The Effects of Facial Characteristics & Attitudes Upon Initial Interpersonal Attraction

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THE EFFECTS OF FACIAL CHARACTERISTICS AND ATTITUDES UPON INITIAL INTERPERSONAL ATTRACTION

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of the Requirements for the Educational Specialist Degree

by
Henry P. Ackerman
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THE EFFECTS OF FACIAL CHARACTERISTICS AND ATTITUDES UPON
INITIAL INTERPERSONAL ATTRACTION
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# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>iii</td>
</tr>
<tr>
<td>List of Tables</td>
<td>iv</td>
</tr>
<tr>
<td>Abstract</td>
<td>vi</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>2</td>
</tr>
<tr>
<td>Limitations of the Study</td>
<td>4</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>6</td>
</tr>
<tr>
<td>Review of the Related Literature</td>
<td>10</td>
</tr>
<tr>
<td>Interpersonal Attraction</td>
<td>10</td>
</tr>
<tr>
<td>Interpersonal Attraction Summary</td>
<td>14</td>
</tr>
<tr>
<td>Predictor Variables of Interpersonal Attraction</td>
<td>14</td>
</tr>
<tr>
<td>Attitude-Value Orientation</td>
<td>15</td>
</tr>
<tr>
<td>Attitude-Value Orientation Summary</td>
<td>20</td>
</tr>
<tr>
<td>Physical Characteristics</td>
<td>21</td>
</tr>
<tr>
<td>Physical Characteristics Summary</td>
<td>24</td>
</tr>
<tr>
<td>Extraneous Variables</td>
<td>25</td>
</tr>
<tr>
<td>Extraneous Variables Summary</td>
<td>27</td>
</tr>
<tr>
<td>Counseling</td>
<td>28</td>
</tr>
<tr>
<td>Summary of Chapter II</td>
<td>30</td>
</tr>
<tr>
<td>Methods and Procedures</td>
<td>32</td>
</tr>
<tr>
<td>Subject Selection</td>
<td>32</td>
</tr>
<tr>
<td>Instruments</td>
<td>35</td>
</tr>
<tr>
<td>Procedure</td>
<td>39</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>45</td>
</tr>
<tr>
<td>Results</td>
<td>48</td>
</tr>
<tr>
<td>Summary, Conclusions, and Recommendations</td>
<td>58</td>
</tr>
<tr>
<td>Suggestions for Further Study</td>
<td>61</td>
</tr>
<tr>
<td>Appendix A</td>
<td>64</td>
</tr>
<tr>
<td>Appendix B</td>
<td>69</td>
</tr>
<tr>
<td>References</td>
<td>70</td>
</tr>
</tbody>
</table>
List of Tables

Table | Description | Page
--- | --- | ---
1. Statistical Analysis of Category I Subjects' Responses to the IAB | 49
2. Category I Low Versus High Level of Interest | 55
3. Statistical Analysis of Category II Subjects' Responses to the IAB | 57
Two groups of males were utilized to examine the causal effect of facial characteristics and attitudes upon initial interpersonal attraction. The two groups were given a booklet in which photographs and attitude statements were paired in various combinations. One group of males was given the booklet with photographs of females non-randomly assigned; while the other group of males was given the booklet with photographs of females randomly assigned. The major finding of the present study was that facial characteristics were more causal in predicting initial interpersonal attraction than were attitudes. A collateral finding was that the attitude statements had in fact little effect upon the initial decision to meet a person of the opposite sex. Also, support for previously completed research that found attitudes and facial characteristics were predictors of initial interpersonal attraction was substantiated by the present study.
Chapter I

Introduction

The present study focused on the causal relationship of facial characteristics and attitude-value orientations in the initial interpersonal attraction process. In previous research, initial interpersonal attraction has been examined and established as one function of human behavior. Two predictors of initial interpersonal attraction which have been identified were utilized in the present study. These predictors were the facial characteristics of a person and the person's attitude-value orientations. Both facial characteristics and attitude-value orientations have been tested and accepted as definite predictors of initial interpersonal attraction. However, the present study focused on the degree of causality of the predictors, facial characteristics and attitude-value orientations, upon initial interpersonal attraction.

Statement of the Problem

The problem presented in the present study was to determine which of the two predictors, facial characteristics or attitude-value orientations, was more causal in establishing the initial interpersonal attraction process.
The research hypotheses appropriate for the present study were:

1. Facial characteristic photographs are predictors of initial interpersonal attraction.
2. Attitude-value orientations are predictors of initial interpersonal attraction.
3. Facial characteristics effect initial interpersonal attraction in a more causal manner than attitude-value orientations.

The null statements of the foregoing hypotheses were:

1. Facial characteristics are not predictors of initial interpersonal attraction.
2. Attitude-value orientations are not predictors of initial interpersonal attraction.
3. Facial characteristics do not affect initial interpersonal attraction in a more causal manner than positive attitude-value orientations.

**Purpose of the Study**

The study of interpersonal attraction as a factor of human behavior has been a relatively new area of investigation, only emerging in the late nineteen forties (Johnson, 1949). The term, interpersonal attraction, was operationally defined in the early nineteen sixties by Newcomb (1961). He operationally defined interpersonal attraction as:

"... any positive action which prompts proximity and verbal communication between two human beings"
that could be considered as positive in reinforcement value to the people who are interacting" (Newcomb, 1961).

As the foregoing implies, there has been a short history of investigation of interpersonal attraction. Thus, an even shorter investigative history has existed for the factoring of the predictors of interpersonal attraction. Two of the predictors which have clearly emerged from the existing research were considered in the present study. The predictors were facial characteristics and attitude-value orientations.

Although interpersonal attraction and its predictors have been identified, tested and accepted as valid parts of human behavior, little or no research has been completed which definitively indicates which of the predictors, facial characteristics or attitude-value orientations, has a more causal effect in the interpersonal attraction process. This causality was the major emphasis in the present study of the initial interpersonal attraction.

An area in which there was a collateral interest was counseling. While the area of counseling was not directly examined in the present study, counseling is in reality a relationship of an interpersonal nature. The counselor has impressions as a result of the initial meeting with the client. These impressions are based at least in part on the
interpersonal attraction process as defined by Newcomb (1961). The interpersonal attraction process which is predicated by the interaction of the facial characteristics and attitude-value orientations of an individual is directly related to the impressions held by the counselor. That is, the facial characteristics and attitude-value orientation of a client will directly affect the impression the counselor makes about the client. Therefore, the results of the present study will add to the body of knowledge, not only in the general area of the initial interpersonal attraction process, but also in the area of the counselor-counselee relationship process.

Limitations of the Study

Several limitations were encountered in the present study of initial interpersonal attraction. The first was related to the ability to generalize the study's results. Due to the non-random selection of subjects and the use of a restricted range of selection characteristics, the results of the present study should not be generalized beyond the present study. The specific characteristics which restricted the range of selection and ability to generalize were:

1. Subjects had to be between the ages of 18 and 20 years.
2. Subjects had to be caucasion.

3. Subjects had to be residents of the southeast.

Despite the limitations of generalization, the present study could be replicated with differing populations. Replication could be done if the characteristics of age, race, and geographic area were altered to fit a different population. In a like manner, the results of the replication studies would only be applicable to the specific population tested.

A second limitation was precipitated by a consideration of ethical procedure. The limitation was evidenced by the female subjects not being physically present during the ranking procedure by the male subjects. The females not being present may have affected an air of artificiality in the present study. Only the photographs of the females were utilized in the present study to prevent the females from discovering their particular rank level; ranks were on an appealing--non-appealing continuum. Ethically, the consideration was to prevent harm to the subjects. However, this consideration may have also introduced a level of artificiality in the present study.

A third limitation dealt with the validity and reliability of the two standardized instruments, Study of Values (1960) and the Tennessee Self-Concept Scale (1964), utilized in the present study. The instruments were utilized to
select male subjects with normal self-esteem as well as to
identify each of the normal self-esteem male subjects
attitude-value orientations. One assumption held in the
present study was that these instruments were valid and
reliable measures. The assumption was based on the existing
research and literature which has indicated the two instru-
ments to be both valid and reliable.

