A MULTIDIMENSIONAL SCALING ANALYSIS OF RATERS' PERCEPTIONS OF NONVERBAL AND VERBAL BEHAVIORS OCCURRING IN SAME AND DIFFERENT SEX INTERACTIONS

Dissertation for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
KENNETH L. FISCHER
1976

This is to certify that the

thesis entitled
A Multidimensional Scaling Analysis of Raters' Perceptions of Nonverbal and Verbal Behaviors Occurring in Same and Different Sex Interactions

presented by

Kenneth L. Fischer

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Psychology

Major professor

Date 8/13/76

ABSTRACT

A MULTIDIMENSIONAL SCALING ANALYSIS OF RATERS' PERCEPTIONS OF NONVERBAL AND VERBAL BEHAVIORS OCCURRING IN SAME AND DIFFERENT SEX INTERACTIONS

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A diversity of variables have been researched to weigh their relative importance to person perception. The more traditional, experimentally-controlled studies typically have focused upon only one variable at a time and have used photographs or pictures of people as stimulus material.

Using the INDSCAL multidimensional scaling method, this present study, exploratory in nature, examined possible sex differences in person perception, as well as the feasibility that perceptions made along masculine-feminine lines and dominant-submissive lines might be similar.

Undergraduate, volunteer, psychology students (male N=90, female N=90) were administered the Trait Evaluation Index as a measure of masculinity and femininity, and the A Scale of the Guilford-Zimmerman Temperament Survey as a measure of dominance and submissiveness. Four categories were made: high masculine-low feminine (hmlf), low masculine-high feminine (lmhf), high dominant (hd), and low

dominant (ld). Eight males and 8 females, two from each category, were used as target persons (TPs). Twenty-four males and 24 females, two from each category assigned to each of three conditions, were used as raters (Rs). The 2 interactors (Is), one male and one female, were psychology students earning research credits. Each TP interacted once with a male I and once with a female I. During each two-minute interaction, only the TP was video taped.

The Rs looked at two videotapes. Tape 1 showed one-minute segments of each of the 8 male TPs interacting with a male I (although the male I was not seen or heard); this was followed by ten-second segments of the first male TP presented before each of the other male TPs, until the first male TP had been presented contiguously with all others. Each male was presented contiguously with all others. Similarly, each female TP was presented in contiguity with all others. Tape 2 was also set up for paired-comparisons; except on this tape, TPs were interacting with a person of the other sex.

Rs assigned to the n condition were instructed to rate the paired-comparisons stimuli simply on the basis of how similar they were; Rs assigned to the mf condition were instructed to rate on the basis of similarity on masculinity-femininity; Rs assigned to the ds condition rated the paired-comparisons on dominance-submissiveness.

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Four judges (Js) sought to ascertain the dimensions presumably used by Rs in making statements of similarity. They viewed tapes and consulted the rank orderings of the TPs provided by the INDSCAL scaling analysis.

The judges were able to agree upon dimensions of personality presumably underlying the rankings and upon the nonverbal and/or verbal behaviors to which Rs attended. Inspections of the Js' dimensions of relevance for all groupings and combinations of Rs and TPs showed that: 1) Female and male Rs differed in perceptual judgments; 2) Each category of Rs perceived the TPs differently; 3) Voice quality was the behavior of the TPs most often attended to; 4) Varying the sex of the I interacting with the TP did make a difference in perception. However, Rs made more wrong than right guesses about the sex of the I; overall, female Rs were the superior guessers; both sexes made more correct guesses when I and TP were not of the same sex, especially, the female TP and male I combination; 5) Ratings of TPs made by Rs on a masculinity-femininity dimension were not similar to those made by Rs rating on dominance-submissiveness; rather, both sets of Rs were more comparable to Rs given neutral instructions for rating similarity.

The subjectivity of the methodology utilized was discussed, with particular attention given to subjectivity in

the judges' determining and naming dimensions of personality and behaviors attended to. The experimenter suggested several ways by which the accuracy of this study's subjective findings might be checked.

