INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or “target” for pages apparently lacking from the document photographed is “Missing Page(s)”. If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in “sectioning” the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from “photographs” if essential to the understanding of the dissertation. Silver prints of “photographs” may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Xerox University Microfilms
300 North Zeeb Road
Ann Arbor, Michigan 48106
SHINAR, Eva Hanski, 1946-
INTERPERSONAL PERCEPTION AS A FUNCTION OF
OCCUPATION AND SEX.

The Ohio State University, Ph.D., 1974
Psychology, clinical

University Microfilms, A XEROX Company, Ann Arbor, Michigan
INTERPERSONAL PERCEPTION AS A FUNCTION
OF OCCUPATION AND SEX

DISSERTATION

Presented in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy in the
Graduate School of The Ohio State University

By

Eva Hanski Shinar, B.A., M.A.

The Ohio State University
1974

Reading Committee:
Professor Samuel H. Osipow, Chairman
Professor Robert F. Campbell
Professor W. Bruce Walsh

Approved By

Adviser
Department of Psychology
TO MY PARENTS
ACKNOWLEDGEMENTS

I wish to express my deep appreciation and gratitude to Professor Samuel H. Osipow, my adviser, who provided me with the opportunity to study in the Counseling Psychology Area of the Department of Psychology. I am indebted to him for his continuous support and encouragement during my graduate studies and for his helpful suggestions, comments and criticisms of the drafts of this dissertation. Deep thanks are extended to my reading committee, Dr. Robert E. Campbell and Dr. W. Bruce Walsh for their time, interest and comments about this study.

Special commendation must be awarded my husband David whose patience, care and love as well as keen "experimental" mind and knowledge of data analysis techniques contributed greatly to the completion of this study. I am also grateful to my colleagues who served as subjects in one of the phases of this research, and to Janet Needs for typing this dissertation.
VITA

February 5, 1946 ....... Born - Breslau, Poland

1967-1969 ............. Research Assistant, Department of Psychology, Hebrew University, University of Jerusalem, Israel

1970 ................... B.A., Hebrew University of Jerusalem, Israel

1971 ................... M.A., The Ohio State University, Columbus, Ohio

1971-1973 ............. Graduate Teaching Associate, Department of Psychology, The Ohio State University, Columbus, Ohio

1973-1974 ............. Clinical Psychology Intern, Department of Psychiatry, College of Medicine, The Ohio State University, Columbus, Ohio

FIELDS OF STUDY


Studies in Clinical Psychology: Professors Herbert L. Mirels, Dennis J. Nolan

Studies in Psychiatry: Professor Peter H. Gwynne
### TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>VITA</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>CHAPTER I</td>
<td></td>
</tr>
<tr>
<td>Review of the Literature</td>
<td>4</td>
</tr>
<tr>
<td>Occupational Stereotypes</td>
<td>4</td>
</tr>
<tr>
<td>Sex-role Stereotypes</td>
<td>18</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>36</td>
</tr>
<tr>
<td>CHAPTER II</td>
<td></td>
</tr>
<tr>
<td>Experiment I</td>
<td>40</td>
</tr>
<tr>
<td>Experiment II</td>
<td>50</td>
</tr>
<tr>
<td>CHAPTER III</td>
<td></td>
</tr>
<tr>
<td>Discussion</td>
<td>90</td>
</tr>
<tr>
<td>CHAPTER IV</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td>117</td>
</tr>
<tr>
<td>APPENDIX</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>122</td>
</tr>
<tr>
<td>II</td>
<td>128</td>
</tr>
<tr>
<td>III</td>
<td>130</td>
</tr>
<tr>
<td>IV</td>
<td>131</td>
</tr>
<tr>
<td>V</td>
<td>132</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>VI</td>
<td>134</td>
</tr>
<tr>
<td>VII</td>
<td>136</td>
</tr>
<tr>
<td>VIII</td>
<td>138</td>
</tr>
<tr>
<td>IX</td>
<td>158</td>
</tr>
<tr>
<td>X</td>
<td>159</td>
</tr>
<tr>
<td>XI</td>
<td>160</td>
</tr>
<tr>
<td>XII</td>
<td>162</td>
</tr>
<tr>
<td>XIII</td>
<td>164</td>
</tr>
<tr>
<td>XIV</td>
<td>165</td>
</tr>
<tr>
<td>XV</td>
<td>167</td>
</tr>
<tr>
<td>XVI</td>
<td>168</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>169</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Correlation Matrix for Males and Females Between the Three Instruction Types</td>
<td>43</td>
</tr>
<tr>
<td>2</td>
<td>Masculine, Neutral and Feminine Occupations</td>
<td>46</td>
</tr>
<tr>
<td>3</td>
<td>Analysis of Variance for Sexual Stereotyping of Occupations</td>
<td>47</td>
</tr>
<tr>
<td>4</td>
<td>Sexual Stereotyping of Occupations as a Function of Sex of Subject X Instructions Type</td>
<td>49</td>
</tr>
<tr>
<td>5</td>
<td>Intercorrelations Matrix for the 20 Impressions Questionnaire Scales</td>
<td>56</td>
</tr>
<tr>
<td>6</td>
<td>Rotated Factor Loadings</td>
<td>58</td>
</tr>
<tr>
<td>7</td>
<td>Analysis of Variance for Factor I</td>
<td>69</td>
</tr>
<tr>
<td>8</td>
<td>Stimulus Person Perception on Factor I as a Function of Sex of Perceiver X Dimension</td>
<td>71</td>
</tr>
<tr>
<td>9</td>
<td>Analysis of Variance for Factor II</td>
<td>72</td>
</tr>
<tr>
<td>10</td>
<td>Analysis of Variance for Factor III</td>
<td>74</td>
</tr>
<tr>
<td>11</td>
<td>Analysis of Variance for Factor IV</td>
<td>76</td>
</tr>
<tr>
<td>12</td>
<td>Analysis of Variance for Factor V</td>
<td>77</td>
</tr>
<tr>
<td>13</td>
<td>Analysis of Variance for Factor VI</td>
<td>79</td>
</tr>
<tr>
<td>14</td>
<td>Stimulus Person Perception on Factor VI as a Function of Sex of Perceiver X Set of Stimulus Person</td>
<td>80</td>
</tr>
<tr>
<td>15</td>
<td>Stimulus Person Perception on Factor VI as a Function of Sex of Perceiver X Dimension</td>
<td>81</td>
</tr>
<tr>
<td>16</td>
<td>Analysis of Variance for Factor VII</td>
<td>83</td>
</tr>
<tr>
<td>17</td>
<td>Analysis of Variance for Factor VIII</td>
<td>85</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Stimulus Person Perception on Factor VII as a Function of Sex of Perceiver X Sex of Stimulus Person</td>
<td>86</td>
</tr>
<tr>
<td>19</td>
<td>Analysis of Variance for Factor IX</td>
<td>87</td>
</tr>
<tr>
<td>20</td>
<td>Stimulus Person Perception on Factor IX as a Function of Sex of Perceiver X Dimension</td>
<td>89</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perception of Stimulus Persons as a Function of Dimension</td>
<td>64</td>
</tr>
<tr>
<td>2</td>
<td>Perception of Stimulus Persons as a Function of Their Sex and Occupational Dimension</td>
<td>65</td>
</tr>
<tr>
<td>3</td>
<td>Perception of Stimulus Persons as a Function of the Sex of the Perceiver</td>
<td>66</td>
</tr>
<tr>
<td>4</td>
<td>Perception of Stimulus Persons as a Function of Their Sex</td>
<td>67</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Madame Ranxcourt, a famous Dentress, lately arrived from Paris, who served her time to the most famous Monsieur Caperon, Dentist to the King of France, cures the Toothache, makes artificial Teeth not to be distinguished from real; sells a Powder she has invented and a most admirable opiate, and cures the Scurvy, lives at Mrs. Sadierre's, in Church Street, St. Ann, Soho.

Advertisement, London 1751
(Wilensky, 1968)

Recent years have been marked by rapid change in different sectors of our lives. The acceleration of change does not merely apply to technologies, industries, or nations. It is a concrete force that penetrates deep into our personal lives compelling us to examine our values and needs and presenting us with new alternatives and roles.

One area in which social change has expressed itself is the growing Women's Liberation Movement. Its feminist ideology forces us to examine our cultural conceptions of masculinity and femininity and the content and implications of gender typed roles and behaviors. Currently available data suggest that many educated women are attempting to redefine their sex roles especially in the areas of occupational and political involvement (Westervelt, 1973). Some examples of this new trend are the rising career aspirations of college women (50% of those recently surveyed aspired to some eminence in a chosen field and a much larger majority expected to work outside the home) accompanied
by a sharp decline in the percentage of those planning large families (Wilson 1971); the climbing divorce rate which causes women to seek new avenues of income and to exercise greater control over their lives; the recent Federal legislation, especially the proposed "Equal Rights Amendment" which will enhance the legal equity of men and women, and has been of great significance in raising women's awareness; and the growing political awareness of women, manifested among other activities in national, state, and regional caucus meetings and consciousness-raising groups.

On the whole it would appear that feminist ideology, as well as forces of social and economic change, are modifying women's role perceptions and expectations. The greatest impact appears to be on perceptions of economic and achievement roles combined with increased awareness of the conflict between the new and the traditionalist role relationships.

Despite the reported changes in the conceptualization of gender typed behaviors, psychological research indicates that both the perception and evaluation of sex-role stereotypes have been remarkably stable in the last twenty years. The laboratory findings suggest that sex role stereotypes are clearly defined and agreed upon by both males and females. It seems that while the communications media indicates more flexibility in sex roles, laboratory research reports that sex role stereotypes are narrow and inflexible.

Attacking the issue of sex roles from the point of view of occupational stereotyping reveals that the major socializing agents in our society still tend to reinforce traditionalist stereotypes so that,
for instance, quite young children tend to sex type occupations (Schlossberg and Goodman, 1972). Similarly to sex role stereotypes, research shows occupational stereotypes to be stable and held in agreement by large segments of the population.

Both occupational and sex role stereotypes are related to self and ideal self concepts of men and women and as such play an important role in career decisions and lifestyle choices. An understanding of the factors which influence both men and women in their career decisions must begin with the relationship between occupational role and sex role. The present study stems from the combination of research in the two areas of occupational and sex role stereotypes. Its main purpose is to explore whether rigidity of sex role stereotyping is also manifested in the way we perceive people in sex-appropriate and sex-inappropriate occupations. This information is of major importance in helping us assess women's and men's perceptions of both sexes' roles in the occupational world. It is also vital in highlighting those dimensions which make some occupations more or less attractive for men and women.
REVIEW OF THE LITERATURE

I. Occupational Stereotypes

Definition of Occupational Stereotypes

The term stereotype has been introduced in the psychological literature by Walter Lippman in Public Opinion (1922). Lippman defines stereotypes as "the pictures in our heads" which make up a repertory of fixed impressions of the environment or part of it. They serve an economy function in information processing since our cognitive capacity is too limited to attend to all events in the environment. They also function to censor information from the real world which contradicts the stereotype.

According to Lippman, stereotypes are derived through faulty processes of reasoning, especially that of failing to draw conclusions from representative samples but rather basing them on casual impressions. As such they have a tendency of being rigid, resistant to education or criticism, factually inaccurate, produced through illogical reasoning, and passed on to others through enculturation.

Another definition of stereotype provided by English and English (1958, p. 523) is essentially similar to that of Lippman's:

A stereotype is a relatively rigid and oversimplified or biased perception or conception of an aspect of reality especially of persons or social groups.

Schenk, in the Encyclopedia of Psychology (1972) states that a stereotype denotes opinions about classes of individuals, groups, or objects which are "preconceived"; i.e., do not derive from new
judgments of each single phenomenon but are pattern-like forms of perceiving and judging. Another element noted by Schenk is that stereotypes are not necessarily false as implied by Lippman and English and English. Although they represent oversimplified and overgeneralized concepts, they may also reflect true and accurate perception.

Holland (1966) also believes in the validity of stereotypes in the context of occupational stereotypes. One of the assumptions underlying his theory of vocational choice is that vocational stereotypes have reliable and important psychological and sociological meanings. Since Holland does not provide an explicitly stated definition of occupational stereotypes, his definition may be derived from the contexts in which he uses the term. It is apparent from Holland's writings that he uses the terms stereotype, vocational perceptions, and vocational images interchangeably. They entail judgment and knowledge of what people in various occupations are like. Holland contends that occupational stereotypes are reliable across people and over time. His own study of vocational images (1963-1964) indicates that he thinks of stereotypes as being expressed in adjectives describing personality characteristics of a specified occupational group member.

In light of the foregoing information, one may define occupational stereotypes as the images which are consciously held about members of different occupational groups. This definition does not concern itself with the element of accuracy of occupational stereotypes, but rather with only that aspect of stereotypes involving the differential attribution of characteristics to members of various occupations.
Measurement of Occupational Stereotypes

Several methods of operationalizing occupational stereotypes can be found in psychological literature. One is the adjective check-list approach in which subjects are presented with a list of adjectives and asked to check those which are descriptive of a specified occupational group member.

The adjective check lists used are often researcher made instruments sometimes with no specific rationale underlying the choice of adjectives (Haire, 1955; Stagner, 1950; Walker, 1958), but more commonly based on other psychometric instruments like Gough and Heilbrun's Adjective Check List (Hollander and Parker, 1969, 1972), R. B. Cattell's Comprehensive List of Personality Traits (Blocher and Schutz, 1961), or Edwards Personal Preference Schedule (Dipboye and Anderson, 1961).

Another approach to studying occupational stereotypes has been to use the semantic differential technique (Osgood et al., 1957) in which subjects are asked to rate stimulus persons in various occupations on a number of seven point bi-polar scales. This approach has been first used by Osgood and Stagner (1941) and later by Jenkins et al. (1958) who compiled an atlas of semantic profiles for a number of occupational titles; Nunnaly and Kittross (1958) who used the semantic differential to study profiles of several categories of mental health personnel; and O'Drwd and Blardslee (1960, 1967) who investigated occupational images of several high level occupations as they exist in the student and faculty populations. Other operational definitions of stereotypes used were written descriptions of a specified occupational group member (Haire and Grunes, 1950; Schutz and Blocher, 1960); simulation
of an interest pattern on the Strong Vocational Interest Blank (Bordin, 1943); and simulation of responses of an occupational group member on the Vocational Preference Inventory (Elmendorf, 1972).

Existence of Occupational Stereotypes

The early studies of occupational stereotypes can be seen as attempts to demonstrate that such phenomena do in fact, exist.

Bordin (1943), who was among the first to formulate hypotheses relating occupational stereotypes to vocational development, demonstrated that subjects were successful in simulating interest patterns of five occupational groups (medical, engineering, accounting, sales and law). Subjects reported that their answers were based on their impressions of what a typical doctor, engineer, salesman, etc., would say, and Bordin interpreted that as evidence supporting the existence of occupational stereotypes and their accuracy.

Several other studies conducted with the Strong Vocational Interest Blank (Benton and Kornhauser, 1948; Garry, 1953; Gehman, 1957; Longstaff, 1948; Strong, 1943; Wallace, 1950) also indicate the ability of majority of subjects to simulate successfully the interest patterns of specified occupational groups, shifting from their own first measured pattern. However, it appears that the accuracy of simulation is not equal across all the subjects (Garry, 1953; Wallace, 1950) and all the occupations (Longstaff, 1948). It is plausible to assume that either some students cannot succeed at the task of simulating an interest pattern or that they have inaccurate stereotypes of some occupations. Also, ability to stereotype accurately on the SVIB may vary as a function of the occupation; i.e., some occupations may have more clearly defined
images than others.

Elmendorf (1972) using simulation of responses of three occupational groups (research chemist, high school teacher, and music instructor or college English professor) on the VPI, found that subjects possessed differentiated stereotypes of the specified occupational group members which were consistent with the model orientations of Holland's theory. However, those stereotypes were inaccurate when overall responses to the VPI were utilized and compared to criterion groups composed of members of the specified occupational groups.

Similarly to studies using the SVIB, (Garry 1953; Wallace, 1950; Longstaff, 1948) Elmendorf's study using the VPI suggests that occupational stereotypes are not entirely accurate, however, similarly to the other studies (Benton and Kornhauser, 1948; Bordin, 1943; Gehman, 1957; Strong, 1943; Wallace, 1950) it also attests to the existence of differential perception of specified occupational group members.

Content of Occupational Stereotypes

The early empirical investigations of occupational stereotypes involved studies relevant to industrial relations. Haire and Grunes (1950) found that perception of a person in the role of a factory worker modified various other aspects of the observer's view of the person. Haire (1955) asked labor union and managerial personnel to check adjectives they considered applicable to men shown in photographs with accompanying brief biographical statements. He found significant differences in the subjects' responses depending upon whether the men were labeled as union officials or plant managers.

The above studies provide evidence supporting the existence of
stereotypes in the industrial world, shed light on the perception of industrial personnel and point out that perceiver's attitudes influence perception.

Walker (1958) asked college students to choose from a list of 112 adjectives the five which in their opinion best described members of each out of ten occupational groups. Using a technique devised to measure the strength of stereotypes and based on the number of adjectives sufficient to account for 5% of the total votes cast for each occupation, Walker found that the doctor was the most highly stereotyped occupation and the trade union leader the least stereotyped one. Comparing his results to previous studies on ethnic and racial stereotypes, Walker concluded that occupational stereotypes are approximately as powerful as ethnic and racial stereotypes. He also urged more research of the nature of occupational images and their development.

Following Walker's investigation of the strength of occupational stereotypes numerous studies (Dipboye and Anderson, 1961; Hollander and Parker, 1969; O'Dowd and Beardslee, 1960, 1967) on students' perception of the occupational world have been conducted. Of those, two studies have been selected to be reviewed below because of their meaningfulness and relevance to the present investigation.

Both studies have been conducted by O'Dowd and Beardslee (1960, 1967) and constitute the most ambitious and comprehensive effort to study the images with which students operate in their approach to the career world.

In their 1960 study, O'Dowd and Beardslee investigated student perceptions of fifteen high level occupations in terms of the
characteristics of the images, their degree of differentiation and their stability when different categories of the college population were compared.

To measure stereotypes O'Dowd and Beardslee developed an instrument, utilizing the semantic differential technique, which consisted of thirty-four bipolar rating scales covering life style, work satisfaction, personality characteristics and social relationships associated with occupational titles. When the mean scale values for each occupation were calculated, distinct profiles were obtained for each occupation. Those were summarized in descriptive vignettes to give a sense of what students believe about the kind of people and life style associated with each occupation. The justification for drawing these rather general portraits as representative of the occupational images held by college students was the high agreement observed among the profiles produced by the different subject populations.

This high degree of consensus on the shape of individual occupational profiles among different samples of students was accompanied by large differences between profiles of different occupations. This finding indicated that college students agree on the specific stereotype of each of the fifteen occupations studied.

Another aspect of O'Dowd and Beardslee's (1960) study was observation of the extent to which college women share with men stereotypes about the male occupational world. Women were asked to rate the fifteen occupations on the same scales on which men rated them, however, the instructions given to women requested them to evaluate the occupations as they involve men in our society. When women's perceptions
were compared with those of men, it was found that women consistently assigned more extreme values to occupations than men. The women were in agreement with men on the more objective dimensions of the occupational world (material and social success) but less in agreement with men regarding the qualities of motivational, intellectual and emotional life which were seen as more attractive by women than by men.

O'Dowd and Beardslee's 1967 study drew on the data collected in their previous project and focused on the consistency of student images of occupations over a four-year period. It also compared occupational stereotypes held by high school students with those of college freshmen, seniors and faculty. The second study, similarly to the first one, also established the existence and content of a system of stereotypes shared by a large population. In addition, it revealed the high stability of the stereotyping system. The findings indicated that changes in the occupational images were very small, and that occupational stereotypes held by high school students were firmly established by the time they entered the tenth grade.

When college faculty perceptions were compared with those of college students, a high degree of agreement was found on the major outlines of the images. The degree of agreement varied as a function of the occupational title. For example, the faculty had much more negative views than the students of the occupations of lawyer, physician, business executive and school teacher. However, with regard to the image of accountants, scientists and artists, students and faculty were in substantial, though not complete agreement.

Another focus of the 1967 study was the perception of occupations
for women by undergraduate students. A new set of occupational titles
was used consisting of high level occupations entered primarily by
women, and also of some occurring both in men's and women's occupa-
tional world. The selection of those occupations was based on litera-
ture about women's occupations and discussions with experts in this
field. A list of fifteen occupations was prepared and rated by college
students on a specially constructed set of thirty-four bipolar scales.
Small but significant differences were found between occupational
stereotypes of women and men in those occupations for which data on
both sexes were available (college professor, doctor, artist, school
teacher, social worker and scientist).

O'Dowd and Beardslee (1967), not assigning much importance to the
above differences, concluded that in line with the civil rights move-
ment, women are perceived equally with men in specified occupations.
This general similarity of occupational stereotypes of men and women,
however, does not necessarily reflect reality. It can be a function
of the specific nature of the occupations used in the study and/or
the dimensions tapped by the rating scales. It is possible that dif-
ferences between the occupational stereotypes of men and women are
reflected in dimensions untapped by O'Dowd and Beardslee's (1967)
questionnaire. In their questionnaire, the authors did not include
items identified as masculine or feminine sex role stereotypes, thus
rendering their instrument invalid for assessing perception of occupa-
tions as a function of the sex of the person in occupation.

Another possible reason for finding only relatively unimportant
differences between occupational stereotypes of men and women could
have been the fact that the sex of the perceiver was not used as an independent variable in the experimental design of O'Dowd and Beardslee's study. Not attempting to control for the sex of the subject, could have contributed to obscure some real differences existing between the images of men and women in similar occupations.

The methodological problems inherent in O'Dowd and Beardslee's (1967) study are being eliminated in the present investigation by several procedures:

1. A new process of selecting occupations to be rated, based primarily on eliciting sexual stereotypes of occupations;
2. Using only those occupational titles perceived as extremely masculine, feminine or neutral;
3. Eliminating effects of particular occupations by combining several occupations into one sexually defined dimension;
4. Using both high and low level occupations;
5. Constructing rating scales directly relevant to those perceptual dimensions hypothesized to differentiate between the perception of males and females;
6. Using the sex of the perceiver as an additional independent variable.

Thus, the present study not only provides information about the perception of individuals in various occupations, but sheds light on the images of persons in sex-appropriate and sex-inappropriate occupations. This information is particularly meaningful in light of the fact that occupational images play an important role in career
development. Research regarding one aspect of career development, namely occupational preferences and their relationship to occupational stereotypes is reviewed below.

**Occupational Stereotypes, Self Concepts and Occupational Preferences**

The formulation of Super’s (1957) theory of career development gave impetus to a new research trend focusing on the relationships between occupational stereotypes, self concepts and occupational preferences.

Schutz and Blocher (1960) found that high school senior boys' vocational preferences were related to occupational stereotypes selected as self descriptive.

Blocher and Schutz (1961) found that a person's declared interest in an occupation varied directly with the degree of acceptance of the occupational stereotype as self descriptive or self enhancing. The subject perceived both his self concept and his ideal self concept to be more similar to his stereotypes of workers in occupations with high claimed interest than in his equivalent stereotypes of workers in occupations with little claimed interest. The findings suggest than an individual may be expected to be interested in an occupation whose members he stereotypes as being similar to himself.

Pallone and Hosinski (1967) investigated the relationship between subjects' self and ideal self concepts and their perceptions of an "ideal" member of an occupational group, rather than a typical member. Subjects were students already engaged in one of seven levels of professional nursing education programs ranging from freshman to graduate students. Coefficients of correlation between self and ideal self,
self and ideal nurse and ideal self-ideal nurse were computed. Results indicated statistically significant correlations between ideal self and occupational role percepts and between self and ideal role percepts. At each level of educational development the congruence between ideal self and occupational role percepts exceeded that between self and occupational role percepts. Relatively higher levels of congruence between self and ideal self and between self and occupational role percepts were observed among graduate nursing students who have attained "adult" status as members of the profession.

The authors interpret their findings in terms of a self concept theory of vocational development. Unlike Super (1957) who views career choice as a process of self concept implementation, Pallone and Hosinski (1967) view it as a process of selecting an occupational role allowing actualization of the ideal self. Results of their study suggest that research on occupational stereotypes and their relationship to occupational preferences should provide information on both typical and ideal occupational role percepts and their relationship to vocational preferences.

Englander (1960) studied the relationship between self perception and perception of people and situations relevant to one's chosen occupation. He had a sample of elementary education majors, education majors in other areas and non-education majors perform Q sorts describing themselves and teaching. Congruency indices between self and elementary teacher perception were computed and compared for the three groups. Each differed significantly from the other two. The results supported the prediction that prespective teachers do indeed see a closer
relationship between their personal characteristics and those of a teacher than do subjects choosing other occupations.

Morrison (1962), using Q sorts to measure self and occupational concepts, found that self perceptions of nursing students were more similar to the role percepts of a nurse than of a teacher, whereas the self perceptions of education majors were more similar to those of a teacher than of a nurse.

Both the Englander and the Morrison studies suggest that similarity of self concept and occupational stereotype influence vocational choice.

Oppenheimer (1966) studied the hypothesis that a positive correlation exists between an occupational preference hierarchy based on predictions made from the degree of agreement between self and occupational role percepts, and the occupational preference hierarchy directly reported by the subject.

Eighty-one male college students were asked to rate self and occupational titles on a modified semantic differential. Each subject has also responded to an Occupational Preference Ranking Instrument which elicited an expressed occupational hierarchy of seven occupations which represent a continuum from the occupation the subject would most like to enter and to the occupation he would least prefer. Correlation coefficients were computed between the occupational preference hierarchy, predicted from the agreement between self and occupational ratings and subject's expressed preference hierarchy. Results indicated that occupational preferences reported by subjects were consistent with their self concepts: subjects showed significantly more agreement between their self concepts and two most preferred
occupations than between their self concept and two non-preferred occupations.

The findings were interpreted as further evidence supporting Super's (1957) self concept theory of vocational development. The above studies strongly indicate that people prefer occupations perceived as congruent with their self concept. The fact that this relationship has been demonstrated with a sample of high school students (Blocher and Schutz, 1961) female college students (Englandar, 1960; Morrison, 1962), and with male liberal arts students (Oppenheimer, 1966) suggests that this conclusion is applicable to the general population of adolescent and post-adolescent youth.

Summary of Research on Occupational Stereotypes

Studies on occupational stereotypes can be seen in a developmental perspective. First were the studies indicating that such phenomena exist. Next were studies concerned with the content of occupational stereotypes in terms of personality characteristics, social attributes and life style, and the extent of agreement across varying sub-populations. Finally, there are the studies relating occupational stereotypes to other phenomena such as occupational preferences or choices.

Interestingly enough almost no studies on occupational stereotypes dealt with sex as a relevant variable. O'Dowd and Beardslee (1960,1967) were the only investigators who used the sex variable in the context of their broader research. In their first study (1960) sex was used in a rather tangential manner to determine the extent to which college women share men's stereotypes about the male occupational world. In their second project (1967) the authors explored perception of female
occupational roles as expressed by male and female subjects; however, several methodological problems inherent in their design render their conclusions as tentative at best.

The studies on occupational stereotypes strongly suggest that these stereotypes provide a large basis for the kinds of decisions which are subsequently made. Unfortunately, the lion's share of the existing research has not concerned itself with the career development of women, and thus cannot provide information about women's perception of their roles in the occupational world. One of the purposes of this study is to investigate the nature of person perception using the sex of the subject, the sex of the person in occupation and the sexual stereotype of the occupation as three independent variables. This approach will allow to assess women's perception of the occupational world as it applies to both males and females and will identify how women's participation in the world of work is viewed in our society by both men and women.

II. Sex Role Stereotypes

It would be impossible to understand the role of women and men in the occupational world without referring to the sex role stereotypes existing in our culture. Millet (1968) basing her conclusions on statistical facts contends that:

American education is blighted by a sex-split curriculum. At present the whole field of knowledge is divided along tacit but well understood sex lines. Those subjects given the highest status in American life are 'masculine'; those given the lowest are 'feminine'. . . . thus math, the sciences . . . business administration . . . are men's subjects . . . and the humanities are relegated suitable to women. (p. 14)
In the world of work the occupational distribution of the sexes is also unbalanced. The Manpower Report of the President (1967) clearly demonstrated that women are underrepresented in the professional technical categories and that their position has declined in recent years; they work at lower level, lower paying jobs than men.

Career development of both sexes is tied closely with gender identity and gender typed behaviors. Occupational sex stereotyping occurs early in the socialization of children. Schlossberg and Goodman (1972) studied children's sex stereotyping of occupations. They found that kindergarten age children and sixth graders felt that a woman's place was clearly not fixing cars or television sets or designing buildings. The children did say that a woman could work as a waitress, nurse, or librarian. In contrast they did not feel that men had to be similarly limited. In short the children were more ready to exclude women from men's jobs than vice versa.

The recent years have been marked by rapid changes in the conceptualization of sex appropriate behaviors. The feminine ideology as well as forces of social and economic change seem to be modifying sex role perceptions and expectations. However, numerous studies indicate that changes in sex role stereotypes are not occurring as rapidly as the media suggests. Traditional sex role stereotypes still exist among lay public (Rosenkrantz et al., 1968) and professionals (Broverman et al., 1970; Broverman et al., 1972). Thus, although some males and females may be reconceptualizing their sex role stereotypes, the literature reveals that change in perception and evaluation of sex appropriate behaviors has been minimal.
Stability of Sex Role Stereotypes

Sex role stereotypes can be defined as the consensual beliefs about the differing characteristics of men and women in our society (Rosenkrantz, et al., 1968).

A number of studies have demonstrated the existence as well as the pervasiveness and stability of sex role stereotypes.

One of the earliest investigations of sex role stereotypes was that of Fernberger (1948). He presented his undergraduate psychology classes with a lecture that many supposed behavioral and personality characteristics differentially attributed to the sexes had not been experimentally demonstrated. Several days later he administered a questionnaire on these sex differences to 217 female and male students (and subsequently to 54 graduate students).

He found that all the subjects continued to view the sexes stereotypically. Female and male subjects agreed that males, when compared with females were more intelligent, more crude, and possessed more all-around superiority. On the other hand females were seen as the cause of trouble, more sensitive, not liking to fight and talking too much. Fernberger's conclusion was that stereotyped opinions regarding sex roles were difficult to change.

Sherriffs and McKee (1957) used Sarbin's Adjective Check List on which female and male college students were asked to indicate which words characterized males and females "in general". The description of males included such attributes as "straight-forward", intellectually rational", "competent", "bold", and "effective in dealing with the environment". Females were described as "emotionally warm", "emotional", and "sensitive".
"involved with social amenities", "irrational", and "snobbish".

Bennett and Cohen (1959) asked 1300 females and males ranging from 15-64 years of age to describe themselves selecting attributes from a list of 250 adjectives. Women were found to see themselves as being more understanding, sympathetic, generous, affectionate than men see themselves, and more vulnerable and dependent than men.

The studies mentioned above demonstrated the existence of sex role stereotypes using lists of attributes from which subjects selected those traits differentially descriptive of men and women. Rosenkrantz et al., (1968) conceptualized sex roles as the degree to which men and women are perceived to possess any specific trait, and thus attempted to develop a new method of measurement. The Sex Role Questionnaire was constructed in response to this conceptualization. It contained 122 items in bipolar form covering a wide range of content: interpersonal sensitivity, emotionality, aggressiveness, dependence-independence maturity, intelligence, activity level, and others. The questionnaire was administered to male and female subjects with instructions to indicate to what extent each item characterized an adult male (masculinity response), adult female (femininity response), and themselves (self response).

Using the Sex Role Questionnaire with a diverse sample, Rosenkrantz et al., (1968) found that the average masculinity responses given by the male subjects correlated nearly perfectly with the average masculinity responses given by the female subjects ($r = .96$). The mean femininity responses given by the men and those by the women were also highly correlated ($r = .95$). Thus, they concluded that sex role stereotypes
cut across the sex, socioeconomic class, and religion of the respondents.

Responses to the Sex Role Questionnaire have subsequently been obtained from 600 men and 383 women, both married and single, who ranged in age from 17 to 60 years, and in education from the elementary school level to advanced graduate degree level. Even though some variation in ratings existed as a function of age and educational level, high consensus about the differing attributes of men and women was found on a considerable number of items.

Other studies (Sherriffs and Jarrett, 1953; McKee and Sherriffs, 1957, 1959; Lunnenborg, 1970) also confirm the existence of pervasive and persistent sex role stereotypes.

**Evaluation of Sex Role Stereotypes**

The literature indicates that not only the existence but also the evaluation of the sex role stereotypes has remained stable over the past 20 years. Investigators have found that the social desirability of attributes designated as masculine is greater than of those designated as feminine.

Sherriffs and Jarrett (1953) using a checklist of 58 behaviors asked subjects to indicate which of the attributes were characteristic of males and females and also which characteristics they preferred. Consistent with previously mentioned studies, Sherriffs and Jarrett found high consensus between men and women in regard to what constituted masculine and feminine behavior. They also found strong agreement on the evaluation of those behaviors, with both male and female subjects expressing a consistent preference for the masculine attributes.

McKee and Sherriffs (1957) and Sherriffs and McKee (1959) conducted
a series of studies designed to validate Sherriffs and Jarrett's (1953) findings using different methods of measurement. They found that social desirability of masculine and feminine attributes remained relatively constant in spite of the type of methodology employed. Furthermore, their results indicated that while open-ended techniques tend to elicit somewhat egalitarian responses from subjects, forced choice procedures yielded marked preference for the masculine rather than feminine sex role stereotypes.

Similar findings were reported by Rosenkrantz et al., (1968) using the Sex Role Questionnaire. They found that the masculine poles of the various items were more often considered to be socially desirable than the feminine poles. This differential valuation of sex related characteristics was observed in different samples of subjects. Of the 41 items defined as stereotypic, 29 had the masculine pole chosen as more desirable by a majority of each sample.

Broverman et al., (1972) report that additional samples of men and women were given the questionnaire with instructions to indicate that point on each item scale which was most desirable for an adult, sex unspecified. The point most desirable for an adult was found to be closer to the masculine pole on the same 29 stereotypic items on which the masculine pole was more valued by the previous samples. Furthermore, men and women once again showed high consensus about the point on each stereotypic item that was most socially desirable for an adult.

To further explore the dimensions represented by the stereotypic items, factor analyses were conducted separately in both a sample of
men and a sample of women (Brovermen et al., 1972). Each analysis produced two orthogonal factors, accounting on the average for 61% of the total variance. The two factors divided the stereotypic items into those on which the male pole was more socially desirable versus those on which the female pole was more socially desirable. The male-valued items were labeled as the "competence cluster", reflecting such traits as independence, activity, competitiveness, ambition, and leadership. The female-valued items were referred to as the "warmth and expressiveness cluster" and reflected such traits as sensitivity to others, gentleness, tactfulness, tenderness, etc.

In summary, studies examining the evaluation of sex roles stereotypes have shown that masculine characteristics are more highly valued in our society than are feminine characteristics and that the social desirability of masculine and feminine attributes has remained fairly persistent over the last two decades. The positively-valued masculine traits form a "competence cluster" and the positively valued feminine traits form the "warmth and expressiveness" cluster.