A fourth limitation dealt with the control of male sub-
jects' response modes as they viewed both the photograph and
the attitude-value orientation statement. Research has
indicated an individual will normally focus first on a photo-
graph or picture rather than a statement when asked to make
a decision. In the present study the male subjects were
asked to look at both the photograph and the typed statement
on each page of the Interpersonal Attraction Booklet prior
to forming any interpersonal attraction decision. Necess-
sarily, it was assumed these directions were sufficient to
produce a valid subject response set from the male subjects
in the present study.

Definition of Terms

The following definitions were utilized for the present
study:

1. Interpersonal Attraction—a term used for any
positive action prompted by the proximity and verbal com-
munication between two or more people which is positive in
reinforcement value to the people.
2. **Initial Interpersonal Attraction**--a term which was represented by the statement in the **Interpersonal Attraction Booklet** "would you like to meet this person." The statement referred to the desirability for further contact based upon a first time meeting with another person.

3. **Interpersonal Attraction Booklet**--a booklet which contained eight pages of photographs and/or value statements and a compatible computer answer sheet. The booklet was designed to test the hypotheses generated in the present study.

4. **Appealing facial photographs**--a term which referred to the three photographs of females out of 30 photographs which had been ranked the most visually appealing by 40 normal self-esteem male subjects.

5. **Non-appealing facial photographs**--a term which referred to the three photographs of females out of 30 photographs which had been ranked the least visually appealing by 40 normal self-esteem male subjects.

6. **Normal self-esteem**--a term which referred to a male subject who scored between a T score of 33 and 59 on the self-esteem measure, the **Tennessee Self-Concept Scale**. The score represented one standard deviation from the mean in both a positive and negative direction.
7. **Tennessee Self-Concept Scale (TSCS)**--a standardized and commercially published research instrument utilized in the present study to determine the level of self-esteem of each male subject.

8. **Positive attitude-value orientation statement (PAVOS)**--a term which referred to a standardized attitude statement about each of the normal self-esteem male subjects. The standardized statement was derived from each of the subjects' highest scaled scores on the **Study of Values** test.

9. **Negative attitude-value orientation statement (NAVOS)**--a term which referred to a standardized attitude statement about each of the normal self-esteem male subjects. The standardized attitude statement was derived from each subjects' highest scaled scores on the **Study of Values**. However, this standardized attitude statement was written in the negative form rather than the original positive form.

10. **Study of Values test (SV)**--a standardized and commercially published research instrument utilized in the present study to determine the attitude-value orientation of each subject. There are six scales of attitude-value orientation defined in the SV. They are:

    1. Theoretical
    2. Religious
    3. Aesthetic
    4. Political
    5. Social
    6. Economic

11. **Category I**--a term which referred to 160 males utilized as subjects who volunteered from psychology classes
and were included in the present study. These subjects variously took the TSCS, the SV, and the IAB with the facial photographs non-randomly placed.

12. **Category II**—a term which referred to 50 male subjects, who volunteered from health and safety classes and were included in the present study. These subjects took the SV and the IAB with the facial photographs randomly placed.
Chapter II

Review of the Related Literature

Chapter II will deal with three main topics. The chapter will describe the literature dealing with the general area of interpersonal attraction. The chapter also deals with predictors and other variables which are related to interpersonal attraction and with the literature in the area of counseling and its relationship to interpersonal attraction.

Interpersonal Attraction

The study of interpersonal attraction has a relatively short chronological history, first being investigated in 1949 by sociologist Paul Johnson. Instead of using the term interpersonal attraction, Johnson (1949) used the term interpersonalism. Interpersonalism as described was the process humans engage in to get to know one another on a better social basis. This process involved positive verbal communications between two individuals and the evidence of like interests (Johnson, 1949).

Johnson (1949) also stated that interpersonalism should be further investigated, not only to determine if interpersonalism was a function of human behavior but also which specific predictors constitute the interpersonalism process.
At this time psychologists took an interest in the study of interpersonalism. Among the first psychologists to deal with this process was Newcomb (1953). Newcomb reviewed twelve studies which utilized interpersonalism as a predictor of human personality. From these reviews, Newcomb (1953) decided that interpersonalism was a process based on a need for affiliation with other human beings. Newcomb (1953) believed that interpersonalism was a process which only could come about when people were in close proximity to one another. This closeness would foster verbal communication to be initiated to alleviate the feelings of deviance when people are just meeting each other for the first time.

Later, Newcomb (1956) tested the validity of the above belief. Newcomb's study dealt with the reinforcing effects of communication in the interpersonalism process. Newcomb's results indicated that people feel positively reinforced when they are able to communicate with other people they wish to get to know better. Newcomb (1956) extrapolated from this study the fact that communicative acts were a function of interpersonalism and interpersonalism was a function of human behavior.

Heider (1958) tied the area of interpersonalism to that of human personality. Heider accepted Newcomb's idea that the term interpersonalism was utilized as a good definition of the interpersonalism process but defined personality as
"... the total actions and reactions of human beings"
(p. 262). The human being's actions and reactions tend
toward a system of order and coherence in understanding his
surrounding environment. According to Heider (1958), the
only way to set up this system was by having the actions of
the person working in a coherent fashion. From the fore-
going statement, Heider (1958) concluded that the inter-
personalism process was a major function of human behavior.

In 1960, Homans, in his work *Social Behavior*, refined
upon Heider's belief that interpersonalism was a part of
personality. Homans believed that interpersonalism was
primarily a function of personality. Homans further
believed that interpersonalism was due to the interaction
of several personality factors that cause people to interact
with one another. He concluded that an operational defini-
tion for interpersonalism was needed to have a workable
basis from which valid research could be conducted.

Newcomb (1961) performed an experiment to operationalize
a definition of interpersonalism. Newcomb decided to
relabel interpersonalism with the term interpersonal attrac-
tion. Newcomb's definition of interpersonal attraction was
any positive action which was prompted by close proximity
and existence of verbal communication between at least two
individuals.

The experimental study involved the use of under-
graduate males who were placed in a boarding house for an
academic semester. Newcomb (1961) had several assistants rate the behavior of the subjects based on the proximity and verbal communication among the male subjects. Newcomb believed that the closer the proximity and the greater the amount of verbal communication among the subjects the greater the level of interpersonal attraction that would exist. His method of determining the existence of interpersonal attraction was to have the assistants ask each of the subjects at the boarding house the following questions:

1. Who do you know the best in the house?
2. Do you like or dislike them?
3. Do you want to get to know them better?

Newcomb's results indicated that the subjects who appeared to have close proximity and also had good verbal communication stated on the questionnaire that they knew the other person the best and would like to get to know him better. Newcomb (1961) concluded that the operational definition he had utilized in his study was adequate in describing interpersonal attraction.

Newcomb further concluded, there were predictors of the interpersonal attraction process. He believed that two of the primary predictors of interpersonal attraction were positive attitude-value orientation and appealing physical characteristics. However, Newcomb left the exact determination of whether attitudes or physical characteristics
were predictors of interpersonal attraction to other researchers who would follow him in the field.

Interpersonal Attraction Summary

As the foregoing literature has shown, interpersonal attraction was initially studied as a sociological phenomenon (Johnson, 1949) but became more accepted as a psychological phenomenon in later years (Newcomb, 1953; Newcomb, 1956; Heider, 1958; Homans, 1960). By 1961, Newcomb had operationalized the term interpersonal attraction by stating that interpersonal attraction was any positive action prompted by proximity and good verbal communication. Newcomb (1961) further stated that predictors of the interpersonal attraction process were positive attitude-value orientation and appealing physical characteristics.

Predictor Variables of Interpersonal Attraction

This section on the predictors and other variables will be divided into three parts. The first part will describe the literature on the attitude-value orientation and its relationship to interpersonal attraction. The second part will describe the literature on physical characteristics and its relationship to interpersonal attraction. The third and final part will describe the literature on other variables (extraneous) and their relationship to interpersonal attraction.
Attitude-Value Orientation

The first predictor variable to be discussed is interpersonal attraction as predicted by a person's attitude-value orientation. The first studies into attitude-value orientation were done in the late nineteen forties (Festinger, 1948). Festinger had shown that positive attitude-value orientation would lead to a more friendly verbal communication with others. It was not until 1960, when Howland utilized the concept of PAVOS in describing certain liking behavior tendencies of human beings, that any real identifiable research was conducted.