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Kenneth L. Laurence Fischer

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Psychology

1976

To Nanc,

Who, more than anyone,

Helped me "hang in there"

and

To Myself,

For doing the "hanging"

ACKNOWLEDGMENTS

To Elaine Donelson, my chairperson, who took me on, stayed with me, and expertly guided me towards excellence, my highest and warmest regard.

To Dave Wessel, Jeanne Gullahorn, and Larry Messé, the other members of my committee, for their incisive comments and facilitating suggestions, my sincerest appreciation.

To Pam Burgess, Ken Goldman, and Mike Schwartz, the three psychology students, who became more than my assistants, my deepest respect and admiration for a job well done.

Thanks to the psychology students, who volunteered to participate as subjects.

Thanks also to the clinical psychology department for the use of their video-taping equipment and space.

Finally, a personal note of affection and gratitude to Nancy, my Love, who worked many long and arduous hours, earning money to pay the bills, so that I might be free to do what I now have accomplished.

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INTRODUCTION

What does a woman mean when she says, "Now there's a real man"? What does a man mean when he says, "Now there's a real woman"? Why does another man "look" masculine to a woman but not to me? Why does another woman "look" feminine to me but not to a woman? Notwithstanding our respective ego problems, could it be that because I am a man and she is a woman, we perceive people differently? Furthermore, might what we commonly refer to as "masculine" or "feminine" be just as appropriately labeled "dominant" or "submissive"?

This present study, exploratory in nature, investigates possible sex differences in person perception, as well as the feasibility that perceptions made along masculine-feminine lines and dominant-submissive lines might be similar.

A diversity of variables have been researched to weigh their relative importance to person perception. The more traditional, experimentally-controlled studies typically have focused upon only one variable at a time and have used photographs or pictures of people as stimulus material (a practice that seems a far cry from the natural way people perceive each other in everyday life).

Appearance

Dress . . . Hamid (1968) found very marked stereotypes when subjects rated photographs of females in different modes of dress. Later, he (Hamid, 1969) studied the extent to which variance in the perception of others is a function of the clothes worn by trying to determine whether such variance was a function of the sex of the perceiver, the sex of the perceived person, or an interaction of these two. (This is an improvement in methodology since he introduces the additional variable of sex and considers both the perceiver and the perceived.) An analysis of variance showed extreme responding in rating the other sex, but the major proportion of variance was attributable to this effect in interaction with dress condition.

Gibbins (1969) showed pictures of six costumes selected from women's magazines (all six were of indoor clothes; the photographs were carefully cut out to remove background effects; the heads of the models were also removed to control for attractiveness or facial expression) to fifty 15-16-year-old girls who, on the basis of the outfits, made perceptual judgments about the wearers' age, occupational level, personality, dating pattern, sexual morals, smoking and drinking, hobbies, occasions on which the outfit is worn and, to a lesser extent, educational level. His most important finding was that for this sample of subjects at

least, the major dimension of the meaning of clothes is their fashionability.

Again using photographs selected from magazines, Foster (1970) investigated the influence of the underclothed and/or unclothed body of the stimulus person on ascribed personality characteristics. Separate sub-groups of male and female subjects rated either the face only or the whole torso of underclothed and unclothed stimulus persons on semantic differential scales. The female respondents, who saw the whole torso, rated the unclothed female stimulus persons higher on activity and potency and lower on evaluation.

Mannerisms

Eyes . . . The effects of eye position on person perception were demonstrated by Tankard (1970). Stimulus photographs were prepared of models in 3 conditions, looking straight into the camera, looking downward, and looking sideways. Subjects changed the position of the iris of their eyes about 2 mm. Despite this fairly small change, the experiment showed a greater number of significant differences in ratings for straight and downward comparisons than for straight and sideways comparisons. Subjects looking downward were perceived as less alert, more weak, more afraid, more ashamed, less receptive, more insecure, more passive, less attentive, less interested, more sad, and

earning lower salaries than subjects looking straight ahead. Subjects looking sideways were perceived as more pleasant and more afraid than subjects looking straight ahead.