Self and Ideal Self Concepts and Sex Role Stereotypes

Several studies dealt with the relationship between sex role stereotyping and the self and ideal self concepts of men and women. Exploration of this relationship is vital to understanding the career development of both sexes particularly in light of Super's (1957) statement that vocational development involves the implementation of self concept.

Rosenkrantz et al., (1968) investigated the relationship between self concepts and differentially valued sex role stereotypes in male
and female college students. They administered the Sex Role Questionnaire to 74 males and 80 females with the instructions to mark on the instrument the extent to which they expected each item to characterize the adult male, the adult female, and themselves. The mean self concept for each item was computed for both the sample of men and the sample of women. Significant difference (p < .001) was found between the self concept response of men and women over the 41 stereotypic items. This result indicated the the male and female subjects clearly perceived themselves as differing along a dimension of stereotypic sex differences. Another interesting finding was that the low social desirability of feminine characteristics did not prevent their incorporation in the women's self reports. It seems that women align themselves with both the negative aspects of femininity (relative incompetence, irrationality, passivity, etc.) and the positive ones (warmth and expressiveness). However, the self-concepts of both men and women differed significantly from the stereotypic expectations each sample had for its own sex. Both men and women perceived themselves as less masculine and feminine, respectively, than their perceptions of the "average" male or female.

Research evidence suggests that the existing stereotypic difference between men and women are approved of and even idealized by large segments of our society. Elman et al., (1970) investigated ideal sex role concepts for both men and women. Using a shortened version of the Sex Role Questionnaire which included 10 male stereotypic and 10 female stereotypic items, they asked both men and women to indicate that point on each item which is ideal for men and for women, respectively. Results
indicated that the ideal man and woman concepts in both male and female subjects closely parallel the male and female sex role stereotypes. The ideal woman was perceived as significantly less aggressive, less active, less independent, less dominant, and less competent than the ideal man; the ideal man was seen as less religious, less gentle, less interpersonally sensitive than the ideal woman. It seems that greater competence in men than in women and greater warmth in women than in men is highly desirable in our society.

Broverman et al. (1972) report similar findings using the long form of the Sex Role Questionnaire and a sample of 137 college males. The findings indicate the college men feel it is desirable for women to adhere to the stereotypically feminine and negatively valued characteristics, e.g., lack of competence, lack of independence and ambition. For men, however, the rules are different. The ideal male is perceived to possess the masculine traits which are socially desirable for adults in general, and also 40% of those feminine characteristics which are socially desirable for women. Statistically significant difference ($p < .01$) exists between the amount of each trait assigned to men and women, indicating that male valued traits are significantly less desirable for women than female valued traits for men.

The above cited studies both suggest that the college population, a group which tends to be critical of traditional social norms, nonetheless believes that the existing sex role stereotypes are desirable.

A substantial amount of studies have dealt with the relationship between sex role stereotypes and ideal self concepts in the context of career choice of women. Farmer and Bohn (1970) found scores on the
Strong Vocational Interest Blank career scales increased and scores on the homemaking scales decreased when 50 working women were instructed to respond as though men like intelligent women and family and career could be combined successfully. Consistent with these results Gray-Shellberg et al., (1972) found in studying the resolution of home-career conflicts in male and female college and non-college students, that the majority of women were motivated to subordinate their interests to those of a fiancé or husband. The men in the sample perceived this as the accepted state of affairs. Once again the sex role stereotype of the female as dependent, unambitious, and not so competent determined the life style choices of women.

Hawley (1971) studied women's perceptions of men's views of the ideal woman relative to these women's careers and then replicated the study on a college sample (Hawley 1972). She found that women's perceptions of man's ideal woman differed as a function of their present career (Hawley 1971) or the career for which they were preparing (Hawley 1972). Those who were in traditionally feminine occupations or preparing for them thought that men view behavior in a sex linked way, while those in non-traditional occupations or preparing for them believed men did not view sex as a determinant of attitudes and behaviors. Despite the greater freedom in career choice, women planning to enter male dominated careers were more concerned about male support than those with more traditional career goals. Only 10% reported they would pursue present choices over the objections of significant men in their lives. One of Hawley's (1972) conclusions was that unlike men, women's career selection is not independent of mate selection. The societal
expectations that a woman should be supportive of a man and not seek self expression through a career reflect the sex role stereotypes existing in our society.

As pointed out earlier, both sexes see the ideal man and woman congruently with their respective sex role stereotypes. Women's perceptions of man's ideal woman influence their career choices and life styles. It is important to indicate that women's perceptions of male attitudes correspond to men's expressed attitudes.

Rossi (1965) found that college men hold traditional attitudes toward women's roles. Two thirds of the men expressed an opinion that women should not choose a career which is difficult to combine with child rearing regardless of their interests and abilities. Furthermore, the men tended to prefer sequential work patterns for women, in which active participation in the occupational world is subservient to child rearing responsibilities.

Kaley (1971) in studying the attitudes toward the dual role of the married professional woman, found that married professional women have positive attitudes toward their dual role of career and marriage while married professional men have negative attitudes toward the dual role.

When asked to indicate their preferred career-home role combination for their future wives over 50% of the college men (1085 unmarried male students) did not consider the possibility of a life time career for their spouses, even with an interruption for child raising (McMillan, 1972).

Meier's (1972) study of college youth's attitudes toward social equality for women found female undergraduates scoring higher on
feminine social equality than male undergraduates. She also found that where the mother exhibits involvement in occupational roles outside the home the males are more positive about social equality for women.

In summary, the literature on male attitudes toward the vocational roles of women suggests that the sex role stereotypes influence men's views of the women's career development. The ideal woman is portrayed mainly as a homemaker and child bearer, subservient, and supportive of the male who is the "breadwinner" and the career oriented person in the family.

Some Consequences of Viewing the Sexes Stereotypically

One area of research dealing with the implications of sex role stereotypes has focused on investigating deviations from normative sex role behaviors. Studies have been conducted in the context of mental health criteria for both sexes, evaluation of professional competence, and likability of males and females exhibiting sex appropriate and sex inappropriate behavior and the role conflict experienced by women in our society.

Goldberg (1968) tested the hypothesis that women view their own sex as inferior in particular in the areas of professional and intellectual competence. He found that 140 college women evaluated a professional article more negatively if they thought it was written by a woman vs. a man even in traditionally feminine fields. When the article bore a male name, the women consistently rated it as more valuable and the author as more competent. Thus, even amongst the educated segments of the population, traditional beliefs about women's inferiority strongly prevail.
Broverman et al., (1970) used the Sex Role Questionnaire with a population of mental health professionals. They hypothesized that the judgments about the behavioral attributes characterizing healthy, mature individuals would differ as a function of the person judged. They also expected that the differences in clinical judgments would parallel stereotypic sex role differences and that traits regarded as a standard of mental health would resemble behaviors judged healthy for men but not for women.

Seventy-nine practicing mental health clinicians (psychologists, psychiatrists, and psychiatric social workers) were administered the 122 item bipolar Sex Role Questionnaire with one of the three instructional sets to describe a healthy, mature, socially competent a. adult sex unspecified, b. a man, and c. a woman. The results indicate a high agreement among both female and male clinicians as to the attributes characterizing healthy adult men, healthy adult women and healthy adults, sex unspecified. Clinicians had different concepts of health for women and men and the differences paralleled the sex role stereotypes. That is, clinicians tended to suggest that healthy women differ from healthy men by being more submissive, less independent, less adventurous, less objective, more easily influenced, less aggressive, less competitive, more excitable in minor crises, more emotional, more conceited about their appearance, and having their feelings more easily hurt. The clinicians' ratings of a healthy adult and a healthy man did not differ from each other, but the conception of a mature, healthy woman did differ significantly from the conception of a healthy adult. The hypothesis that a double standard of health exists for men and women was
thus confirmed: the general standard of mental health is actually applied to men only, while healthy women are perceived as significantly less healthy by adult standards.

Burhenne (1972) investigated female and male evaluations of sex appropriate and sex inappropriate sex role stereotypes on four dimensions: mental health and interpersonal comfort, likability, status, and ability. She found that subjects (100 male and 100 female college students) evaluated sex appropriate sex role stereotypes as more mentally healthy and interpersonally comfortable, and more likable than sex inappropriate sex role stereotypes. Furthermore, masculine sex appropriate sex role stereotypes were evaluated as more mentally healthy and interpersonally comfortable than feminine sex appropriate sex role stereotypes. Burhenne (1972) points out that the findings hold implications for the attribution of pathology to individuals who deviate from expected societal sex role stereotypes. Thus, career oriented women exhibiting masculine behavioral attributes may be perceived as less well adjusted than traditionally feminine homemaker women by college students, clinicians, and the public. Similarly, men interested in the traditionally feminine occupational fields may be perceived as less well adjusted than those interested in the traditionally masculine occupations.

Osipow and Gold's (1968) study lends support to the above findings. They found that the interests, as measured by the SVIB, of clients having personality adjustment problems are counter to social expectations of their sex. Women with personality adjustment problems had far fewer primary patterns in the domestic area on the SVIB and a higher
proportion of reject patterns in the traditionally feminine occupations like teaching, than women who had no personality adjustment problems. Similarly, men with personality adjustment problems demonstrated interest patterns counter to the masculine sex role stereotype existing in the American culture.

Another study, which is only tangentially related to attribution of pathology to individuals deviating from the social vocational norms is that by Roe and Siegelman (1964). These researchers investigated the relationship between certain antecedent conditions (childhood experiences) and particular subsequent events (adult interests and activities). They administered several inventories and questionnaires to a sample of 24 male and 25 female engineers, 22 male and 23 female social workers and 142 Harvard University seniors from different academic disciplines. The inventories and questionnaires includes information about the subject's general and occupational interests, several measures of the subject's personality and data about the subject's perceptions of early personal relations with parents.

One of Roe and Siegelman's (1964) conclusions is that while occupational choice, at least for social workers and engineers, seems to be related to personality characteristics of the subject, similar childhood experiences do not systematically lead to the same choice. Thus men social workers and female engineers appear to have had more stressful childhood experiences than male engineers and female social workers, and this seems to be in some way related to their later attempts to defy social vocational norms. Even though Roe and Siegelman's (1964) study does not provide any direct evidence supporting the attribution
of maladjustment to people deviating from their vocationally appropriate sex role stereotypes, it points out that early stressful experiences (likely to be related to indices of mental health) are instrumental in choosing sex inappropriate careers.

One serious consequence of viewing the sexes stereotypically is the role conflict women are experiencing in today's society. To the extent that the sex role stereotypes reflect the societal standards for sex appropriate behavior women are clearly put in a double bind by the fact that different standards exist for women than for adults. If women adopt the behaviors specified as desirable for adults, they risk censure for their failure to be appropriately feminine; but if they adopt the behaviors that are designated as feminine, they are necessarily deficient with respect to the general standards for adult behavior.

This conflict is reflected in numerous studies conducted in the context of women's career development. Houts and Entwisle (1968) asked 405 tenth-grade girls from a wide range of socioeconomic backgrounds about their attitudes towards grades and the women's role. They found a significant, positive relationship between attitude toward achievement and school grades for those who perceived masculine achievement orientation and competition appropriate to woman's role, but not for those who held the traditional sex role orientation emphasizing homemaking and child rearing responsibilities. Thus, women's perceptions of the appropriateness of competition to conceptions of femininity mediate their academic achievement which in turn affects later career development.
Horner (1969) has documented a motive to avoid success in college women. Experimentally, she inferred fear of success from fear of success imagery in thematic apperception stories. She found more than 65% of the female subjects (N = 90) projecting fear of success themes on the story stimuli whereas less than 10% of the male subjects (N = 88) did so. Horner defined the motive to avoid success as a tendency to anxiety about achieving because of expected negative consequences of success. Horner's explanation of her results is based on the notion of sex appropriate and sex inappropriate behavior. Femininity as defined by the American culture, and achievement are mutually exclusive. Anticipation of success over a male can provoke anxieties in women about the loss of femininity and self esteem. Thus, fear of success can inhibit positive achievement and career motivations and aspirations.

Steinmann, Levi, and Fox (1964) documented the existence of the intrapsychic conflict experienced by women by showing the discrepancies between women's self concept, ideal self concept, and their perceptions of man's ideal woman concept. They found that female college students perceived themselves as integrating almost equal components of passive and active orientations while their ideal woman was slightly more active and self assertive. However, they viewed man's ideal woman as significantly more passive in the sense that she saw her own satisfactions as subordinate to those of her husband and family and her family responsibilities as taking precedence over any occupational activity. Since other studies (Matthews and Tiedeman, 1964; Entwisle and Greenberger, 1970; Farmer and Bohn, 1970) have indicated that women's career choices and life styles are greatly influenced by attitudes toward marriage
and male perceptions of women's roles, the background for the role conflict in women is clear. The attitudinal framework of both sexes appears to inhibit qualified women from seeking higher education and professional careers, goals which are incongruent with the normative gender-typed behaviors.

Summary of Research on Sex Role Stereotypes

The literature surveyed in this section of the paper demonstrates the contemporary existence of clearly defined sex role stereotypes for men and women. Characteristics ascribed to men are positively valued more often than characteristics ascribed to women. The positively valued masculine traits consist of behaviors which entail competence, rationality, independence and assertion; the positively-valued feminine traits entail behaviors reflecting warmth and emotional expressiveness. Both men and women incorporate both the positive and negative traits of the appropriate stereotype into their self concepts. Moreover, these sex role differences are considered desirable by college students, healthy by mental health professionals and are even seen as ideal by both men and women. Since more feminine traits are negatively valued than are masculine traits, women tend to have more negative self concepts than do men. The tendency of women to see themselves as inferior to men is an evidence to the powerful social pressure to conform to the sex role standards of the society. This pressure is an important factor in women's career development and their life style choices. One implication of the findings is that both sexes, but in particular women, are constrained in their development by those standards constituting the gender-appropriate behaviors.
**Statement of the Problem**

Much of the research on occupational stereotypes has confined itself to examining the existence, the content and the stability of occupational images and their relationship to occupational preferences and choices. Unfortunately, not much attention has been paid to the effects of sex role stereotyping on the career development of both men and women. The literature suggests that both the occupational and sex role stereotypes play an important role in the kinds of lifestyle and career decisions which are subsequently made. It appears that an understanding of the factors which influence the entry of women into occupational roles must begin with the relationship between sex role and occupational role. It also seems logical to assume that men's life styles and career choices are mediated by the normative, sex-appropriate behaviors, which have been incorporated into men's self concepts.

The present study stems from the combination of research in the areas of occupational and sex role stereotypes. Its main concern is assessment of person perception as a function of the sex appropriateness or sex inappropriateness of the person's occupation.

The effects of three sexually relevant variables on person perception are being investigated:

1. sex of the perceiver,
2. sex of the stimulus person,
3. sexual dimension of the occupation.

The last variable is comprised of three levels: masculine occupations, feminine occupations and neutral (sex unidentified) occupations.
The instrument used to investigate subjects' perceptions of stimulus persons in sex appropriate, sex inappropriate and neutral occupational dimensions is the Impressions Questionnaire constructed by the experimenter for the purpose of this study. It consists of twenty rating scales which are conceptualized to represent the following dimensions: personal adjustment and interpersonal comfort; political liberalism and individualism; professional competence and influence; attractiveness; happiness in home life; intelligence; sex role stereotypic attributes and likability.

Hypotheses

This study is exploratory in nature since the interaction of the three sex related variables in the context of person perception has not been investigated before. However, the existing data on occupational and sex role stereotypes warrant several specific hypotheses.

The first hypothesis concerns subjects' impressions of stimulus persons on the dimensions of personal adjustment (Scales 1 and 2).

**H-1** Evaluations of stimulus persons on the scales related to personal adjustment will differ as a function of the sex appropriateness of the occupation being judged. Stimulus persons in sex-appropriate occupations will be evaluated as better personally adjusted than stimulus persons in sex-inappropriate occupations.

The next hypothesis concerns subjects' impressions of stimulus persons on the dimensions of interpersonal adjustment. (Scales 3 and 4)

**H-2** Evaluation of stimulus persons on the scales related to interpersonal adjustment will differ as a function of the sex appropriateness of the occupation being judged. Stimulus persons in sex-appropriate occupations will be evaluated as better interpersonally adjusted than
stimulus persons in sex-inappropriate occupations.

The next hypothesis deals with subjects' evaluation of the stimulus persons on the dimension of political liberalism and individualism. (Scales 5 and 6)

**H-3** Evaluations of stimulus persons on the dimensions of political liberalism and individualism will differ as a function of the sex appropriateness of the occupation. People in sex-inappropriate occupations will be evaluated as more liberal and individualistic than people in sex-appropriate occupations.

The next hypothesis concerns subjects' evaluations of the stimulus persons on the dimension of professional competence and influence. (Scales 8 and 9)

**H-4** Evaluations of the stimulus persons on the dimensions of professional competence and influence will differ as a function of the sex of the stimulus person. Women will be judged as less professionally competent and less influential than men across all occupations.

The following hypothesis deals with subjects' evaluations of stimulus persons on the dimensions related to sex role stereotypes. (Scales 13-19)

**H-5** Evaluations of stimulus persons on the sex role stereotypic attributes will differ as a function of an interaction between the sex of the stimulus person and the sexual dimension of the occupation. Women in sex-inappropriate occupations will be perceived congruently with the masculine sex role stereotype. Similarly, men in sex-inappropriate occupations will be perceived congruently with the feminine sex role stereotype.
The following hypothesis deals with subjects' evaluations of stimulus persons on the dimension of likability. (Scale 20)

**H-6** Evaluations of stimulus persons on the dimension of likability will differ as a function of the sex appropriateness of the occupation. Stimulus persons in sex-appropriate occupations will be evaluated as more likable than stimulus persons in sex-inappropriate occupations.

The following hypothesis deals with subjects' evaluations of stimulus persons in the masculine, the feminine and the neutral occupational dimension.

**H-7** Evaluations of stimulus persons will differ as a function of the sexual dimension of the occupation. The largest difference in stimulus person perception will occur between the masculine and the feminine dimension with the neutral dimension falling between the two.
CHAPTER II

Experiment I

Method

The purpose of this study was to obtain ratings of occupations in terms of their being perceived as feminine, masculine, or neutral.

Subjects Three groups of undergraduate students in an introductory psychology course at The Ohio State University, 60 males and 60 females, served as subjects.

Instruments A list of 129 occupations (Appendix I) was constructed according to Roe's (1956) classification of occupations. The occupations included in the list represent the 8 dimensions of Roe's occupational space: service, business contact, organization, technology, outdoor, science, general-cultural and arts and entertainment. Each occupational area has a hierarchy of 3 levels equivalent to the top 4 levels in Roe's system, in the following way:

Level 1 occupations included in the occupational list consist of a combination of the first 2 levels in Roe's system, i.e., professional-managerial 1 (independent responsibility) and professional-managerial 2.

Level 2 consists of occupations labeled as level 3 in Roe's system, i.e., semi-professional and small business occupations.

Level 3 consists of occupations equivalent to level 4 in Roe's system, i.e., skilled occupations.
The assignment of occupations to the eight occupational fields and the three levels was based on Roe's (1956) classification as set out in her book *The Psychology of Occupations*, and Meir's (1968) occupational questionnaire developed for the purpose of empirically studying the structure of Roe's classification system.

The order of the occupations was randomized within the list. The pages of the list were arranged in two orders, the second order being the reverse of the first. In the administration of the questionnaire, half the subjects received the first order and the other half the second order. Each occupation appearing on the list was followed by a 7-point ranking scale representing the degree to which occupations are perceived as feminine, masculine, or neutral.

**Procedure** Each group of subjects was presented with the list of occupations and the ranking scales, and asked to respond according to the instructions provided on the first page of the questionnaire. The commonly accepted basis for identifying sex-related occupations is the proportion of men and women employed in an occupation; however, other criteria for rating are also possible, for example, personality attributes linked with occupations and sex, physical capabilities required to perform certain jobs, personal experience with the occupational world, etc. In order to avoid one-sided identification of sex-related occupations based on a preconceived notion of the basis for making those ratings, each group received different instructions. Three types of instructions were used in the study:

- **Group 1** subjects received "vague" instructions, (with no structure for rating) based on the standard semantic differential scales
technique (Osgood et al., 1957), (Appendix II). After completion of the questionnaire, the subjects were asked to report the basis on which they made their judgments.

Group 2 was asked to rank the occupations on the basis of the proportion of men and women employed in them as perceived by the subject (Appendix III).

Group 3 ranked occupations on the basis of the sex-related attributes linked with each occupation (Appendix IV).

Thirteen subjects from the "vague" instructions group were administered the occupations ranking task 3 weeks after they first responded to it in order to determine the test-retest reliability of the occupational ratings.

Results

The occupational ratings data were analyzed separately for each group and for the males and females in each group. The scale interval values were assigned numbers from 1 to 7, with 1 representing the masculine end of the continuum, 7, the feminine end of the continuum, and 4, the middle, neutral interval.

For each occupation the mean ranking, standard deviation, and standard error of the mean were calculated. Pearson product moment correlations were computed across all occupations between the 6 subgroups of subjects resulting from the combination of 3 instruction groups times 2 sexes. The correlation matrix is presented in Table 1. It shows that the mean rating given by the men to all 129 occupations correlated .97 or above with the mean rating given by the women under all instruction conditions. The correlations between the three instruc-
Table 1
CORRELATION MATRIX FOR MALES AND FEMALES
BETWEEN THE THREE INSTRUCTION TYPES

<table>
<thead>
<tr>
<th></th>
<th>&quot;Vague&quot;</th>
<th></th>
<th>&quot;Proportion&quot;</th>
<th></th>
<th>&quot;Personality Attributes&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Males</td>
<td>Females</td>
<td>Males</td>
</tr>
<tr>
<td>&quot;Vague&quot;</td>
<td>1.0000</td>
<td>0.9695</td>
<td>0.9734</td>
<td>0.9678</td>
<td>0.9773</td>
</tr>
<tr>
<td>Females</td>
<td>0.9695</td>
<td>1.0000</td>
<td>0.9570</td>
<td>0.9577</td>
<td>0.9546</td>
</tr>
<tr>
<td>&quot;Proportion&quot;</td>
<td>0.9734</td>
<td>0.9570</td>
<td>1.0000</td>
<td>0.9795</td>
<td>0.9687</td>
</tr>
<tr>
<td>Females</td>
<td>0.9578</td>
<td>0.9577</td>
<td>0.9755</td>
<td>1.0000</td>
<td>0.9597</td>
</tr>
<tr>
<td>&quot;Personality&quot;</td>
<td>0.9773</td>
<td>0.9648</td>
<td>0.9687</td>
<td>0.9597</td>
<td>1.0000</td>
</tr>
<tr>
<td>Attributes&quot;</td>
<td>0.9569</td>
<td>0.9816</td>
<td>0.9535</td>
<td>0.9501</td>
<td>0.9652</td>
</tr>
</tbody>
</table>
tion groups for male and female subjects varied between .95 and .98, the smallest being .950 between the mean ratings given by women in the "proportion" instructions group and those given by women in the "personality attributes" instructions group.

Since the correlations between the mean ratings given by both sexes within and between the instruction groups were extremely high, the subsequent analysis of the ratings designed to determine the sexual stereotypes of occupations was conducted across all the subjects and all the instruction groups (6 subgroups).

The criterion for identifying typically feminine, typically masculine, and neutral occupations was the mean rating of the occupation and the standard deviation of the rating scores across the 6 subgroups. Those occupations whose mean rating was close to 1 with the smallest variance were labeled masculine occupations; those occupations whose mean rating was closest to 4 with the smallest variance were labeled neutral occupations; and those occupations whose mean rating was closest to 7 with the smallest variance were labeled feminine occupations. The mean scores, standard deviations, and standard errors of the mean computed across all instruction groups are presented in Appendix V.

Twelve occupational titles were selected to be used in the experiment proper, representing 4 masculine, 4 feminine, and 4 neutral occupations. The occupational level was controlled by assigning an equal number of occupations belonging to the same occupational level to each of the 3 sexual dimensions of the occupations. The occupations selected to be used in Experiment 2, their mean rankings, standard deviations
and standard errors of the mean, across all subjects are presented in Table 2.

**Reliability of the Occupational Scales**

Test-retest reliability of the occupational ratings was measured using a group of 13 subjects, who rated the occupations under the semantic differential instructions (group 1 instructions). The mean rating for each occupation was computed. Test-retest reliability over a period of 3 weeks was .97.

In each occupational questionnaire the occupation of pediatrician appeared twice, on two different pages of the questionnaire. Within subject reliability on this scale was .78.

**Analysis of Variance for Occupational Ratings**

A two way ANOVA, 3 (instruction group) X 2 (sexes) X 120 (subjects) was conducted on the occupational ratings data to determine the effects of the subject's sex and the three types of instructions on perception of occupations as feminine, masculine, and neutral. Results of this analysis are presented in Table 3. The significant main effect of instructions (p < .001) on sexual stereotyping of occupations indicates that occupations are viewed as most masculine under the "proportion" instructions (mean score = 2.88). There is no difference in perception between the other two instruction groups (mean score = 3.18).

The significant main effect of the subject's sex (p < .001) on sexual stereotyping of occupations indicates that women perceive occupations as masculine to a lesser degree than male subjects do.

The significant interaction between instruction groups and sex of the subject (p < .001) indicates that males under "vague" instructions
### Masculine Occupations

<table>
<thead>
<tr>
<th>Name</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error of the Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Attorney</td>
<td>1.583</td>
<td>0.265</td>
<td>0.149</td>
</tr>
<tr>
<td>Engineer</td>
<td>1.917</td>
<td>0.447</td>
<td>0.193</td>
</tr>
<tr>
<td>Race Car Driver</td>
<td>1.583</td>
<td>0.447</td>
<td>0.193</td>
</tr>
<tr>
<td>Used Car Sales Dealer</td>
<td>2.083</td>
<td>0.629</td>
<td>0.229</td>
</tr>
</tbody>
</table>

### Neutral Occupations

<table>
<thead>
<tr>
<th>Name</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error of the Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journalist</td>
<td>3.833</td>
<td>0.152</td>
<td>0.112</td>
</tr>
<tr>
<td>Counseling Psychologist</td>
<td>4.000</td>
<td>0.182</td>
<td>0.123</td>
</tr>
<tr>
<td>Comedian</td>
<td>3.750</td>
<td>0.386</td>
<td>0.179</td>
</tr>
<tr>
<td>Assistant in a Scientific Laboratory</td>
<td>4.167</td>
<td>0.697</td>
<td>0.241</td>
</tr>
</tbody>
</table>

### Feminine Occupations

<table>
<thead>
<tr>
<th>Name</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error of the Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Librarian</td>
<td>5.583</td>
<td>0.992</td>
<td>0.288</td>
</tr>
<tr>
<td>Nurse (Registered)</td>
<td>6.583</td>
<td>0.265</td>
<td>0.149</td>
</tr>
<tr>
<td>Private Secretary</td>
<td>6.250</td>
<td>1.295</td>
<td>0.329</td>
</tr>
<tr>
<td>Manicurist</td>
<td>6.667</td>
<td>0.242</td>
<td>0.142</td>
</tr>
</tbody>
</table>
Table 3

ANALYSIS OF VARIANCE FOR SEXUAL STEREOTYPING OF OCCUPATIONS

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation (O)</td>
<td>OI</td>
<td>1270.072</td>
<td>129</td>
<td>9.84552</td>
<td>80.4744</td>
<td>.001</td>
</tr>
<tr>
<td>Instructions Type (I)</td>
<td>OI</td>
<td>15.78618</td>
<td>2</td>
<td>7.89309</td>
<td>80.4744</td>
<td>.001</td>
</tr>
<tr>
<td>Sex of Subject (S)</td>
<td>OS</td>
<td>4.33325</td>
<td>1</td>
<td>4.33325</td>
<td>64.3603</td>
<td>.001</td>
</tr>
<tr>
<td>O x I</td>
<td>OIS</td>
<td>25.30513</td>
<td>258</td>
<td>1.43564</td>
<td>29.8813</td>
<td>.001</td>
</tr>
<tr>
<td>O x S</td>
<td>OIS</td>
<td>8.68531</td>
<td>129</td>
<td>.06733</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I x S</td>
<td>OIS</td>
<td>2.87128</td>
<td>2</td>
<td>2.98813</td>
<td>29.8813</td>
<td>.001</td>
</tr>
<tr>
<td>O x I x S</td>
<td>OIS</td>
<td>12.39556</td>
<td>258</td>
<td>.04805</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(group 1) and under "sex related personality attributes" instructions (group 3) rate occupations as slightly more masculine than females do.

The interaction between instruction groups and sex of the subject is presented in Table 4.

Criteria for Occupational Ratings in the "Vague" Instructions Group

Seventy-three percent of the 45 subjects in the "vague" instructions group used perceived proportion of men and women in occupations as the primary criterion for their ratings. An additional 13% used proportion as their secondary criterion. Thus, a total of 86% of the subjects receiving "vague" instructions reported relying on proportion estimates in their occupational ratings.
Table 4

SEXUAL STEREOTYPING OF OCCUPATIONS
AS A FUNCTION OF SEX OF SUBJECT X
INSTRUCTIONS TYPE INTERACTION

<table>
<thead>
<tr>
<th>Instructions</th>
<th>Sex of Subject</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>&quot;Vague&quot;</td>
<td>3.1066</td>
<td>3.2672</td>
</tr>
<tr>
<td>&quot;Proportion&quot;</td>
<td>2.8824</td>
<td>2.8773</td>
</tr>
<tr>
<td>&quot;Personality Attributes&quot;</td>
<td>3.0303</td>
<td>3.3219</td>
</tr>
<tr>
<td>Mean</td>
<td>3.0064</td>
<td>3.1554</td>
</tr>
</tbody>
</table>
EXPERIMENT II

Method

The purpose of this study was to assess perception of stimulus persons in sex-appropriate, sex-inappropriate, and neutral occupations.

Subjects A sample of 114 undergraduate students (57 females and 57 males) from an introductory psychology course at The Ohio State University participated in the study.

Instruments

Development of the Impressions Questionnaire

The main objective of this part of the study was to build an instrument which would be similar to Osgood's semantic differential (1957), but which would be specifically aimed to tap those dimensions of person perception relevant to the concepts investigated in the study.

Thirty-seven 7-point bipolar scales representing some of the dimensions along which people perceive others were prepared. The 37 scales were selected on the basis of their face validity as measures of the perceptual dimensions relevant to the study. Some of them were selected from Harrison's (undated) Person Description Instrument, PDI, which was developed to measure objectively which concepts individuals employ to describe others. Based on a series of factor analytic studies, Harrison selected a number of bipolar scales to yield 6 interpersonal
and 4 non-interpersonal dimensions along which person perception is structured. Additional scales were selected from those employed by O'Dowd and Beardslee (1960) in their study of occupational stereotypes and from the Sex-Role Questionnaire developed by Rosenkrantz et al., (1968). Several scales were constructed by the experimenter on the basis of their relevance to the hypotheses being tested in the study.

The 37 bipolar scales were presented to 10 judges (8 graduate students and 2 faculty members in psychology). Each judge was asked to sort out the traits into an unlimited number of categories, each category consisting of interrelated traits, and to label each category in terms of the construct being measured by the scales. The allocation of the scales into categories revealed 9 clusters. Each cluster was then labeled by the experimenter in congruence with the names used by the judges, eg.: labels like psychic health, mental health, psychic comfort or adjustment were summarized by the experimenter under the label of personal adjustment; labels like vocationality, professionalism, vocational adjustment were collapsed under the label of professional competence, etc.

The scales most representative of each cluster (based on the number of judges who classified them as belonging to that cluster) were subsequently presented to a new group of judges (11 graduate students in psychology) whose task was to rank order the traits in each category from the most to the least representative trait of the category.

The purpose of the above analysis was to ascertain the face validity of the scales and to determine which scales will be included in the final form of the Impressions Questionnaire.
The following 20 scales were finally selected to be included in the Impressions Questionnaire. The source of each scale and the cluster it was judged to represent are indicated for each of the scales (p.53).

Procedure The experiment was conducted in two sessions one week apart. Dividing the experiment into two sessions was done to insure independency of judgments, ability to complete the ratings within a reasonable time limit, and to alleviate fatigue. Completion of one questionnaire took between 15-30 minutes.

On each of the sessions the subject received a booklet entitled "Impressions Questionnaire" consisting of 12 stimulus persons, each in a different occupation, and was asked to rate the stimulus person on the provided scales. Two booklets were constructed identical in terms of the occupations presented in them - 4 masculine, 4 feminine, and 4 neutral (see Table 2) - and different in terms of the sex of the stimulus person in each occupation. Sample pages for one occupation are presented in Appendix VI. All together 24 stimulus persons were rated by each subject, 12 on each session, in such a manner that each occupation appeared only once in each booklet; that is, on each session the subject rated 6 male and 6 female stimulus persons in different occupations.

Four random orders of rating scales were used in each questionnaire, and the scales' polarity was varied randomly within each order.

Each Impressions Questionnaire was constructed in such a way that an equal number of stimulus persons in sex-appropriate, sex-inappropriate, and neutral occupations was presented on each session, that is 2 males and 2 females in each of the three sexual dimensions of occupations.
<table>
<thead>
<tr>
<th>Scale</th>
<th>Source</th>
<th>Cluster</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. has personality adjustment problems/does not have personality</td>
<td>Harrison's PDI</td>
<td>Personal adjustment</td>
</tr>
<tr>
<td>adjustment problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. relaxed/tense</td>
<td>Harrison's PDI</td>
<td>Personal adjustment</td>
</tr>
<tr>
<td>3. comfortable with others/uncomfortable with others</td>
<td>Harrison's PDI</td>
<td>Interpersonal adjustment</td>
</tr>
<tr>
<td>4. sociable/unsociable</td>
<td>O'Dowd and Beardslee (1960)</td>
<td>Interpersonal adjustment</td>
</tr>
<tr>
<td>5. politically liberal/politically conservative</td>
<td>Constructed by experimenter</td>
<td>Political and social attitudes</td>
</tr>
<tr>
<td>6. conformist/individualist</td>
<td>Constructed by experimenter</td>
<td>Political and social attitudes</td>
</tr>
<tr>
<td>7. good looking/unattractive</td>
<td>Constructed by experimenter</td>
<td>Physical attractiveness</td>
</tr>
<tr>
<td>8. professionally competent/professionally incompetent</td>
<td>Constructed by experimenter</td>
<td>Professional competence</td>
</tr>
<tr>
<td>9. influential/uninfluential</td>
<td>Harrison's PDI</td>
<td>Professional competence</td>
</tr>
<tr>
<td>10. great personal satisfaction/little personal satisfaction</td>
<td>O'Dowd and Beardslee (1960)</td>
<td>Personal satisfaction</td>
</tr>
<tr>
<td>11. happy home life/unhappy home life</td>
<td>O'Dowd and Beardslee (1960)</td>
<td>Happiness in home life</td>
</tr>
<tr>
<td>12. intelligent/dull</td>
<td>Harrison's PDI</td>
<td>Intellectuality</td>
</tr>
<tr>
<td>13. competitive/uncompetitive</td>
<td>Rosenkrantz et al., 1968</td>
<td>Sex-role stereotypes</td>
</tr>
<tr>
<td>14. self assertive/submissive</td>
<td>Rosenkrantz et al., 1968</td>
<td>Sex-role stereotypes</td>
</tr>
<tr>
<td>15. active/passive</td>
<td>Rosenkrantz et al., 1968</td>
<td>Sex-role stereotypes</td>
</tr>
<tr>
<td>16. dependent/independent</td>
<td>Rosenkrantz et al., 1968</td>
<td>Sex-role stereotypes</td>
</tr>
<tr>
<td>17. emotional/rational</td>
<td>Rosenkrantz et al., 1968</td>
<td>Sex-role stereotypes</td>
</tr>
<tr>
<td>18. aggressive/meek</td>
<td>Rosenkrantz et al., 1968</td>
<td>Sex-role stereotypes</td>
</tr>
<tr>
<td>19. socially sensitive/socially insensitive</td>
<td>Rosenkrantz et al., 1968</td>
<td>Sex-role stereotypes</td>
</tr>
<tr>
<td>20. likable/unlikable</td>
<td>Constructed by experimenter</td>
<td>Likability</td>
</tr>
</tbody>
</table>
The order of stimulus person presentation was randomized and the pages of the questionnaire were arranged in two orders, the second order being the reverse of the first. In the administration of the questionnaire half the subjects received the first order and the other half the second order. Each subject was asked to indicate his name, sex, and age on the first page of the Impressions Questionnaire. Then instructions (adapted from Osgood et al., 1957) were presented (Appendix VII). Fourteen subjects were administered one of the Impressions Questionnaires 17 days after they first responded to it. The objective was to collect data on the test-retest reliability of the Impressions Questionnaire scales. Test retest reliability was calculated on 3360 scores pairs (across 14 subjects X 12 occupations X 20 scales). The resulting Pearson r was .68.