Howland (1960) stated that subjects will tend to affiliate with people that they perceive as having values and beliefs similar to their own. Furthermore, Howland believed that attitude-value orientation was a functional element of human behavior. Thus, he concluded that attitude-value orientation was probably a predictor of interpersonal attraction. However, he did not produce any data to support these conjectures.

The next year, two research studies were completed by Byrne (1961a; 1961b) which supported the statement that attitude-value orientation was a functional element of human behavior. Byrne's results also indicated that attitude-value orientation had two directions, positive and negative. The positive direction was demonstrated by interaction with other people whose opinions and beliefs
were similar (Byrne, 1961a). The negative direction was demonstrated by an absence of interaction due to the other person having differing opinions and beliefs than the subject. Byrne (1961a; 1961b) concluded, the subject would probably interact with another person when the other person's opinions and beliefs were similar to the subject's.

Byrne (1962) tested his belief that positive and negative attitude-value orientations were functional elements of human behavior by conducting a research study which operationally defined the above mentioned terms. Byrne had subjects complete a questionnaire in which he asked several questions dealing with the subject's affiliation modes with other people. The subjects were asked if they would affiliate with people who had similar opinions and beliefs as they did and if they would affiliate with others who did not have similar beliefs and opinions.

The study produced results which indicated attitude-value orientation was a functional element of human behavior. The results also supported the definitions Byrne had originated for positive and negative attitude-value orientation. Thus, Byrne decided that the attitude-value orientation was a functional element of human behavior and probably related to the interpersonal attraction process. However, he did not offer specific data to support his contention.

In 1965, Byrne conducted an additional research study in which he used randomly selected undergraduates to test
his belief that attitude-value orientation was a predictor of interpersonal attraction. The results from the study indicated attitude-value orientation was a predictor of interpersonal attraction. Positive attitude-value orientation was linearly related to initial interpersonal attraction and negative attitude-value was not linearly related to initial interpersonal attraction.

Conversely, Aronson and Worchell (1966) completed a research study which disputed the findings of Byrne's 1965 study. Aronson's and Worchell's study of the liking and disliking phenomenon indicated attitude-value orientation was a functional element of human behavior and could show no support that attitude-value orientation was a predictor of initial interpersonal attraction. They concluded that the process of interpersonal attraction was not predicted by attitude-value orientations in either a positive or a negative direction.

Within a year of Aronson's and Worchell's study four research studies (Griffitt, 1966; Byrne & Griffitt, 1966; Griffitt, 1967; Byrne, 1967) were completed and all of these studies indicated the process of interpersonal attraction was predicted by attitude-value orientation. Griffitt (1966) utilized a randomly selected group of undergraduate male college students to test the belief that self-concept and attitude-value orientation were predictors of interpersonal attraction. Griffitt's results indicated that self-concept
was not a predictor but attitude-value was a predictor of interpersonal attraction. Self-concept was shown to be a variable which could extraneously affect the interpersonal attraction process. That is, if a subject had poor self-esteem the test of interpersonal attraction would be invalid.

Byrne and Griffitt (1966) undertook a study which replicated the Aronson and Worchell (1966) study on the liking-disliking phenomenon. Byrne's and Griffitt's results contradicted Aronson's and Worchell's (1966). Byrne and Griffitt found attitude-value orientation was not only a functional element of human behavior but in fact also a predictor of interpersonal attraction. They further found that Aronson and Worchell (1966) had drawn erroneous conclusions probably due to the presence of uncontrolled extraneous variables (Byrne and Griffitt, 1966).

Griffitt (1967) replicated his study (Griffitt, 1966) on self-concept and attitude-value orientation as a predictor of interpersonal attraction. Griffitt utilized a new group of randomly chosen college undergraduates to test the belief that attitude-value orientation was a predictor while self-concept was not a predictor of interpersonal attraction. The results supported his original study. Griffitt (1967) decided that his original study was valid and attitude-value orientations were definitely predictors of interpersonal attraction.
Byrne (1967) conducted a research study to rebutt the Aronson and Worchell (1966) study's findings. Byrne randomly selected 600 undergraduates to test two collateral beliefs. The first belief was that when effective arousal states exist then attitude-value orientation will subsequently follow. The second belief was that when attitude-value orientation did follow effective arousal states then attitude-value orientation was a predictor of interpersonal attraction. Byrne randomly placed the 600 subjects into two groups consisting of 300 subjects apiece. The experimental group received the treatment while the control group did not. The control group was utilized to further validate the results of his study. The results indicated the relationship between effective arousal states and attitude-value orientation was linear and in a positive direction. There was further indication that the interpersonal attraction process was predicted by attitude-value orientation (Byrne, 1967). Furthermore, Byrne concluded that Aronson's and Worchell's (1966) sample was erroneously drawn and that attitude-value orientation was a predictor of interpersonal attraction. He also stated that, since there had been no operationalization of the terms positive and negative attitude-value orientation (PAVOS and NAVOS), future research studies should operationalize the constructs for tests of interpersonal attraction.
One year later, Griffitt (1968) conducted a research study on the differential effects of reinforcement upon the interpersonal attraction process. He utilized a large sample of undergraduate male students to test the belief that when a person had PAVOS interaction with others would be pleasant. However, when the person had NAVOS interaction with other people would be unpleasant or would be entirely absent. The study's results indicated the more PAVOS a person possessed, the more verbal interaction took place with other people. However, when a person had NAVOS then there would be little interaction with other people; therefore, he concluded PAVOS was a predictor of interpersonal attraction while NAVOS was not a predictor (Griffitt, 1968).

The following year, Byrne conducted a major research study which operationalized the terms PAVOS and NAVOS. Byrne (1969) utilized a large sample of undergraduate males to test two areas of interest. The first area was that when a person possessed attitude-value orientation considered similar by other people then interaction would take place. The second area was when a person possessed attitude-value orientation considered dissimilar by other people then interaction would not take place. The results indicated that both beliefs were accurate.

**Attitude-Value Orientation Summary**

The foregoing literature review has shown attitude-value orientation to be a functional element of human
behavior (Howland, 1960; Byrne, 1961a; Byrne, 1961b; Byrne, 1962) as well as a predictor of interpersonal attraction (Byrne, 1965). However, attitude-value orientation as a predictor of interpersonal attraction was disputed by Aronson and Worchell (1966). Aronson and Worchell (1966) believed attitude-value orientation was only a functional element of human personality. However, a considerable amount of research had indicated attitude-value orientation as a predictor of interpersonal attraction (Griffitt, 1966; Byrne & Griffitt, 1966; Griffitt, 1967; Byrne, 1967). Finally, interpersonal attraction was shown to be predicted by positive attitude-value orientation while not being predicted by negative attitude-value orientation (Griffitt, 1968; Byrne, 1969).

Physical Characteristics

The second predictor variable to be discussed is interpersonal attraction as a function of a person's physical characteristics. The first identifiable study with physical characteristics was conducted by Mills and Aronson in 1965. They utilized a randomly selected group of male undergraduates to test the belief that physical characteristics were a function of human behavior. Their results proved the belief to be accurate. They concluded the person would constantly be affected by people's physical characteristics and the interpersonal attraction process would be similarly affected (Mills and Aronson, 1965).
Lechart (1966) conducted a research study to determine if physical characteristics were predictors of interpersonal attraction. His results indicated that physical characteristics were predictors of interpersonal attraction. It was apparent that interpersonal attraction was able to be predicted, not only by attitude-value but also by physical characteristics of a person.

Walster (1966) obtained specific data which further supported the findings of Lechart. Walster utilized a randomly selected group of male college students to test two areas of interest. The first area dealt with attractive physical characteristics and their ability to foster interpersonal attraction while the second area dealt with ability of attractive physical characteristics to predict interpersonal attraction. Walster's results were statistically significant and indicated that attractive physical characteristics fostered interpersonal attraction.

Aronson (1968) performed research with appealing as well as non-appealing physical characteristics as predictors of interpersonal attraction. Aronson used a randomly selected group of college males as subjects to test two areas of interest. The first area dealt with the reinforcing effects of appealing physical characteristics and their ability to reinforce initial interpersonal attraction. The second area dealt with the ability of non-appealing physical
characteristics of a person in reinforcing the initial interpersonal attraction process. Aronson's results indicated the appealing physical characteristics reinforce the initial interpersonal attraction process. However, the non-appealing characteristics nullify interpersonal attraction. Aronson (1968) found the interpersonal attraction process was reinforced as well as predicted by appealing physical characteristics.