Gitter, Mostofsky, and Guichard (1972) had their stimulus persons looking at another stimulus person (instead of a camera, cf. Tankard's study), a much better way of investigating the social effects of visual interaction. Unfortunately, again, photographs were used for stimulus material. For the 10 photographs, (a) the eyes of the first stimulus person (1P) were pointing in the same direction as the orientation of the head, (b) both 1P and the second stimulus person (2P) were looking at points along the horizontal plane (not looking "upward" or "downward"), (c) the faces of both 1P and 2P were relatively blank and emotionless. A second set of prints was made from the 10 photographs for use with a second treatment group (1P) in which the 1P stimuli alone were shown.

Each subject was presented with only one photograph at a time and asked to evaluate the 1P's (a) direction of gaze, (b) focus of gaze, and (c) type of emotion expressed. Subjects for the 2P treatment group were asked in addition if 2P was looking at 1P. Subjects in the 1P treatment group were shown a photograph of a girl in which the head was oriented and they were asked to indicate the corresponding direction of her eyes. The instructions given the subjects

in the 2P treatment group were slightly different inasmuch as the photograph depicted both a 1P and a 2P model. The photographs in the 1P treatment group were identical to those of the 2P treatment group with the exception of the presence or absence of 2P.

The overall results show the social effects of visual interaction. First, the presence of 2P affected the perception of 1P, inasmuch as 1P's eyes were perceived to look more toward 2P, and as 1P was perceived to express more emotion. Second, when 2P was perceived as looking at 1P, 1P was perceived as expressing less emotion than when 2P was not perceived as looking at 1P. (The authors state that the finding that when 2P was perceived as not looking at 1P, 1P was perceived as expressing more emotion, need not necessarily be considered paradoxical. Not looking may be interpreted as looking away from; and not looking thereby constitutes an example of another mode of social interaction. If 2P was seen as ignoring or purposely avoiding 1P, subjects may have indeed "read into" 1P's expression some emotive content.) Third, in presence of 2P, 1P was perceived as focusing the gaze more than when 2P was absent. Finally, whether 2P was present or not, women perceived more emotion on 1P's face than did men.

Hands . . . Manual expression was the subject of Gitin's (1970) study. She hypothesized that (a) Activation or Intensity would emerge as the most important factor or

dimension of the semantic space for manual expression; (b) there would be at least three dimensions needed to define the semantic space for manual expression. For her stimuli, an actor was seated behind a suspended black cloth screen. Six-inch slits were cut, through which he extended his arms to a point halfway between his shoulders and elbows. Generally, the method of eliciting emotional expression that was used, was, the actor was instructed to try to experience and act out a specific emotional situation.

Although she used a 16-millimeter motion picture camera to film the stimulus person's hands, her subjects saw only single frames (36) rather than film clips. Gitin conceded the limitation that still photographs may not necessarily represent emotional expression unless, as Ekman and Friesen (1967) stated, they happen to "coincide with some point during the period of maximum activity rather than with the beginning or end point of an act" thereby conveying "at least some impression of movement and perhaps by inference some of the relevant sequential cues." (To this experimenter's mind, at least, this is stretching things a bit.)

She performed a three-mode (scales, concepts, subjects) factor analysis of 78 subjects' ratings of these 36 photographs of manual expression on 40 semantic differential-type scales. Four scale factors were identified: 1) Activation,

2) Evaluation, 3) Dynamism, and 4) Control. Similarly, four concept factors were found: 1) Grip, 2) Droop, 3) Cup, and 4) Push. One major subject factor was found. It was discovered that Scale Factor 1 intercorrelated most highly with Concept Factor 1, Scale Factor 2 with Concept Factor 2, Scale Factor 3 with Concept Factor 3, and Scale Factor 4 with Concept Factor 4. The magnitude of the intercorrelations diminished according to the respective decrease in importance of the factor for describing the verbal and visual spaces.