Results

Data from this experiment were analyzed by two methods differing in the nature of the dependent variables used.

Method I The dependent variables were scores (1 through 7) on each of the 20 scales included in the Impressions Questionnaire. A 3-way analysis of variance, 3 (sexual dimension of the occupation) X 2 (sex of the subject) X 2 (sex of the stimulus person), was conducted for each of the scales used, yielding a total of 20 separate analyses of variance (Appendix VIII).

More detailed report of data analyzed by Method I will not be presented here, and the reader is referred to the appendices for more specific information. The wealth and complexity of data obtained through this method make a coherent and meaningful presentation almost impossible.
In order to attain a more parsimonious description of observed data, Method II of analysis is introduced. It proved to be more instrumental in dealing with issues raised by this investigation.

**Method II** The major aim of this method was data reduction as a means to provide better understanding of the variables involved. The first step of the procedure was to determine the coefficients of correlation of all the variables (scales) with one another, to factor analyze this correlation matrix and to rotate the resultant factor axes using the Varimax technique. This technique provides a meaningful solution in the sense that each of the variables loads highly on only one or two factors with near zero loadings on all others. The second step was to conduct a 3 way analysis of variance 3 (sexual dimensions of occupation) X 2 (sex of the subject) X 2 (sex of stimulus person) using factor scores as the dependent variables.

The mathematical procedure of factor analysis used in this investigation was that of principal components analysis, which consists of finding the characteristic vectors of the correlation matrix. The objective is to portray a set of associated variables in terms of a set of orthogonal linear combinations of those variables. The linear combinations are chosen so that each set of component scores accounts for a decreasing proportion of the variance in the original variables, subject to being orthogonal with previously extracted components.

The Pearson product moment correlation coefficients were calculated between the 20 variables (scales) of the Impressions Questionnaire. The coefficients are presented in Table 5. The correlation matrix was factor analyzed using the principal components method. The resultant
## Table 5

Intercorrelations matrix for the 20 Impressions Questionnaire Scales.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>1.0000</td>
<td>0.4104</td>
<td>0.1457</td>
<td>0.1610</td>
<td>0.1633</td>
<td>0.1540</td>
<td>0.1468</td>
<td>0.1399</td>
<td>0.1315</td>
<td>0.0495</td>
</tr>
<tr>
<td>Row 2</td>
<td>-0.4104</td>
<td>1.0000</td>
<td>0.0723</td>
<td>0.1576</td>
<td>0.1576</td>
<td>0.1536</td>
<td>0.1522</td>
<td>0.1507</td>
<td>0.1502</td>
<td>0.1502</td>
</tr>
<tr>
<td>Row 3</td>
<td>-0.1457</td>
<td>-0.0723</td>
<td>1.0000</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
</tr>
<tr>
<td>Row 4</td>
<td>-0.1610</td>
<td>-0.1576</td>
<td>-0.2163</td>
<td>1.0000</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
</tr>
<tr>
<td>Row 5</td>
<td>0.1633</td>
<td>0.1576</td>
<td>0.2163</td>
<td>0.2163</td>
<td>1.0000</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
</tr>
<tr>
<td>Row 6</td>
<td>0.1540</td>
<td>0.1536</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>1.0000</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
</tr>
<tr>
<td>Row 7</td>
<td>0.1468</td>
<td>0.1522</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>1.0000</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
</tr>
<tr>
<td>Row 8</td>
<td>0.1399</td>
<td>0.1507</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>1.0000</td>
<td>0.2163</td>
<td>0.2163</td>
</tr>
<tr>
<td>Row 9</td>
<td>0.1315</td>
<td>0.1502</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>1.0000</td>
<td>0.2163</td>
</tr>
<tr>
<td>Row 10</td>
<td>0.0495</td>
<td>0.1502</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>0.2163</td>
<td>1.0000</td>
</tr>
</tbody>
</table>
unrotated factor matrix (Appendix X) indicated that the first 9 factors account for 74% of the total variance. Harman (1967, Chapter 9) presents some guidelines for "when to stop factoring". One practical approach suggested is that

If after 75 percent...of the total variance is accounted for, any additional factor accounts for less than 5 percent it would not be retained. Such arbitrary consideration is quite apart from the statistical significance of such an additional factor--it is dropped because the decision was made beforehand that any factor having such small impact on the total variance could hardly have any practical significance. (p. 198)

Based on Harman's suggestion a decision was made to rotate only 9 out of the 20 extracted principal components. This number coincides with the 9 conceptual clusters in terms of which the original hypotheses were stated. The Varimax rotation method was applied to obtain the most meaningful and interpretable factor structure while keeping the axes orthogonal.

The rotated factor matrix showing the principal results of the Varimax rotation is presented in Table 6. The results in the table should be looked at both vertically and horizontally. Each column represents a factor and is indicated by roman numerals. The entries in the table, the factor loadings, are the correlation coefficients between each variable and each factor. A positive loading measures the degree to which a characteristic is associated with the cluster. A negative loading measures the degree to which the absence of a characteristic is associated with the cluster. Each factor is defined by the variables on which it has the highest loadings, either positive or negative.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor</th>
<th>I Leadership</th>
<th>II Interpersonal Adjustment &amp; Likability</th>
<th>III Professional &amp; Intellectual Competence</th>
<th>IV Personal Adjustment</th>
<th>V Social Sensitivity</th>
<th>VI Social Activity</th>
<th>VII Happiness in Home Life</th>
<th>VIII Physical Attractiveness</th>
<th>IX Liberalism and Individualism</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. maladjusted/adjusted</td>
<td></td>
<td>-0.11</td>
<td>-0.11</td>
<td>-0.12</td>
<td>-0.78</td>
<td>0.01</td>
<td>0.21</td>
<td>0.07</td>
<td>-0.20</td>
<td>-0.02</td>
</tr>
<tr>
<td>2. relaxed/tense</td>
<td></td>
<td>0.02</td>
<td>0.15</td>
<td>-0.08</td>
<td>0.65</td>
<td>0.05</td>
<td>0.13</td>
<td>0.06</td>
<td>-0.09</td>
<td>0.09</td>
</tr>
<tr>
<td>3. comfortable with others/uncomfortable with others</td>
<td></td>
<td>0.21</td>
<td>0.85</td>
<td>0.16</td>
<td>0.12</td>
<td>0.03</td>
<td>-0.03</td>
<td>0.03</td>
<td>-0.02</td>
<td>0.08</td>
</tr>
<tr>
<td>4. sociable/unsociable</td>
<td></td>
<td>0.30</td>
<td>0.75</td>
<td>0.05</td>
<td>0.13</td>
<td>0.10</td>
<td>0.04</td>
<td>0.04</td>
<td>0.26</td>
<td>0.09</td>
</tr>
<tr>
<td>5. politically liberal/politically conservative</td>
<td></td>
<td>0.17</td>
<td>0.14</td>
<td>0.00</td>
<td>0.03</td>
<td>0.07</td>
<td>0.00</td>
<td>0.08</td>
<td>0.08</td>
<td>0.86</td>
</tr>
<tr>
<td>6. conformist/individualist</td>
<td></td>
<td>-0.46</td>
<td>-0.06</td>
<td>-0.18</td>
<td>-0.07</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.02</td>
<td>-0.06</td>
<td>-0.61</td>
</tr>
<tr>
<td>7. good looking/unattractive</td>
<td></td>
<td>0.18</td>
<td>0.17</td>
<td>0.09</td>
<td>0.06</td>
<td>0.00</td>
<td>0.03</td>
<td>0.07</td>
<td>0.88</td>
<td>0.10</td>
</tr>
<tr>
<td>8. professionally competent/professional incompetent</td>
<td></td>
<td>0.15</td>
<td>0.18</td>
<td>0.76</td>
<td>-0.00</td>
<td>0.04</td>
<td>0.11</td>
<td>-0.00</td>
<td>0.12</td>
<td>-0.05</td>
</tr>
<tr>
<td>9. influential/uninfluential</td>
<td></td>
<td>0.54</td>
<td>0.17</td>
<td>0.39</td>
<td>0.11</td>
<td>0.15</td>
<td>-0.14</td>
<td>0.07</td>
<td>0.11</td>
<td>0.16</td>
</tr>
<tr>
<td>10. great personal satisfaction/little personal satisfaction</td>
<td></td>
<td>0.49</td>
<td>0.11</td>
<td>0.46</td>
<td>0.13</td>
<td>0.10</td>
<td>0.10</td>
<td>0.15</td>
<td>0.13</td>
<td>0.18</td>
</tr>
<tr>
<td>11. happy home life/unhappy home life</td>
<td></td>
<td>0.10</td>
<td>0.07</td>
<td>0.14</td>
<td>-0.01</td>
<td>0.01</td>
<td>-0.03</td>
<td>0.07</td>
<td>0.07</td>
<td>0.01</td>
</tr>
<tr>
<td>12. intelligent/dull</td>
<td></td>
<td>0.36</td>
<td>0.13</td>
<td>0.62</td>
<td>0.13</td>
<td>0.18</td>
<td>-0.04</td>
<td>0.08</td>
<td>0.17</td>
<td>0.24</td>
</tr>
<tr>
<td>13. competitive/uncompetitive</td>
<td></td>
<td>0.79</td>
<td>0.08</td>
<td>0.14</td>
<td>0.00</td>
<td>-0.05</td>
<td>0.09</td>
<td>0.03</td>
<td>0.17</td>
<td>0.11</td>
</tr>
<tr>
<td>14. self-assertive/submissive</td>
<td></td>
<td>0.80</td>
<td>0.17</td>
<td>0.16</td>
<td>0.03</td>
<td>-0.00</td>
<td>0.06</td>
<td>0.07</td>
<td>0.01</td>
<td>0.05</td>
</tr>
<tr>
<td>15. active/passive</td>
<td></td>
<td>0.17</td>
<td>0.04</td>
<td>0.03</td>
<td>-0.04</td>
<td>-0.07</td>
<td>0.93</td>
<td>-0.03</td>
<td>0.04</td>
<td>0.07</td>
</tr>
<tr>
<td>16. dependent/independent</td>
<td></td>
<td>-0.57</td>
<td>-0.06</td>
<td>-0.27</td>
<td>-0.11</td>
<td>-0.10</td>
<td>-0.15</td>
<td>-0.00</td>
<td>0.09</td>
<td>-0.26</td>
</tr>
<tr>
<td>17. emotional/rational</td>
<td></td>
<td>-0.30</td>
<td>-0.01</td>
<td>0.67</td>
<td>-0.13</td>
<td>0.17</td>
<td>0.11</td>
<td>-0.14</td>
<td>0.19</td>
<td>-0.02</td>
</tr>
<tr>
<td>18. aggressive/meek</td>
<td></td>
<td>0.82</td>
<td>0.22</td>
<td>0.10</td>
<td>-0.01</td>
<td>-0.07</td>
<td>0.05</td>
<td>0.00</td>
<td>0.09</td>
<td>0.13</td>
</tr>
<tr>
<td>19. socially sensitive/socially insensitive</td>
<td></td>
<td>0.01</td>
<td>0.12</td>
<td>0.04</td>
<td>0.03</td>
<td>0.06</td>
<td>-0.06</td>
<td>0.01</td>
<td>0.01</td>
<td>0.04</td>
</tr>
<tr>
<td>20. likable/unlikable</td>
<td></td>
<td>0.03</td>
<td>0.53</td>
<td>0.43</td>
<td>0.13</td>
<td>0.16</td>
<td>0.13</td>
<td>0.11</td>
<td>0.33</td>
<td>0.21</td>
</tr>
</tbody>
</table>
A set of factor identifications is proposed below:

The particular name by which the factor is designated should not raise an issue for dispute. If another investigator chooses to call these factors by other names he is free to do so. The naming of factors is not a problem of factor analysis, which is a branch of statistics, but some descriptive names may be highly desirable in a particular field for purposes of classification. (Harman, 1967, p. 134)

**Factor I - Leadership**

This factor has high positive loadings on variables 13 (competitiveness), 14 (self-assertiveness), 15 (independence), and 18 (aggressiveness). These 4 variables are associated with masculine sex role stereotypes in our culture. The factor has negligible loadings, however, on variables 15 (activity), 17 (emotionality), and 19 (social sensitivity) - traits which are also sexually stereotypic.

The smaller loadings on 9 (influence) and 10 (great personal satisfaction) are consistent with the factor interpretation as reflecting leadership.

**Factor II - Interpersonal Adjustment and Likability**

This factor has high loadings on variable 3 (comfort with others), variable 4 (sociability), and variable 20 (likability). It has negligible loadings on the rest of the variables. The high loading of this factor on variables 3 and 4 is congruent with the conceptual cluster which these two variables were thought to represent in the Impressions Questionnaire and in terms of which the second hypothesis was formulated. The smaller loading on variable 20 (likability) is consistent with the factor interpretation.

**Factor III - Professional and Intellectual Competence**

This factor has high loadings on variables 8 (professional
competence), 12 (intelligence), and 17 (rationalism). These three are clearly reflected in the factor's name.

Smaller loadings of Factor III on variable 9 (influence), variable 10 (personal satisfaction), and variable 20 (likability) are consistent with the factor's definition as professional and intellectual competence.

**Factor IV - Personal Adjustment**

This factor's highest loadings are on variables 1 (no personality adjustment problems) and 2 (being relaxed). It has negligible loadings on the rest of the variables. The high loading of this factor on variables 1 and 2 is congruent with the conceptual cluster these two variables were supposed to represent in the Impressions Questionnaire, and in terms of which the first hypothesis was formulated.

**Factor V - Social Sensitivity**

This factor has only one large loading on variable 19, actually rating social sensitivity. Its loadings on the remaining nineteen variables are negligible. Variable 19 (social sensitivity) was originally included in the Impressions Questionnaire as one of the sex-role stereotypic items, however, the correlation matrix (Table 5) and the principal components analysis show that this variable is independent of any other conceptual cluster.

**Factor VI - Activity**

This factor has large loading on only one variable, 15, actually measuring activity. Its loadings on the remaining nineteen variables are negligible. Variable 15 was originally included in the Impressions Questionnaire as one of the sex-role stereotypic items, however, both
the correlation matrix (Table 5) and the principal components analysis show that this variable is independent of any other conceptual cluster.

**Factor VII - Happiness in Home Life**

This factor has large loading on only one variable, 11, actually rating happiness in home life. Its loadings on the remaining nineteen variables are negligible. Variable 11 was originally included in the Impressions Questionnaire as a conceptually independent item and the principal components analysis supported this view.

**Factor VIII - Physical Attractiveness**

This factor has its largest loading on variable 7 actually rating physical attractiveness. A small loading of Factor VIII on variable 20 (likability) is consistent with the factor designation.

The high loading of Factor VIII on variable 7 supports the original conceptualization of this variable as being independent of any other cluster.

**Factor IX - Liberalism and Individualism**

This factor has large loadings on variables 5 (political liberalism) and 6 (individualism). It has small loadings on variable 12 (intelligence) and variable 16 (independence) which is consistent with the factor interpretation.

Factor IX is congruent with the conceptually derived cluster of political liberalism and individualism in terms of which the third hypothesis of this investigation was stated.

**Computation of Factor Scores**

One of the main goals of this study was to investigate the nature of person perception as a function of the sex of the person-in-
occupation, the sex of the perceiver and the sexual dimension of the occupation. The statistical analysis utilized for this purpose was a 3 way analysis of variance, 2 (sex of the person-in-occupation) \( \times \) 2 (sex of the perceiver) \( \times \) 3 (sexual dimension of the occupation). The dependent variables on which the analysis of variance was conducted were factor scores (defined below). The use of factor scores in an analysis of variance is an acceptable procedure and common in applied research. (Press, 1972, p. 293)

Each subject's original 20 scores were now replaced with a new set of 9 factor scores. Each factor score is a weighted sum of the scores on the variables making up a factor according to the following equation

\[
F_{ij} = a_{i1}Z_{1,j} + \cdots + a_{ik}Z_{k,j} + \cdots + a_{i20}Z_{20,j}
\]

where

- \( F_{ij} \) is factor score on factor \( i \) for subject \( j \)
- \( a_{ik} \) is the factor loading of factor \( i \) on scale \( k \)
- \( k \) is the scale number (\( k = 1, \ldots, 20 \))
- \( Z_{kj} \) is the standard score of subject \( j \) on scale \( k \)

The standard score that is weighted by the factor loading is the raw scale score after a transformation to a standard normal distribution. Thus the standard score for subject \( j \) on scale \( k \) is

\[
z_{k,j} = \frac{X_{kj} - \bar{X}_k}{\sigma_k}
\]

where

- \( X_{kj} \) is the raw score on scale \( k \) for subject \( j \)
Xk is the mean (across subjects) of scale k
σk is the standard deviation of scale k

Analysis of Variance

A 2 (sex of the stimulus person) X 2 (sex of the subject) X 3 (sexual dimension of the occupation) X 114 (subjects) ANOVA was conducted separately on each of the 9 factor scores. Results of each of the 9 analyses of variance are reported below. Perception of stimulus persons as a function of the sexual dimension of the occupation (labeled from now on as dimension) on each of the 9 factors is presented in Figure 1.

Perception of stimulus persons as a function of the interaction between the sex of the stimulus person and the dimension is presented in Figure 2.

Perception of stimulus persons as a function of the sex of the perceiver is presented in Figure 3, and perception of stimulus persons as a function of the sex of the stimulus person is illustrated by Figure 4.

Examination of the analysis of variance results reveals that both the sexual dimension of the occupation and the specific nature of each occupation within dimension are important factors in stimulus person perception. One of the main interests in this study is the investigation of person perception as a function of the sexual dimension of the occupation, rather than as a function of the particular occupational title. In line with this purpose the results section will be limited to findings associated with the sexual stereotyping of occupations and will not focus on the differences existing between particular occupations.
Fig. 1 Perception of Stimulus Persons as a Function of Dimension.
Fig. 2 Perception of Stimulus Persons as a Function of Their Sex and Occupational Dimension.
Fig. 3 Perception of Stimulus Persons as a Function of the Sex of the Perceiver.
Fig. 4 Perception of Stimulus Persons as a Function of Their Sex
The reader interested in a more detailed presentation of data related to the function of specific occupations in stimulus person perception is referred to in Appendices X through XVI.

Appendix X shows the mean scores of each occupation within dimension on each of the nine factors. Appendix XI - XVI show the differences in stimulus person perception as a function of the particular occupation and either the sex of the perceiver or the sex of the stimulus person.

ANOVA For Factor I - Leadership

Results of this analysis are presented in Table 7. It shows a significant main effect of the sex of the stimulus person on the perception of stimulus persons (p < .05) indicating that males are perceived as possessing fewer leadership qualities than females across the three dimensions of occupations. (Mean score for males = 0.03; mean score for females = -0.03). The main effect of dimension on the perception of stimulus persons (p < 0.001) indicates that people in masculine occupations are judged to have more leaderlike characteristics than their counterparts in feminine occupations. People in neutral occupations are seen more as leaders than their counterparts in feminine occupations, however, less so than people in masculine occupations. This effect of dimension on stimulus person perception is clearly illustrated in Figure 1.

The significant interaction between sex of the stimulus person and dimension (p < .005) as graphically presented in Figure 2 indicates that the effect of dimension is not independent of the sex of the stimulus person. While males and females in masculine and neutral occupa-
### Table 7

#### ANALYSIS OF VARIANCE FOR FACTOR I

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>Sums of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of perceiver (A)</td>
<td>S(A)</td>
<td>2.986403</td>
<td>1</td>
<td>2.986403</td>
<td>1.2586</td>
<td>.2586</td>
</tr>
<tr>
<td>Sex of stimulus person (B)</td>
<td>S(B)</td>
<td>2.416258</td>
<td>1</td>
<td>2.416258</td>
<td>5.5072</td>
<td>.05</td>
</tr>
<tr>
<td>Sexual dimension of occupation (D)</td>
<td>SD(A)</td>
<td>965.9597</td>
<td>2</td>
<td>482.9797</td>
<td>351.0017</td>
<td>.001</td>
</tr>
<tr>
<td>Subjects within sex S(A)</td>
<td>S(A)</td>
<td>265.7495</td>
<td>112</td>
<td>2.372763</td>
<td>3.4942</td>
<td>.005</td>
</tr>
<tr>
<td>Occupation within dimension O(D)</td>
<td>SO(AD)</td>
<td>160.7830</td>
<td>9</td>
<td>17.86476</td>
<td>7.4447</td>
<td>.005</td>
</tr>
<tr>
<td>A x B</td>
<td>S(B)</td>
<td>.03027534</td>
<td>1</td>
<td>.03027534</td>
<td>0.0690</td>
<td>.9686</td>
</tr>
<tr>
<td>A x D</td>
<td>SD(A)</td>
<td>20.48779</td>
<td>2</td>
<td>10.24390</td>
<td>7.4447</td>
<td>.005</td>
</tr>
<tr>
<td>P x D</td>
<td>SBD(A)</td>
<td>6.321777</td>
<td>2</td>
<td>3.160889</td>
<td>8.4801</td>
<td>.005</td>
</tr>
<tr>
<td>B x S(A)</td>
<td>S(A)</td>
<td>49.13914</td>
<td>112</td>
<td>4.382423</td>
<td>8.4801</td>
<td>.005</td>
</tr>
<tr>
<td>D x S(A)</td>
<td>S(O(D)</td>
<td>308.2246</td>
<td>224</td>
<td>1.376002</td>
<td>1.3588</td>
<td>.2586</td>
</tr>
<tr>
<td>A x C(D)</td>
<td>S(O(D)</td>
<td>6.522461</td>
<td>9</td>
<td>0.7247179</td>
<td>0.8488</td>
<td>.9686</td>
</tr>
<tr>
<td>B x C(D)</td>
<td>S(O(D)</td>
<td>4.554199</td>
<td>9</td>
<td>0.5060221</td>
<td>1.6112</td>
<td>.005</td>
</tr>
<tr>
<td>A x B x D</td>
<td>SBD(A)</td>
<td>.6327972</td>
<td>2</td>
<td>.316886</td>
<td>0.8488</td>
<td>.9686</td>
</tr>
<tr>
<td>S(A) x O(D)</td>
<td>S(O(D)</td>
<td>537.6360</td>
<td>1,008</td>
<td>533.3690</td>
<td>1.2349</td>
<td>.2586</td>
</tr>
<tr>
<td>B x D x S(A)</td>
<td>S(O(D)</td>
<td>83.49391</td>
<td>224</td>
<td>372.7806</td>
<td>1.2349</td>
<td>.2586</td>
</tr>
<tr>
<td>A x B x O(D)</td>
<td>SBD(A)</td>
<td>3.489258</td>
<td>9</td>
<td>3.826953</td>
<td>1.2349</td>
<td>.2586</td>
</tr>
<tr>
<td>B x S(A) x O(D)</td>
<td>S(O(D)</td>
<td>316.4514</td>
<td>1,008</td>
<td>313.9399</td>
<td>1.2349</td>
<td>.2586</td>
</tr>
</tbody>
</table>
tions are perceived as being more leaderlike than their counterparts in feminine occupations, small but significant differences can be seen between the perception of males and females in the same dimension. Males in masculine occupations are seen as slightly more leaderlike than females in masculine occupations with the reverse occurring in feminine and neutral occupations. In those occupations females are judged as having slightly more leadership qualities than males.

The largest difference between male and female stimulus persons exists in the feminine dimension.

The only other significant interaction is between sex of perceiver and sexual dimension of occupation ($p < .005$).

This interaction presented in Table 8 indicates that while both female and male subjects view stimulus persons in the masculine dimension as having more leadership qualities than their counterparts in either the feminine or the neutral dimension, consistent differences exist between male and female subjects within each dimension. Persons in masculine and neutral occupations are viewed by female subjects as being more leaderlike than when viewed by male subjects. Persons in feminine occupations are viewed by female subjects as less leaderlike than when viewed by male subjects.

**ANOVA For Factor II - Interpersonal Adjustment and Likability**

Results of this analysis are presented in Table 9. The significant main effect of the sex of the perceiver ($p < .025$) on the perception of stimulus persons indicates that female subjects perceive people-in-occupations as better interpersonally adjusted and more likable than do male subjects (mean score for female subjects = -0.10; mean score
Table 8
Stimulus Person Perception on Factor I
As A Function of Sex of Perceiver X
Dimension Interaction

<table>
<thead>
<tr>
<th></th>
<th>Masculine Dimension</th>
<th>Feminine Dimension</th>
<th>Neutral Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Perceiver</td>
<td>-0.5753</td>
<td>0.7038</td>
<td>-0.0290</td>
</tr>
<tr>
<td>Female Perceiver</td>
<td>-0.7124</td>
<td>0.8755</td>
<td>-0.2619</td>
</tr>
<tr>
<td>Source</td>
<td>Error Term</td>
<td>Sums of Squares</td>
<td>Degrees of Freedom</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------------</td>
<td>-----------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Sex of perceiver (A)</td>
<td>S(A)</td>
<td>25.67104</td>
<td>1</td>
</tr>
<tr>
<td>Sex of stimulus person (B)</td>
<td>SB(A)</td>
<td>20.43976</td>
<td>1</td>
</tr>
<tr>
<td>Sexual dimension of occupation (D)</td>
<td>SD(A)</td>
<td>10.19927</td>
<td>2</td>
</tr>
<tr>
<td>Subjects within sex S(A)</td>
<td>533.7498</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>Occupation within dimension O(D)</td>
<td>SO(AD)</td>
<td>299.6577</td>
<td>9</td>
</tr>
<tr>
<td>A x B</td>
<td>SB(A)</td>
<td>0.09002686</td>
<td>1</td>
</tr>
<tr>
<td>A x D</td>
<td>SD(A)</td>
<td>1398268</td>
<td>2</td>
</tr>
<tr>
<td>B x S(A)</td>
<td>SB(D)</td>
<td>47.07254</td>
<td>2</td>
</tr>
<tr>
<td>D x S(A)</td>
<td>63.18390</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>A x O(D)</td>
<td>SO(AD)</td>
<td>34.20294</td>
<td>9</td>
</tr>
<tr>
<td>B x O(D)</td>
<td>23.04636</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>A x B x D</td>
<td>6508331</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>S(A) x O(D)</td>
<td>782.0068</td>
<td>1,008</td>
<td></td>
</tr>
<tr>
<td>B x D x S(A)</td>
<td>134.1760</td>
<td>224</td>
<td></td>
</tr>
<tr>
<td>A x B x O(D)</td>
<td>4.275497</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>B x S(A) x O(D)</td>
<td>536.8279</td>
<td>1,008</td>
<td></td>
</tr>
</tbody>
</table>
for male subjects = +0.10). The significant main effect of the sex of the stimulus person (p < .001) on the perception of stimulus persons indicates that females-in-occupations are viewed as better interpersonally adjusted and more likable than males-in-occupations.

The significant main effect of dimension (p < .01) on the perception of stimulus persons indicates that people in neutral and feminine occupations are viewed as slightly better interpersonally adjusted and more likable than people in masculine occupations. (See Figure 1)

The significant interaction between the sex of stimulus person and dimension (p < .001) as presented in Figure 2 indicates that the effect of dimension is not independent of the sex of the stimulus person. Whereas only very slight differences between males and females exist in the masculine and neutral dimension, the feminine dimension clearly differentiates between the sexes. Females in the feminine occupational dimension are viewed as better interpersonally adjusted and more likable than males in this dimension.

ANOVA For Factor III - Professional and Intellectual Competence

Results of this analysis are presented in Table 10. The significant main effect of the sex of the perceiver (p < .05) on stimulus person perception indicates that males perceive people-in-occupation as less professionally and intellectually competent than females, however, the difference is small (mean score for male subjects = 0.08; mean score for female subjects = -0.08).

The significant main effect of dimension (p < .001) on stimulus person perception indicates that people in feminine occupations are perceived as least competent, whereas those in neutral occupations as
## Table 10

**ANALYSIS OF VARIANCE FOR FACTOR III**

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>Sums of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of perceiver (A)</td>
<td>S(A)</td>
<td>19.03450</td>
<td>1</td>
<td>19.03450</td>
<td>4.1148</td>
<td>.05</td>
</tr>
<tr>
<td>Sex of stimulus person (B)</td>
<td>SB(A)</td>
<td>.1530125</td>
<td>1</td>
<td>.1530125</td>
<td>0.2483</td>
<td></td>
</tr>
<tr>
<td>Sexual dimension of occupation (D)</td>
<td>SD(A)</td>
<td>18.22670</td>
<td>2</td>
<td>9.113350</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Subjects within sex S(A)</td>
<td></td>
<td></td>
<td></td>
<td>4.625874</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation within dimension O(D)</td>
<td>SO(AD)</td>
<td>468.8394</td>
<td>9</td>
<td>54.09326</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>A x B</td>
<td>SB(A)</td>
<td>.8839900</td>
<td>1</td>
<td>.8839900</td>
<td>1.4344</td>
<td></td>
</tr>
<tr>
<td>A x D</td>
<td>SD(A)</td>
<td>.7954865</td>
<td>2</td>
<td>.3977432</td>
<td>0.3582</td>
<td></td>
</tr>
<tr>
<td>B x D</td>
<td>SBD(A)</td>
<td>.7978058</td>
<td>2</td>
<td>.3969029</td>
<td>0.7497</td>
<td></td>
</tr>
<tr>
<td>B x S(A)</td>
<td></td>
<td>69.02371</td>
<td>112</td>
<td>.6162831</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D x S(A)</td>
<td></td>
<td>248.7568</td>
<td>224</td>
<td>1.110520</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x O(D)</td>
<td>SO(AD)</td>
<td>27.89834</td>
<td>9</td>
<td>3.097593</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>B x O(D)</td>
<td>SBO(AD)</td>
<td>10.04643</td>
<td>9</td>
<td>1.116270</td>
<td>2.3791</td>
<td>.025</td>
</tr>
<tr>
<td>A x B x D</td>
<td>SBD(A)</td>
<td>.1266179</td>
<td>2</td>
<td>.6030893</td>
<td>0.1133</td>
<td></td>
</tr>
<tr>
<td>S(A) x O(D)</td>
<td></td>
<td>739.0982</td>
<td>1,008</td>
<td>.7332330</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B x D x S(A)</td>
<td></td>
<td>119.1922</td>
<td>224</td>
<td>.5321080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x B x O(D)</td>
<td>SBO(AD)</td>
<td>2.931903</td>
<td>9</td>
<td>.3259670</td>
<td>0.6943</td>
<td></td>
</tr>
<tr>
<td>B x S(A) x O(D)</td>
<td></td>
<td>472.9446</td>
<td>1,008</td>
<td>.4691910</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
most competent. As seen in Figure 1 those differences are rather slight.

ANOVA For Factor IV - Personal Adjustment

Results of this analysis are presented in Table 11. A significant main effect of dimension \( (p < .001) \) on stimulus person perception indicates that personal adjustment is judged to be greatest in neutral occupations and smallest in masculine occupations, with feminine occupations somewhere between the other two. As shown in Figure 1, the differences between the three dimensions are rather slight.

The significant interaction between the sex of the stimulus person and the sex of the perceiver \( (p < .001) \) indicates that while female subjects perceive male and female stimulus persons to be equally well adjusted, males perceive male stimulus persons to be slightly better adjusted than female stimulus persons. The differences between the mean factor scores are very small and do not exceed .09 in standard scores.

ANOVA For Factor V - Social Sensitivity

Results of this analysis are presented in Table 12.

A significant main effect of the sex of the stimulus person \( (p < .05) \) on stimulus person perception indicates that females-in-occupation are perceived as slightly more socially sensitive than males (mean score for females = -0.04; mean score for males = 0.04). A significant main effect of dimension \( (p < .001) \) on stimulus person perception indicates that social sensitivity is judged to be greatest in neutral and feminine occupations and smallest in masculine occupations. The differences between the three dimensions are presented in Figure 1.