Sigal and Aronson (1969) conducted further research which showed support for Aronson's original notions. Sigal and Aronson utilized a randomly selected group of undergraduate males to test two areas of interest. The first area dealt with the inability of non-attractive physical characteristics to predict interpersonal attraction, while the second area dealt with the ability of attractive physical characteristics to predict interpersonal attraction. The results indicated support for both areas. Sigal and Aronson concluded that non-appealing physical characteristics would always nullify initial interpersonal attraction, while appealing physical characteristics were shown to be predictors of initial interpersonal attraction.

Aron (1971) completed a study with physical characteristics as predictors of interpersonal attraction. He replicated Aronson's (1968) study on interpersonal attraction and achieved similar results. Appealing physical
characteristics were shown to be reinforcers as well as predictors of initial interpersonal attraction. He finalized that the interpersonal attraction process could be predicted and reinforced by appealing physical characteristics.

Physical Characteristics Summary

The foregoing literature review has shown that physical characteristics of a person are functional elements of human behavior (Aronson, 1965) as well as predictors of interpersonal attraction (Lechart, 1966; Walster, 1966). Physical characteristics can either nullify or reinforce interpersonal attraction (Aronson, 1968; Sigal & Aronson, 1969; Aron, 1971). Appealing physical characteristics reinforce while non-appealing physical characteristics nullify initial interpersonal attraction (Aronson, 1968; Sigal & Aronson, 1969; Aron, 1971). In reviewing the literature on interpersonal attraction, one study was identified which had both physical characteristics and attitudes as predictors of initial interpersonal attraction (Byrne, 1968). However, this study did not attempt to indicate which predictor, physical characteristics or attitude-value orientation, was more causal in predicting initial interpersonal attraction. The results of the study indicated that interpersonal attraction process was predicted by both physical characteristics and attitudes.
Extraneous Variables

The third area to be discussed is interpersonal attraction as confounded by a group of extraneous variables. The first extraneous variable identified was the total physical characteristics of the female in interpersonal studies (Wiggins, 1968). Wiggins' study dealt with the differential effects of total physical characteristics of the female upon male perception. Wiggins utilized a large sample of undergraduate males to test three areas of interest. The first area dealt with the male "beer drinker" and his usual preference in being interpersonally attracted to a female with large breasts. The second area dealt with the "intellectual" male whose usual preference in being interpersonally attracted was to a petite female, and the third area dealt with the "moderate drinking" male whose preference in being interpersonally attracted was to a moderately proportioned female. Wiggins' results supported all three hypothesized areas. Wiggins decided that the only way to control for the total physical characteristics factor was to use photographs of the female's face and not her total physical characteristics.

The second identifiable extraneous variable was the geographic location of the subject. Byrne (1968a) conducted research on interpersonal attraction. He concluded that geographic location would differentially affect a subject
choice in an interpersonal attraction matter. Byrne stated that studies could only be generalized to the specific geographic region in which the study took place. If the study's findings were generalized outside a specific geographic area the findings would have been invalid and confounding.

The third identifiable extraneous variable was identified by Jackson (1971) as age of the subject. Jackson conducted a study on the factor of age of an individual and its effect on the interpersonal attraction process. Jackson found that age of the male subject should be similar to the age of the female when the male subject is required to answer questions relating to interpersonal attraction. The requirement of age similarities of the male subject and the female subject was based on the fact that the older the female, the less likely the male would want to affiliate with her.

The fourth identifiable extraneous variable dealt with the race of the subjects. Hendrick (1969) conducted a research study in which race and positive attitude-value orientation were compared in their relative causal relationship to interpersonal attraction. Hendrick's results indicated that race would confound an interpersonal attraction study if different races were utilized. Therefore, Hendrick concluded that only one specific race should be utilized in any study of interpersonal attraction.
The final identifiable extraneous variable dealt with was self-esteem of the subject. Three different researchers have studied the effects of self-esteem upon interpersonal attraction (Walster, 1965; Jacobs, 1971; Simon, 1971). The results of the three research studies were statistically significant and indicated that the low self-esteem person never had adequate interpersonal attraction relationships. The individual with normal self-esteem usually had adequate interpersonal attraction relationships. The three research studies reached the same conclusion: that is, normal self-esteem subjects should be the only individuals included in interpersonal attraction studies (Walster, 1965; Jacobs, 1971, Simon, 1971).

Walster (1965) found that the best way to eliminate the extraneous variable of self-esteem would be to use a measure of self-esteem. The use of the self-esteem measure would determine people who had normal self-esteem. The normal self-esteem subject, according to Walster, should have been the only individual utilized in interpersonal attraction studies. Walster's conclusion was supported by the later research of Jacobs (1971) and Simon (1971).

Extraneous Variables Summary

The foregoing literature review has shown several variables to be possible confounders of interpersonal attraction studies. The variables which were identified as possible confounders of interpersonal attraction studies...
were the physical characteristics of the female (Wiggins, 1968), the geographic location of subjects (Byrne, 1968), the age of subjects (Jackson, 1971), the race of the subjects (Hendrick, 1969), and the self-esteem ratings of the subjects (Walster, 1965; Jacobs, 1971; Simon, 1971).

Counseling

The area of counseling was not directly examined in the present study; however, counseling is in reality a process of an interpersonal nature. A major study on the relationship of counseling to the area of interpersonal attraction was conducted by Schofield (1964). Schofield's *Psychotherapy: The Purchase of Friendship* stated that in the initial therapy sessions counselors formed impressions of clients, emanating from the client's physical characteristics and attitude-value orientations. Since physical characteristics and attitude-value orientations of the client are basic to the formation of counselor impression, there is a direct relationship to the interpersonal attraction process.

The relationship of impression forming by counselor's and interpersonal attraction arose from a similar base, physical characteristics and attitude-value orientation of the client. If the physical characteristics were non-appealing or the attitude-value orientations were negative then there was a high probability the counselor's impression would be unfavorable and the interpersonal attraction process would not take place (Schofield, 1964).
Several years passed before any identifiable research was conducted on the relationship of counselor impression forming and the interpersonal attraction process. However, in the early nineteen seventies two studies were conducted which supported Schofield's (1964) findings (Cheng, 1973; Fischer & Apostal, 1975).

Cheng (1973) conducted the first identifiable research on counselor impression forming since Schofield's (1964) study. Cheng utilized six randomly selected counselors as subjects to determine the relationship of rapport to counselor effectiveness. He used the subjects to test two areas of interest. The first area dealt with the variable of genuineness and its contribution to the quality of the counseling relationship. The second area was that rapport could be set up after the resolution of initial interpersonal attraction process conflicts (Cheng, 1973). The results of the Cheng study, having been statistically significant, indicated that genuineness did contribute to the quality of the counseling relationship and rapport could be initiated after the resolution of conflicts. He concluded that the counseling session outcome was dependent on the impressions formed by the counselor.

Fischer and Apostal (1975) conducted research which further indicated support for the findings of Schofield and Cheng. Fischer and Apostal's study utilized 20 male and 20 female second semester master level graduate students as
subjects to test two areas of interest. The first area dealt with the vocal cues of the client and their differential effects on the counselor's impressions of the client's genuineness. The second area dealt with the assumption that the impressions of the counselor are based on the interpersonal attraction process. The results indicated that vocal cues did affect counselor impression of genuineness and the counselor's impressions were based on interpersonal attraction. They concluded that the client who presented himself well would be assumed to be genuine and the counselor did form impressions from the initial sessions based on the interpersonal attraction process.

**Summary of Chapter II**

The foregoing literature reviews seem to indicate that interpersonal attraction is a function of human behavior and is predicted by the physical characteristics and attitudes of an individual. However, there has been no identifiable study which has shown which of the predictors, physical characteristics or attitudes, is more causal in the initial interpersonal attraction process. The present study's objective is to show this relationship of causality. Within the present study there was one major difference from other interpersonal attraction studies, only the facial photographs of the female were used. The necessity to use the facial photographs of the female was based on Wiggins' (1968) study.
which indicated that interpersonal attraction studies could be confounded if the total physical characteristics of the female were used to test interpersonal attraction.
Chapter III

Methods and Procedures

Chapter III includes the methodological outline of the present study. The description of subject selection, instruments employed, procedure followed, and data analysis are also included.

