. New York: Academic Press, 1964. Pp. 1-48.

Triandis, H. C., and Davis, E. E. "Race and Belief as Determinants of Behavioral Intentions," Journal of Personality and Social Psychology, II (1965), 715-725.

Triandis, H. C., and Fishbein, M. "Cognitive Interaction in Person Perception," Journal of Abnormal and Social Psychology, LXVII (1963), 446-453.

Triandis, H. C., Loh, W. D., and Levin, L. "Race, Status, Quality of Spoken English, and Opinions About Civil Rights as Determinants of Interpersonal Attitudes," Journal of Personality and Social Psychology, III (1966), 468-472.

Walster, E., Aronson, V., Abrahams, D., and Rottmann, L. "Importance of Physical Attractiveness in Dating Behavior," Journal of Personality and Social Psychology, V (1966), 508-516.

Winer, B. J. Statistical Principles in Experimental Design. New York: McGraw-Hill Book Company, 1962.

Wishner, J. Reanalysis of "Impressions of Personality," Psychological Review, LXVII (1960), 96-112.