ANOVA For Factor VI - Activity
Table 11
ANALYSIS OF VARIANCE FOR FACTOR IV

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>Sums of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of perceiver (A)</td>
<td>S(A)</td>
<td>.01735624</td>
<td>1</td>
<td>.01735624</td>
<td>0.0081</td>
<td></td>
</tr>
<tr>
<td>Sex of stimulus person (B)</td>
<td>SB(A)</td>
<td>1.098379</td>
<td>1</td>
<td>1.098379</td>
<td>2.2544</td>
<td></td>
</tr>
<tr>
<td>Sexual dimension of occupation (D)</td>
<td>SD(A)</td>
<td>18.26202</td>
<td>2</td>
<td>9.131012</td>
<td>10.0248</td>
<td>.001</td>
</tr>
<tr>
<td>Subjects within sex S(A)</td>
<td></td>
<td>238.9577</td>
<td>112</td>
<td>2.133511</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation within dimension O(D)</td>
<td>SO(AD)</td>
<td>230.1126</td>
<td>9</td>
<td>25.56807</td>
<td>20.4171</td>
<td>.001</td>
</tr>
<tr>
<td>A x B</td>
<td></td>
<td>1.630729</td>
<td>1</td>
<td>1.630729</td>
<td>3.3470</td>
<td>.001</td>
</tr>
<tr>
<td>A x D</td>
<td></td>
<td>1.869080</td>
<td>2</td>
<td>0.9345398</td>
<td>1.0260</td>
<td></td>
</tr>
<tr>
<td>B x D</td>
<td></td>
<td>2.737076</td>
<td>2</td>
<td>1.368538</td>
<td>2.6719</td>
<td></td>
</tr>
<tr>
<td>B x S(A)</td>
<td></td>
<td>54.56876</td>
<td>112</td>
<td>0.4872210</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D x S(A)</td>
<td></td>
<td>204.0287</td>
<td>224</td>
<td>.9108422</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x C(D)</td>
<td></td>
<td>17.95940</td>
<td>9</td>
<td>1.995438</td>
<td>1.5935</td>
<td>.001</td>
</tr>
<tr>
<td>B x C(D)</td>
<td></td>
<td>85.41373</td>
<td>9</td>
<td>9.490414</td>
<td>19.1733</td>
<td>.001</td>
</tr>
<tr>
<td>A x B x D</td>
<td></td>
<td>8.854438</td>
<td>2</td>
<td>4.027219</td>
<td>0.7863</td>
<td></td>
</tr>
<tr>
<td>S(A) x O(D)</td>
<td></td>
<td>1262.307</td>
<td>1,008</td>
<td>1.252289</td>
<td>.7863</td>
<td></td>
</tr>
<tr>
<td>B x D x S(A)</td>
<td></td>
<td>114.7325</td>
<td>224</td>
<td>0.512398</td>
<td>.5935</td>
<td></td>
</tr>
<tr>
<td>A x B x O(D)</td>
<td></td>
<td>1.476798</td>
<td>9</td>
<td>.1640867</td>
<td>.3315</td>
<td></td>
</tr>
<tr>
<td>B x S(A) x O(D)</td>
<td></td>
<td>498.9404</td>
<td>1,008</td>
<td>.4945266</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 12

ANALYSIS OF VARIANCE FOR FACTOR V

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>Sums of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of perceiver (A)</td>
<td>S(A)</td>
<td>5.367538</td>
<td>1</td>
<td>5.367538</td>
<td>1.2332</td>
<td>0.50</td>
</tr>
<tr>
<td>Sex of stimulus person (B)</td>
<td>S(B)</td>
<td>3.953950</td>
<td>1</td>
<td>3.953950</td>
<td>4.1659</td>
<td>0.05</td>
</tr>
<tr>
<td>Sexual dimension of occupation (D)</td>
<td>S(D)</td>
<td>80.664146</td>
<td>2</td>
<td>40.33223</td>
<td>26.7646</td>
<td>0.001</td>
</tr>
<tr>
<td>Subjects within sex S(A)</td>
<td>S(A) x S(B)</td>
<td>1450.9922</td>
<td>112</td>
<td>11.67157</td>
<td>13.1525</td>
<td>0.01</td>
</tr>
<tr>
<td>Occupation within dimension S(D)</td>
<td>S(D) x S(A)</td>
<td>105.0441</td>
<td>9</td>
<td>11.67157</td>
<td>13.1525</td>
<td>0.01</td>
</tr>
<tr>
<td>A x B</td>
<td>S(A) x S(B)</td>
<td>0.0115322</td>
<td>1</td>
<td>0.0115322</td>
<td>0.0118</td>
<td>0.01</td>
</tr>
<tr>
<td>A x D</td>
<td>S(A) x S(D)</td>
<td>4.787613</td>
<td>2</td>
<td>2.393822</td>
<td>1.5865</td>
<td>0.01</td>
</tr>
<tr>
<td>B x D</td>
<td>S(B) x S(D)</td>
<td>7.253235</td>
<td>2</td>
<td>1.626617</td>
<td>2.5291</td>
<td>0.01</td>
</tr>
<tr>
<td>B x S(A)</td>
<td>S(B) x S(A)</td>
<td>106.3018</td>
<td>112</td>
<td>1.506526</td>
<td>1.0468</td>
<td>0.01</td>
</tr>
<tr>
<td>D x S(A)</td>
<td>S(D) x S(A)</td>
<td>337.5515</td>
<td>224</td>
<td>1.506526</td>
<td>1.0468</td>
<td>0.01</td>
</tr>
<tr>
<td>A x C(D)</td>
<td>S(A) x C(D)</td>
<td>8.384750</td>
<td>9</td>
<td>0.9750</td>
<td>0.9750</td>
<td>0.01</td>
</tr>
<tr>
<td>B x C(D)</td>
<td>S(B) x C(D)</td>
<td>6.979279</td>
<td>9</td>
<td>0.7751754</td>
<td>1.3489</td>
<td>0.01</td>
</tr>
<tr>
<td>A x B x D</td>
<td>S(A) x B x D</td>
<td>7.253235</td>
<td>2</td>
<td>1.626617</td>
<td>2.5291</td>
<td>0.01</td>
</tr>
<tr>
<td>S(A) x C(D)</td>
<td>S(A) x C(D)</td>
<td>864.9029</td>
<td>1,008</td>
<td>0.8894037</td>
<td>1.0468</td>
<td>0.01</td>
</tr>
<tr>
<td>B x D x S(A)</td>
<td>S(B) x D x S(A)</td>
<td>114.0073</td>
<td>224</td>
<td>0.6270833</td>
<td>0.5314</td>
<td>0.01</td>
</tr>
<tr>
<td>A x B x C(D)</td>
<td>S(A) x B x C(D)</td>
<td>2.749511</td>
<td>9</td>
<td>0.3055012</td>
<td>0.5314</td>
<td>0.01</td>
</tr>
<tr>
<td>B x S(A) x C(D)</td>
<td>S(B) x S(A) x C(D)</td>
<td>629.4885</td>
<td>1,008</td>
<td>0.5748894</td>
<td>0.5314</td>
<td>0.01</td>
</tr>
</tbody>
</table>
Results of this analysis are presented in Table 13.

The significant main effect of the sex of the stimulus person on stimulus person perception \((p < .001)\) indicates that females-in-occupations are perceived as being more active than their male counterparts (mean score for females = -0.06; mean score for males = 0.06).

The significant main effect of dimension on stimulus person perception \((p < .001)\) indicates that people in masculine occupations are perceived to be more active than those in feminine or neutral occupations. Differences between the three dimensions are presented in Figure 1.

The significant interaction between sex of the perceiver and sex of the stimulus person \((p < .05)\) indicates that while both male and female subjects view females in occupations as more active than their male counterparts, definite differences exist between the sexes in their judgment of stimulus persons. Female subjects tend to use more extreme values in their ratings and thus perceive females-in-occupations as more active and males-in-occupations as more passive in comparison to the ratings done by male subjects. This interaction is presented in Table 14.

The significant interaction between the sex of the perceiver and dimension \((p < .05)\) indicates that the main effect of dimension in stimulus person perception is not independent of the sex of the perceiver. Female subjects perceive people in masculine occupations as more active than those in all other dimensions; whereas male subjects assign equal level of activity to people in both feminine and masculine occupations. This interaction is presented in Table 15.
### Table 13

**ANALYSIS OF VARIANCE FOR FACTOR VI**

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>Sums of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of perceiver (A)</td>
<td>S(A)</td>
<td>1222457</td>
<td>1</td>
<td>1222457</td>
<td>0.1544</td>
<td>.001</td>
</tr>
<tr>
<td>Sex of stimulus person (B)</td>
<td>S^3(A)</td>
<td>9,046781</td>
<td>1</td>
<td>9,046781</td>
<td>26.1428</td>
<td>.001</td>
</tr>
<tr>
<td>Sexual dimension of occupation (D)</td>
<td>S^7(D)</td>
<td>6,748004</td>
<td>2</td>
<td>3,374002</td>
<td>8.1918</td>
<td>.001</td>
</tr>
<tr>
<td>Subjects within sex S(A)</td>
<td>S(A)</td>
<td>88,69482</td>
<td>112</td>
<td>7,91980</td>
<td>.791980</td>
<td>.001</td>
</tr>
<tr>
<td>Occupation within dimension O(D)</td>
<td>S(OAD)</td>
<td>1297.444</td>
<td>9</td>
<td>1441604</td>
<td>191,9330</td>
<td>.001</td>
</tr>
<tr>
<td>A x B</td>
<td>S^2(B)</td>
<td>1,414997</td>
<td>1</td>
<td>1,414997</td>
<td>4.0890</td>
<td>.05</td>
</tr>
<tr>
<td>A x E</td>
<td>S^2(D)</td>
<td>3,483316</td>
<td>2</td>
<td>1,741658</td>
<td>4.2286</td>
<td>.05</td>
</tr>
<tr>
<td>B x D</td>
<td>S^2(D)</td>
<td>10,15872</td>
<td>2</td>
<td>5,079359</td>
<td>18,1699</td>
<td>.001</td>
</tr>
<tr>
<td>B x S(A)</td>
<td>S^2(B)</td>
<td>38,75783</td>
<td>112</td>
<td>3,460520</td>
<td>4.118774</td>
<td>.005</td>
</tr>
<tr>
<td>D x S(A)</td>
<td>S^2(B)</td>
<td>92,26054</td>
<td>224</td>
<td>4,118774</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x C(D)</td>
<td>S(CD)</td>
<td>32,67024</td>
<td>9</td>
<td>3,630027</td>
<td>4.8330</td>
<td>.005</td>
</tr>
<tr>
<td>B x C(D)</td>
<td>S(CD)</td>
<td>11,77927</td>
<td>9</td>
<td>1,368809</td>
<td>4.1477</td>
<td>.005</td>
</tr>
<tr>
<td>A x B x D</td>
<td>S^2(BD)</td>
<td>1,374150</td>
<td>2</td>
<td>.687051</td>
<td>2.4578</td>
<td></td>
</tr>
<tr>
<td>S(A) x C(D)</td>
<td>S^2(BD)</td>
<td>757,1060</td>
<td>1,008</td>
<td>7510971</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B x D x S(A)</td>
<td>S(BD)</td>
<td>62,61877</td>
<td>224</td>
<td>2,759480</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x B x C(D)</td>
<td>S^2(BD)</td>
<td>3,332909</td>
<td>9</td>
<td>3,703232</td>
<td>1.1736</td>
<td></td>
</tr>
<tr>
<td>B x S(A) x C(D)</td>
<td>S^2(BD)</td>
<td>316,0723</td>
<td>1,008</td>
<td>3155478</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 14

STIMULUS PERSON PERCEPTION ON FACTOR VI
AS A FUNCTION OF SEX OF PERCEIVER X SEX
OF STIMULUS PERSON INTERACTION

<table>
<thead>
<tr>
<th></th>
<th>Yale Stimulus Person</th>
<th>Female Stimulus Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Perceiver</td>
<td>0.0419</td>
<td>-0.0277</td>
</tr>
<tr>
<td>Female Perceiver</td>
<td>0.0740</td>
<td>-0.0865</td>
</tr>
</tbody>
</table>
Table 15

STIMULUS PERSON PERCEPTION ON FACTOR VI
AS A FUNCTION OF SEX OF PERCEIVER X
DIMENSION INTERACTION

<table>
<thead>
<tr>
<th></th>
<th>Male Perceiver</th>
<th>Female Perceiver</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Masculine</strong></td>
<td>-0.0368</td>
<td>-0.0936</td>
</tr>
<tr>
<td><strong>Feminine</strong></td>
<td>-0.0323</td>
<td>0.0550</td>
</tr>
<tr>
<td><strong>Neutral</strong></td>
<td>0.0904</td>
<td>0.0197</td>
</tr>
</tbody>
</table>

Dimension
The significant interaction between the sex of the stimulus person and dimension \((p < .001)\) as presented in Figure 2 indicates that the effect of dimension is not independent of the sex of the stimulus person. Whereas only slight differences exist between males and females in the masculine and neutral dimensions, the feminine dimension clearly differentiates between the sexes. Females in feminine occupations are viewed as more active than males in those occupations.

**ANOVA For Factor VII - Happiness in Home Life**

Results of this analysis are presented in Table 16.

The significant main effect of dimension \((p < .001)\) on stimulus person perception indicates that people in feminine occupations are perceived as least happy whereas those in neutral occupations as happiest in their home life, with people in masculine occupations falling in between the two (Figure 1). The differences between the three dimensions are very slight.

The significant interaction between the sex of the stimulus person and dimension \((p < .001)\) indicates that the effect of dimension on stimulus person perception is not independent of the stimulus person's sex. As shown in Figure 2, males in masculine occupations are perceived as happier than females in those occupations, whereas females in feminine occupations are judged as being happier than their male counterparts.

In the neutral dimension the level of happiness ascribed to both males and females is equal and greater than that assigned to people in feminine occupations.

**ANOVA For Factor VIII - Attractiveness**
### Table 16

**ANALYSIS OF VARIANCE FOR FACTOR VII**

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>Sums of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of perceiver (A)</td>
<td>S(A)</td>
<td>1.622894</td>
<td>1</td>
<td>1.622894</td>
<td>0.9196</td>
<td></td>
</tr>
<tr>
<td>Sex of stimulus person (B)</td>
<td>SB(A)</td>
<td>0.02696033</td>
<td>1</td>
<td>0.02696033</td>
<td>0.0417</td>
<td></td>
</tr>
<tr>
<td>Sexual dimension of occupation (D)</td>
<td>SD(A)</td>
<td>14.93410</td>
<td>2</td>
<td>7.467049</td>
<td>11.2541</td>
<td>.001</td>
</tr>
<tr>
<td>Subjects within sex S(A)</td>
<td></td>
<td>197.6561</td>
<td>112</td>
<td>1.764786</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation within dimension O(D)</td>
<td>SO(AD)</td>
<td>178.2511</td>
<td>9</td>
<td>19.80566</td>
<td>15.9098</td>
<td>.001</td>
</tr>
<tr>
<td>A x B</td>
<td>SB(A)</td>
<td>1.772099</td>
<td>1</td>
<td>1.772099</td>
<td>2.7377</td>
<td></td>
</tr>
<tr>
<td>A x D</td>
<td>SD(A)</td>
<td>8630962</td>
<td>2</td>
<td>4315181</td>
<td>0.6504</td>
<td></td>
</tr>
<tr>
<td>B x D</td>
<td>SBD(A)</td>
<td>16.79103</td>
<td>2</td>
<td>8.395515</td>
<td>12.1840</td>
<td>.001</td>
</tr>
<tr>
<td>B x S(A)</td>
<td></td>
<td>72.49614</td>
<td>112</td>
<td>6472870</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D x S(A)</td>
<td></td>
<td>148.6225</td>
<td>224</td>
<td>6634933</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x O(D)</td>
<td>SO(A)</td>
<td>3.365922</td>
<td>9</td>
<td>3.739913</td>
<td>0.3064</td>
<td></td>
</tr>
<tr>
<td>B x O(D)</td>
<td>SBO(A)</td>
<td>51.59290</td>
<td>9</td>
<td>5.732542</td>
<td>9.1736</td>
<td>.001</td>
</tr>
<tr>
<td>A x B x O(D)</td>
<td>SBD(A)</td>
<td>4618378</td>
<td>2</td>
<td>2309189</td>
<td>0.3351</td>
<td></td>
</tr>
<tr>
<td>S(A) x O(D)</td>
<td></td>
<td>1254.8228</td>
<td>1,008</td>
<td>1.248668</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B x D x S(A)</td>
<td></td>
<td>154.3495</td>
<td>224</td>
<td>6890603</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x B x O(D)</td>
<td>SBO(AD)</td>
<td>7.688461</td>
<td>9</td>
<td>8542734</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B x S(A) x O(D)</td>
<td></td>
<td>629.8923</td>
<td>1,008</td>
<td>6248932</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Results of this analysis are presented in Table 17.

The significant main effect of the sex of the perceiver \((p < .05)\) on stimulus person perception indicates that male subjects perceive all stimulus persons as being more attractive than do female subjects (mean score for males = -0.09; mean score for females = +0.09).

The significant main effect of the sex of the stimulus person \((p < .001)\) on stimulus person perception indicates that females-in-occupations are viewed as more attractive than their male counterparts.

The significant interaction between the sex of the perceiver and the sex of the stimulus person \((p < .001)\), as presented in Table 18, indicates that the effect of the sex of the stimulus person is not independent of the sex of the perceiver. Female stimulus persons are perceived as most attractive by males, whereas male stimulus persons are perceived as least attractive by females.

The significant interaction between the sex of the stimulus person and dimension \((p < .001)\) indicates that the effect of the sex of the stimulus person is not independent of dimension. As shown in Figure 2, males in masculine occupations are perceived as slightly more attractive than females in those occupations, whereas males in feminine occupations are viewed as less attractive than females in those occupations. Females in neutral occupations are perceived as slightly more attractive than their male counterparts.

ANOVA For Factor IX - Liberalism and Individualism

Results of this analysis are presented in Table 19.

The significant main effect of dimension \((p < .001)\) on stimulus person perception indicates that people in neutral occupations are
<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>Sums of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of perceiver (A)</td>
<td>S(A)</td>
<td>22.48616</td>
<td>1</td>
<td>22.48616</td>
<td>5.6367</td>
<td>.001</td>
</tr>
<tr>
<td>Sex of stimulus person (B)</td>
<td>SB(A)</td>
<td>23.14175</td>
<td>1</td>
<td>23.14175</td>
<td>3.5039</td>
<td>.001</td>
</tr>
<tr>
<td>Sexual dimension of occupation (D)</td>
<td>SD(A)</td>
<td>5.962434</td>
<td>2</td>
<td>2.98217</td>
<td>2.5843</td>
<td></td>
</tr>
<tr>
<td>Subjects within sex (A)</td>
<td></td>
<td>446.7986</td>
<td>112</td>
<td>3.989273</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occuration within dimension (O)</td>
<td>SO(AD)</td>
<td>152.0438</td>
<td>9</td>
<td>16.89375</td>
<td>22.0542</td>
<td>.001</td>
</tr>
<tr>
<td>A x B</td>
<td>SB(A)</td>
<td>8.869125</td>
<td>1</td>
<td>8.869125</td>
<td>13.2237</td>
<td>.001</td>
</tr>
<tr>
<td>A x D</td>
<td>SD(A)</td>
<td>3.720220</td>
<td>2</td>
<td>1.860109</td>
<td>1.616</td>
<td></td>
</tr>
<tr>
<td>B x D</td>
<td>SBD(A)</td>
<td>38.76204</td>
<td>2</td>
<td>19.38101</td>
<td>24.1686</td>
<td>.001</td>
</tr>
<tr>
<td>B x S(A)</td>
<td></td>
<td>75.11842</td>
<td>112</td>
<td>6.707002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D x S(A)</td>
<td></td>
<td>258.5381</td>
<td>224</td>
<td>1.154187</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x D x O(D)</td>
<td>SO(A)</td>
<td>2.904048</td>
<td>9</td>
<td>0.3226719</td>
<td>0.4212</td>
<td></td>
</tr>
<tr>
<td>B x O(D)</td>
<td>SBC(A)</td>
<td>75.40756</td>
<td>9</td>
<td>8.378617</td>
<td>12.7368</td>
<td>.001</td>
</tr>
<tr>
<td>A x B x D</td>
<td>SBD(A)</td>
<td>5.405426</td>
<td>2</td>
<td>2.702713</td>
<td>0.3370</td>
<td></td>
</tr>
<tr>
<td>S(A) x O(D)</td>
<td></td>
<td>772.1377</td>
<td>1,008</td>
<td>0.765096</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B x D x S(A)</td>
<td></td>
<td>179.6272</td>
<td>224</td>
<td>0.801971</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A x B x O(D)</td>
<td>SBO(AD)</td>
<td>5.434679</td>
<td>9</td>
<td>0.6037852</td>
<td>0.9178</td>
<td></td>
</tr>
<tr>
<td>B x S(A) x O(D)</td>
<td></td>
<td>663.0881</td>
<td>1,008</td>
<td>0.6578255</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 18

STIMULUS PERSON PERCEPTION ON FACTOR VIII
AS A FUNCTION OF SEX OF PERCEIVER X SEX
OF STIMULUS PERSON INTERACTION

<table>
<thead>
<tr>
<th></th>
<th>Male Stimulus Person</th>
<th>Female Stimulus Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Perceiver</td>
<td>0.0587</td>
<td>-0.2391</td>
</tr>
<tr>
<td>Female Perceiver</td>
<td>0.1262</td>
<td>0.0561</td>
</tr>
<tr>
<td>Source</td>
<td>Error Term</td>
<td>Sums of Squares</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Sex of perceiver (A)</td>
<td>S(A)</td>
<td>.4209666</td>
</tr>
<tr>
<td>Sex of stimulus person (B)</td>
<td>S(B)</td>
<td>.2409313</td>
</tr>
<tr>
<td>Sexual dimension of occupation (D)</td>
<td>S(D)</td>
<td>156.6111</td>
</tr>
<tr>
<td>Subjects within sex S(A)</td>
<td>S(S)</td>
<td>280.6775</td>
</tr>
<tr>
<td>Occupation within dimension O(D)</td>
<td>S(O)</td>
<td>104.2825</td>
</tr>
<tr>
<td>A x B</td>
<td>S(A)</td>
<td>.03707618</td>
</tr>
<tr>
<td>A x D</td>
<td>S(D)</td>
<td>12.58896</td>
</tr>
<tr>
<td>B x D</td>
<td>S(D)</td>
<td>143.8101</td>
</tr>
<tr>
<td>B x S(A)</td>
<td>S(S)</td>
<td>86.44803</td>
</tr>
<tr>
<td>F x S(A)</td>
<td>S(S)</td>
<td>327.4067</td>
</tr>
<tr>
<td>A x C(D)</td>
<td>S(C)</td>
<td>9.258698</td>
</tr>
<tr>
<td>B x C(D)</td>
<td>S(C)</td>
<td>9.853760</td>
</tr>
<tr>
<td>Z x B x D</td>
<td>S(Z)</td>
<td>2.680559</td>
</tr>
<tr>
<td>S(A) x O(D)</td>
<td>S(S)</td>
<td>259.6111</td>
</tr>
<tr>
<td>F x D x S(A)</td>
<td>S(S)</td>
<td>222.4483</td>
</tr>
<tr>
<td>A x B x O(D)</td>
<td>S(O)</td>
<td>8.440277</td>
</tr>
<tr>
<td>B x S(A) x O(D)</td>
<td>S(S)</td>
<td>509.6919</td>
</tr>
</tbody>
</table>
perceived as most liberal and individualistic people in feminine occupations are perceived as least so, and those in masculine occupations fall between the two.

The significant interaction between the sex of the perceiver and dimension (p < .05) indicates that females perceive people in masculine occupations as more liberal and individualistic than their counterparts in feminine occupations. In fact they judge people in the feminine dimension to be least liberal and individualistic. Males on the other hand attribute the same level of liberalism to people in both feminine and masculine dimensions. This finding is presented in Table 20.

The significant interaction between the sex of the stimulus person and dimension (p < .001) indicates that the effect of dimension is not independent of the stimulus person's sex. Females in masculine occupations are perceived as being more liberal and individualistic than their male counterparts. The reverse occurs in feminine occupations in which males are perceived as being more liberal and individualistic than females. Both sexes are perceived as almost equally liberal in the neutral dimension.
Table 20

STIMULUS PERSON PERCEPTION ON FACTOR IX
AS A FUNCTION OF SEX OF PERCEIVER X
DIMENSION INTERACTION

<table>
<thead>
<tr>
<th></th>
<th>Masculine Dimension</th>
<th>Feminine Dimension</th>
<th>Neutral Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Perceiver</td>
<td>0.1865</td>
<td>0.1766</td>
<td>-0.3262</td>
</tr>
<tr>
<td>Female Perceiver</td>
<td>-0.0152</td>
<td>0.3043</td>
<td>-0.3267</td>
</tr>
</tbody>
</table>
CHAPTER III

Discussion

Experiment I

The purpose of this experiment was to obtain ratings of occupations in terms of their being perceived as feminine, masculine, or neutral. The ratings were needed since no normative data base was available regarding sexual stereotypes of occupations as they exist among college students today. The method of eliciting sexual stereotypes of occupations was distinctive in that three types of rating criteria (3 instruction types) were used, each emphasizing a different aspect of perception on the basis of which the subsequent ratings were made. This technique was utilized to avoid one-sided identification of sex related occupations based on unsubstantiated assumptions as to what the basis for making these ratings ought to be.

The results indicate that sexual stereotypes of occupations are clearly defined and held in agreement by both college men and college women. The correlation matrix (Table 1) of the mean ratings given by men and women in each of the three instruction groups illustrates that the sexual classification of occupations is rather constant and highly similar regardless of the criteria used for rating. It appears that sexual typing of occupations is as pervasive and persistent as occupational and sex role stereotyping are in the American society.

The analysis of variance conducted on the ratings of occupations revealed that on the average all the occupations were perceived as
being more masculine than feminine (the mean ranking across the three instruction groups and the two sexes was 3.08). This is probably due to the fact that the list of occupations presented for rating gives representation to each of the eight occupational fields and the three levels in each field, whereas women are not equally distributed among these occupational fields and levels.

Despite the fact that the analysis of variance results (Table 3) indicated a significant main effect ($p < .001$) of the type of instructions on sexual stereotyping of occupations, practically this finding has little significance. The difference between the mean ratings given by subjects in the "proportion" instruction group and the other two groups is only of 0.28 on a rating scale of 1-7. Similarly, the practical significance of the main effect of the sex of the subject ($p < .001$) on the sex typing of occupations is very small. The mean rating of occupations given by women is greater by only .15 (on a scale of 1-7) than the mean rating given by men. The significant interaction ($p < .001$) between instruction group and sex of the subject indicates that while no difference exists between the sexes using the perceived proportion of men and women in occupations as a criterion for rating, slight but significant differences between the sexes occur under the other two rating instructions. It appears that female subjects tend to view occupations as consistently less masculine than males do when other than "perceived proportion" criteria are the basis for evaluation. The largest difference between ratings done by males and females exists in the "personality attributes" instruction group.

A smaller yet similar in direction difference occurs in the "vague" instruction group. The difference between the "vague" and the other
two instruction groups can be attributed to the fact that while in the other two groups subjects responded to the rating task using either proportion or personality attributes as the basis for evaluation, in the "vague" instruction group they used a mixture of proportion and personality attributes criteria as the basis for their judgments. Although the results of the analysis of variance may have little practical significance because of the small size of the differences between the means, their consistency is interesting and warrants an explanation. Several observations can be made regarding the analysis of variance results:

1. When perceived proportion of men and women in the occupation is the criterion for rating, all the occupations are perceived as slightly more masculine than under other ratings criteria, and no difference between the mean ratings given by male and female subjects exists.

2. When "personality attributes" criteria are used, females rate all occupations as less masculine than males do.

Hence, when sexual stereotyping of occupations is anchored in some objective reality, i.e., the actual proportion of men and women in the labor force, high agreement exists between the male and female subjects in that both see the world of work as more masculine than feminine. However, when sex linked attributes are used as the basis for sexual stereotyping of occupations, female subjects tend to perceive all occupations as slightly more open to women than males do. In other words female subjects seem to believe that based on their personality characteristics they are suitable to perform a wider range of jobs than men are ready to give them credit for.
This finding is compatible with Entwisle and Greenberger's (1970) survey of views of women's roles as expressed by ninth graders, which indicated that girls have more liberal opinions than boys on whether women should work, hold the same jobs as men and derive satisfaction from problem solving.

The results of this study strongly suggest that sex labeling of occupations is a deeply ingrained feature in attitudes toward the world of work. Sex labeling of occupations also seems to be a self-perpetuating and self-promoting system in that the proportion of men and women in various occupations parallels the traditional beliefs about the sex-related attributes required to perform those jobs.

The data on sexual stereotyping of occupations derived through this experiment (Appendix V) provide information not only about the mean rating of each occupation in terms of its masculinity, femininity and neutrality but also about the variance in judgments of each occupation. It is important to pay attention to both parameters (mean and standard deviation of ratings) in determining the strength of a particular stereotype. Based on this stipulation the twelve occupations selected from this experiment to be grouped under the stereotypically masculine, feminine or neutral dimensions were those whose means were closest to the appropriate interval on the rating scale with the smallest variance.

Experiment II

The purpose of this experiment was to assess perception of stimulus persons in sex appropriate, sex inappropriate and neutral occupations, using the sexual dimension of the occupation, the sex of the person in
occupation and the sex of the perceiver as independent variables. Several predictions were stated at the onset of the study regarding subjects' impressions of stimulus persons on a variety of dimensions. The dimensions represented conceptually derived clusters of items hypothesized to reflect personal and interpersonal adjustment, political liberalism, sex role stereotypes, likability, etc. The analysis of data conducted for this experiment included factor analytical methods designed to, scientifically, determine the nature of the clusters involved. Results of the factor analysis indicate that the identified factors do not always correspond to the conceptually derived ones.

Since the analysis of results was based on the factors identified statistically, the following discussion is concerned with findings related to those factors only, and refers to the original hypotheses only when the statistically and conceptually derived clusters are similar.

The results are best summarized in Figures 1 through 4 which illustrate the effects of the three independent variables on all the factors simultaneously. As can be seen from the graphs, the magnitude of the effects is not homogenous across all the factors. Some factors are affected more by a particular variable or combination of variables than others. In addition, a general statement can be made about the relative importance of each of the three independent variables: sexual dimension of the occupation appears to have the greatest impact on stimulus person perception with the sex of the stimulus person being of secondary importance and the sex of the perceiver having the least effect of all.
In order to present a coherent and meaningful summary of the results the effect of each of the three independent variables on all factors is discussed.

Sex of Perceiver

In general, person perception does not vary greatly as a function of the sex of the subject. Male and female subjects are in agreement regarding evaluation of stimulus persons on all but three factors: interpersonal adjustment and likability (Factor II), professional and intellectual competence (Factor III) and physical attractiveness (Factor VIII). Female subjects perceive all stimulus persons as slightly better interpersonally adjusted, more likable, more competent and less attractive than male subjects do. Despite the fact that the differences between the mean factor scores given by male and female subjects are statistically significant, their practical significance is minute (.19 in standard scores for Factor II; .17 in standard scores for Factor III; and .18 in standard scores for Factor VIII).

Thus, the conclusion that a strong consensus exists between male and female subjects regarding their judgment of people in sex appropriate, sex inappropriate and neutral occupations is justifiable.

Sex of Stimulus Person

On the whole, perception of people in occupations varies very little as a function of the sex of the person in occupation. The lack of a statistically significant difference on Factor III - Professional and Intellectual Competence, is contradictory to Hypothesis 4, predicting that women will be judged as less professionally competent than men across all occupations. As shown in Figure 4, the mean factor scores
on the cluster of professional competence are similar for male and female subjects. Thus, one can assume that the lack of significant difference between men and women in the perception of professional competence represents a true similarity between the sexes. Although Hypothesis 4 stated at the beginning of the study refers to a conceptually derived cluster of professional competence, which slightly differs from the statistically derived one Factor III (Professional and Intellectual Competence), the current results can serve as evidence of the changing views about women's potential and ability in the context of occupational performance.

Despite the statistically significant differences that exist between the mean factor scores given to male and female stimulus persons on six out of the nine factors, their practical significance is very small. As can be seen from Figure 4, the largest difference between mean factor scores reaches only .18 in standard scores. Thus, the conclusion that male and female stimulus persons are evaluated in a highly similar manner across all occupational dimensions is justifiable.

Interactions Between Sex of Stimulus Person and Sex of the Perceiver

Three statistically significant interactions between the sex of the stimulus person and the sex of the perceiver have been noted and discussed in the results section. Those interactions occur on Factor IV - Personal Adjustment, Factor VI - Activity, and Factor VIII - Physical Attractiveness. The magnitude of the interactions is relatively small, and therefore any psychologically based explanations of their meaning would be far fetched.

The only interaction which warrants attention because of its being
the largest of the three is for Factor VIII. It indicates that while male subjects perceive female stimulus persons as most attractive, female subjects view male stimulus persons as least attractive (the difference between the mean factor scores for male and female subjects is .36 in standard scores). Both men and women perceive members of their own sex as equally attractive.

This finding can be explained in the following way: physical attractiveness has long been a key element in the American stereotype of the ideal women. As Westervelt (1973) noted, "we tend to regard physical allure as an invaluable asset for even the achieving woman (though not for the achieving man) (p. 7). The commonly accepted reaction to a woman has been in terms of her physical appearance, usually without reference to her skills, achievements and capacity for growth. The significant interaction on the factor of physical attractiveness points out that male subjects still respond to women-in-occupations stressing the dimension of physical beauty, while it is absent in their evaluation of men. Female subjects, however, perhaps due to the new feminist ideology, do not share this one dimensional view of women, and view both male and female stimulus persons as equally attractive.

On the whole it appears that stimulus person perception does not vary greatly as a function of the interaction between the sex of the stimulus person and the sex of the perceiver. The only perceptual dimension which is affected by this interaction is that of physical attractiveness. Psychological explanation of this finding is based on the notion that physical beauty has been an important and relevant
component in evaluation of women, but not in the judgment of men.

Sexual Dimension of the Occupation

Of the three independent variables used in this study, the sexual dimension of the occupation (labeled from now on as dimension) proved to be the most powerful one in terms of its effect on stimulus person perception. As can be seen from the analysis of variance results, the main effect of dimension is statistically significant for all but one factor (Factor VIII - Physical Attractiveness). Figure 1 clearly illustrates the magnitude of the main effects of dimension on each of the nine factors. It can be noted that person perception is strongly affected by dimension on some factors (I, V and IX) and relatively little affected by it on other factors (II, III, IV, VI and VII).

The following discussion will be limited to only those findings which are both statistically and practically significant. It will not focus on results which are statistically significant, yet of minor practical importance due to the small size of the difference between the mean factor scores of the three dimensions.

The factors influenced most by dimension are: Factor I - Leadership, Factor V - Social Sensitivity, and Factor IX - Liberalism and Individualism. Person perception on these three factors varies greatly between the three dimensions. People in the feminine dimension are perceived to be least leaderlike, whereas those in the masculine dimension are evaluated as being most leaderlike; people in the feminine and neutral dimension are perceived as more socially sensitive than those in the masculine dimension; and people in the neutral dimension are judged to be most liberal and individualistic, while those in the
feminine dimension are perceived to be least so.

The findings related to person perception on Factor I and V parallel the content of the sex appropriate sex role stereotype existing in the American culture. It seems that once the norm of participation in an occupational category has become associated with a particular sex, sex and its standard of conduct become a salient feature of that occupational category. Thus, people in feminine occupations are not supposed to manifest leadership qualities, whereas leadership behavior is expected of people in masculine occupations. Similarly, people in the feminine dimension are expected to be more sensitive than those in the masculine dimension.

As noted in the results section, the leadership factor in this experiment has its highest positive loadings on variables associated with the masculine sex role stereotype (competitiveness, self assertiveness, independence and aggressiveness, all of which were found to be evaluated as typically masculine attributes (Rosenkrantz et al., 1968).] The social sensitivity factor has its highest positive loading on a variable associated with the feminine sex role stereotype (interpersonal sensitivity, which was found to be evaluated as a typically feminine characteristic by Rosenkrantz et al., 1968).

Thus, the two most salient features differentiating between the masculine and the feminine occupational dimension are leadership and social sensitivity. Interestingly enough, these two features correspond to the two orthogonal clusters of male valued and female valued stereotypic items identified by Broverman et al., 1972.