Subject Selection

The present study required the use of both male and female subjects. The number of male subjects was significantly larger than the number of female subjects. Twenty-two psychology classes and seven health and safety classes classified at the 250 level and under were approached for male volunteers. Two different psychology classes and one health and safety class were approached for female volunteers. Females were also recruited from non-academic environments. In order to reduce the possibility of male subjects recognizing female subjects, the females were selected from different classes and environments than the male subjects. It was deemed desirable to have "naive" male subjects rate the degree of attractiveness of the female subjects. If the male subjects had known or recognized the female subjects,
confounding judgements would have been present and would have increased the possibility of invalidating the results of the study.

A total of 210 males and 30 females were selected from the original groups of volunteers to participate in the present study.

All males and females within the respective psychology classes, health and safety classes, and non-academic environments were initially asked to fill out a questionnaire. The questionnaire required the person to provide his/her name, present address, present phone number, age, place of residence, race, sex, and the time when they could report for follow-up sessions. All subjects had to meet the following criteria to be selected for participation within the present study:

1. Subjects had to be caucasion.
2. Subjects had to be residents of the southeast.
3. Subjects had to be between the ages of 18 and 20 years.
4. Subjects had to be able to report at a specified time for one or more follow-up sessions.

Category I consisted of 160 volunteer male subjects from introductory psychology classes who were initially given the Tennessee Self-Concept Scale and Study of Values test. The male subjects of Category I had a mean age of
19.0 years. The Category I subjects were geographically distributed in the following manner:

- Kentucky: 111 subjects
- Missouri: 10 subjects
- Tennessee: 15 subjects
- Florida: 9 subjects
- Alabama: 8 subjects
- Georgia: 6 subjects
- South Carolina: 2 subjects

The academic class distribution of Category I male subjects was:

- 100 level psychology classes: 90 subjects
- 199 level psychology classes: 30 subjects
- 200 level psychology classes: 20 subjects
- 220 level psychology classes: 15 subjects
- 250 level psychology classes: 5 subjects

Category II was made up of 50 male subjects who were initially given the Study of Values test and then given the Interpersonal Attraction Booklet test. The male subjects of Category II had an overall mean age of 18.5 years. The male subjects of Category II were geographically distributed in the following manner:

- Kentucky: 38 subjects
- Tennessee: 8 subjects
- Florida: 3 subjects
- Alabama: 1 subject
The academic class distribution of Category II male subjects was:

100 level health and safety classes 50 subjects

There was only one category of females utilized within the present study. There were 30 females utilized as subjects, they were exclusively utilized for the photographs needed for the present study. The overall mean age of the females was 18.5 years. The females were geographically distributed in the following manner:

Kentucky 22 subjects
Tennessee 6 subjects
Alabama 2 subjects

The academic and non-academic class distribution was:

100 level psychology classes 17 subjects
100 level health and safety classes 3 subjects
Non-academic classing 10 subjects

Instruments

Three instruments were used in the present study. The Tennessee Self-Concept Scale (TSCS) was employed to determine the 100 male subjects from the original 160 males who had normal self-esteem. Normal self-esteem was operationally defined to include all T scores ranging from 33 to 59 on the TSCS. All males whose T scores fell within this prescribed T-range were identified as possessing normal self-esteem.
The TSCS is published by Counselor Recordings and Tapes of Nashville, Tennessee. The TSCS has two scoring forms: (a) counseling and (b) clinical and research. Based upon the research of Surin (1969) the clinical and research forms were utilized in the present study. Surin had shown that the clinical and research form had high reliability and validity when used with older adolescents (16 to 20 years of age). Surin's (1969) results also indicated the TSCS had both good internal as well as external reliability and validity.

The second instrument, the **Study of Values** test (SV), was used to determine the attitude-value orientations of each of the male subjects judged to possess normal self-esteem. The scale within the SV which was the highest elevated for each normal self-esteem subject was the one that was assigned to the subject in the present study. The SV has six scales: theoretical, economic, aesthetic, social, political, and religious. A full description of each scale has been given in Appendix A. The SV is published by the Houghton-Mifflin Corporation.

Recent research with the SV has shown the instrument to be both a valid and reliable predictor of attitude-value orientation (Allport & Vernon, 1970). Allport and Vernon (1970) further indicated the instrument was valid as well as reliable when used with older adolescents (16 to 20 years of age).
The third instrument, the Interpersonal Attraction Booklet (IAB), was used to test the present study's research hypotheses. The instrument was utilized in two different forms. The first form had the female photographs non-randomly placed in the IAB, while the second form had the photographs of the females randomly placed. A sample page of the IAB is found in Appendix B.

The IAB's two forms were utilized with two different groups of male subjects. The subject's were classified into two categories. The first group was labelled as Category I. This group of subjects was utilized to determine whether they liked to meet a person based on a non-random assignment of photographs in the IAB. The second group of males was classified as Category II. This group of subjects was utilized to determine whether they would like to meet a person based on a random assignment of photographs in the IAB. Essentially, the two forms of the IAB utilized in the present study were employed to examine the effect of photograph placement in the decision-making process of subjects.

The IAB is an instrument that was constructed on the assumption that it would be a valid and reliable predictor of interpersonal attraction. The assumption was based on the Byrne (1969) study results. As Byrne stated; "... the instrument employed, though artificial, is the best one to
test interpersonal attraction without the study being confounded" (p. 269). The actual instrument utilized in the present study contained eight pages and on each page there was a photograph, an attitude-value orientation statement, or a paired photograph and attitude-value orientation statement. The photographs utilized were three that were determined to be attractive and three that were determined to be unattractive. The statements utilized were those types which had been determined to be the most like the male subject from the Study of Values test.

The IAB was derived from a study by Byrne (1969). Byrne incorporated the use of facial characteristics in photographs and attitude-value orientations in typed statements. These were presented to the male subjects to make personal decisions on an interpersonal attraction basis. While the IAB is similar to the Byrne instrument, the IAB as well as the methodological procedures utilized within improve upon several weaknesses found in Byrne's study. The major weakness of the Byrne instrument was that the photographs and statements were never placed in conjoint order and the conclusions reached from the results of his study are of questionable validity. A second weakness was that the females utilized in the photographs were neither of the same age nor same geographic area.
Procedure

The procedure for data collection in the present study was accomplished in the following manner. The female volunteers were contacted by telephone and asked to come in for an appointment to be photographed. Before these pictures were taken the females were informed that their photographs would be utilized in a study in which male subjects would rank the photographs as to their attractiveness. The female subjects were informed that if they did not want to participate they were free to leave the session. Some of the females who participated received a monetary reward for the use of their photographs in the present study. The other females received course credit for participation in the session.

All of the photographs were taken in the same room and under identical conditions to avoid possible contamination from differing light and shadow sources.

The male volunteers were placed into two categories. Category I male subjects took the **Tennessee Self-Concept Scale**, the **Study of Values** test, and the **Interpersonal Attraction Booklet** with the photographs non-randomly placed. Category II male subjects took the **SV** and the **IAB** with the photographs randomly placed.

The 160 subjects in Category I were not initially told they were to be a part of a research study. They were told
that if they came to the sessions, they would gain knowledge of their level of self-esteem and attitude-value system. Furthermore, the subjects were told that by having knowledge of their own level of self-esteem and attitude-value systems they might be better able to adjust to life within college. The subjects were told in advance that the results from the TSCS and SV would be individually interpreted should they desire the results. The subjects were also told the results were confidential. Finally, the male subjects were told that if they should participate in the session they could earn extra credit or financial reimbursement. The subjects were contacted and asked to report to a specific location on a given time and day. During these initial appointments the TSCS and SV were administered to all subjects.

The TSCS and SV were hand calculated. From the TSCS, the 100 subjects who had scores between T score values of 33 and 59 were classified as having normal self-esteem. Only these 100 normal self-esteem subjects' SV tests were scored. Also, the normal self-esteem subjects whose SV tests were scored were used in the latter phases of the present study.