With regard to the neutral occupational dimension, the actual
results differ slightly from those expected and stated in Hypothesis 7. It was predicted that the largest difference in stimulus person perception would occur between the masculine and the feminine dimension with the neutral dimension falling between the two. As can be seen from Figure 1 this prediction is sustained for Factor I - (Leadership) but is not supported for Factors V (Social Sensitivity) and IX (Liberalism and Individualism). In the latter two, people in neutral occupations are judged to be more sensitive socially and more liberal and individualistic than people in the feminine and masculine dimensions. The reason for this finding may stem from the stereotypes of the occupations chosen to represent the neutral dimension. It seems logical to assume that people in three out of the four neutral occupations, namely journalist, counseling psychologist and comedian, are perceived as being relatively more liberal and sensitive than people in other occupations (e.g., engineer or librarian) simply because of the nature of the occupation. Despite the fact that each one of the three occupations belongs to a different occupational field based on Roe's (1956) classification (journalist is in the general cultural category; counseling psychologist in the service category; and comedian in the arts and entertainment category) all three are related in that they deal with people. The journalist, the counseling psychologist and the comedian all require a high degree of interpersonal sensitivity and social awareness. The counseling psychologist and the journalist may be perceived as liberal because of their frequent exposure to a variety of ideas, life styles and values, in short to all the facets of human nature. The comedian is likely to be perceived as liberal, because
of his ability to see people and events from a satirical perspective and to criticize and laugh about even the gravest social matters.

In summary, evaluation of stimulus persons is strongly affected by occupational dimension in the perception of leadership, social sensitivity and liberalism. It is interesting to note that evaluation of personal and interpersonal adjustment, professional and intellectual competence, activity, happiness in home life and physical attractiveness is similar for stimulus persons in the three occupational dimensions.

**Interaction Between Dimension and Sex of Perceiver**

Three statistically significant interactions of dimension and sex of perceiver were discussed in the results section. Those interactions occurred on Factor I - Leadership (Table 8), Factor VI - Activity (Table 15), and Factor IX - Liberalism and Individualism (Table 20).

The magnitude of the interactions is small yet their direction is consistent in the sense that in all of them women view people in feminine occupations more negatively than men do, and they view people in masculine occupations more positively than men do. Thus, women perceive people in feminine occupations to be less leaderlike, less active and less liberal and individualistic than men perceive them to be. On the other hand, women perceive people in masculine occupations to be more leaderlike, more active and more liberal than men perceive them to be.

It appears that women are slightly more vulnerable than men to sex role stereotyping.

This author is unaware of any social or cultural mechanism which
would explain this finding. No previously collected data on sex role stereotyping indicated that women are holding slightly stronger sex role stereotypes than men do.

Interaction Between Dimension and Sex of Stimulus Person

The interaction between dimension and sex of stimulus person plays an important role in stimulus person perception. As noted in the results section, this interaction is statistically significant for Factor I - (Leadership), II - (Interpersonal Adjustment), VI - (Activity), VII - (Happiness in Home Life), VIII (Physical Attractiveness) and IX (Liberalism and Individualism). Figure 2, used as a basis for this discussion, illustrates how perception of male and female stimulus persons varies in each of the three dimensions. As can be seen from Figure 2 all significant interactions between sex of stimulus person and dimension are due only to the difference between males and females in the masculine and feminine dimensions.

In the neutral dimension both males and females are perceived in a similar way and the scores of both fall close to the grand mean. Therefore, the following discussion focuses only on the differences in the perception of males and females between the masculine and the feminine dimension. It was noted in the section dealing with the main effect of dimension that people in the masculine dimension are perceived as more leaderlike than people in the feminine dimension. This effect, however, is not independent of the sex of the stimulus person. While both sexes are judged to lack leadership qualities in the feminine occupations, males in feminine occupations are perceived as having fewer leadership attributes than females in those occupations. However,
in the masculine dimension both males and females are judged to be equal on the leadership factor.

This finding indicates that women in sex-inappropriate occupations are perceived congruently with the masculine sex role stereotype. Similarly, men in sex inappropriate occupations are perceived congruently with the feminine sex role stereotype. These results support Hypothesis 5 which predicts that evaluation of stimulus persons on the sex role stereotypic attributes will differ in the above fashion. The only difference between Hypothesis 5 and the results lies in the observation that the conceptually derived cluster of sex role stereotypes referred to in Hypothesis 5 differs slightly from the leadership factor derived statistically. Yet, as reported by Broverman et al., (1972) leadership is one of the most salient features differentiating between male and female valued behaviors.

Interestingly enough, a different standard exists for women and men in sex-inappropriate occupations. Women in sex-inappropriate occupations are perceived similarly to men in those occupations in terms of leadership qualities. However, men in sex-inappropriate occupations are perceived as even less leaderlike than females in those occupations.

This finding can be explained in the context of Women's Liberation Movement and its ideology, and the absence of a parallel male movement. While feminist ideology encourages women to reconceptualize their role perceptions, to modify their life styles and to seek access to all roles, especially positions of power, no movement encouraging men to try out new life styles (those traditionally reserved for women)
exists. There is more social approval for women stepping out of the traditionally feminine roles, than for men crossing the boundaries of the traditionally masculine occupations.

The significant interaction between the sex of the stimulus person and dimension on the factor of interpersonal adjustment and likability (Factor II) is the result of a trend similar to that observed in Factor I. Again, the only difference in the perception of male and female stimulus persons exists in the feminine dimension, indicating that females in feminine occupations are perceived as significantly better adjusted interpersonally and more likable than males in feminine occupations. Thus, males in sex-inappropriate occupations are perceived as significantly less well interpersonally adjusted and likable than females in both sex-inappropriate and sex-appropriate occupations.

This finding partially supports Hypotheses 2 and 6. Hypothesis 2 predicted that stimulus persons in sex-appropriate occupations would be evaluated as better adjusted interpersonally than those in sex-inappropriate occupations. Hypothesis 6 stated that the same relationship would exist regarding likability. The results indicate that the predicted situation regarding judgment of interpersonal adjustment and likability exists only for male stimulus persons. The explanation of this finding is similar to that suggested for the interaction of Factor I. Again, different standards are manifested for men and women: women are "allowed" by contemporary society to participate in masculine jobs without risking being labeled maladjusted interpersonally or unlikable. However, males are viewed as socially maladjusted and unlikable when they choose sexually inappropriate occupations.
The interaction on Factor II is consistent with the results reported by Burhenne (1972) which indicated that sex appropriate sex role stereotypes are evaluated as more interpersonally comfortable than sex inappropriate sex role stereotypes. The present study, however, indicates that this relationship exists only for males (and not for females) deviating from their culturally normative sex role behaviors.

The significant interaction between the sex of the stimulus person and dimension on the factor of activity (Factor VI) is the result of a trend similar to that observed in Factor I and II. Again, the only difference in the perception of male and female stimulus persons exists in the feminine dimension indicating that females in feminine occupations are perceived as significantly more active than males in feminine occupations.

Thus, males in sex-inappropriate occupations are perceived as significantly less active than females in both sex-inappropriate and sex-appropriate occupations.

Activity has been identified as a male valued stereotypic item (Rosenkrantz et al., 1968). Hence, it appears that males in sex-inappropriate occupations are perceived congruently with the feminine sex role stereotype of passivity, and interestingly enough, are judged to be more passive than females in those occupations. As before the explanation of this phenomenon probably lies in the increasing social acceptance of "liberated" women taking men's positions and lack of such acceptance for males deviating from their socially prescribed behaviors.

The significant interaction on Factor VII - Happiness in Home Life, is based on the differences between perception of males and females in
both the masculine and the feminine dimension. Females in masculine occupations are perceived to be significantly less happy than males in those occupations. The reverse is true for the feminine dimension, in which males are perceived as significantly less happy than females.

Thus, it appears that people in sex-inappropriate occupations are perceived as significantly less happy in their home lives than people in sex-appropriate occupations.

This finding can probably be attributed to the expectation that women in masculine occupations have difficulty combining professional and family life, and because of the career demands may be unhappy in their home life. An alternative explanation suggests that women in masculine occupations may be perceived as unhappy in their home life because their deviation from the normative sex role behaviors may result in a power struggle and competition at home. For males in feminine occupations the explanation is different. Their deviation from the socially prescribed behavior is likely to be perceived as an admission of sexual and personal inadequacy which is also expressed in their relative unhappiness in family life.

The significant interaction on Factor VIII - Physical Attractiveness is due mainly to the difference between males and females in the feminine dimension. It indicates that females in feminine occupations are perceived as significantly more attractive than males in those occupations. In fact, males in sex-inappropriate occupations are judged to be less physically attractive than both females in sex-appropriate and sex-inappropriate occupations and males in sex-appropriate occupations.
This finding can probably be attributed to the exposure to ideas of liberation for women but not for men, resulting from feminist ideology. Thus, the man deviating from his gender-typed behavior is perceived as lacking those physical attributes which his "brother" conforming to the "masculine" norms has. However, the woman deviating from her sex role stereotype by entering masculine occupations is perceived almost as physically attractive as her "sister" in feminine occupations (as seen in Figure 2 the difference between perception of females in masculine and feminine dimensions is very small and practically insignificant, especially in light of the fact that the score for females in the masculine dimension falls on the grand mean and not above it).

The significant interaction on Factor IX - Liberalism and Individualism is due to the differences between males and females in both the masculine and the feminine dimension. Females in the masculine dimension are perceived as more liberal and individualistic than males in that dimension. The reverse occurs in the feminine dimension in which males are perceived as significantly more liberal and individualistic than females. Interestingly enough, the level of conformity and conservatism ascribed to both sexes is of a similar magnitude for both males and females in sex-appropriate occupations.

Thus, it appears that people in sex-inappropriate occupations are perceived to be significantly more liberal and individualistic than people in sex-appropriate occupations. This result supports Hypothesis 3, which predicted the existence of the above relationship.

The phenomenon of attributing political liberalism and individua-
lism to people choosing sex-inappropriate occupations is easily understood. People who deviate from the normative pattern of behavior must, by definition, be perceived as independent and non-conforming in their thinking and actions.

The non-significant interactions on Factor III - Professional and Intellectual Competence, IV - Personal Adjustment and V - Social Sensitivity also deserve to be commented on. They indicate that no significant differences between the perception of males and females in the three dimensions exist on the above factors.

As shown in Figure 2, the mean factor scores for males and females in each of the three occupational dimensions are very similar to each other; the analysis of variance results indicate that the standard deviation of the factor scores is extremely low. Assuming that the lack of significant differences reflects a true similarity between the sexes poses a need to explain the results on Factor IV - (Personal adjustment) because of their being contradictory to Hypothesis 1. Hypothesis 1 predicts that people in sex-appropriate occupations will be perceived as better adjusted personally than people in sex-inappropriate occupations. The results of the study indicate that people in both sex-appropriate and sex-inappropriate occupations are perceived to be equally well personally adjusted. This finding is inconsistent with both Hypothesis 1 and previous reports (Burhenn, 1972) that appropriate sex role stereotypes are judged to be more mentally healthy than inappropriate sex role stereotypes. It is also inconsistent with Osipow and Gold's (1968) finding that males and females with personality adjustment problems have interest patterns deviating from the social
expectations of their sex.

A possible reason for the discrepancy between the current results and those of Burhenne (1972) and Osipow and Gold (1968) may be that evaluations of sex role stereotypes are changing, so that subjects no longer perceive deviations from the normative behavior, i.e., participation in sex-inappropriate occupations, as an expression of personal maladjustment.

The finding that both sexes are judged to be equally competent professionally and intellectually also supports the view that changes are occurring in the evaluation of women's potential. Traditionally women have been perceived as less competent than men. This study shows that, at least in the occupational area, judgment of competence does not vary as a function of the sex of the performer.

**Conclusions**

This study demonstrates that out of the three independent variables hypothesized to influence person perception the most powerful one is the sexual dimension of the occupation of the person observed. The effect of dimension, however, is not independent of the sex of the stimulus person. Thus in addition to the strong effect of dimension, the sex-appropriateness and sex-inappropriateness of the occupation also play an important role in stimulus person perception.

The main findings of this study lead to the following broad conclusions:

1. A strong consensus about the differing characteristics of people in all the occupations examined here exists between college men and women.
2. Stimulus person perception does not vary greatly as a function of the interaction between the sex of the stimulus person and the sex of the perceiver. The only perceptual dimension which is affected by this interaction is that of physical attractiveness.

3. The difference in perception of people in masculine and feminine occupations parallels the difference between the positively valued masculine and feminine traits as identified by Broverman et al., (1972). Thus, the two most salient features differentiating between the masculine and the feminine occupational dimensions are leadership (characteristic of masculine occupations) and social sensitivity (characteristic of feminine occupations).

4. Evaluation of people in terms of their personal and interpersonal adjustment, professional and intellectual competence, activity, happiness in home life and physical attractiveness varies little or not at all as a function of the sexual dimension of the occupation.

5. Perception of males and females in the neutral dimension is highly similar. They are perceived as equals on all the factors studied.

6. Perception of professional and intellectual competence is not affected by the sex-appropriateness and sex-inappropriateness of the occupational dimension.

7. People in sex-appropriate occupations are perceived as being happier in their family life than people in sex-inappropriate occupations.
8. People choosing sex-inappropriate occupations are perceived as being more liberal politically and more individualistic in their thinking than people choosing sex-appropriate occupations.

9. Males in sex-inappropriate occupations are perceived as less leaderlike, less well adjusted socially, less likable, less active and less attractive than either females in those occupations, females in sex-inappropriate occupations or males in sex-appropriate occupations. It seems that a double standard exists for males and females deviating from their sex role stereotypic behaviors. There is more social tolerance of women trying out masculine occupations than of men experimenting with feminine occupations.

Implications

The results of this study have several implications:

1. The finding that males in sex-inappropriate occupations are perceived more negatively than females in sex-inappropriate occupations on a variety of dimensions implies that Women's Liberation Movement and its feminist ideology has had some impact on attitudes towards women's careers. It also suggests a need for an equivalent male movement to create more social tolerance of men trying out traditionally feminine occupational roles.

2. Happiness in family life, a sexually inappropriate occupational choice, and conforming or conservative attitudes
are perceived as mutually exclusive propositions. Thus, it appears that under the present circum-
stances only people who are liberal and individualis-
tic can be happy in sex-inappropriate occupations.

3. This study indicates that on the majority of the examined factors no differences exist between the sexes in the masculine occupational dimension. The perceived similarity of men and women in masculine occupations is not a valid indicator of the ease with which women can penetrate or be accepted as members in those occupations. Attitudes of potential employers and peers in each occupational group are important factors in women's vocational behavior. Research needs to be carried out to explore how employers and peers evaluate men and women in masculine occupations. This project could be conducted utilizing the Impressions Questionnaire and administering it to potential employers and peers in various masculine occupations. Employers' judgment of women vs. men in masculine occupations would provide a measure of the ease with which women can penetrate those occupations. Peer group evaluation would provide an indicator of the acceptance of women in sex-inappropriate occupations. Possible differentiation in this research could be: a. A comparison of the views held by private and state or government funded instructions; b. A comparison of the views of those employers or peers who had or had no previous experience with women in masculine
occupations, in order to test the effects of exposure to women in masculine occupations on perception.

4. This study indicates that the perception of men in feminine occupations is less favorable than that of women in those occupations. This perceived difference between males and females in feminine occupations is not a valid indicator of the difficulty encountered by males interested in those occupations. Attitudes of potential employers and peers towards men and women in various feminine occupations need to be surveyed to determine the degree of acceptance and the ease with which men can penetrate those occupations. A comparison of the views of those employers and peers who had or had no previous experience with men in sex-inappropriate occupations could be done to determine the effect of exposure to men in feminine occupations on perception.

5. Research needs to be done to determine the relationship between self and others' perceptions of various occupational group members. Its purpose would be twofold: a. To test the validity of college students' images of people in sex-appropriate, sex-inappropriate and neutral occupations by comparing them to those people's self perceptions; b. To find out whether in fact women in masculine occupations perceive themselves as equal to men in those occupations on the factors examined in this study, and whether men in feminine occupations perceive themselves less
favorably than females in those occupations on the factors found in this study. This information is important because the attribution to occupational group members of characteristics incongruent with their self perception might well be a biasing factor influencing career choice.

6. The present study employed a population of students who reside for the most part in the Mid-West. Different populations of subjects may evaluate people in sex-appropriate, sex-inappropriate and neutral occupations differentially. For example, college students from the east or west coast may view people in occupations differently from Mid-Western college students. Furthermore, perception of people in occupations may vary as a function of age, maternal employment status (Broverman et al., 1972), educational level and socio-economic status. Future researchers need to carefully define the demographic parameters of their populations in order to control for those variables which might influence evaluations of people in sex-typed and neutral occupations.

7. The present study indicates that important differences exist in the perception of males and females as a function of the sex-appropriateness and sex-inappropriateness of the occupational dimensions. Counselors, both male and female, need to be aware of the attitudes held by college population, at large, about sex-appropriate and sex-inappropriate behaviors. Moreover, they need to be aware of their own sex biases about male and female counselees, because their attitudes might have
great impact on the vocational goals of both male and female clients.

**Limitations**

This study has several limitations:

1. The subject sample used in this study consisted of Mid-Western college students. Thus, the conclusions drawn from this study ought to be limited to college student population in the Mid-West only. In order to determine whether the present findings can be generalized to the population at large further research needs to be done using samples differing in terms of place of residency, age, religion, socio-economic status and educational level.

2. The methodological procedure used in this study to explore stimulus person perception involved rating the extent to which the stimulus person possessed a given attribute. As McKee and Sherriffs (1957) noted, significant differences in the evaluations of female and male sex role stereotypes may be found due to the research methodology. Forced choice questionnaires with social desirability held constant across choices proved to be more effective than open ended ones in eliciting significant differences between male and female sex role stereotypes. McKee and Sherriffs (1957) state that "...most subjects will, if given a chance, deny partiality for either sex." They interpret this to mean that "college subjects have a veneer of egalitarianism overlying their more fundamental established beliefs" (p. 370). This phenomenon
may also apply to the college students in the present study. Although this study employed rating scales rather than open-ended questions, the social desirability factor could have entered into the subjects' responses. This consideration provides a plausible explanation for the relatively small absolute differences on some of the perceptual factors used in the study (e.g., professional and intellectual competence and personal adjustment).

3. This study sheds light on the perception of people in sex-appropriate, sex-inappropriate and neutral occupations in the present time. Its findings would have been more meaningful had data concerning the same issue existed from the late fifties or early sixties, i.e., pre-Women's Liberation Movement. Such information would have served as a baseline against which the present results might have been compared. Since no such data are available, it is unfortunately impossible to assess whether attitude change has occurred in perception of people in sex-appropriate, sex-inappropriate and neutral occupations.
CHAPTER IV

Summary

Psychological literature suggests that both occupational and sex-role stereotypes play an important role in the kinds of lifestyle and career decisions which are subsequently made. It appears that an understanding of the factors which influence the entry of men and women into occupational roles must begin with the relationship between sex role and occupational role.

The present study stemmed from the combination of research in the areas of occupational and sex role stereotypes. Its main purpose was assessment of person perception as a function of the sex appropriateness or sex inappropriateness of the person's occupation. The effects of three sexually relevant variables on person perception were investigated:

1) sex of the perceiver
2) sex of the stimulus person
3) sexual dimension of the occupation

The last variable was comprised of three levels: masculine occupations, feminine occupations and neutral (sex unidentified) occupations.

Experiment I was conducted to determine the nature of occupations which were subsequently included in each of the three levels. Ratings of occupations in terms of their being perceived as feminine, masculine or neutral were obtained. The method of eliciting sexual stereotypes of occupations was distinctive in that three types of rating criteria
(3 instruction types) were used, each emphasizing a different aspect of perception on the basis of which the subsequent ratings were made.

Results of Experiment I indicated that sexual stereotypes of occupations are clearly defined and held in agreement by both college men and college women. Sexual typing of occupations seems to be as persuasive and persistent as occupational and sex role stereotyping are in the American society.

Twelve occupational titles were selected to be used in Experiment II, representing 4 masculine, 4 feminine and 4 neutral occupations. The subjects - 57 male and 57 female college students were presented with the task of rating 2 stimulus persons (one female and 1 male) in each of the twelve occupations. The instrument used for rating was the Impressions Questionnaire, constructed by the experimenter for the purpose of this study. The Impressions Questionnaire consisted of 20 rating scales representing the following 9 orthogonal factors:

Factor I - Leadership
Factor II - Interpersonal Adjustment and Likability
Factor III - Professional and Intellectual Competence
Factor IV - Personal Adjustment
Factor VI - Activity
Factor VII - Happiness in Home Life
Factor VIII - Physical Attractiveness
Factor IX - Liberalism and Individualism

In order to determine the effects of the independent variables (sex of perceiver, sex of stimulus person and sexual dimension of the occupation) on person perception, a 3-way analysis of variance was conducted using factor scores as the dependent variables.

The results indicated that out of the three independent variables hypothesized to influence person perception the most powerful one is the sexual dimension of the occupation of the person observed. The
effect of dimension, however, is not independent of the sex of the person observed. Thus, in addition to the strong effect of dimension, the sex appropriateness and sex-inappropriateness of the occupation also play an important role in person perception.

The main results of this study suggest that a strong agreement about the differing characteristics of people in all the occupations examined exists between college men and women. It also appears that stimulus person perception is relatively unaffected by the interaction between the sex of the stimulus person and the sex of the perceiver. The only perceptual dimension which varies as a function of this interaction is that of physical attractiveness.

Comparison of stimulus person perception in masculine and feminine occupations reveals two salient features differentiating between the two occupational dimensions. Leadership is the quality underlying masculine occupations while social sensitivity is the main characteristic of feminine occupations. This difference in perception of people in masculine and feminine occupations parallels the difference between the positively valued masculine and feminine traits as identified by Broverman et al., (1972).

Perception of males and females in the neutral dimension is highly similar. They are perceived as equals on all the factors studied. However, perception of males and females in masculine and feminine occupations varies as a function of the sex appropriateness or sex inappropriateness of the occupational dimension. In general, people in sex appropriate occupations are perceived as being happier in their family life and less politically liberal and individualistic in their thinking than
people in sex inappropriate occupations. Males in sex inappropriate occupations are perceived as less leaderlike, less well adjusted socially, less likable, less active and less attractive than either females in those occupations, females in sex inappropriate occupations or males in sex appropriate occupations. Thus, it appears that a double standard exists for males and females deviating from their sex role stereotypic behavior. There is more social tolerance of women trying out masculine occupations than of men experimenting with feminine occupations. This phenomenon may be attributed to the growth of the Women's Liberation Movement and its feminist ideology, which probably has had some impact on attitudes toward women's careers.

Implications of this study are seen in terms of (1) suggesting a need for a male movement, equivalent to the Women's Liberation Movement, to create more social tolerance and acceptance of men trying out traditionally feminine occupational roles; (2) determining the ease with which women can penetrate masculine occupations, by comparing employers' and peers' judgment of women vs. men in masculine occupations; (3) determining the difficulty encountered by males interested in choosing feminine occupations by comparing the attitudes of potential employers and peers toward men and women in various feminine occupations; (4) investigating the relationship between self and others' perceptions of various occupational group members; (5) studying the effects of demographic variables on the evaluation of people in sex appropriate, sex inappropriate and neutral occupations; (6) providing information to counselors about the attitudes held by college population at large, about sex appropriate and sex inappropriate behaviors;
(7) emphasizing that vocational counselors need to be aware of their own sex biases about male and female counselees, because their opinions may have great impact on the vocational goals of their male and female clients.
**APPENDIX I**

**Order I**

<table>
<thead>
<tr>
<th></th>
<th>Stockbroker</th>
<th>M</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rehabilitation counselor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Hospital attendant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Mayor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Groundskeeper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Railroad conductor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Public relations director</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Conservationist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Private secretary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Certified public accountant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Probation officer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Building contractor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Florist supply sales work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Boat captain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Dental hygienist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Astronomer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>X-Ray technician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Telephone sales representative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Statistician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Manicurist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Research scientist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Air traffic controller</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

122
<table>
<thead>
<tr>
<th>23.</th>
<th>Air steward(ess) work</th>
<th>M</th>
<th>N</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td>Carpenter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>Pawnbroker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>Police sergeant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>Radio operator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>Clinical psychologist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>Real estate sales work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>Assistant in a scientific research lab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>Used car sales work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>File clerk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>Fisherman</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>Auto mechanic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>TV sales work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>Electrician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.</td>
<td>Receptionist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>Reservations clerk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39.</td>
<td>Short order cook</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>Dentist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41.</td>
<td>Pediatrician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42.</td>
<td>Agronomist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43.</td>
<td>Aviator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44.</td>
<td>Animal caretaker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45.</td>
<td>Physicist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46.</td>
<td>Sales vice president</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47.</td>
<td>Sales manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Order</td>
<td>Profession</td>
<td>M</td>
<td>N</td>
<td>F</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>48.</td>
<td>Physician's assistant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49.</td>
<td>Hardware store sales work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50.</td>
<td>Game warden</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>Politician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>FBI agent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>Jewlery sales work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54.</td>
<td>Personnel director</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55.</td>
<td>Motel manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>56.</td>
<td>Technical sales work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>57.</td>
<td>Banker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58.</td>
<td>Veterinarian</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>59.</td>
<td>Physician-general practitioner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60.</td>
<td>Laboratory technician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>61.</td>
<td>Practical nurse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>62.</td>
<td>Psychiatrist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>Computer programmer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64.</td>
<td>Oceanographer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65.</td>
<td>Mining engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>66.</td>
<td>Pediatrician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>67.</td>
<td>High government official</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>68.</td>
<td>School psychologist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69.</td>
<td>Geologist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70.</td>
<td>Watch repair work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71.</td>
<td>Pharmacist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>72</td>
<td>Bank teller</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>Business machine sales work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>Drafting work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>Occupational therapist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76</td>
<td>Farm manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>Engineer (e.g. electrical)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>Highway maintenance worker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>Customs inspector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>Construction worker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>Surgeon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>Bell captain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>Door to door sales work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>Taxidermist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>Heavy equipment operator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>86</td>
<td>Dry cleaning store owner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>87</td>
<td>History professor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>Managing editor (e.g. TIME)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>Social worker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>Prima ballet dancer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>Magician</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>Educational administrator (e.g. Dean)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>Humanities professor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>94</td>
<td>Insurance agent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>Professional athlete</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Order I

96. Theatrical director
97. Law professor
98. Forestry engineer
99. Counseling psychologist
100. Meteorologist
101. Choreographer
102. Jewelry designer
103. Comedian
104. District attorney
105. Company president
106. Miner
107. Federal judge
108. School principal
109. Orchestra conductor
110. Pharmaceutical sales work
111. Elementary school teacher
112. Head librarian
113. Creative artist (e.g. painter)
114. Top level labor official
115. Composer
116. Cashier
117. Singer
118. University president
119. Dietician
<table>
<thead>
<tr>
<th>Order</th>
<th>Profession</th>
</tr>
</thead>
<tbody>
<tr>
<td>120.</td>
<td>Writer</td>
</tr>
<tr>
<td>121.</td>
<td>Journalist</td>
</tr>
<tr>
<td>122.</td>
<td>Architect</td>
</tr>
<tr>
<td>123.</td>
<td>High school teacher</td>
</tr>
<tr>
<td>124.</td>
<td>Radio announcer</td>
</tr>
<tr>
<td>125.</td>
<td>Nurse (registered)</td>
</tr>
<tr>
<td>126.</td>
<td>Race car driver</td>
</tr>
<tr>
<td>127.</td>
<td>Mathematician</td>
</tr>
<tr>
<td>128.</td>
<td>Park manager</td>
</tr>
<tr>
<td>129.</td>
<td>Law clerk</td>
</tr>
<tr>
<td>130.</td>
<td>U.S. supreme court justice</td>
</tr>
</tbody>
</table>
APPENDIX II

Name
Age
Sex

Any given concept can be described on a continuum between two adjectives having opposite meaning. For example, the concept "knife" can be rated on a 7 point graphic scale as being more clearly related to one or the other of a pair of opposites, such as:

sharp _ _ _ _ _ _ _ dull
strong _ _ _ _ _ _ _ weak
heavy _ _ _ _ _ _ _ light

In this experiment you are asked to rate a list of occupations on two opposite dimensions: feminine - masculine.

If for a given occupation your response is very close to one end, mark

M N F
X__________ or __________X

close to one end, mark

X__________ or __________X

slightly closer to one end

X__________ or __________X

equally distant from both ends (neutral), mark

________X______ or ________X____

M - masculine
F - feminine
N - neutral

Assume that the scales are divided into equal intervals. Work quickly without going back and forth through the scales, and make an independent judgment on each scale.
Please answer the following question after having finished rating all the occupations.

On the basis of what did you make your judgment of the masculinity, femininity or neutrality of each occupation? (circle your answer)

a. on the basis of the proportion of men and women employed in that occupation

b. on the basis of the personality traits matching each occupation

c. on the basis of physical capabilities required for each occupation

d. other - specify:

If you check more than one alternative, please indicate which was primary and which was (were) secondary.
APPENDIX III

Name
Age
Sex

Occupations can be described as feminine, neutral or masculine on the basis of the proportion of men and women employed in those occupations. For example, occupations in which the number of men is much greater than that of women are called masculine occupations; those which are highly populated by women - feminine occupations, and those in which the number of men and women is approximately equal - neutral occupations.

Please rate each of the following occupations in terms of its being masculine, feminine or neutral, based on your perception of the proportion of men and women employed in that occupation.

Each occupation listed below can be rated on a scale where at one end most or all of the people in that occupation are men, and at the other end most of the people or all of them are women. Each scale is divided into 7 equal intervals corresponding to the proportion of men and women in that occupation. For example, if as far as you know, in a given occupation the number of men and women is approximately equal your answer should be:

M _______ N _______ F
X

If, on the other hand, in a given occupation the number of women slightly exceeds the number of men mark your answer as following:

M _______ N _______ F
X

e tc.

Work quickly without going back and forth through the scales, and make an independent judgment on each scale.
APPENDIX IV

Name
Age
Sex

Occupations can be described as feminine, masculine or neutral on the basis of the personality characteristics of people employed in them. For example, occupations typified by predominantly feminine traits are called feminine occupations, and those typified by predominantly masculine traits are called masculine occupations. Occupations with which no specifically masculine or feminine characteristics are linked are called neutral occupations.

Please rate each of the following occupations in terms of its masculinity, femininity or neutrality, based on your perception of the personality characteristics of people in those occupations.

Each occupation listed below can be rated on a scale where at one end most or all of the personality characteristics are masculine, and at the other end most or all of them are feminine. Each scale is divided into 7 equal intervals.