When all the male subjects had volunteered from the various psychology classes, testing was begun. Only Category I male subjects were required to take the **Tennessee Self-Concept Scale**. The 160 male subjects of Category I
who took the TSCS had an overall mean score of 333 which converted to a T score value of a 46.

The Category I male subjects were also required to take the Study of Values test. Only those 100 subjects who had been classified as normal self-esteem subjects had their SV tests scored. The 100 subjects were placed by their scores into the following categories:

- Aesthetic: 24 subjects
- Religious: 24 subjects
- Theoretic: 21 subjects
- Economic: 13 subjects
- Political: 13 subjects
- Social: 4 subjects

The Category II male subjects were only required to take the SV test. The 50 male subjects of Category II were categorized in the following manner:

- Religious: 14 subjects
- Theoretic: 12 subjects
- Aesthetic: 10 subjects
- Economic: 6 subjects
- Political: 4 subjects
- Social: 4 subjects

The 60 subjects who did not make the cut-off boundaries for normal self-esteem were later contacted and thanked for their assistance. They were also asked if they would like to
be told about the tests they had taken. If the subjects desired the results, an appointment was set up for them to come in for an interpretation session.

From the 100 subjects that had normal self-esteem and had taken the SV, 40 were chosen to rate the photographs of the females on the basis of appealingness. The 40 subjects chosen were divided proportionately over the six scales of the SV. For example, four subjects out of 100 subjects scored highest on the social value scale; therefore, on a proportionate basis one subject was used to rate. The other three subjects were placed in the IAB group. The 40 males chosen to rank the females' photographs were distributed in the following manner:

- Aesthetic: 10 subjects
- Religious: 10 subjects
- Theoretic: 9 subjects
- Economic: 5 subjects
- Political: 5 subjects
- Social: 1 subject

All 40 subjects reported to a specific room at a given time one week after their initial testing date. Each subject was given five envelopes which contained 30 photographs. The subjects were told to write one statement on each envelope. The statements were: (a) very appealing, (b) appealing, (c) some appeal, (d) little appeal, and (e)
least appealing. After writing the statements, the subjects were told to put the photographs into the appropriate envelope based upon the subject's own perception of what was appealing or not appealing. The subjects were further informed that when they finished, they could leave. The envelopes were collected in groups of five, numbered according to the subject who used them, and bound together by a rubber band.

The present study required three photographs that were the highest scored on by the 40 male subjects. The present study also required three photographs that were the lowest scored on by the 40 male subjects. The scoring for the three highest photographs had the numeric values of 191, 174, and 161 respectively. While the three lowest scored photographs had numeric values of 66, 59, and 50 respectively.

At a later time, all 40 subjects who participated in the ranking procedure were contacted and debriefed in a similar manner as previous subjects. If a subject wanted feedback, a one-to-one interpretation session was set up at the subject's convenience.

The 60 remaining male subjects of Category I, who had normal self-esteem, were utilized to test the research and null hypotheses by responding to the questions in the IAB. The 60 subjects were told to report to a specific location
at a given time to take the IAB. These appointments were approximately two weeks after the subjects were initially tested. When each subject arrived, he was given an IAB, a computer answer sheet, and an instruction sheet which contained the following:

"Examine carefully each page in the IAB and answer the questions on each page by placing your answer on the computer answer sheet. For each question, mark only one of the letter forms--a through e. The letters correspond to the following terms in the IAB. They are:

(1) a = definitely no
(2) b = probably no
(3) c = maybe
(4) d = probably
(5) e = definitely yes

Answer the question, 'Would you like to meet this person,' which is on each of the eight pages of the IAB by applying the above method.

When you are finished bring both the IAB and the computer answer sheet to the front of the room and then you may leave. You will be contacted at a later time to see if you are interested in feedback on your results of the tests you have taken."

The 60 subjects who took the IAB were debriefed by a telephone call in which each subject was informed that he
had participated in a research study. The subjects were asked if they would like to receive feedback from the results of the tests they had taken. The subjects were also thanked for assisting in the completion of the project. If the subject wanted feedback, a one-to-one interpretation session was set up at the subject's convenience.

A second group of males was required to complete the present study. The second group of 50 male subjects was labelled as Category II. Category II male subjects were only required to take the SV and the IAB. The Category II subjects were volunteers from the health and safety classes on the Western Kentucky University campus.

The Category II subjects were required to take the SV and the IAB following the same procedure as Category I male subjects. The only difference in procedure related to time elapsed between taking the SV and IAB. The subjects completed the SV one day and were asked to report back the next day to take the IAB. The debriefing of Category II male subjects was the same as Category I male subjects.

Data Analysis

The following section will describe the procedure utilized in analysis of the data produced by Category I and II subjects' responses to the IAB. The subjects were required to place their answers on a number 516 computer answer sheet. These sheets were brought to the WKU Faculty
and Student Research Center. The sheets were coded and processed at the center for a specific group of statistical types of data.

The computer analysis master program utilized to obtain the statistical data was the SPSSH program. The master program was published by the McGraw-Hill Publishers in 1975. The specific program utilized from the master program was constructed by Carolyn Marks of WKU. The program constructed by Ms. Marks produced the following types of statistical data. The types of data produced were means, standard deviations, t tests for all possible combinations of means, analysis of variance for repeated measures (ANOVARM), and the Omega Square Test for the amount of expected total population responses in the present study.

The last two measures of statistical significance were utilized to provide a further basis for the efficacy of the present study. The analysis of variance procedure was utilized to determine if the results were heterogeneous or homogeneous. If the resultant score was above a 35.000 then it could be assumed that the results were heterogeneous and valid. If the score was below 35.000 then it could be assumed that the results were homogeneous and not valid. The last statistical procedure, the Omega Square Test, was utilized with each group of appropriate t-test combinations to determine whether the total amount of total expected population responses was included in the
sample populations' responses. If the resultant score was above a .450 then it could be assumed that the sample populations' responses were equivalent to the expected total population responses. The reverse held true for the score below a .450 by the sample population.
Chapter IV

Results

Chapter IV contains a description of the results of the subjects' responses to the Interpersonal Attraction Booklet. The IAB had two forms: the first had female photographs non-randomly placed within and the second had female photographs randomly placed within. Category I consisted of a group of 60 males who had completed the TSCS, SV, and IAB with the facial photographs non-randomly placed. Category II included 50 males who had completed the SV and IAB with the facial photographs randomly placed.

Data from Category I subjects' responses were analyzed first and the data have been placed in Table 1.

Category I subject responses to appealing facial photographs indicated the mean of the appealing facial photographs was greater than the non-appealing facial photographs (3.816 and 2.583 respectively). When a correlated t test between the two means was computed, the result was highly significant, being beyond the probability level of .001. The resulting score from the t test indicated that the appealing facial photograph had significantly greater responses from Category I subjects than the non-appealing facial photographs. The score indicated that the subjects
Table 1
Statistical Analysis of Category I
Subjects' Responses to the IAB

<table>
<thead>
<tr>
<th>Heading</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t test</th>
<th>P</th>
<th>Omega</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appealing Facial Photograph</td>
<td>3.816</td>
<td>1.017</td>
<td>8.17</td>
<td>.001</td>
<td>.512</td>
</tr>
<tr>
<td>Non-appealing Facial Photograph</td>
<td>2.583</td>
<td>1.030</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Attitude-Value Orientation</td>
<td>3.800</td>
<td>.971</td>
<td>7.74</td>
<td>.001</td>
<td>.701</td>
</tr>
<tr>
<td>Negative Attitude-Value Orientation</td>
<td>2.383</td>
<td>.940</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appealing Facial Photo. with NAVOS</td>
<td>4.366</td>
<td>1.073</td>
<td>17.14</td>
<td>.001</td>
<td>.831</td>
</tr>
<tr>
<td>Non-appealing Facial Photo. with PAVOS</td>
<td>1.483</td>
<td>.748</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appealing Facial Photo. with PAVOS</td>
<td>4.366</td>
<td>1.033</td>
<td>3.53</td>
<td>.094</td>
<td>.652</td>
</tr>
<tr>
<td>Appealing Facial Photo. with NAVOS</td>
<td>3.667</td>
<td>1.073</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-appealing Facial Photo. with PAVOS</td>
<td>1.483</td>
<td>.748</td>
<td>6.14</td>
<td>.095</td>
<td>.528</td>
</tr>
<tr>
<td>Non-appealing Facial Photo. with NAVOS</td>
<td>2.200</td>
<td>.840</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
would rather meet a person with an appealing facial photograph than a person with a non-appealing facial photograph. The Omega Square Test (Metze, 1974) was also computed upon the correlated t test of each category of results. This test was utilized to determine if the sample population responses were similar to the expected total population responses, if the total population had been sampled during the present study. A score of .450 or above generated from the Omega Square Test would indicate that the sample population responses had indeed been similar to the expected total population responses. The Omega Square Test result between appealing and non-appealing facial photographs was a .512 which indicated that the sample population responses were similar to the expected total population responses.