If, based on your perception of a given occupation, it is not linked with specifically designated masculine or feminine traits, your answer should be:

\[
\text{M} \quad \text{N} \quad \text{F}
\]

If, on the other hand, the occupation is linked with slightly more feminine personality characteristics than with masculine characteristics, you will mark: etc.

\[
\text{M} \quad \text{N} \quad \text{X} \quad \text{F}
\]

Work quickly without going back and forth through the scales, and make an independent judgment on each scale.
## APPENDIX V

### C. MEAN Score and SD and SE across ALL Instruction Groups

<table>
<thead>
<tr>
<th>Occupation</th>
<th>M</th>
<th>SD</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td>1.000</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>78</td>
<td>1.167</td>
<td>0.152</td>
<td>0.112</td>
</tr>
<tr>
<td>85</td>
<td>1.167</td>
<td>0.152</td>
<td>0.112</td>
</tr>
<tr>
<td>130</td>
<td>1.250</td>
<td>0.386</td>
<td>0.179</td>
</tr>
<tr>
<td>12</td>
<td>1.333</td>
<td>0.242</td>
<td>0.142</td>
</tr>
<tr>
<td>80</td>
<td>1.333</td>
<td>0.242</td>
<td>0.142</td>
</tr>
<tr>
<td>65</td>
<td>1.417</td>
<td>0.265</td>
<td>0.149</td>
</tr>
<tr>
<td>6</td>
<td>1.500</td>
<td>0.636</td>
<td>0.230</td>
</tr>
<tr>
<td>14</td>
<td>1.500</td>
<td>0.636</td>
<td>0.230</td>
</tr>
<tr>
<td>34</td>
<td>1.583</td>
<td>0.265</td>
<td>0.149</td>
</tr>
<tr>
<td>36</td>
<td>1.583</td>
<td>0.447</td>
<td>0.193</td>
</tr>
<tr>
<td>104</td>
<td>1.583</td>
<td>0.265</td>
<td>0.149</td>
</tr>
<tr>
<td>105</td>
<td>1.583</td>
<td>0.265</td>
<td>0.149</td>
</tr>
<tr>
<td>126</td>
<td>1.583</td>
<td>0.447</td>
<td>0.193</td>
</tr>
<tr>
<td>26</td>
<td>1.667</td>
<td>0.970</td>
<td>0.284</td>
</tr>
<tr>
<td>114</td>
<td>1.667</td>
<td>0.970</td>
<td>0.284</td>
</tr>
<tr>
<td>24</td>
<td>1.750</td>
<td>0.386</td>
<td>0.179</td>
</tr>
<tr>
<td>118</td>
<td>1.750</td>
<td>0.568</td>
<td>0.218</td>
</tr>
<tr>
<td>4</td>
<td>1.833</td>
<td>1.242</td>
<td>0.322</td>
</tr>
<tr>
<td>1</td>
<td>1.917</td>
<td>0.811</td>
<td>0.260</td>
</tr>
<tr>
<td>43</td>
<td>1.917</td>
<td>0.811</td>
<td>0.260</td>
</tr>
<tr>
<td>50</td>
<td>1.917</td>
<td>0.629</td>
<td>0.229</td>
</tr>
<tr>
<td>67</td>
<td>1.917</td>
<td>0.447</td>
<td>0.193</td>
</tr>
<tr>
<td>76</td>
<td>1.917</td>
<td>0.992</td>
<td>0.288</td>
</tr>
<tr>
<td>77</td>
<td>1.917</td>
<td>0.647</td>
<td>0.193</td>
</tr>
<tr>
<td>98</td>
<td>1.917</td>
<td>0.629</td>
<td>0.229</td>
</tr>
<tr>
<td>107</td>
<td>1.917</td>
<td>1.174</td>
<td>0.313</td>
</tr>
<tr>
<td>5</td>
<td>2.000</td>
<td>0.909</td>
<td>0.275</td>
</tr>
<tr>
<td>22</td>
<td>2.000</td>
<td>0.727</td>
<td>0.246</td>
</tr>
<tr>
<td>25</td>
<td>2.000</td>
<td>0.727</td>
<td>0.246</td>
</tr>
<tr>
<td>.31</td>
<td>2.083</td>
<td>0.629</td>
<td>0.229</td>
</tr>
<tr>
<td>40</td>
<td>2.083</td>
<td>0.629</td>
<td>0.229</td>
</tr>
<tr>
<td>46</td>
<td>2.083</td>
<td>1.174</td>
<td>0.313</td>
</tr>
<tr>
<td>52</td>
<td>2.083</td>
<td>1.356</td>
<td>0.336</td>
</tr>
<tr>
<td>128</td>
<td>2.083</td>
<td>0.629</td>
<td>0.229</td>
</tr>
<tr>
<td>33</td>
<td>2.167</td>
<td>1.061</td>
<td>0.297</td>
</tr>
<tr>
<td>47</td>
<td>2.167</td>
<td>1.606</td>
<td>0.366</td>
</tr>
<tr>
<td>81</td>
<td>2.167</td>
<td>1.424</td>
<td>0.345</td>
</tr>
<tr>
<td>95</td>
<td>2.167</td>
<td>1.606</td>
<td>0.366</td>
</tr>
<tr>
<td>45</td>
<td>2.250</td>
<td>1.114</td>
<td>0.305</td>
</tr>
<tr>
<td>82</td>
<td>2.333</td>
<td>1.333</td>
<td>0.333</td>
</tr>
<tr>
<td>109</td>
<td>2.333</td>
<td>0.606</td>
<td>0.225</td>
</tr>
<tr>
<td>74</td>
<td>2.417</td>
<td>0.629</td>
<td>0.229</td>
</tr>
<tr>
<td>10</td>
<td>2.500</td>
<td>1.545</td>
<td>0.359</td>
</tr>
<tr>
<td>11</td>
<td>2.500</td>
<td>1.545</td>
<td>0.359</td>
</tr>
<tr>
<td>42</td>
<td>2.500</td>
<td>1.545</td>
<td>0.359</td>
</tr>
<tr>
<td>51</td>
<td>2.500</td>
<td>1.545</td>
<td>0.359</td>
</tr>
<tr>
<td>57</td>
<td>2.500</td>
<td>1.000</td>
<td>0.289</td>
</tr>
<tr>
<td>79</td>
<td>2.500</td>
<td>1.364</td>
<td>0.337</td>
</tr>
<tr>
<td>122</td>
<td>2.500</td>
<td>0.818</td>
<td>0.261</td>
</tr>
<tr>
<td>56</td>
<td>2.583</td>
<td>1.174</td>
<td>0.313</td>
</tr>
<tr>
<td>64</td>
<td>2.583</td>
<td>1.356</td>
<td>0.336</td>
</tr>
<tr>
<td>.97</td>
<td>2.583</td>
<td>0.811</td>
<td>0.260</td>
</tr>
<tr>
<td>27</td>
<td>2.667</td>
<td>1.152</td>
<td>0.310</td>
</tr>
<tr>
<td>58</td>
<td>2.667</td>
<td>1.515</td>
<td>0.355</td>
</tr>
<tr>
<td>Occup.</td>
<td>M</td>
<td>SD</td>
<td>SE</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>59</td>
<td>2.667</td>
<td>1.333</td>
<td>0.333</td>
</tr>
<tr>
<td>69</td>
<td>2.750</td>
<td>1.295</td>
<td>0.329</td>
</tr>
<tr>
<td>124</td>
<td>2.750</td>
<td>0.932</td>
<td>0.279</td>
</tr>
<tr>
<td>8</td>
<td>2.833</td>
<td>1.242</td>
<td>0.322</td>
</tr>
<tr>
<td>70</td>
<td>2.833</td>
<td>1.606</td>
<td>0.366</td>
</tr>
<tr>
<td>94</td>
<td>2.833</td>
<td>1.242</td>
<td>0.322</td>
</tr>
<tr>
<td>16</td>
<td>2.917</td>
<td>0.629</td>
<td>0.229</td>
</tr>
<tr>
<td>49</td>
<td>2.917</td>
<td>0.992</td>
<td>0.328</td>
</tr>
<tr>
<td>115</td>
<td>3.000</td>
<td>1.356</td>
<td>0.336</td>
</tr>
<tr>
<td>35</td>
<td>3.000</td>
<td>1.455</td>
<td>0.348</td>
</tr>
<tr>
<td>71</td>
<td>3.000</td>
<td>1.273</td>
<td>0.326</td>
</tr>
<tr>
<td>88</td>
<td>3.000</td>
<td>1.455</td>
<td>0.348</td>
</tr>
<tr>
<td>91</td>
<td>3.083</td>
<td>0.811</td>
<td>0.260</td>
</tr>
<tr>
<td>108</td>
<td>3.083</td>
<td>1.356</td>
<td>0.336</td>
</tr>
<tr>
<td>21</td>
<td>3.167</td>
<td>0.879</td>
<td>0.271</td>
</tr>
<tr>
<td>86</td>
<td>3.167</td>
<td>1.424</td>
<td>0.345</td>
</tr>
<tr>
<td>100</td>
<td>3.167</td>
<td>1.961</td>
<td>0.297</td>
</tr>
<tr>
<td>127</td>
<td>3.167</td>
<td>1.788</td>
<td>0.286</td>
</tr>
<tr>
<td>41</td>
<td>3.250</td>
<td>2.205</td>
<td>0.429</td>
</tr>
<tr>
<td>84</td>
<td>3.250</td>
<td>0.568</td>
<td>0.218</td>
</tr>
<tr>
<td>92</td>
<td>3.250</td>
<td>0.750</td>
<td>0.250</td>
</tr>
<tr>
<td>66</td>
<td>3.333</td>
<td>0.970</td>
<td>0.284</td>
</tr>
<tr>
<td>73</td>
<td>3.333</td>
<td>1.879</td>
<td>0.396</td>
</tr>
<tr>
<td>19</td>
<td>3.417</td>
<td>0.992</td>
<td>0.288</td>
</tr>
<tr>
<td>29</td>
<td>3.417</td>
<td>1.174</td>
<td>0.313</td>
</tr>
<tr>
<td>63</td>
<td>3.417</td>
<td>0.629</td>
<td>0.229</td>
</tr>
<tr>
<td>87</td>
<td>3.417</td>
<td>0.992</td>
<td>0.288</td>
</tr>
<tr>
<td>54</td>
<td>3.500</td>
<td>1.000</td>
<td>0.289</td>
</tr>
<tr>
<td>83</td>
<td>3.500</td>
<td>0.818</td>
<td>0.261</td>
</tr>
<tr>
<td>96</td>
<td>3.500</td>
<td>0.455</td>
<td>0.195</td>
</tr>
<tr>
<td>28</td>
<td>3.583</td>
<td>0.992</td>
<td>0.288</td>
</tr>
<tr>
<td>60</td>
<td>3.583</td>
<td>0.992</td>
<td>0.288</td>
</tr>
<tr>
<td>44</td>
<td>3.667</td>
<td>0.970</td>
<td>0.284</td>
</tr>
<tr>
<td>62</td>
<td>3.667</td>
<td>0.924</td>
<td>0.255</td>
</tr>
<tr>
<td>93</td>
<td>3.667</td>
<td>0.606</td>
<td>0.225</td>
</tr>
<tr>
<td>110</td>
<td>3.667</td>
<td>1.879</td>
<td>0.396</td>
</tr>
<tr>
<td>113</td>
<td>3.667</td>
<td>0.788</td>
<td>0.256</td>
</tr>
<tr>
<td>102</td>
<td>3.750</td>
<td>0.386</td>
<td>0.179</td>
</tr>
<tr>
<td>2</td>
<td>3.833</td>
<td>0.333</td>
<td>0.167</td>
</tr>
<tr>
<td>3</td>
<td>3.833</td>
<td>1.061</td>
<td>0.297</td>
</tr>
<tr>
<td>121</td>
<td>3.833</td>
<td>0.152</td>
<td>0.012</td>
</tr>
<tr>
<td>129</td>
<td>3.833</td>
<td>1.242</td>
<td>0.322</td>
</tr>
<tr>
<td>120</td>
<td>3.917</td>
<td>0.083</td>
<td>0.013</td>
</tr>
<tr>
<td>68</td>
<td>4.000</td>
<td>0.727</td>
<td>0.266</td>
</tr>
<tr>
<td>99</td>
<td>4.000</td>
<td>0.182</td>
<td>0.123</td>
</tr>
<tr>
<td>123</td>
<td>4.000</td>
<td>0.182</td>
<td>0.123</td>
</tr>
<tr>
<td>30</td>
<td>4.167</td>
<td>0.697</td>
<td>0.261</td>
</tr>
<tr>
<td>39</td>
<td>4.167</td>
<td>0.697</td>
<td>0.261</td>
</tr>
<tr>
<td>13</td>
<td>4.333</td>
<td>0.788</td>
<td>0.256</td>
</tr>
<tr>
<td>117</td>
<td>4.500</td>
<td>0.455</td>
<td>0.195</td>
</tr>
<tr>
<td>18</td>
<td>4.583</td>
<td>1.356</td>
<td>0.336</td>
</tr>
<tr>
<td>101</td>
<td>4.583</td>
<td>0.229</td>
<td>0.071</td>
</tr>
<tr>
<td>117</td>
<td>4.750</td>
<td>1.114</td>
<td>0.305</td>
</tr>
<tr>
<td>53</td>
<td>4.750</td>
<td>1.114</td>
<td>0.305</td>
</tr>
<tr>
<td>89</td>
<td>4.750</td>
<td>0.750</td>
<td>0.250</td>
</tr>
<tr>
<td>75</td>
<td>4.833</td>
<td>1.424</td>
<td>0.345</td>
</tr>
<tr>
<td>32</td>
<td>4.917</td>
<td>0.992</td>
<td>0.288</td>
</tr>
<tr>
<td>48</td>
<td>5.000</td>
<td>1.455</td>
<td>0.368</td>
</tr>
<tr>
<td>102</td>
<td>5.083</td>
<td>1.174</td>
<td>0.313</td>
</tr>
<tr>
<td>72</td>
<td>5.167</td>
<td>1.061</td>
<td>0.297</td>
</tr>
<tr>
<td>Male Engineer</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>self-assertive</td>
<td>submissive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>socially sensitive</td>
<td>socially insensitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unsociable</td>
<td>sociable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>competitive</td>
<td>uncompetitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>passive</td>
<td>active</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unhappy home life</td>
<td>happy home life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>great personal satisfaction</td>
<td>little personal satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>politically liberal</td>
<td>politically conservative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>professionally competent</td>
<td>professionally incompetent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>emotional</td>
<td>logical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tense</td>
<td>relaxed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dependent</td>
<td>independent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>conformist</td>
<td>individualist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>aggressive</td>
<td>meek</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dull</td>
<td>intelligent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>uninfluential</td>
<td>influential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unattractive</td>
<td>good looking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>has personality adjustment problems</td>
<td>does not have personality adjustment problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>comfortable with others</td>
<td>uncomfortable with others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>likeable</td>
<td>unlikeable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FEMALE ENGINEER

self-assertive □□□□□□□□□□ submissive
socially sensitive □□□□□□□□□□ socially insensitive
unsociable □□□□□□□□□□ sociable
competitive □□□□□□□□□□ uncompetitive
passive □□□□□□□□□□ active
unhappy home life □□□□□□□□□□ happy home life
great personal satisfaction □□□□□□□□□□ little personal satisfaction
politically liberal □□□□□□□□□□ politically conservative
professionally competent □□□□□□□□□□ professionally incompetent
emotional □□□□□□□□□□ logical
tense □□□□□□□□□□ relaxed
dependent □□□□□□□□□□ independent
conformist □□□□□□□□□□ individualist
aggressive □□□□□□□□□□ meek
dull □□□□□□□□□□ intelligent
uninfluential □□□□□□□□□□ influential
unattractive □□□□□□□□□□ good looking
has personality adjustment problems □□□□□□□□□□ does not have personality adjustment problems
comfortable with others □□□□□□□□□□ uncomfortable with others
likeable □□□□□□□□□□ unlikeable
APPENDIX VII
Impressions Questionnaire

Instructions

The purpose of this study is to find out impressions people have of persons in various occupations. This is accomplished by having the subjects judge the person-in-occupation against a series of descriptive scales. We know that each person is an individual having a unique composition of characteristics, however we believe that some characteristics are common to people performing the same job. In responding to this questionnaire make your judgments on the basis of what you feel about men and women in these occupations. On each page of this booklet you will find a different person-in-occupation (e.g., FEMALE MANICURIST; MALE ENGINEER) to be judged and beneath it a set of scales. You are to rate the person-in-occupation on each of these scales in order.

Here is how you are to use these scales:

If you feel that the person at the top of the page is very closely related to one end of the scale you should place your X as follows:

- active X, passive
- relaxed X, tense
- emotional X, logical

The direction toward which you check depends of course upon which of the two ends of the scale seems most characteristic. If you consider the person-in-occupation to be equally distant from both ends, that is neutral, place your X in the middle space (Neut.).

IMPORTANT: Place your X marks in the middle of the spaces, not on the boundaries. This: X, Not this: X.

Be sure you check every scale, do not omit any. Never put more than one X mark on a single scale. Do not look back and forth through the scales.
Do not try to remember how you checked similar scales earlier in the questionnaire. Make separate and independent judgment on each scale. Work at a fairly high speed, not worry or puzzle over individual items. It is your first impression, the immediate feelings about the rated person that we are interested in. On the other hand, do not be careless. It is your true impression and honest response we want.

Thank you.
### Appendix VIII

#### Analysis of Variance

Scale 1: Has personality adjustment problems / Has no personality adjustment problems

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>F</th>
<th>Sum of Squares</th>
<th>Deg. of Mean Square</th>
<th>Freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (A)</td>
<td>(A)</td>
<td></td>
<td>53018.25</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2 A</td>
<td>(A)</td>
<td></td>
<td>0.1355</td>
<td>0.773218</td>
<td>1</td>
</tr>
<tr>
<td>3 B</td>
<td>SB(A)</td>
<td></td>
<td>0.6308</td>
<td>9.137427</td>
<td>1</td>
</tr>
<tr>
<td>4 D</td>
<td>(A)</td>
<td></td>
<td>9.0766</td>
<td>31.87134</td>
<td>2</td>
</tr>
<tr>
<td>5 S(A)</td>
<td>(A)</td>
<td></td>
<td>639.2944</td>
<td>5.707496</td>
<td>112</td>
</tr>
<tr>
<td>6 D(D)</td>
<td>SB(AD)</td>
<td></td>
<td>29.3993</td>
<td>716.9377</td>
<td>9</td>
</tr>
<tr>
<td>7 AB</td>
<td>SB(A)</td>
<td></td>
<td>0.1099</td>
<td>1461977</td>
<td>1</td>
</tr>
<tr>
<td>8 AD</td>
<td>SB(A)</td>
<td></td>
<td>1.0600</td>
<td>3.721198</td>
<td>2</td>
</tr>
<tr>
<td>9 BD</td>
<td>SBD(A)</td>
<td></td>
<td>2.9912</td>
<td>8.783600</td>
<td>2</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td>(A)</td>
<td></td>
<td>162.2454</td>
<td>112.14861</td>
<td>1</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td>(A)</td>
<td></td>
<td>393.2739</td>
<td>1.755477</td>
<td>224</td>
</tr>
<tr>
<td>12 AD(AD)</td>
<td>SB(AD)</td>
<td></td>
<td>6951</td>
<td>21.02834</td>
<td>9</td>
</tr>
<tr>
<td>13 BD(AD)</td>
<td>SB(AD)</td>
<td></td>
<td>14.3595</td>
<td>171.9764</td>
<td>9</td>
</tr>
<tr>
<td>14 ABD</td>
<td>SB(A)</td>
<td></td>
<td>1.3930</td>
<td>4.09622</td>
<td>2</td>
</tr>
<tr>
<td>15 SBD(A)</td>
<td>(A)</td>
<td></td>
<td>2731.2572</td>
<td>1008.2709375</td>
<td>9</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td>(A)</td>
<td></td>
<td>329.8423</td>
<td>1.468225</td>
<td>224</td>
</tr>
<tr>
<td>17 ABD(AD)</td>
<td>SB(AD)</td>
<td></td>
<td>1.0929</td>
<td>13.08910</td>
<td>9</td>
</tr>
<tr>
<td>18 SBD(AD)</td>
<td>(A)</td>
<td></td>
<td>1341.371</td>
<td>1008.330725</td>
<td>9</td>
</tr>
</tbody>
</table>

**Mean**

4.40205

**Cell Means**

<table>
<thead>
<tr>
<th>A = 1</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.38323</td>
<td>4.41886</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B = 1</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.38437</td>
<td>4.41932</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D = 1</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.41667</td>
<td>4.26316</td>
<td>4.52632</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B = 1</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.37427</td>
<td>4.39620</td>
<td></td>
</tr>
<tr>
<td>4.39327</td>
<td>4.44444</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 1</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.43421</td>
<td>4.26316</td>
<td>4.59833</td>
<td></td>
</tr>
<tr>
<td>4.39912</td>
<td>4.26316</td>
<td>4.59430</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B = 1</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.45833</td>
<td>4.16886</td>
<td>4.52412</td>
<td></td>
</tr>
<tr>
<td>4.37500</td>
<td>4.35746</td>
<td>4.52851</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 1</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.43860</td>
<td>4.17105</td>
<td>4.51316</td>
<td></td>
</tr>
<tr>
<td>4.42982</td>
<td>4.35526</td>
<td>4.50351</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 2</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.47807</td>
<td>4.16667</td>
<td>4.53509</td>
<td></td>
</tr>
<tr>
<td>4.32018</td>
<td>4.35965</td>
<td>4.65251</td>
<td></td>
</tr>
</tbody>
</table>

138
### ANALYSIS OF VARIANCE FOR Scale 2: Relaxed/Tense

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>ERROR TERM</th>
<th>F</th>
<th>SUM OF SQUARES</th>
<th>DEG. OF FREEDOM</th>
<th>MEAN SQUARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 MEAN</td>
<td>$S(A)$</td>
<td></td>
<td>35974.50</td>
<td>1</td>
<td>35974.50</td>
</tr>
<tr>
<td>2 A</td>
<td>$S(A)$</td>
<td></td>
<td>9.009137</td>
<td>1</td>
<td>9.009137</td>
</tr>
<tr>
<td>3 B</td>
<td>$S(B)$</td>
<td></td>
<td>675804.1</td>
<td>1</td>
<td>675804.1</td>
</tr>
<tr>
<td>4 D</td>
<td>$SD(A)$</td>
<td></td>
<td>124.9407</td>
<td>2</td>
<td>62.47035</td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td></td>
<td>1088.097</td>
<td>112</td>
<td>9.715151</td>
</tr>
<tr>
<td>6 D(D)</td>
<td>$SD(AD)$</td>
<td></td>
<td>791.5505</td>
<td>9</td>
<td>87.95006</td>
</tr>
<tr>
<td>7 AB</td>
<td>$S(B)$</td>
<td></td>
<td>11.19334</td>
<td>1</td>
<td>11.19334</td>
</tr>
<tr>
<td>8 AD</td>
<td>$SD(A)$</td>
<td></td>
<td>9.509552</td>
<td>2</td>
<td>4.754776</td>
</tr>
<tr>
<td>9 BD</td>
<td>$SBD(A)$</td>
<td></td>
<td>15.78146</td>
<td>2</td>
<td>7.890732</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td></td>
<td>147.2151</td>
<td>112</td>
<td>1.314420</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td></td>
<td>782.4805</td>
<td>224</td>
<td>3.493252</td>
</tr>
<tr>
<td>12 AO(D)</td>
<td>$S(AD)$</td>
<td></td>
<td>66.80656</td>
<td>9</td>
<td>7.423173</td>
</tr>
<tr>
<td>13 BD(D)</td>
<td>$SBD(AD)$</td>
<td></td>
<td>114.1512</td>
<td>9</td>
<td>12.68346</td>
</tr>
<tr>
<td>14 ABD</td>
<td>$SBD(A)$</td>
<td></td>
<td>1785690</td>
<td>2</td>
<td>8928452</td>
</tr>
<tr>
<td>15 SBD(AD)</td>
<td></td>
<td></td>
<td>3960.5822</td>
<td>1008</td>
<td>3.929148</td>
</tr>
<tr>
<td>16 ABD</td>
<td>$SBD(AD)$</td>
<td></td>
<td>408.1726</td>
<td>224</td>
<td>1.822199</td>
</tr>
<tr>
<td>17 ABD</td>
<td>$SBD(AD)$</td>
<td></td>
<td>9.317792</td>
<td>9</td>
<td>1.001976</td>
</tr>
<tr>
<td>18 ABD</td>
<td>$SBD(AD)$</td>
<td></td>
<td>1734.407</td>
<td>1008</td>
<td>1.720842</td>
</tr>
</tbody>
</table>

**MEAN:** 3.62610

**CELL MEANS**

<table>
<thead>
<tr>
<th>A = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.68348</td>
<td>3.56871</td>
</tr>
<tr>
<td>3.61038</td>
<td>3.64181</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D = 1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.82373</td>
<td>3.72697</td>
<td>3.32895</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.60380</td>
<td>3.76316</td>
</tr>
<tr>
<td>3.61696</td>
<td>3.52047</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.83114</td>
<td>3.75000</td>
</tr>
<tr>
<td>3.81360</td>
<td>3.70395</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D = 1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.85307</td>
<td>3.77193</td>
<td>3.20614</td>
</tr>
<tr>
<td>3.79167</td>
<td>3.66202</td>
<td>3.45175</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.76754</td>
</tr>
<tr>
<td>3.76316</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.89474</td>
<td>3.73684</td>
</tr>
<tr>
<td>3.65789</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.93860</td>
</tr>
<tr>
<td>3.78070</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.68860</td>
<td>3.62719</td>
</tr>
<tr>
<td>3.24561</td>
<td></td>
</tr>
</tbody>
</table>
### ANALYSIS OF VARIANCE FOR Scale 3: Comfortable with others/Uncomfortable with others

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>ERROR TERM</th>
<th>F</th>
<th>SUM OF SQUARES</th>
<th>DEG. OF MEAN SQUARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 MEAN</td>
<td>S(A)</td>
<td>******</td>
<td>18191.89</td>
<td>1</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>6.2651</td>
<td>77.67580</td>
<td>1</td>
</tr>
<tr>
<td>3 B</td>
<td>S(B)</td>
<td>37.5079</td>
<td>50.30737</td>
<td>1</td>
</tr>
<tr>
<td>4 D</td>
<td>S(D)</td>
<td>18.5137</td>
<td>75.50507</td>
<td>2</td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td></td>
<td>1321.120</td>
<td>112</td>
</tr>
<tr>
<td>6 D(D)</td>
<td>S(D)</td>
<td>28.6431</td>
<td>426.7175</td>
<td>9</td>
</tr>
<tr>
<td>7 AB</td>
<td>S(B)</td>
<td>0.2292</td>
<td>307.3683</td>
<td>9</td>
</tr>
<tr>
<td>8 AD</td>
<td>S(D)</td>
<td>1.0606</td>
<td>4.325202</td>
<td>2</td>
</tr>
<tr>
<td>9 BD</td>
<td>S(D)</td>
<td>23.1015</td>
<td>68.69081</td>
<td>2</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td></td>
<td>150.2195</td>
<td>112</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td></td>
<td>456.7720</td>
<td>224</td>
</tr>
<tr>
<td>12 AD(D)</td>
<td>S(D)</td>
<td>41.108</td>
<td>60.81752</td>
<td>9</td>
</tr>
<tr>
<td>13 BD(D)</td>
<td>S(D)</td>
<td>1.4259</td>
<td>14.70905</td>
<td>9</td>
</tr>
<tr>
<td>14 ABD</td>
<td>S(D)</td>
<td>0.4650</td>
<td>1.386702</td>
<td>2</td>
</tr>
<tr>
<td>15 S(D)</td>
<td></td>
<td></td>
<td>165.979</td>
<td>1008</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td></td>
<td></td>
<td>333.9934</td>
<td>224</td>
</tr>
<tr>
<td>17 ABD(D)</td>
<td>S(D)</td>
<td>1.2929</td>
<td>13.3740</td>
<td>9</td>
</tr>
<tr>
<td>18 SBD(D)</td>
<td></td>
<td></td>
<td>1155.368</td>
<td>1008</td>
</tr>
</tbody>
</table>

**MEAN** 2.57858

**CELL MEANS**

- **A**
  - 1 2.74708 2.41009
  - 2 2.71418 2.44298

- **B**
  - 1 2.52412 2.80373 2.40789
  - 2 2.53509 2.28509

- **D**
  - 1 2.89327 2.60088
  - 2 2.53509 2.28509

- **A**
  - 1 2.70395 2.91886 2.61842
  - 2 2.34430 2.68660 2.19737

- **D**
  - 1 2.50000 3.15570 2.48684
  - 2 2.54825 2.45175 2.32895

- **A**
  - 1 2.71053 3.25000 2.71930
  - 2 2.69737 2.58772 2.51754

- **D**
  - 1 2.28947 3.06140 2.25439
  - 2 2.39912 2.31579 2.14035
## Analysis of Variance for Scale 4: Sociable/Unsociable

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>F</th>
<th>Sum of Squares</th>
<th>Deg. of Mean Square</th>
<th>Freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>S(A)</td>
<td></td>
<td>17888.89</td>
<td>1</td>
<td>17888.89</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td></td>
<td>2744005</td>
<td>1</td>
<td>2744005</td>
</tr>
<tr>
<td>3 B</td>
<td>SB(A)</td>
<td></td>
<td>3684357</td>
<td>1</td>
<td>3684357</td>
</tr>
<tr>
<td>4 D</td>
<td>SD(A)</td>
<td></td>
<td>8889099</td>
<td>2</td>
<td>8889099</td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td></td>
<td>9804910</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>6 D(D)</td>
<td>SO(AD)</td>
<td></td>
<td>6411445</td>
<td>9</td>
<td>6411445</td>
</tr>
<tr>
<td>7 AB</td>
<td>SB(A)</td>
<td></td>
<td>9366899</td>
<td>1</td>
<td>9366899</td>
</tr>
<tr>
<td>8 AD</td>
<td>SD(A)</td>
<td></td>
<td>6242371</td>
<td>2</td>
<td>6242371</td>
</tr>
<tr>
<td>9 BD</td>
<td>SBD(A)</td>
<td></td>
<td>2772999</td>
<td>2</td>
<td>2772999</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td></td>
<td>1175867</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td></td>
<td>2209323</td>
<td>224</td>
<td></td>
</tr>
<tr>
<td>12 AD(D)</td>
<td>SO(AD)</td>
<td></td>
<td>4058845</td>
<td>9</td>
<td>4058845</td>
</tr>
<tr>
<td>13 BD(D)</td>
<td>SO(AD)</td>
<td></td>
<td>7216540</td>
<td>9</td>
<td>7216540</td>
</tr>
<tr>
<td>14 AB</td>
<td>SBD(A)</td>
<td></td>
<td>3348289</td>
<td>2</td>
<td>3348289</td>
</tr>
<tr>
<td>15 SD(AD)</td>
<td></td>
<td></td>
<td>1435896</td>
<td>1008</td>
<td></td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td></td>
<td></td>
<td>1057972</td>
<td>224</td>
<td></td>
</tr>
<tr>
<td>17 ABO(D)</td>
<td>SBO(AD)</td>
<td></td>
<td>9362232</td>
<td>9</td>
<td>9362232</td>
</tr>
<tr>
<td>18 SBO(AD)</td>
<td></td>
<td></td>
<td>1159922</td>
<td>1008</td>
<td></td>
</tr>
</tbody>
</table>

**Mean:** 2.55702

**Cell Means**

- **A**: 1
  - 1: 2.65716
  - 2: 2.45687

- **B**: 1
  - 1: 2.67617
  - 2: 2.43787

- **D**: 1
  - 1: 2.61866
  - 2: 2.91447
  - 3: 2.33773

- **B**: 1
  - 1: 2.77047
  - 2: 2.54386

- **A**: 1
  - 1: 2.53728
  - 2: 2.98465
  - 3: 2.44956

- **D**: 1
  - 1: 2.50044
  - 2: 2.64530
  - 3: 2.25588

- **B**: 1
  - 1: 2.44737
  - 2: 2.34649

- **A**: 1
  - 1: 2.54366
  - 2: 2.92366
  - 3: 2.47368

- **D**: 1
  - 1: 2.53070
  - 2: 2.67544
  - 3: 2.42544

- **B**: 1
  - 1: 2.35088
  - 2: 2.19300

- **A**: 2
  - 1: 2.25000
  - 2: 2.51316
  - 3: 2.23246
## ANALYSIS OF VARIANCE FOR Scale 5: Politically liberal/
Politically conservative

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>ERROR TERM</th>
<th>F</th>
<th>SUM OF SQUARES</th>
<th>DEG. OF FREEDOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 MEAN</td>
<td>S(A)</td>
<td></td>
<td>38033.77</td>
<td>1</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>0.4725</td>
<td>3.298611</td>
<td>1</td>
</tr>
<tr>
<td>3 B</td>
<td>SB(A)</td>
<td>10.6640</td>
<td>21.58223</td>
<td>1</td>
</tr>
<tr>
<td>4 D</td>
<td>SD(A)</td>
<td>83.4073</td>
<td>646.8953</td>
<td>2</td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td>781.8749</td>
<td>6.961018</td>
<td>112</td>
</tr>
<tr>
<td>6 AD(A)</td>
<td>SD(AD)</td>
<td>21.3396</td>
<td>305.6054</td>
<td>9</td>
</tr>
<tr>
<td>7 AB</td>
<td>SB(A)</td>
<td>0.7182</td>
<td>1.450653</td>
<td>1</td>
</tr>
<tr>
<td>8 AD</td>
<td>SD(A)</td>
<td>7.4206</td>
<td>57.55298</td>
<td>2</td>
</tr>
<tr>
<td>9 BD</td>
<td>SBD(A)</td>
<td>21.6188</td>
<td>87.73877</td>
<td>2</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td></td>
<td>226.2283</td>
<td>112</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td></td>
<td>868.6562</td>
<td>224</td>
</tr>
<tr>
<td>12 AD(D)</td>
<td>SD(AD)</td>
<td>1.1583</td>
<td>20.94116</td>
<td>9</td>
</tr>
<tr>
<td>13 BD(D)</td>
<td>SB(AD)</td>
<td>1.1848</td>
<td>13.55029</td>
<td>9</td>
</tr>
<tr>
<td>14 AB</td>
<td>SBD(A)</td>
<td>1.3309</td>
<td>5.370636</td>
<td>2</td>
</tr>
<tr>
<td>15 SD(AD)</td>
<td></td>
<td></td>
<td>2024.901</td>
<td>1008</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td></td>
<td></td>
<td>451.9561</td>
<td>224</td>
</tr>
<tr>
<td>17 ABO(D)</td>
<td>SBO(AD)</td>
<td>0.8429</td>
<td>9.640137</td>
<td>9</td>
</tr>
<tr>
<td>18 SBO(AD)</td>
<td></td>
<td></td>
<td>1280.922</td>
<td>1008</td>
</tr>
</tbody>
</table>

- **MEAN**: 3.72844

### CELL MEANS

<table>
<thead>
<tr>
<th>A = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.76316</td>
<td>3.69371</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.81725</td>
<td>3.63962</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D = 1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.64912</td>
<td>4.5965</td>
<td>3.17653</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.82895</td>
<td>3.69737</td>
</tr>
<tr>
<td>3.80556</td>
<td>3.56187</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D = 1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.86104</td>
<td>4.21710</td>
<td>3.21053</td>
</tr>
<tr>
<td>3.43640</td>
<td>4.50219</td>
<td>3.14254</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.93421</td>
<td>4.21272</td>
</tr>
<tr>
<td>3.96403</td>
<td>4.50658</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.06140</td>
<td>4.07456</td>
<td>3.35088</td>
</tr>
<tr>
<td>3.66228</td>
<td>4.35965</td>
<td>3.07018</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D = 1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0702</td>
<td>4.35088</td>
<td>3.25877</td>
</tr>
<tr>
<td>3.06579</td>
<td>4.65351</td>
<td>3.02632</td>
</tr>
</tbody>
</table>
## Analysis of Variance for Scale 6: Conformist/Individualist

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>F</th>
<th>Sum of Squares</th>
<th>Deg. of Mean Square</th>
<th>Freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>S(A)</td>
<td>65922.81</td>
<td>1</td>
<td>65922.81</td>
<td>1</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>4.6496</td>
<td>53.33479</td>
<td>1</td>
<td>53.33479</td>
</tr>
<tr>
<td>3 B</td>
<td>SB(A)</td>
<td>1.6169</td>
<td>2.703216</td>
<td>1</td>
<td>2.703216</td>
</tr>
<tr>
<td>4 D</td>
<td>SD(A)</td>
<td>135.6777</td>
<td>817.4939</td>
<td>2</td>
<td>408.7468</td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td>1284.721</td>
<td>112</td>
<td>11.47072</td>
<td>112</td>
</tr>
<tr>
<td>6 D(D)</td>
<td>SD(AD)</td>
<td>24.665</td>
<td>434.3369</td>
<td>9</td>
<td>48.25964</td>
</tr>
<tr>
<td>7 AB</td>
<td>SB(A)</td>
<td>0.2527</td>
<td>4225.168</td>
<td>1</td>
<td>4225.168</td>
</tr>
<tr>
<td>8 AD</td>
<td>SD(A)</td>
<td>3.6823</td>
<td>22.18677</td>
<td>2</td>
<td>11.09323</td>
</tr>
<tr>
<td>9 BD</td>
<td>SD(B)</td>
<td>52.6008</td>
<td>269.0903</td>
<td>2</td>
<td>134.5452</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td>187.2496</td>
<td>112</td>
<td>1.671871</td>
<td>112</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td>674.8291</td>
<td>224</td>
<td>3.012630</td>
<td>224</td>
</tr>
<tr>
<td>12 AO(D)</td>
<td></td>
<td>5.5415</td>
<td>27.36279</td>
<td>9</td>
<td>3.040310</td>
</tr>
<tr>
<td>13 BD</td>
<td>SB(AD)</td>
<td>1.1420</td>
<td>17.61719</td>
<td>9</td>
<td>1.957465</td>
</tr>
<tr>
<td>14 ABD</td>
<td>SD(AD)</td>
<td>1.7048</td>
<td>8.721436</td>
<td>2</td>
<td>4.360718</td>
</tr>
<tr>
<td>15 SO(D)</td>
<td></td>
<td>1988.068</td>
<td>1008</td>
<td>1.972289</td>
<td>1008</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td></td>
<td>572.9590</td>
<td>224</td>
<td>2.557852</td>
<td>224</td>
</tr>
<tr>
<td>17 ABD(D)</td>
<td></td>
<td>21.91602</td>
<td>9</td>
<td>2.435112</td>
<td>9</td>
</tr>
<tr>
<td>18 SBD(AD)</td>
<td></td>
<td>1727.800</td>
<td>1008</td>
<td>1.714087</td>
<td>1008</td>
</tr>
</tbody>
</table>

**Mean** 4.90863

**Cell Means**

<table>
<thead>
<tr>
<th>A</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.76901</td>
<td>5.04825</td>
</tr>
<tr>
<td>B</td>
<td>4.07719</td>
<td>4.94006</td>
</tr>
<tr>
<td>D</td>
<td>5.27412</td>
<td>4.13596</td>
</tr>
<tr>
<td>B</td>
<td>4.72515</td>
<td>4.81287</td>
</tr>
<tr>
<td>A</td>
<td>5.02924</td>
<td>5.06725</td>
</tr>
<tr>
<td>A</td>
<td>5.04825</td>
<td>4.12061</td>
</tr>
<tr>
<td>A</td>
<td>5.50000</td>
<td>4.15132</td>
</tr>
<tr>
<td>D</td>
<td>4.89254</td>
<td>4.51535</td>
</tr>
<tr>
<td>B</td>
<td>5.65570</td>
<td>3.75658</td>
</tr>
<tr>
<td>A</td>
<td>5.71491</td>
<td>4.41778</td>
</tr>
<tr>
<td>D</td>
<td>5.38158</td>
<td>3.62895</td>
</tr>
<tr>
<td>A</td>
<td>5.07018</td>
<td>4.61842</td>
</tr>
<tr>
<td>B</td>
<td>5.92982</td>
<td>3.68421</td>
</tr>
</tbody>
</table>
### Analysis of Variance for Scale 7: Good looking/ Unattractive

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>F</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>S(A)</td>
<td></td>
<td>34866.33</td>
<td>1</td>
<td>34866.33</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td></td>
<td>14506.58</td>
<td>1</td>
<td>14506.58</td>
</tr>
<tr>
<td>3 B</td>
<td>S(B)</td>
<td></td>
<td>42500.35</td>
<td>1</td>
<td>42500.35</td>
</tr>
<tr>
<td>4 D</td>
<td>S(D)</td>
<td></td>
<td>50377.53</td>
<td>2</td>
<td>25188.77</td>
</tr>
<tr>
<td>5 S(A)</td>
<td>S(A)</td>
<td></td>
<td>56420.53</td>
<td>112</td>
<td>56420.53</td>
</tr>
<tr>
<td>6 D(D)</td>
<td>S(D)</td>
<td></td>
<td>21527.04</td>
<td>9</td>
<td>23852.22</td>
</tr>
<tr>
<td>7 AB</td>
<td>S(B)</td>
<td></td>
<td>10193.34</td>
<td>1</td>
<td>10193.34</td>
</tr>
<tr>
<td>8 AD</td>
<td>S(D)</td>
<td></td>
<td>6286.166</td>
<td>2</td>
<td>3143.083</td>
</tr>
<tr>
<td>9 BD</td>
<td>S(D)</td>
<td></td>
<td>3236.427</td>
<td>2</td>
<td>16182.11</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td>S(B)</td>
<td></td>
<td>12248.41</td>
<td>112</td>
<td>12248.41</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td>S(D)</td>
<td></td>
<td>18666.35</td>
<td>224</td>
<td>18666.35</td>
</tr>
<tr>
<td>12 AO(D)</td>
<td>S(O)</td>
<td></td>
<td>1008.07</td>
<td>9</td>
<td>1008.07</td>
</tr>
<tr>
<td>13 BD(D)</td>
<td>S(D)</td>
<td></td>
<td>14400.40</td>
<td>9</td>
<td>14400.40</td>
</tr>
<tr>
<td>14 ABD</td>
<td>S(D)</td>
<td></td>
<td>8447.571</td>
<td>2</td>
<td>8447.571</td>
</tr>
<tr>
<td>15 S(O)</td>
<td>S(O)</td>
<td></td>
<td>1607.43</td>
<td>1068</td>
<td>1607.43</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td>S(B)</td>
<td></td>
<td>2576.022</td>
<td>224</td>
<td>2576.022</td>
</tr>
<tr>
<td>17 ABO(D)</td>
<td>S(O)</td>
<td></td>
<td>99581.74</td>
<td>9</td>
<td>99581.74</td>
</tr>
<tr>
<td>18 SBD(O)</td>
<td>S(D)</td>
<td></td>
<td>96327.54</td>
<td>1008</td>
<td>96327.54</td>
</tr>
</tbody>
</table>

**Mean**  3.56981

**Cell Means**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3.54678</td>
<td>3.59284</td>
</tr>
<tr>
<td>B</td>
<td>3.69444</td>
<td>3.44518</td>
</tr>
<tr>
<td>D</td>
<td>3.37719</td>
<td>3.83333</td>
</tr>
<tr>
<td>A</td>
<td>3.73246</td>
<td>3.36111</td>
</tr>
<tr>
<td>D</td>
<td>3.65643</td>
<td>3.52924</td>
</tr>
<tr>
<td>B</td>
<td>3.33114</td>
<td>3.6009</td>
</tr>
<tr>
<td>B</td>
<td>3.19298</td>
<td>4.21053</td>
</tr>
</tbody>
</table>
### Analysis of Variance for Scale 8: Professionally competent/Professionally incompetent

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>F</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>S(A)</td>
<td></td>
<td>12835.33</td>
<td>1</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td></td>
<td>62.64473</td>
<td>1</td>
</tr>
<tr>
<td>3 B</td>
<td>S0(A)</td>
<td></td>
<td>11.32164</td>
<td>1</td>
</tr>
<tr>
<td>4 D</td>
<td>SD(A)</td>
<td></td>
<td>20.13193</td>
<td>2</td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td></td>
<td>8.504507</td>
<td>2</td>
</tr>
<tr>
<td>6 O(D)</td>
<td>SO(AD)</td>
<td></td>
<td>27.49387</td>
<td>9</td>
</tr>
<tr>
<td>7 AB</td>
<td>SB(A)</td>
<td></td>
<td>3.95219</td>
<td>2</td>
</tr>
<tr>
<td>8 AD</td>
<td>SD(A)</td>
<td></td>
<td>9.89793</td>
<td>2</td>
</tr>
<tr>
<td>9 BD</td>
<td>S(BD(A))</td>
<td></td>
<td>1.278447</td>
<td>112</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td></td>
<td>1.650448</td>
<td>2</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td></td>
<td>1.30087U</td>
<td>9</td>
</tr>
<tr>
<td>12 AO(D)</td>
<td>SO(AD)</td>
<td></td>
<td>3.137275</td>
<td>2</td>
</tr>
<tr>
<td>13 BD(O)</td>
<td>SB0(AD)</td>
<td></td>
<td>1.056308</td>
<td>2</td>
</tr>
<tr>
<td>14 ABD</td>
<td>SB(DA)</td>
<td></td>
<td>1.338217</td>
<td>2</td>
</tr>
<tr>
<td>15 S0(B)</td>
<td></td>
<td></td>
<td>1.421691</td>
<td>2</td>
</tr>
<tr>
<td>16 SBD</td>
<td></td>
<td></td>
<td>1.9916185</td>
<td>2</td>
</tr>
</tbody>
</table>

**Mean** 2.16594

**Cell Means**

<table>
<thead>
<tr>
<th>A = 1</th>
<th>2.31725</th>
<th>2.01462</th>
</tr>
</thead>
<tbody>
<tr>
<td>B = 1</td>
<td>2.23026</td>
<td>2.10161</td>
</tr>
<tr>
<td>D = 1</td>
<td>2.05373</td>
<td>2.33443</td>
</tr>
<tr>
<td>B = 1</td>
<td>2.34257</td>
<td>2.29094</td>
</tr>
<tr>
<td>A = 1</td>
<td>2.11696</td>
<td>1.91228</td>
</tr>
<tr>
<td>D = 1</td>
<td>2.19956</td>
<td>2.45295</td>
</tr>
<tr>
<td>B = 1</td>
<td>1.90789</td>
<td>2.21491</td>
</tr>
<tr>
<td>A = 1</td>
<td>2.01316</td>
<td>2.50219</td>
</tr>
<tr>
<td>B = 2</td>
<td>2.09430</td>
<td>2.16667</td>
</tr>
<tr>
<td>D = 1</td>
<td>2.10088</td>
<td>2.60965</td>
</tr>
<tr>
<td>B = 2</td>
<td>2.29825</td>
<td>2.29825</td>
</tr>
<tr>
<td>A = 2</td>
<td>2.18925</td>
<td>2.39474</td>
</tr>
<tr>
<td>D = 1</td>
<td>2.89035</td>
<td>2.03509</td>
</tr>
</tbody>
</table>
### Analysis of Variance for Scale 9

#### Influential/Uninfluential

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>F</th>
<th>Sum of Squares</th>
<th>Deg. of Freedom</th>
<th>Mean Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>S(A)</td>
<td></td>
<td>30094.10</td>
<td>1</td>
<td>30094.10</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>1.1860</td>
<td>15.51023</td>
<td>1</td>
<td>15.51023</td>
</tr>
<tr>
<td>3 B</td>
<td>S(B)</td>
<td>0.1225</td>
<td>1.679006</td>
<td>1</td>
<td>1.679006</td>
</tr>
<tr>
<td>4 D</td>
<td>S(D)</td>
<td>176.1044</td>
<td>1060.759</td>
<td>2</td>
<td>530.3796</td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td></td>
<td>1464.700</td>
<td>112</td>
<td>12.07760</td>
</tr>
<tr>
<td>6 D(D)</td>
<td>S(D)</td>
<td>44.2606</td>
<td>822.9568</td>
<td>9</td>
<td>92.55075</td>
</tr>
<tr>
<td>7 AB</td>
<td>S(AB)</td>
<td>2.2366</td>
<td>3.22522</td>
<td>1</td>
<td>3.22522</td>
</tr>
<tr>
<td>8 AD</td>
<td>S(AD)</td>
<td>9.8715</td>
<td>59.46904</td>
<td>2</td>
<td>29.73047</td>
</tr>
<tr>
<td>9 BD</td>
<td>S(BD)</td>
<td>6.6282</td>
<td>21.03540</td>
<td>2</td>
<td>10.51770</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td></td>
<td>161.7226</td>
<td>112</td>
<td>1.443952</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td></td>
<td>674.6284</td>
<td>224</td>
<td>3.011734</td>
</tr>
<tr>
<td>12 ABD</td>
<td>S(ABD)</td>
<td>1.2338</td>
<td>23.21948</td>
<td>9</td>
<td>2.570042</td>
</tr>
<tr>
<td>13 SBD</td>
<td>S(BD)</td>
<td>1.2652</td>
<td>13.90649</td>
<td>9</td>
<td>1.545166</td>
</tr>
<tr>
<td>14 SSD</td>
<td>S(BD)</td>
<td>0.5640</td>
<td>1.790099</td>
<td>2</td>
<td>0.895043</td>
</tr>
<tr>
<td>15 SDD</td>
<td>S(DD)</td>
<td>2107.769</td>
<td>1008</td>
<td>1008</td>
<td>2.091041</td>
</tr>
<tr>
<td>16 SBD</td>
<td>S(BD)</td>
<td>355.4465</td>
<td>224</td>
<td>2</td>
<td>1.586015</td>
</tr>
<tr>
<td>17 ABD</td>
<td>S(ABD)</td>
<td>2.0231</td>
<td>22.29248</td>
<td>9</td>
<td>2.476942</td>
</tr>
<tr>
<td>18 SBD</td>
<td>S(ABD)</td>
<td></td>
<td>1231.092</td>
<td>1008</td>
<td>1.221321</td>
</tr>
</tbody>
</table>

**Mean**

3.31652

**Cell Means**

<table>
<thead>
<tr>
<th>A</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>3.39181</td>
<td>3.24123</td>
</tr>
<tr>
<td>A2</td>
<td>3.32456</td>
<td>3.30848</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B1</td>
<td>3.43421</td>
<td>3.34941</td>
</tr>
<tr>
<td>B2</td>
<td>3.21491</td>
<td>3.26754</td>
</tr>
</tbody>
</table>

**D**

<table>
<thead>
<tr>
<th>D</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>2.94079</td>
<td>4.19408</td>
<td>2.61469</td>
</tr>
<tr>
<td>D2</td>
<td>3.34895</td>
<td>3.49327</td>
<td>3.06898</td>
</tr>
</tbody>
</table>

**A**

<table>
<thead>
<tr>
<th>A</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>3.07895</td>
<td>3.02630</td>
</tr>
<tr>
<td>A2</td>
<td>3.10196</td>
<td>3.10351</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>2.87061</td>
<td>4.32456</td>
<td>2.77551</td>
</tr>
<tr>
<td>B2</td>
<td>3.01316</td>
<td>4.22807</td>
<td>3.06140</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>2.87719</td>
<td>4.22368</td>
<td>2.70175</td>
</tr>
<tr>
<td>A2</td>
<td>3.01316</td>
<td>4.22807</td>
<td>3.06140</td>
</tr>
<tr>
<td>SOURCE</td>
<td>ERROR TERM</td>
<td>F</td>
<td>SUM OF SQUARES</td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>---------</td>
<td>----------------</td>
</tr>
<tr>
<td>1 MEAN</td>
<td>S(A)</td>
<td>20074.16</td>
<td>1</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>32694.3E-02</td>
<td>1</td>
</tr>
<tr>
<td>3 B</td>
<td>SB(A)</td>
<td>807.670</td>
<td>2</td>
</tr>
<tr>
<td>4 D</td>
<td>SD(A)</td>
<td>328.947</td>
<td>2</td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td>1150.773</td>
<td>112</td>
</tr>
<tr>
<td>6 O(D)</td>
<td>SC(AD)</td>
<td>965.9219</td>
<td>9</td>
</tr>
<tr>
<td>7 AB</td>
<td>SB(A)</td>
<td>6143.951</td>
<td>1</td>
</tr>
<tr>
<td>6 AD</td>
<td>SD(A)</td>
<td>44665.53</td>
<td>2</td>
</tr>
<tr>
<td>9 BD</td>
<td>SED(A)</td>
<td>31.4165</td>
<td>2</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td>154.7587</td>
<td>112</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td>667.4541</td>
<td>224</td>
</tr>
<tr>
<td>12 AO(D)</td>
<td></td>
<td>21.04053</td>
<td>9</td>
</tr>
<tr>
<td>13 BD(D)</td>
<td></td>
<td>4255713</td>
<td>9</td>
</tr>
<tr>
<td>14 ABD</td>
<td>SBD(A)</td>
<td>23604.58</td>
<td>2</td>
</tr>
<tr>
<td>15 SO(AD)</td>
<td></td>
<td>1623.119</td>
<td>1008</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td></td>
<td>4115967</td>
<td>224</td>
</tr>
<tr>
<td>17 ABD(S)</td>
<td></td>
<td>6181612</td>
<td>9</td>
</tr>
<tr>
<td>18 SBO(AD)</td>
<td></td>
<td>11926.61</td>
<td>1008</td>
</tr>
</tbody>
</table>

**MEAN**

2.70870

**CELL MEANS**

A = 1 2
2.70760 2.70797

B = 1 2
2.80994 2.60746

D = 1 2 3
2.35355 3.47697 2.31360

B = 1 2
2.79386 2.62134

A = 1 2
2.82602 2.59357

D = 1 2 3
2.35085 3.41886 2.34430

B = 1 2
2.31140 3.53059 2.78289

D = 1 2 3
2.32237 3.72149 2.36596

B = 1 2
2.34568 2.23246 2.24123

A = 1

D = 1 2 3
2.37281 3.63158 2.37719

B = 1 2
2.34649 3.20614 2.31140

A = 2

D = 1 2 3
2.39068 3.25077 2.17105

B = 1 2
2.39474 2.39474

A = Great personal satisfaction/Little personal satisfaction

B = Scale 10
**ANALYSIS OF VARIANCE FOR**

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>ERROR TERM</th>
<th>F</th>
<th>SUM OF SQUARES</th>
<th>DEG. OF MEAN SQUARE</th>
<th>FREEDOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 MEAN</td>
<td>S(A)</td>
<td></td>
<td>36798.66</td>
<td>1</td>
<td>36798.66</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>0.0079</td>
<td>3654971E-01</td>
<td>1</td>
<td>3654971E-01</td>
</tr>
<tr>
<td>3 B</td>
<td>SB(A)</td>
<td>3.0500</td>
<td>3.368421</td>
<td>1</td>
<td>3.368421</td>
</tr>
<tr>
<td>4 D</td>
<td>SD(A)</td>
<td>32.4108</td>
<td>40.76450</td>
<td>2</td>
<td>40.76450</td>
</tr>
<tr>
<td>5 STA</td>
<td></td>
<td>517.7017</td>
<td>462.3051</td>
<td>112</td>
<td>462.3051</td>
</tr>
<tr>
<td>6 O(D)</td>
<td>SO(AD)</td>
<td>21.3041</td>
<td>475.8547</td>
<td>9</td>
<td>52.67274</td>
</tr>
<tr>
<td>7 AB</td>
<td>SB(A)</td>
<td>2.3351</td>
<td>2.578946</td>
<td>1</td>
<td>2.578946</td>
</tr>
<tr>
<td>8 AD</td>
<td>SD(A)</td>
<td>1.5704</td>
<td>3.950287</td>
<td>2</td>
<td>1.975143</td>
</tr>
<tr>
<td>9 RD</td>
<td>SBD(A)</td>
<td>16.5519</td>
<td>51.39476</td>
<td>7</td>
<td>25.69737</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td>123.6938</td>
<td>1.104408</td>
<td>112</td>
<td>1.104408</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td>281.7351</td>
<td>2.257776</td>
<td>224</td>
<td>2.257776</td>
</tr>
<tr>
<td>12 AO(D)</td>
<td>SO(AD)</td>
<td>0.3174</td>
<td>6.977367</td>
<td>9</td>
<td>7753262</td>
</tr>
<tr>
<td>13 BD(D)</td>
<td>SBQ(AP)</td>
<td>11.3960</td>
<td>126.0249</td>
<td>9</td>
<td>14.00277</td>
</tr>
<tr>
<td>14 ABD</td>
<td>SBD(A)</td>
<td>0.2571</td>
<td>7981567</td>
<td>2</td>
<td>3990784</td>
</tr>
<tr>
<td>15 SQ(AD)</td>
<td></td>
<td>2501.669</td>
<td>1.055114</td>
<td>1008</td>
<td>1.055114</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td></td>
<td>347.7661</td>
<td>1.552526</td>
<td>224</td>
<td>1.552526</td>
</tr>
<tr>
<td>17 ABO(D)</td>
<td>SBQ(AD)</td>
<td>2.0695</td>
<td>22.6608</td>
<td>9</td>
<td>2.542979</td>
</tr>
<tr>
<td>18 SBO(AD)</td>
<td></td>
<td>1238.569</td>
<td>1.228739</td>
<td>1008</td>
<td>1.228739</td>
</tr>
</tbody>
</table>

**MEAN** 3.66740

**CELL MEANS**

<table>
<thead>
<tr>
<th>A = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.67105</td>
<td>3.66374</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.70249</td>
<td>3.63231</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D = 1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.60307</td>
<td>3.90351</td>
<td>3.49561</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.67544</td>
<td>3.66667</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.54605</td>
<td>3.51316</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D = 1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.51316</td>
<td>4.06140</td>
<td>3.45175</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B = 1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.80702</td>
<td>3.68860</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 2</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.65789</td>
<td>3.70614</td>
</tr>
</tbody>
</table>
### Analysis of Variance for Scale 12: Intelligent/Dull

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>F</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>S(A)</td>
<td></td>
<td>21552.28</td>
<td>1</td>
<td>21552.23</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td></td>
<td>2.2712</td>
<td>1</td>
<td>3.29611</td>
</tr>
<tr>
<td>3 B</td>
<td>SBA(A)</td>
<td>23.7203</td>
<td>30.10567</td>
<td>1</td>
<td>30.10562</td>
</tr>
<tr>
<td>4 D</td>
<td>SD(A)</td>
<td>148.4317</td>
<td>724.2856</td>
<td>2</td>
<td>362.1428</td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td></td>
<td>1362.195</td>
<td>112</td>
<td>12.16246</td>
</tr>
<tr>
<td>6 D(D)</td>
<td>SCI(AD)</td>
<td>67.1195</td>
<td>1147.050</td>
<td>9</td>
<td>127.4500</td>
</tr>
<tr>
<td>7 AB</td>
<td>SBA(A)</td>
<td>0.4362</td>
<td>5559235</td>
<td>1</td>
<td>5559235</td>
</tr>
<tr>
<td>8 AD</td>
<td>SD(A)</td>
<td>4.7072</td>
<td>22.96948</td>
<td>2</td>
<td>11.48474</td>
</tr>
<tr>
<td>9 RD</td>
<td>SBD(A)</td>
<td>0.2276</td>
<td>596.6797</td>
<td>2</td>
<td>2983.398</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td></td>
<td>142.0893</td>
<td>112</td>
<td>12.8655</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td></td>
<td>546.5129</td>
<td>224</td>
<td>2.439794</td>
</tr>
<tr>
<td>12 AD(D)</td>
<td>SO(AD)</td>
<td>4.4491</td>
<td>76.03271</td>
<td>9</td>
<td>8.44079</td>
</tr>
<tr>
<td>13 BD(D)</td>
<td>SBD(AD)</td>
<td>3.5293</td>
<td>39.46164</td>
<td>9</td>
<td>4.36268</td>
</tr>
<tr>
<td>14 ABD</td>
<td>SBD(A)</td>
<td>0.8791</td>
<td>2.304916</td>
<td>2</td>
<td>1.52458</td>
</tr>
<tr>
<td>15 SO(AD)</td>
<td></td>
<td></td>
<td>1914.040</td>
<td>1008</td>
<td>1.895849</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td></td>
<td></td>
<td>293.6670</td>
<td>224</td>
<td>1.31013</td>
</tr>
<tr>
<td>17 ABO(D)</td>
<td>SBO(AD)</td>
<td>0.9319</td>
<td>10.38257</td>
<td>9</td>
<td>1.153610</td>
</tr>
<tr>
<td>18 SBD(AD)</td>
<td></td>
<td></td>
<td>1247.799</td>
<td>1008</td>
<td>1.237895</td>
</tr>
</tbody>
</table>

**Mean** 2.80665

**Cell Means**

- A = 1
  - 2
    - 2.84137
    - 2.77193

- B = 1
  - 2
    - 2.91155
    - 2.70175

- D = 1
  - 2
    - 2.66421
    - 2.84093
    - 2.24671

- A = 1
  - 2
    - 2.96053
    - 2.72222

- D = 1
  - 2
    - 2.86257
    - 2.66129

- A = 1
  - 2
    - 2.75042
    - 3.60132
    - 2.37939

- D = 1
  - 2
    - 2.62000
    - 3.57675
    - 2.11403

- B = 1
  - 2
    - 2.80921
    - 3.57895
    - 2.34649

- A = 1
  - 2
    - 2.5921
    - 3.39912
    - 2.14693

- D = 1
  - 2
    - 2.85088
    - 3.54386
    - 2.48848

- A = 2
  - 2
    - 2.63596
    - 3.25877
    - 2.27193

- D = 1
  - 2
    - 2.76754
    - 3.61403
    - 2.20614

- B = 1
  - 2
    - 2.48246
    - 3.53947
    - 2.02193
### ANALYSIS OF VARIANCE FOR Scale 13: Competitive/ Uncompetitive

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>ERROR TERM</th>
<th>F SUM OF SQUARES</th>
<th>DEG. OF FREEDOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 MEAN</td>
<td>S(A)</td>
<td>**********</td>
<td>19264.47</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>0.0415</td>
<td>3742689</td>
</tr>
<tr>
<td>3 B</td>
<td>Sb(A)</td>
<td>13.9591</td>
<td>17.05263</td>
</tr>
<tr>
<td>4 D</td>
<td>SD(A)</td>
<td>341.1182</td>
<td>2220.269</td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td></td>
<td>1009.052</td>
</tr>
<tr>
<td>6 D(D)</td>
<td>SO(AD)</td>
<td>38.3892</td>
<td>522.6315</td>
</tr>
<tr>
<td>7 AB</td>
<td>Sb(A)</td>
<td>0.6693</td>
<td>8420668</td>
</tr>
<tr>
<td>8 AD</td>
<td>SD(A)</td>
<td>9.2530</td>
<td>60.22632</td>
</tr>
<tr>
<td>9 BD</td>
<td>SBD(A)</td>
<td>6.0570</td>
<td>14.80664</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td></td>
<td>136.8203</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td></td>
<td>728.9917</td>
</tr>
<tr>
<td>12 AO(D)</td>
<td>SO(AD)</td>
<td>0.2596</td>
<td>3.536133</td>
</tr>
<tr>
<td>13 BO(D)</td>
<td>SBO(AD)</td>
<td>2.4324</td>
<td>24.87427</td>
</tr>
<tr>
<td>14 ABD</td>
<td>SBD(A)</td>
<td>1.5516</td>
<td>3.793411</td>
</tr>
<tr>
<td>15 SO(AD)</td>
<td></td>
<td></td>
<td>1525.354</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td></td>
<td></td>
<td>273.7908</td>
</tr>
<tr>
<td>17 ABO(D)</td>
<td>SBO(AD)</td>
<td>1.1604</td>
<td>11.86670</td>
</tr>
<tr>
<td>18 SBO(AD)</td>
<td></td>
<td></td>
<td>1145.329</td>
</tr>
</tbody>
</table>

**MEAN:** 2.65351

**CELL MEANS**

- **A =** 1
  - 2.66520
  - 2.64181

- **B =** 1
  - 2.73246
  - 2.57456

- **D =** 1
  - 1.69298
  - 3.65655
  - 2.40899

- **B =** 1
  - 2.72661
  - 2.60380

- **A =** 1
  - 2.73830
  - 2.54532

- **D =** 1
  - 1.75439
  - 3.66886
  - 2.57237

- **B =** 1
  - 1.63158
  - 4.04825
  - 2.24561

- **D =** 1
  - 1.67325
  - 3.95833
  - 2.56579

- **B =** 1
  - 1.71272
  - 3.75877
  - 2.25219

- **A =** 1
  - 1.66667
  - 3.76316
  - 2.75000

- **D =** 1
  - 1.84210
  - 3.57456
  - 2.39474

- **B =** 1
  - 1.67982
  - 4.15351
  - 2.38158

- **A =** 2
  - 1.58333
  - 2.94298
  - 2.10965
## ANALYSIS OF VARIANCE FOR Scale 14: Self assertive/ Submissive

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>ERROR TERM</th>
<th>F</th>
<th>SUM OF SQUARES</th>
<th>DEG. OF FREEDOM</th>
<th>MEAN SQUARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 MEAN</td>
<td><strong>A</strong></td>
<td></td>
<td>20369.60</td>
<td>1</td>
<td>20369.60</td>
</tr>
<tr>
<td>2 A</td>
<td><strong>S(A)</strong></td>
<td>4.8880</td>
<td>39.08223</td>
<td>1</td>
<td>39.08223</td>
</tr>
<tr>
<td>3 B</td>
<td><strong>S(B)</strong></td>
<td>18.1942</td>
<td>23.76643</td>
<td>1</td>
<td>23.76643</td>
</tr>
<tr>
<td>4 D</td>
<td><strong>S(D)</strong></td>
<td>254.9243</td>
<td>1539.860</td>
<td>2</td>
<td>769.9297</td>
</tr>
<tr>
<td>5 S(A)</td>
<td><strong>S(A)</strong></td>
<td>895.5654</td>
<td>112</td>
<td>7.995564</td>
<td></td>
</tr>
<tr>
<td>6 D(D)</td>
<td><strong>S(D)</strong></td>
<td>26.0632</td>
<td>338.5200</td>
<td>9</td>
<td>37.61333</td>
</tr>
<tr>
<td>7 AB</td>
<td><strong>S(A)</strong></td>
<td>0.0509</td>
<td>105.6366</td>
<td>1</td>
<td>105.6366</td>
</tr>
<tr>
<td>8 AD</td>
<td><strong>S(A)</strong></td>
<td>8.8908</td>
<td>53.70435</td>
<td>2</td>
<td>26.85217</td>
</tr>
<tr>
<td>9 BD</td>
<td><strong>S(B)</strong></td>
<td>16.7246</td>
<td>43.00684</td>
<td>2</td>
<td>21.50342</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td><strong>S(B)</strong></td>
<td>146.3013</td>
<td>112</td>
<td>1.306262</td>
<td></td>
</tr>
<tr>
<td>11 SD(A)</td>
<td><strong>S(D)</strong></td>
<td>676.5310</td>
<td>224</td>
<td>3.020227</td>
<td></td>
</tr>
<tr>
<td>12 AD(D)</td>
<td><strong>S(D)</strong></td>
<td>1.6346</td>
<td>21.23120</td>
<td>9</td>
<td>2.359022</td>
</tr>
<tr>
<td>13 BD(D)</td>
<td><strong>S(B)</strong></td>
<td>2.3951</td>
<td>23.05176</td>
<td>9</td>
<td>2.561306</td>
</tr>
<tr>
<td>14 ABD</td>
<td><strong>S(B)</strong></td>
<td>0.7177</td>
<td>1.045535</td>
<td>2</td>
<td>0.522768</td>
</tr>
<tr>
<td>15 ABD</td>
<td><strong>S(D)</strong></td>
<td>145.703</td>
<td>1008</td>
<td>1.443157</td>
<td></td>
</tr>
<tr>
<td>16 B(D)</td>
<td><strong>S(D)</strong></td>
<td>288.0049</td>
<td>224</td>
<td>1.285736</td>
<td></td>
</tr>
<tr>
<td>17 ABD(B)</td>
<td><strong>S(B)</strong></td>
<td>1.7806</td>
<td>17.13745</td>
<td>9</td>
<td>1.904160</td>
</tr>
<tr>
<td>18 B(D)</td>
<td><strong>S(D)</strong></td>
<td>1077.970</td>
<td>1008</td>
<td>1.069414</td>
<td></td>
</tr>
</tbody>
</table>

**MEAN**: 2.72990

**CELL MEANS**

<table>
<thead>
<tr>
<th>A = 1</th>
<th>B = 1</th>
<th>D = 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.84941</td>
<td>2.02310</td>
<td>1.99781</td>
</tr>
<tr>
<td>2.61038</td>
<td>2.63670</td>
<td>3.76096</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 1</th>
<th>B = 1</th>
<th>D = 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.94883</td>
<td>1.97588</td>
<td>2.17982</td>
</tr>
<tr>
<td>2.75000</td>
<td>4.02651</td>
<td>3.68640</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 1</th>
<th>B = 1</th>
<th>D = 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.69737</td>
<td>2.01974</td>
<td>1.81579</td>
</tr>
<tr>
<td>2.52339</td>
<td>3.49342</td>
<td>3.83553</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 1</th>
<th>B = 1</th>
<th>D = 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.13158</td>
<td>2.03182</td>
<td>1.82018</td>
</tr>
<tr>
<td>2.39123</td>
<td>4.06579</td>
<td>3.60526</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A = 2</th>
<th>B = 1</th>
<th>D = 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.22607</td>
<td>1.81140</td>
<td>1.82018</td>
</tr>
<tr>
<td>2.64035</td>
<td>2.15351</td>
<td>3.60526</td>
</tr>
</tbody>
</table>
### Analysis of Variance for Scale 15: Active/Passive

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>F</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>S(A)</td>
<td>******</td>
<td>32446.66</td>
<td>1</td>
<td>32446.66</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>30.236</td>
<td>28.554970</td>
<td>1</td>
<td>28.554970</td>
</tr>
<tr>
<td>3 B</td>
<td>S(A)</td>
<td>31.464</td>
<td>39.32162</td>
<td>1</td>
<td>39.32162</td>
</tr>
<tr>
<td>4 D</td>
<td>S(B)</td>
<td>33.270</td>
<td>2.219</td>
<td>2</td>
<td>1.1095</td>
</tr>
<tr>
<td>5 Source</td>
<td>S(A)</td>
<td>422.033</td>
<td>112</td>
<td>3.775296</td>
<td></td>
</tr>
</tbody>
</table>

### Mean

<table>
<thead>
<tr>
<th>Cell Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>A = 1</td>
</tr>
<tr>
<td>3.48026</td>
</tr>
<tr>
<td>3.40716</td>
</tr>
</tbody>
</table>

| B = 1      |
| 3.56360    |
| 3.32383    |

| D = 1      |
| 3.04605    |
| 3.82675    |
| 3.45833    |

| B = 1      |
| 3.58626    |
| 3.37427    |

| A = 1      |
| 3.15769    |
| 3.73465    |
| 3.54825    |
| 2          |
| 2.93421    |
| 3.91866    |
| 3.36642    |

| D = 1      |
| 3.03728    |
| 4.09649    |
| 3.55702    |

| B = 1      |
| 3.05462    |
| 3.55702    |
| 3.35965    |

| A = 1      |
| 3.08333    |
| 4.03070    |
| 3.64474    |

| D = 1      |
| 3.23246    |
| 3.43860    |
| 3.45175    |

| B = 1      |
| 2.99123    |
| 4.16228    |
| 3.69305    |

| A = 2      |
| 2.87719    |
| 3.67544    |
| 3.26754    |
### Analysis of Variance for Scale 16: Dependent/Independent

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>F</th>
<th>Sum of Squares</th>
<th>Deg. of Freedom</th>
<th>Mean Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>S(A)</td>
<td></td>
<td>69373.44</td>
<td>1</td>
<td>69373.44</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>5.0310</td>
<td>58.77229</td>
<td>1</td>
<td>58.77229</td>
</tr>
<tr>
<td>3 B</td>
<td>S(B)</td>
<td>6.2354</td>
<td>16.89510</td>
<td>1</td>
<td>16.89510</td>
</tr>
<tr>
<td>4 D</td>
<td>S(D)</td>
<td>131.4573</td>
<td>1009.233</td>
<td>2</td>
<td>504.6165</td>
</tr>
<tr>
<td>5 S(A)</td>
<td>S(A)</td>
<td>1308.297</td>
<td>1122</td>
<td>112</td>
<td>112.69212</td>
</tr>
<tr>
<td>6 D(O)</td>
<td>S(O(D))</td>
<td>175.576</td>
<td>366.6555</td>
<td>9</td>
<td>40.73950</td>
</tr>
<tr>
<td>7 AB</td>
<td>S(B)</td>
<td>0.2052</td>
<td>0.559235</td>
<td>1</td>
<td>0.559235</td>
</tr>
<tr>
<td>8 AD</td>
<td>S(D)</td>
<td>4.4061</td>
<td>32.84229</td>
<td>2</td>
<td>16.42114</td>
</tr>
<tr>
<td>9 BD</td>
<td>S(BD)</td>
<td>2.4914</td>
<td>10.49170</td>
<td>2</td>
<td>5.245850</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td></td>
<td>303.4690</td>
<td>112</td>
<td>2.709544</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td></td>
<td>859.8540</td>
<td>224</td>
<td>3.838634</td>
</tr>
<tr>
<td>12 A(D)</td>
<td>S(O(D))</td>
<td>2.3947</td>
<td>44.95825</td>
<td>9</td>
<td>5.559017</td>
</tr>
<tr>
<td>13 BD(D)</td>
<td>S(BD)</td>
<td>0.3857</td>
<td>7.307861</td>
<td>9</td>
<td>8.119845</td>
</tr>
<tr>
<td>14 AB(D)</td>
<td>S(AB)</td>
<td>0.7566</td>
<td>3.186020</td>
<td>2</td>
<td>1.593010</td>
</tr>
<tr>
<td>15 SD(D)</td>
<td>S(SD)</td>
<td>233.504</td>
<td>1008</td>
<td>1008</td>
<td>2.317960</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td></td>
<td></td>
<td>471.6470</td>
<td>224</td>
<td>2.105566</td>
</tr>
<tr>
<td>17 ABD(D)</td>
<td>S(ABD)</td>
<td>1.8049</td>
<td>34.20044</td>
<td>9</td>
<td>3.800049</td>
</tr>
<tr>
<td>18 SBD(AD)</td>
<td></td>
<td></td>
<td>2122.289</td>
<td>1008</td>
<td>2.105445</td>
</tr>
</tbody>
</table>