The first research hypothesis indicated that facial characteristics were predictive of initial interpersonal attraction. The null hypothesis, appealing facial characteristics do not predict initial interpersonal attraction, was rejected.

Category I subjects' responses to positive attitude-value orientation statements (PAVOS) and negative attitude-value orientation statements (NAVOS) indicated that the mean of the PAVOS was greater than the NAVOS mean score (3.800 and 2.303 respectively). When the correlated t test between the two means was computed the resulting score was significant beyond the probability level of .001. The resulting
score from the t test indicated that PAVOS had a significantly greater number of responses associated with it from Category I subjects than the NAVOS. The resulting score indicated that the subjects would rather meet a person with PAVOS than NAVOS. The Omega Square Test computed at .701 indicated that the sample population responses were similar to the expected total population responses. Thus, the second research hypothesis that PAVOS could predict initial interpersonal attraction was retained.

Category I subjects' responses to appealing facial photographs paired with NAVOS and non-appealing facial photographs paired with PAVOS indicated support for another previously stated hypothesis. The mean scores for the appealing facial photograph paired with NAVOS and the non-appealing facial photograph paired with PAVOS were 4.366 and 1.483 respectively. When a correlated t test between the two means was computed the resulting score was highly significant to the .001 level. The resulting score from the t test indicated that the appealing facial photograph paired with NAVOS had significantly greater responses associated with it than the non-appealing facial photograph paired with PAVOS. The score indicated that subjects would rather meet a person with an appealing facial photograph even with NAVOS than a person with a non-appealing facial photograph who presented PAVOS. The Omega Square Test score
was a .831 which indicated that the sample population responses were again similar to the expected total population responses. Therefore, the third research hypothesis that the facial characteristics when paired with attitude-value orientation statements would be the major predictor of initial interpersonal attraction was supported. The null hypothesis which indicated that the pairing of facial characteristics with attitude-value orientation statements was rejected.

There were pairings of photographs and statements within the present study for which there were no specific research or null hypotheses generated. However, the reporting of results from these pairings have been appropriate in order to further validate the results of the present study.

Category I subject responses to appealing facial photographs paired with NAVOS and appealing facial photographs paired with PAVOS produced the following results. The mean score for the appealing facial photographs paired with NAVOS was greater than the mean of the appealing facial photographs paired with PAVOS (4.366 and 3.66). When a correlated \( t \) test between the two means was computed the result was insignificant being less than the required .001 probability level.

The resulting score from the \( t \) test indicated that the appealing facial photographs with PAVOS had similar
responses from Category I subjects. The score indicated that subjects would equally want to meet a person with an appealing facial photograph with PAVOS as well as a person with an appealing facial photograph paired with NAVOS. The PAVOS and NAVOS had little effect upon the Category I subjects' decisions to meet the person. The Omega Square Test was a .634, indicating that the sample population responses were similar to the expected total population responses. Thus, the results indicated that a subject would have likely wanted to meet the photographed person. That is, if a person was facially appealing the attitude-value orientation of the person had little effect in the decision made by the subject.

Category I subjects' responses to non-appealing facial photographs paired with PAVOS and non-appealing facial photographs paired with NAVOS produced some interesting results. The mean score for non-appealing facial photographs paired with NAVOS was greater than the non-appealing facial photographs paired with PAVOS (2.20 and 1.48). When a correlated t test between the two means was computed the result was insignificant, being less than the required .001 probability level. The resulting score from the t test indicated that the non-appealing facial photographs paired with PAVOS and the non-appealing facial photographs paired with NAVOS had similar responses from the Category I
subjects. The score indicated that the subject had little interest in meeting another person who was non-appealing facially even if the other person had PAVOS. The non-appealing facial photograph had an unfavorable effect upon Category I subject decisions to meet the person in the photograph. The Omega Square Test score was .517 which indicated that the sample population responses were similar to the expected total population responses.

The results of the present study indicated that non-appealing facial characteristics had an adverse effect upon Category I subjects' decisions of whether they would like to meet the photographed person. The appealing facial photographs produced a high level of interest in the subjects to want to meet the photographed persons. The non-appealing facial photographs produced a low level of interest in the subject to want to meet the photographed persons. The low level of interest was still present even when a non-appealing photograph was paired with a positive attitude-value orientation statement. The foregoing results are shown in Table 2.

Category II subjects saw the same photographs, statements, and paired photographs with statements as Category I subjects. However, the photographs were randomly placed in the IAB. Random placement of photographs was utilized in an attempt to attain more conservative results than what had been attained with non-random placement of photographs.
### Table 2

**Category I Low Versus High Level of Interest**

<table>
<thead>
<tr>
<th>Level of Interest</th>
<th>Combination of Photographs and Attitude Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Appealing Photograph</td>
</tr>
<tr>
<td></td>
<td>PAVOS</td>
</tr>
<tr>
<td>Low</td>
<td>Non-appealing Photograph</td>
</tr>
<tr>
<td></td>
<td>PAVOS</td>
</tr>
</tbody>
</table>
The second group's data were analyzed and the results from the analysis have been placed in Table 3.

As can be seen in Table 3, the results from Category II subjects' responses produced results similar to Category I subjects' responses. Attitudes were shown to be predictive of initial interpersonal attraction. Facial characteristics were also shown to be predictors of initial interpersonal attraction. The major finding was that attitudes were shown to be significantly less predictive than facial characteristics in the initial interpersonal attraction process. However, there was a difference between the two categories of male responses. The difference was evident in the response patterns of the subjects. The subjects responded in a more objective manner when the photographs were randomly placed in the IAB. An example of this was the difference between Category I and II response to the pairing of appealing facial characteristics to PAVOS and NAVOS. The more appropriate response was seen in Category II responses.
Table 3
Statistical Analysis of Category II
Subjects' Responses to the IAB

<table>
<thead>
<tr>
<th>Heading</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-test</th>
<th>P</th>
<th>Omega</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appealing Facial Photograph</td>
<td>3.850</td>
<td>1.005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-appealing Facial Photograph</td>
<td>2.250</td>
<td>0.895</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Attitude-Value Orientation</td>
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Chapter V

Summary, Conclusions, and Recommendations

The primary purpose of the present study was to determine whether an appealing facial photograph or a positive attitude-value orientation statement was more causal in affecting the initial interpersonal attraction process. Significant results were found in the present study which indicated that appealing facial photographs affect far more the interpersonal attraction process than positive attitude-value orientations. The research hypothesis, appealing facial photographs affect initial interpersonal attraction in a more causal manner, was supported. The results have further indicated that a male will be more initially attracted to a female when the female is facially appealing. Conversely, if the female is not facially appealing, even if she had PAVOS, there will be little initial interpersonal attraction.

The present study also investigated to what degree appealing photographs were predictors of initial interpersonal attraction. Significance was found in the present study in support of the research hypothesis. The research hypothesis that appealing facial photographs were predictors
of initial interpersonal attraction was retained. The results indicated that a male will be attracted to a female who is facially attractive but not to a facially non-attractive female. These results support the findings of Walster (1966), Lechart (1966), and Aronson and Mill (1965). These researchers found that the physical characteristics of the female would predict initial interpersonal attraction by the male.