**Mean** 5.03545

**Cell Means**

<table>
<thead>
<tr>
<th>A = 1</th>
<th>4.88889</th>
<th>5.18202</th>
</tr>
</thead>
<tbody>
<tr>
<td>B = 1</td>
<td>4.95607</td>
<td>5.11403</td>
</tr>
<tr>
<td>D = 1</td>
<td>5.56031</td>
<td>4.18421</td>
</tr>
<tr>
<td>A = 1</td>
<td>4.82456</td>
<td>4.95322</td>
</tr>
<tr>
<td>B = 1</td>
<td>5.08918</td>
<td>5.27485</td>
</tr>
<tr>
<td>D = 1</td>
<td>5.35746</td>
<td>4.19298</td>
</tr>
<tr>
<td>A = 1</td>
<td>5.76316</td>
<td>4.17544</td>
</tr>
<tr>
<td>B = 1</td>
<td>5.39474</td>
<td>4.14035</td>
</tr>
<tr>
<td>A = 1</td>
<td>5.72588</td>
<td>4.22807</td>
</tr>
<tr>
<td>B = 1</td>
<td>5.25439</td>
<td>4.14035</td>
</tr>
<tr>
<td>A = 2</td>
<td>5.46053</td>
<td>4.24561</td>
</tr>
<tr>
<td>B = 1</td>
<td>5.53509</td>
<td>4.14035</td>
</tr>
<tr>
<td>A = 2</td>
<td>5.99123</td>
<td>4.21053</td>
</tr>
<tr>
<td>SOURCE</td>
<td>ERROR TERM</td>
<td>F</td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>-------</td>
</tr>
<tr>
<td>1 MEAN</td>
<td>S(A)</td>
<td>60370.58</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>6.6665</td>
</tr>
<tr>
<td>3 B</td>
<td>SB(A)</td>
<td>15.3907</td>
</tr>
<tr>
<td>4 D</td>
<td>SD(A)</td>
<td>107.3481</td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td>1510.56</td>
</tr>
<tr>
<td>6 D(D)</td>
<td>SO(AD)</td>
<td>61.6982</td>
</tr>
<tr>
<td>7 AB</td>
<td>SB(A)</td>
<td>3.9102</td>
</tr>
<tr>
<td>8 AD</td>
<td>SD(A)</td>
<td>0.2855</td>
</tr>
<tr>
<td>9 BD</td>
<td>SBD(A)</td>
<td>0.7238</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td>229.0988</td>
</tr>
<tr>
<td>11 SD(A)</td>
<td></td>
<td>695.2022</td>
</tr>
<tr>
<td>12 AD(D)</td>
<td>SO(AD)</td>
<td>2.8303</td>
</tr>
<tr>
<td>13 BD(D)</td>
<td>SB(AD)</td>
<td>1.7403</td>
</tr>
<tr>
<td>14 ABD</td>
<td>SBD(A)</td>
<td>0.1532</td>
</tr>
<tr>
<td>15 SO(AD)</td>
<td></td>
<td>2336.92</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td></td>
<td>360.6099</td>
</tr>
<tr>
<td>17 ABD</td>
<td>SBD(A)</td>
<td>0.8113</td>
</tr>
<tr>
<td>18 SBO(AD)</td>
<td></td>
<td>1461.844</td>
</tr>
</tbody>
</table>

**MEAN 4.69737**

**CELL MEANS**

A = 1 2

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.51608</td>
<td>4.87065</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B = 1 2

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.80482</td>
<td>4.58991</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D = 1 2 3

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.15460</td>
<td>4.01206</td>
<td>4.92544</td>
<td></td>
</tr>
</tbody>
</table>

A = 1 2

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.67398</td>
<td>4.35819</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B = 1

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.93567</td>
<td>4.82164</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

D = 1 2 3

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.93860</td>
<td>3.83991</td>
<td>4.76974</td>
<td></td>
</tr>
</tbody>
</table>

A = 1 2

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.37061</td>
<td>4.18471</td>
<td>5.08114</td>
<td></td>
</tr>
</tbody>
</table>

D = 1 2 3

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.29605</td>
<td>4.12281</td>
<td>4.99561</td>
<td></td>
</tr>
</tbody>
</table>

B = 1 2

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.01316</td>
<td>3.90132</td>
<td>4.85526</td>
<td></td>
</tr>
</tbody>
</table>

A = 1

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.11403</td>
<td>4.01754</td>
<td>4.89035</td>
<td></td>
</tr>
</tbody>
</table>

B = 1 2

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.47807</td>
<td>4.72807</td>
<td>5.10088</td>
<td></td>
</tr>
</tbody>
</table>

A = 2

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.76316</td>
<td>3.66228</td>
<td>4.64912</td>
<td></td>
</tr>
</tbody>
</table>

B = 1 2

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.26316</td>
<td>4.14053</td>
<td>5.06140</td>
<td></td>
</tr>
</tbody>
</table>
### Analysis of Variance for Scale 18: Aggressive/Meek

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>F</th>
<th>Sum of Squares</th>
<th>Deg. of Freedom</th>
<th>Mean Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>S(A)</td>
<td>21867.77</td>
<td>1</td>
<td>21867.77</td>
<td></td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>18.1758</td>
<td>1</td>
<td>18.1758</td>
<td></td>
</tr>
<tr>
<td>3 B</td>
<td>S(BA)</td>
<td>22.6618</td>
<td>1</td>
<td>22.6618</td>
<td></td>
</tr>
<tr>
<td>4 D</td>
<td>S(D)</td>
<td>2385.969</td>
<td>2</td>
<td>1192.986</td>
<td></td>
</tr>
<tr>
<td>5 S(A)</td>
<td></td>
<td>897.4132</td>
<td>112</td>
<td>8.012619</td>
<td></td>
</tr>
<tr>
<td>6 D(D)</td>
<td>S(D)</td>
<td>561.6826</td>
<td>9</td>
<td>62.40918</td>
<td></td>
</tr>
<tr>
<td>7 A(B)</td>
<td>S(BA)</td>
<td>7401420</td>
<td>1</td>
<td>7401420</td>
<td></td>
</tr>
<tr>
<td>8 D(B)</td>
<td>S(BD)</td>
<td>14.66162</td>
<td>2</td>
<td>7.330811</td>
<td></td>
</tr>
<tr>
<td>9 B(D)</td>
<td>S(BD)</td>
<td>32.37134</td>
<td>2</td>
<td>16.18567</td>
<td></td>
</tr>
<tr>
<td>10 S(B)</td>
<td></td>
<td>158.6063</td>
<td>112</td>
<td>1.416127</td>
<td></td>
</tr>
<tr>
<td>11 S(D)</td>
<td></td>
<td>565.7915</td>
<td>224</td>
<td>2.52856</td>
<td></td>
</tr>
<tr>
<td>12 A(D)</td>
<td>S(D)</td>
<td>1.2058</td>
<td>9</td>
<td>0.134666</td>
<td></td>
</tr>
<tr>
<td>13 A(B)</td>
<td>S(D)</td>
<td>46.86255</td>
<td>9</td>
<td>5.207409</td>
<td></td>
</tr>
<tr>
<td>14 A(B)</td>
<td>S(BD)</td>
<td>3.229828</td>
<td>2</td>
<td>1.614914</td>
<td></td>
</tr>
<tr>
<td>15 A(D)</td>
<td>S(D)</td>
<td>1400.083</td>
<td>1008</td>
<td>1.349971</td>
<td></td>
</tr>
<tr>
<td>16 ABD</td>
<td>S(AD)</td>
<td>274.3921</td>
<td>224</td>
<td>1.224964</td>
<td></td>
</tr>
<tr>
<td>17 ABD</td>
<td>S(AD)</td>
<td>5.534912</td>
<td>9</td>
<td>0.6149902</td>
<td></td>
</tr>
<tr>
<td>18 ABD</td>
<td>S(AD)</td>
<td>1038.477</td>
<td>1008</td>
<td>1.030234</td>
<td></td>
</tr>
</tbody>
</table>

**Mean**

2.82712

**Cell Means**

<table>
<thead>
<tr>
<th>A</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>A</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
### Analysis of Variance

**Scale 19: Socially sensitive/Socially insensitive**

<table>
<thead>
<tr>
<th>Source</th>
<th>Error Term</th>
<th>Sum of Squares</th>
<th>Degrees of Freedom</th>
<th>Mean Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mean</td>
<td>S(A)</td>
<td>29546.08</td>
<td>1</td>
<td>29546.08</td>
</tr>
<tr>
<td>2A</td>
<td>S(A)</td>
<td>37622</td>
<td>1</td>
<td>4710562</td>
</tr>
<tr>
<td>3B</td>
<td>SB(A)</td>
<td>40067</td>
<td>1</td>
<td>1068750</td>
</tr>
<tr>
<td>4D</td>
<td>SD(A)</td>
<td>237531</td>
<td>2</td>
<td>982013</td>
</tr>
<tr>
<td>5S(A)</td>
<td></td>
<td>1402337</td>
<td>112</td>
<td>125207</td>
</tr>
<tr>
<td>6D</td>
<td>SD(AD)</td>
<td>153003</td>
<td>9</td>
<td>365798</td>
</tr>
<tr>
<td>7AB</td>
<td>SB(A)</td>
<td>01492</td>
<td>1</td>
<td>390255</td>
</tr>
<tr>
<td>8AD</td>
<td>SD(A)</td>
<td>08377</td>
<td>2</td>
<td>327361</td>
</tr>
<tr>
<td>9BD</td>
<td>SD(A)</td>
<td>29834</td>
<td>2</td>
<td>4769436</td>
</tr>
<tr>
<td>10SB(A)</td>
<td></td>
<td>2907478</td>
<td>112</td>
<td>2667391</td>
</tr>
<tr>
<td>11SD(A)</td>
<td></td>
<td>8755254</td>
<td>224</td>
<td>3997702</td>
</tr>
<tr>
<td>12AD(D)</td>
<td>SD(AD)</td>
<td>150555</td>
<td>9</td>
<td>3599381</td>
</tr>
<tr>
<td>13BD(D)</td>
<td>SB(D)</td>
<td>14702</td>
<td>9</td>
<td>2379365</td>
</tr>
<tr>
<td>14ABD</td>
<td>SD(A)</td>
<td>08633</td>
<td>2</td>
<td>1369994</td>
</tr>
<tr>
<td>15SO(D)</td>
<td>SD(AD)</td>
<td>2409927</td>
<td>1008</td>
<td>2390600</td>
</tr>
<tr>
<td>16SBD(A)</td>
<td></td>
<td>3596036</td>
<td>224</td>
<td>1605373</td>
</tr>
<tr>
<td>17ABD(D)</td>
<td>SB(D)</td>
<td>03976</td>
<td>9</td>
<td>6434088</td>
</tr>
<tr>
<td>18SBD(AD)</td>
<td></td>
<td>1631292</td>
<td>1008</td>
<td>1618344</td>
</tr>
</tbody>
</table>

**Mean** 328618

**Cell Means**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3.41740</td>
<td>3.15497</td>
</tr>
<tr>
<td>B</td>
<td>3.34068</td>
<td>3.22368</td>
</tr>
<tr>
<td>D</td>
<td>3.63925</td>
<td>3.70066</td>
</tr>
<tr>
<td>A</td>
<td>3.46784</td>
<td>3.36696</td>
</tr>
<tr>
<td>B</td>
<td>3.22953</td>
<td>3.06041</td>
</tr>
<tr>
<td>A</td>
<td>3.78728</td>
<td>3.26535</td>
</tr>
<tr>
<td>D</td>
<td>3.49123</td>
<td>3.13596</td>
</tr>
<tr>
<td>B</td>
<td>3.73684</td>
<td>3.17982</td>
</tr>
<tr>
<td>A</td>
<td>3.54167</td>
<td>3.22149</td>
</tr>
<tr>
<td>D</td>
<td>3.82895</td>
<td>3.24561</td>
</tr>
<tr>
<td>B</td>
<td>3.74561</td>
<td>3.28509</td>
</tr>
<tr>
<td>A</td>
<td>3.64474</td>
<td>3.11403</td>
</tr>
<tr>
<td>B</td>
<td>3.33772</td>
<td>3.15769</td>
</tr>
</tbody>
</table>
## ANALYSIS OF VARIANCE FOR Scale 20: Likable/Unlikable

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>ERROR TERM</th>
<th>F</th>
<th>SUM OF SQUARES</th>
<th>DEG. OF MEAN SQUARE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 MEAN</td>
<td>S(A)</td>
<td>****</td>
<td>20515.37</td>
<td>1</td>
</tr>
<tr>
<td>2 A</td>
<td>S(A)</td>
<td>0.57</td>
<td>7.578947</td>
<td>1</td>
</tr>
<tr>
<td>3 B</td>
<td>S(B(A))</td>
<td>25.04</td>
<td>28.65497</td>
<td>1</td>
</tr>
<tr>
<td>4 D</td>
<td>S(D(A))</td>
<td>35.32</td>
<td>132.2024</td>
<td>2</td>
</tr>
<tr>
<td>5 S(A)</td>
<td>S(A)</td>
<td>1467.44</td>
<td>12.10220</td>
<td>112</td>
</tr>
<tr>
<td>6 O(D)</td>
<td>S(O(D))</td>
<td>20.27</td>
<td>219.3001</td>
<td>9</td>
</tr>
<tr>
<td>7 AB</td>
<td>S(B(A))</td>
<td>1.65</td>
<td>1.894730</td>
<td>1</td>
</tr>
<tr>
<td>8 AD</td>
<td>S(D(A))</td>
<td>3.66</td>
<td>15.69963</td>
<td>2</td>
</tr>
<tr>
<td>9 BD</td>
<td>S(BD(A))</td>
<td>15.24</td>
<td>27.89554</td>
<td>2</td>
</tr>
<tr>
<td>10 SB(A)</td>
<td></td>
<td></td>
<td>128.16</td>
<td>112</td>
</tr>
<tr>
<td>11 S(D)</td>
<td></td>
<td></td>
<td>419.119</td>
<td>224</td>
</tr>
<tr>
<td>12 AD(D)</td>
<td>S(D(D))</td>
<td>2.61</td>
<td>26.24712</td>
<td>9</td>
</tr>
<tr>
<td>13 ABD(D)</td>
<td>S(ABD(D)</td>
<td>6.74</td>
<td>51.74774</td>
<td>9</td>
</tr>
<tr>
<td>14 SBD(D)</td>
<td>S(BD(D)</td>
<td>0.68</td>
<td>1.252014</td>
<td>2</td>
</tr>
<tr>
<td>15 SOD(D)</td>
<td></td>
<td></td>
<td>1211.43</td>
<td>1008</td>
</tr>
<tr>
<td>16 SBD(A)</td>
<td></td>
<td></td>
<td>204.87</td>
<td>224</td>
</tr>
<tr>
<td>17 ABD(O)</td>
<td>S(O(O)</td>
<td>1.30</td>
<td>10.01061</td>
<td>9</td>
</tr>
<tr>
<td>18 SBO(O)</td>
<td></td>
<td></td>
<td>859.37</td>
<td>1008</td>
</tr>
</tbody>
</table>

**MEAN** 2.73830

**CELL MEANS**

A = 1  2  
2.79094  2.68567

B = 1  2  
2.84064  2.63596

D = 1  2  3  
2.84539  2.93750  2.63202

B = 1  2  
2.91959  2.66228

A = 1  2  
2.76170  2.60965

D = 1  2  3  
2.92763  2.89254  2.55263

B = 1  2  
2.76316  2.96246  2.31140

A = 1  2  
2.88816  3.18202  2.45175

D = 1  2  3  
2.80263  2.69298  2.41228

A = 1  2  
2.97368  3.15789  2.62719

B = 1  2  
2.88158  2.62719  2.47607

A = 2  3  
2.80763  3.20614  2.77632

B = 1  2  3  
2.72368  2.75877  2.34649
## APPENDIX IX

### Unrotated Factor Matrix

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>VAR1</td>
<td>-0.4722</td>
<td>0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR2</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR3</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR4</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR5</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR6</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR7</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR8</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR9</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR10</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR11</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR12</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR13</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR14</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR15</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR16</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR17</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR18</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR19</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
<tr>
<td>VAR20</td>
<td>0.3725</td>
<td>-0.3725</td>
<td>-0.1737</td>
<td>0.7237</td>
<td>-0.0351</td>
<td>-0.1726</td>
<td>0.6072</td>
<td>-0.1677</td>
<td>0.1664</td>
<td>-0.1644</td>
</tr>
</tbody>
</table>

158
### MEAN FACTOR SCORES FOR EACH OCCUPATION WITHIN DIMENSION

<table>
<thead>
<tr>
<th>Factor</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
<th>IX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. District Attorney</td>
<td>-.77</td>
<td>-.04</td>
<td>-.42</td>
<td>-.07</td>
<td>-.15</td>
<td>1.40</td>
<td>-.12</td>
<td>.01</td>
<td>.15</td>
</tr>
<tr>
<td>2. Engineer</td>
<td>.50</td>
<td>.45</td>
<td>-.33</td>
<td>-.11</td>
<td>.41</td>
<td>-.83</td>
<td>.28</td>
<td>-.25</td>
<td>-.30</td>
</tr>
<tr>
<td>3. Race Car Driver</td>
<td>-.68</td>
<td>.23</td>
<td>-.33</td>
<td>.11</td>
<td>.41</td>
<td>-.43</td>
<td>.02</td>
<td>.10</td>
<td>.41</td>
</tr>
<tr>
<td>4. Used Car Sales Dealer</td>
<td>-.62</td>
<td>-.31</td>
<td>.72</td>
<td>.43</td>
<td>.41</td>
<td>-.43</td>
<td>.02</td>
<td>.10</td>
<td>.41</td>
</tr>
<tr>
<td>5. Head Librarian</td>
<td>.70</td>
<td>.37</td>
<td>-.10</td>
<td>.01</td>
<td>-.21</td>
<td>-.10</td>
<td>.06</td>
<td>.60</td>
<td>.37</td>
</tr>
<tr>
<td>6. Registered Nurse</td>
<td>.43</td>
<td>-.05</td>
<td>-.30</td>
<td>-.20</td>
<td>-.21</td>
<td>-.34</td>
<td>-.24</td>
<td>.10</td>
<td>.12</td>
</tr>
<tr>
<td>7. Private Secretary</td>
<td>.81</td>
<td>.03</td>
<td>.02</td>
<td>-.04</td>
<td>.05</td>
<td>.09</td>
<td>.34</td>
<td>-.36</td>
<td>.27</td>
</tr>
<tr>
<td>8. Manicurist</td>
<td>1.22</td>
<td>-.45</td>
<td>.72</td>
<td>.26</td>
<td>.02</td>
<td>.39</td>
<td>.21</td>
<td>-.15</td>
<td>.19</td>
</tr>
<tr>
<td>9. Journalist</td>
<td>-.57</td>
<td>-.08</td>
<td>.05</td>
<td>-.06</td>
<td>-.16</td>
<td>1.34</td>
<td>-.13</td>
<td>-.15</td>
<td>-.41</td>
</tr>
<tr>
<td>10. Counseling Psychologist</td>
<td>-.00</td>
<td>-.09</td>
<td>.35</td>
<td>-.62</td>
<td>-.37</td>
<td>-.26</td>
<td>-.35</td>
<td>.09</td>
<td>-.33</td>
</tr>
<tr>
<td>11. Comedian</td>
<td>-.23</td>
<td>.60</td>
<td>.37</td>
<td>.29</td>
<td>-.27</td>
<td>-.74</td>
<td>.48</td>
<td>-.10</td>
<td>-.56</td>
</tr>
<tr>
<td>12. Assistant in a Scientific Laboratory</td>
<td>.22</td>
<td>.54</td>
<td>-.51</td>
<td>.55</td>
<td>.20</td>
<td>-.12</td>
<td>-.37</td>
<td>.21</td>
<td>-.01</td>
</tr>
</tbody>
</table>
APPENDIX XI

STIMULUS PERSON PERCEPTION ON FACTOR II
AS A FUNCTION OF SEX OF PERCEIVER X
OCCUPATION WITHIN DIMENSION INTERACTION

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male Perceiver</th>
<th>Female Perceiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. District Attorney</td>
<td>0.1770</td>
<td>-0.2539</td>
</tr>
<tr>
<td>2. Engineer</td>
<td>0.4766</td>
<td>0.4214</td>
</tr>
<tr>
<td>3. Race Car Driver</td>
<td>0.2283</td>
<td>0.2395</td>
</tr>
<tr>
<td>4. Used Car Sales Dealer</td>
<td>-0.1629</td>
<td>-0.4500</td>
</tr>
<tr>
<td>5. Head Librarian</td>
<td>0.4132</td>
<td>0.3330</td>
</tr>
<tr>
<td>6. Registered Nurse</td>
<td>0.0655</td>
<td>-0.1647</td>
</tr>
<tr>
<td>7. Private Secretary</td>
<td>0.0299</td>
<td>0.0209</td>
</tr>
<tr>
<td>8. Manicurist</td>
<td>-0.2540</td>
<td>-0.6459</td>
</tr>
<tr>
<td>9. Journalist</td>
<td>0.1761</td>
<td>-0.3298</td>
</tr>
<tr>
<td>10. Counseling Psychologist</td>
<td>0.0925</td>
<td>-0.2722</td>
</tr>
<tr>
<td>11. Comedian</td>
<td>-0.4563</td>
<td>-0.7452</td>
</tr>
<tr>
<td>12. Assistant in a Scientific Laboratory</td>
<td>0.3807</td>
<td>0.6905</td>
</tr>
</tbody>
</table>
STIMULUS PERSON PERCEPTION ON FACTOR II
AS A FUNCTION OF SEX OF STIMULUS PERSON
X OCCUPATION WITHIN DIMENSION INTERACTION

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male Stimulus Person</th>
<th>Female Stimulus Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. District Attorney</td>
<td>-0.0216</td>
<td>-0.0553</td>
</tr>
<tr>
<td>2. Engineer</td>
<td>0.4238</td>
<td>0.4762</td>
</tr>
<tr>
<td>3. Race Car Driver</td>
<td>0.2041</td>
<td>0.2637</td>
</tr>
<tr>
<td>4. Used Car Sales Dealer</td>
<td>-0.3484</td>
<td>-0.2644</td>
</tr>
<tr>
<td>5. Head Librarian</td>
<td>0.5071</td>
<td>0.2391</td>
</tr>
<tr>
<td>6. Registered Nurse</td>
<td>0.0951</td>
<td>-0.1943</td>
</tr>
<tr>
<td>7. Private Secretary</td>
<td>0.3498</td>
<td>-0.2991</td>
</tr>
<tr>
<td>8. Manicurist</td>
<td>0.0317</td>
<td>-0.9316</td>
</tr>
<tr>
<td>9. Journalist</td>
<td>-0.0538</td>
<td>-0.0999</td>
</tr>
<tr>
<td>10. Counseling Psychologist</td>
<td>-0.1356</td>
<td>-0.0441</td>
</tr>
<tr>
<td>11. Comedian</td>
<td>-0.6538</td>
<td>-0.5477</td>
</tr>
<tr>
<td>12. Assistant in a Scientific</td>
<td>0.6450</td>
<td>0.4261</td>
</tr>
</tbody>
</table>

Neutral Feminine Masculine
### APPENDIX XII

STIMULUS PERSON PERCEPTION ON FACTOR III AS A FUNCTION OF SEX OF PERCEIVER X OCCUPATION WITHIN DIMENSION INTERACTION

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male Perceiver</th>
<th>Female Perceiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. District Attorney</td>
<td>-0.2598</td>
<td>-0.5792</td>
</tr>
<tr>
<td>2. Engineer</td>
<td>-0.4038</td>
<td>-0.6522</td>
</tr>
<tr>
<td>3. Race Car Driver</td>
<td>0.2504</td>
<td>0.4108</td>
</tr>
<tr>
<td>4. Used Car Sales Dealer</td>
<td>0.7833</td>
<td>0.6577</td>
</tr>
<tr>
<td>5. Head Librarian</td>
<td>0.1229</td>
<td>-0.3324</td>
</tr>
<tr>
<td>6. Registered Nurse</td>
<td>-0.1832</td>
<td>-0.4132</td>
</tr>
<tr>
<td>7. Private Secretary</td>
<td>0.0033</td>
<td>0.0442</td>
</tr>
<tr>
<td>8. Manicurist</td>
<td>0.7023</td>
<td>0.7318</td>
</tr>
<tr>
<td>9. Journalist</td>
<td>0.1384</td>
<td>-0.0457</td>
</tr>
<tr>
<td>10. Counseling Psychologist</td>
<td>-0.1737</td>
<td>-0.5261</td>
</tr>
<tr>
<td>11. Comedian</td>
<td>0.3066</td>
<td>0.4310</td>
</tr>
<tr>
<td>12. Assistant in a Scientific Laboratory</td>
<td>-0.2856</td>
<td>-0.7279</td>
</tr>
</tbody>
</table>
STIMULUS PERSON PERCEPTION ON FACTOR III AS A FUNCTION OF SEX OF STIMULUS PERSON X OCCUPATION WITHIN DIMENSION INTERACTION

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. District Attorney</td>
<td>-0.3950</td>
<td>-0.4440</td>
</tr>
<tr>
<td>2. Engineer</td>
<td>-0.6267</td>
<td>-0.4293</td>
</tr>
<tr>
<td>3. Race Car Driver</td>
<td>0.2702</td>
<td>0.3910</td>
</tr>
<tr>
<td>4. Used Car Sales Dealer</td>
<td>0.7305</td>
<td>0.7104</td>
</tr>
<tr>
<td>5. Head Librarian</td>
<td>-0.0646</td>
<td>-0.1450</td>
</tr>
<tr>
<td>6. Registered Nurse</td>
<td>-0.2761</td>
<td>-0.3203</td>
</tr>
<tr>
<td>7. Private Secretary</td>
<td>-0.0846</td>
<td>0.1322</td>
</tr>
<tr>
<td>8. Manicurist</td>
<td>0.7973</td>
<td>0.6369</td>
</tr>
<tr>
<td>9. Journalist</td>
<td>0.0552</td>
<td>0.0375</td>
</tr>
<tr>
<td>10. Counseling Psychologist</td>
<td>-0.4198</td>
<td>-0.2800</td>
</tr>
<tr>
<td>11. Comedian</td>
<td>0.3406</td>
<td>0.3970</td>
</tr>
<tr>
<td>12. Assistant in a Scientific Laboratory</td>
<td>-0.4168</td>
<td>-0.5967</td>
</tr>
</tbody>
</table>
### APPENDIX XIII

**STIMULUS PERSON PERCEPTION ON FACTOR IV AS A FUNCTION OF SEX OF STIMULUS PERSON X OCCUPATION WITHIN DIMENSION INTERACTION**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male Stimulus Person</th>
<th>Female Stimulus Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. District Attorney</td>
<td>-0.0775</td>
<td>-0.0720</td>
</tr>
<tr>
<td>2. Engineer</td>
<td>-0.0657</td>
<td>-0.0939</td>
</tr>
<tr>
<td>3. Race Car Driver</td>
<td>0.3464</td>
<td>0.1747</td>
</tr>
<tr>
<td>4. Used Car Sales Dealer</td>
<td>0.4344</td>
<td>0.4190</td>
</tr>
<tr>
<td>5. Head Librarian</td>
<td>0.0736</td>
<td>-0.0590</td>
</tr>
<tr>
<td>6. Registered Nurse</td>
<td>0.0080</td>
<td>-0.0406</td>
</tr>
<tr>
<td>7. Private Secretary</td>
<td>0.2303</td>
<td>-0.3043</td>
</tr>
<tr>
<td>8. Manicurist</td>
<td>-0.2264</td>
<td>0.7469</td>
</tr>
<tr>
<td>9. Journalist</td>
<td>-0.0319</td>
<td>-0.0911</td>
</tr>
<tr>
<td>10. Counseling Psychologist</td>
<td>-0.6868</td>
<td>-0.5442</td>
</tr>
<tr>
<td>11. Comedian</td>
<td>-0.3523</td>
<td>-0.2323</td>
</tr>
<tr>
<td>12. Assistant in a Scientific</td>
<td>0.4055</td>
<td>0.7013</td>
</tr>
</tbody>
</table>

Neutral Feminine Masculine
APPENDIX XIV

STIMULUS PERSON PERCEPTION ON FACTOR VI AS A FUNCTION OF SEX OF PERCEIVER X OCCUPATION WITHIN DIMENSION INTERACTION

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male Perceiver</th>
<th>Female Perceiver</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. District Attorney</td>
<td>1.2408</td>
<td>1.5658</td>
</tr>
<tr>
<td>2. Engineer</td>
<td>-0.2057</td>
<td>-0.6135</td>
</tr>
<tr>
<td>3. Race Car Driver</td>
<td>-0.7261</td>
<td>-0.9261</td>
</tr>
<tr>
<td>4. Used Car Sales Dealer</td>
<td>-0.4563</td>
<td>-0.3998</td>
</tr>
<tr>
<td>5. Head Librarian</td>
<td>-0.1273</td>
<td>-0.0655</td>
</tr>
<tr>
<td>6. Registered Nurse</td>
<td>-0.3332</td>
<td>-0.3491</td>
</tr>
<tr>
<td>7. Private Secretary</td>
<td>0.0492</td>
<td>0.1285</td>
</tr>
<tr>
<td>8. Manicurist</td>
<td>0.2822</td>
<td>0.5060</td>
</tr>
<tr>
<td>9. Journalist</td>
<td>1.1838</td>
<td>1.5010</td>
</tr>
<tr>
<td>10. Counseling Psychologist</td>
<td>-0.1237</td>
<td>-0.3994</td>
</tr>
<tr>
<td>11. Comedian</td>
<td>-0.5933</td>
<td>-0.8804</td>
</tr>
<tr>
<td>12. Assistant in a Scientific Laboratory</td>
<td>-0.1051</td>
<td>-0.1425</td>
</tr>
<tr>
<td>Occupation</td>
<td>Male Stimulus Person</td>
<td>Female Stimulus Person</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>1. District Attorney</td>
<td>1.3761</td>
<td>1.4305</td>
</tr>
<tr>
<td>2. Engineer</td>
<td>-0.4102</td>
<td>-0.4090</td>
</tr>
<tr>
<td>3. Race Car Driver</td>
<td>-0.8319</td>
<td>-0.8203</td>
</tr>
<tr>
<td>4. Used Car Sales Dealer</td>
<td>-0.4068</td>
<td>-0.4493</td>
</tr>
<tr>
<td>5. Head Librarian</td>
<td>-0.0884</td>
<td>-0.1044</td>
</tr>
<tr>
<td>6. Registered Nurse</td>
<td>-0.1197</td>
<td>-0.5626</td>
</tr>
<tr>
<td>7. Private Secretary</td>
<td>0.1996</td>
<td>-0.0220</td>
</tr>
<tr>
<td>8. Manicurist</td>
<td>0.6173</td>
<td>0.1709</td>
</tr>
<tr>
<td>9. Journalist</td>
<td>1.3402</td>
<td>1.3446</td>
</tr>
<tr>
<td>10. Counseling Psychologist</td>
<td>-0.2216</td>
<td>-0.3015</td>
</tr>
<tr>
<td>11. Comedian</td>
<td>-0.7775</td>
<td>-0.6962</td>
</tr>
<tr>
<td>12. Assistant in a Scientific Laboratory</td>
<td>0.0180</td>
<td>-0.2656</td>
</tr>
</tbody>
</table>
## APPENDIX XV

### STIMULUS PERSON PERCEPTION ON FACTOR VII

**AS A FUNCTION OF SEX OF STIMULUS PERSON X OCCUPATION WITHIN DIMENSION INTERACTION**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>District Attorney</td>
<td>-0.2560</td>
<td>0.0065</td>
</tr>
<tr>
<td>Engineer</td>
<td>-0.3121</td>
<td>-0.0333</td>
</tr>
<tr>
<td>Race Car Driver</td>
<td>0.3444</td>
<td>0.2114</td>
</tr>
<tr>
<td>Used Car Sales Dealer</td>
<td>-0.1337</td>
<td>0.1684</td>
</tr>
<tr>
<td>Head Librarian</td>
<td>0.1188</td>
<td>0.0096</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>0.0106</td>
<td>-0.4970</td>
</tr>
<tr>
<td>Private Secretary</td>
<td>0.1033</td>
<td>0.5693</td>
</tr>
<tr>
<td>Manicurist</td>
<td>0.5435</td>
<td>-0.1272</td>
</tr>
<tr>
<td>Journalist</td>
<td>-0.1084</td>
<td>-0.1420</td>
</tr>
<tr>
<td>Counseling Psychologist</td>
<td>-0.3904</td>
<td>-0.3082</td>
</tr>
<tr>
<td>Comedian</td>
<td>0.4917</td>
<td>0.4732</td>
</tr>
<tr>
<td>Assistant in a Scientific Laboratory</td>
<td>-0.3693</td>
<td>-0.3637</td>
</tr>
</tbody>
</table>
APPENDIX XVI

STIMULUS PERSON PERCEPTION ON FACTOR VIII
AS A FUNCTION OF SEX OF STIMULUS PERSON X
OCCUPATION WITHIN DIMENSION INTERACTION

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male Stimulus Person</th>
<th>Female Stimulus Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. District Attorney</td>
<td>0.1392</td>
<td>0.1610</td>
</tr>
<tr>
<td>2. Engineer</td>
<td>-0.1613</td>
<td>-0.0635</td>
</tr>
<tr>
<td>3. Race Car Driver</td>
<td>-0.3660</td>
<td>-0.1255</td>
</tr>
<tr>
<td>4. Used Car Sales Dealer</td>
<td>0.2282</td>
<td>-0.0350</td>
</tr>
<tr>
<td>5. Head Librarian</td>
<td>0.4648</td>
<td>0.7437</td>
</tr>
<tr>
<td>6. Registered Nurse</td>
<td>0.3615</td>
<td>-0.1667</td>
</tr>
<tr>
<td>7. Private Secretary</td>
<td>0.1204</td>
<td>-0.8420</td>
</tr>
<tr>
<td>8. Manicurist</td>
<td>0.2236</td>
<td>-0.5148</td>
</tr>
<tr>
<td>9. Journalist</td>
<td>-0.0700</td>
<td>-0.2200</td>
</tr>
<tr>
<td>10. Counseling Psychologist</td>
<td>0.3700</td>
<td>-0.1858</td>
</tr>
<tr>
<td>11. Comedian</td>
<td>-0.1667</td>
<td>-0.0307</td>
</tr>
<tr>
<td>12. Assistant in a Scientific Laboratory</td>
<td>0.2443</td>
<td>0.1815</td>
</tr>
</tbody>
</table>
REFERENCES


Harrison, R. The structure and measurement of person perception. Unpublished (undated) manuscript, Yale University, NIMH Grant #M-6466A.


Meier, H. C. Mother-centeredness and college youths' attitudes toward social equality for women: Some empirical findings. *Journal of Marriage and the Family*, 1972, 34, 115-121.