The present study was also designed to determine if positive attitude-value orientation statements (PAVOS) were predictors of initial interpersonal attraction. Significance was found in the present study in support of the research hypothesis. The research hypothesis that PAVOS were predictors of initial interpersonal attraction was retained. The results indicated that a person will be initially attracted, on an interpersonal basis, to another who has PAVOS but not to a person with NAVOS. These results are consistent with Byrne's (1965; 1966; 1968; 1969) and Griffitt's (1966a; 1966b; 1967; 1968) findings. The present study refutes, however, the findings of Aronson and Worrell's research study. Aronson and Worrell (1966) stated that there was no linear relationship between PAVOS and interpersonal attraction. The present study found that a linear relationship between PAVOS and interpersonal attraction did exist.
The major finding of the present study indicated that when paired with facial characteristics the PAVOS and NAVOS statements had little affect upon the decision-making processes of the subjects. It was evident that the subjects tended to make their decisions on whether to meet the female solely on her photographed facial appearance. This finding tends to support Byrne's (1968a) belief that physical characteristics are the most important factor in initiating interpersonal attraction. The reason why physical characteristics are the most important factor in a male's initial decision to meet a female may arise from the male's need to be seen with an attractive woman (Wiggins, 1969). The present study differed methodologically from Byrne's (1968a) study in that the only physical characteristic utilized was the facial photograph of the female. The different methodological form utilized arose from Wiggins' (1968) research findings. He found that the only valid means to test interpersonal attraction when physical characteristics were involved was by the use of facial characteristics of the female.

The additional analyses that were computed did not yield statistical significance. The pairings of appealing facial photographs with PAVOS and the pairings of appealing facial photographs with NAVOS indicated no significant difference between their mean scores. That is, the pairings were shown to be similar to one another through the subjects' responses
to them. The pairing of non-appealing facial photographs with PAVOS and the pairing of non-appealing facial photographs with NAVOS indicated no difference between the two aforementioned pairings. That is, the pairings were shown to be similar to one another.

One factor did alter the outcome of the present study. The factor involved a methodological weakness found in the present study. The weakness dealt with the placement of photographs in the IAB. Category I subjects saw the photographs non-randomly placed while Category II saw them randomly placed. Non-random placement lessened the ability of the male to objectively decide if he wanted to meet the female; therefore, random placement was utilized for Category II.

Suggestions for Further Study

Since the research hypotheses were supported the following studies are suggested. The first study would involve the use of photographs of women who were smiling instead of a natural face as utilized in the present study. The utilization of a smiling pose would increase the subjects' likeability of all photographs. Therefore, it could be assumed that the reliability of results would be extenuated by such photograph utilization.

An additional study could be done with the comparison of the natural face versus the smiling face groups. This
study would assumedly indicate which type of facial expression would be more predictive in the initial interpersonal attraction process. It can be assumed that smiling facial expressions would be higher in predictive ability.

Then, the two aforementioned studies with the present study could be utilized with the opposite sex. That is, the use of females to rate the males as to whether they would like to meet them or not could be adequately applied in studies of interpersonal attraction. The assumed results would be similar to those mentioned in the foregoing sections of this chapter.

Another area of study that could evolve from the present study deals with the area of counseling. Since counseling is an interpersonal relationship as defined by Schofield (1964) then studies as the aforementioned could be undertaken. That is, there could be studies utilizing smiling photographs of males, comparison of natural face versus smiling face pose, and replication of the present study with males as the photographed persons rather than females. The same types of research studies could also be done with females being rated by males. The criterion variable in the counseling research studies would be altered. The statement for the variable would read: "Would you like to be counseled by this person?" instead of "Would you like to meet this person?".
Finally the study designed to eliminate the artificiality present in the research studies of interpersonal attraction could be undertaken. Wiggins' (1968) study could be utilized as a basis for testing the interpersonal attraction process in a more real, non-laboratory manner. Here, control of the male population would be accomplished by manipulating the type of woman the males would meet and what would be said to them by the woman.
Appendix A

Positive and Negative Attitude-Value Orientation Statements

1. Aesthetic - Positive

This person's dominant interest is the discovery of harmony and form. Her pursuit of her goals is based on the identity of experience, so truth for her is beauty and/or making a thing beautiful is more important than to make it true. She sees the business world as a destroyer of beauty. While dealing with people she is interested in them but not in their total welfare; she tends to be individualistic and self-sufficient. Her chief aim in life is seeking life as a procession of events and each event is to be enjoyed for its own sake.

Aesthetic - Negative

This person's dominant interest is not in the discovery of harmony nor form. Her pursuit of her goals are rarely based on the identity of experience, truth for her is not as a destroyer of beauty. While dealing with people she becomes very interested in them and especially with their total welfare; she tends not to be individualistic not self-sufficient. Her chief aim in life is not dependent on it as a procession of events and she rarely sees each event as to be enjoyed for its own sake.
2. Religious - Positive

This person's dominant interest is in the discovery of unity of self with God. Her pursuit of her goals takes a direction to understand life through the highest and absolutely satisfying value experience of revealing God. Essentially, she affirms her life by the active participation in understanding herself and others through God. Her chief aim in life is to understand the revelations by God so that she can lead a good life on earth.

Religious - Negative

This person's dominant interest is not in the discovery of unity of self with God. Her pursuit of her goals rarely take a direction to understand life through the highest and absolutely satisfying value experience of revealing God. She does not affirm her existence by the active participation of understanding herself and others through God. Her chief aim in life is not to understand the revelations of God so that she can lead a good life on earth.

3. Theoretical - Positive

This person's dominant interest is in the discovery of truth. Her pursuit of her goals rarely include the use of the "cognitive" attitude. She looks for identities and differences and seeks to observe and to reason out a solution whenever possible. Essentially, her interests are rationally oriented and her chief aim in her life is to have order and systemized knowledge.
Theoretical - Negative

This person's dominant interest is not the discovery of truth. Her pursuit of her goals rarely include the use of the "cognitive" attitude. She rarely looks for identities and differences and rarely seeks to observe and to reason. Essentially, her interests are not rationally oriented and her chief aim in life is not to order and systematize her knowledge.

4. Economic - Positive

This person's dominant interest is the discovery of what is useful. Her pursuit of her goal takes a practical, self-preserving stance and she likes the affairs of the business world. For her luxury is beauty and when dealing with others she would rather be wealthy than dominating or serving them. Her chief aim is the accumulation of "tangible" wealth through the use of practical, applied knowledge.

Economic - Negative

This person's dominant interest is not discovering of what is useful. Her pursuit of her goals do not take a practical nor self-preserving stance and she does not like the affairs of the business world. Luxury is not beauty for her and when she deals with others she rather not base it on wealth but on domination or serving of them. Her chief aim in life is not the accumulation of tangible wealth by any means.
5. Political - Positive

This person's dominant interest is in the acquisition of power (political and non-political). Her pursuit of her goals are highly power attaining oriented which is usually based on her ability to compete and struggle to get to where she wants to go. Essentially, her basic motive in life is to gain power. So, her chief aim in life is in attaining personal power, influence, and renown.

Political - Negative

This person's dominant interest is not in the acquisition of power (political and/or non-political). Her pursuit of her goals are rarely power oriented and competition and struggle are rarely part of her personality. Her basic motive in life rarely revolves around attaining power. Therefore, her chief aim in life is not in attaining personal power, influence, nor renown.

6. Social - Positive

This person's dominant interest is in love of other people in an altruistic or philanthropic manner. Her pursuit of her goals takes a non-selfish, kind, and sympathetic course in relation to herself and others. Essentially, she prizes other people as ends. Therefore, her chief aim in life is to promote love as the only suitable form of human relationship which is based on the social interest or selflessness in her relationships.
Social - Negative

This person's dominant interest is not based on love of others in either an altruistic or philantrophic manner. Her pursuit of her goals do not take a non-selfish, kind, or sympathetic course in relation to herself and others. Essentially, she does not prize people as ends. So, her chief aim in life is not to promote love as the only suitable form of human relationship with others which is based on the social interest (selflessness) concept.
Appendix B

Example of Interpersonal Attraction Booklet Forms

Facial Picture Placed Here

Attitude-Value Statement Placed Here

A) Would you like to meet this person?

a   b   c   d   e

Definitely   Probably   Maybe   Probably   Definitely
No           No           Yes      Yes

(answer on the red answer sheet for this question)

B) Why?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

(answer this question on this sheet of paper)
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