Facial Expression . . . Most studies have used static stimuli, which are most frequently obtained by instructing or otherwise inducing the stimulus person to express different emotions and then photographing the result. In real life, however, it is apparent that emotional expressions have temporal properties that cannot be included in a photograph or a drawing. Further, the use of a set of photographs obtained from a single stimulus person calls into question the generality of the obtained results. While most investigators have included a number of subjects in their studies, similar sampling of stimulus persons has not occurred. Many investigators have been aware of these problems, and a number have expressed the need for a method of judging emotions "live" in the laboratory (e.g., Thompson and Meltzer, 1964).

Miller, Banks, and Ogawa (1962) conducted an experiment in which a monkey received a conditioned stimulus (CS) followed by shock, but had no means of avoiding the shock. A second monkey, who did not receive the CS, was able to learn to avoid the shock by responding appropriately to the first monkey's anxiety in the presence of the CS. Whether the second monkey could identify the emotion of the first monkey is, of course, questionable; he could, however, use that emotion as a discriminative stimulus.

Gubar's (1966) study is an attempt to adopt the Miller et al. (1962) technique to the study of the recognition of facial expressions of emotion in humans. This was done by confronting both the subject and the observer with a discrimination task involving both reward and punishment, each correlated with a different stimulus. The subject could perceive the stimuli, but had no means of responding so as to receive the reward or avoid the punishment. The observer, in contrast, could respond so as to receive reward and avoid punishment (both for himself and for the subjects), but could not perceive the stimuli. Rather, the observer could perceive the expressions of the subject's face. Given these circumstances, better than chance performance on the part of the observer would imply that the observer could recognize, or at least discriminate between, the subject's facial expression in the presence of a reward stimulus and

the subject's facial expression in the presence of a punishment stimulus.

Gubar's results showed that: (a) Facial expressions can be evoked and judged "live" in a laboratory; (b) Actual experience with evoking situations was associated with better recognition of expressions than verbal knowledge of the same situation, and this better recognition was true for both expressions anticipating reward and for those anticipating shock.

In a study of communication of affect through spontaneous facial expressions (Buck et al., 1972), emotional responses were produced through the presentation of emotionally loaded visual stimuli. Color slides with varied emotional content were presented to a human sender, while an observer watching the sender's face on closed-circuit television attempted to (a) judge what kind of slide the sender was watching and to (b) rate the sender's emotional reaction. The experiment was designed to investigate whether significant nonverbal communication of affect could be demonstrated in this kind of experimental situation. It also explored the physiological concomitants of the communication process: whether the physiological responses of an observer were influenced by the reception of accurate emotional information from a sender, and whether "physiologic covariation" between the physiological responses of the

sender and observer occurred and were related to the accuracy of communication (cf. Kaplan, Burch, and Bloom, 1964). Finally, the experiment explored the relationships of sex of subject, personality variables, and physiological responding, with the ability to send and receive emotional information through facial expression. Results revealed significant communication of affect, particularly among female pairs. There was a negative relationship between the sender's skin conductance responsitivity and communication accuracy.

The findings of a later study (Buck, Miller, and Caul, 1974) suggest that the superior communication found among female pairs was due to the greater facial responsiveness of the female senders. Female senders were judged more accurately than male senders, but female observers were not reliably more accurate than male observers. Also, the experimenter rated females as being more facially expressive than males. This experiment replicated the finding of a negative correlation between facial communication and the skin conductance response to the slides. The tendency of males to be internalizers and females to be externalizers noted in the previous study was repeated in this experiment. (Jones, 1935, 1960, characterizes "internalizers" as those who show little overt affect but evidence large electrodermal activity, and "externalizers" as those who display

affect overtly but have minimal changes in skin potential.) Internalizers were found to be higher in introversion and sensitization, and more impersonal in their verbal descriptions of their emotions, than externalizers; externalizers were higher in self-esteem.

Facial and Body Cues . . . Judge agreement regarding a detail of behavior has little meaning unless the judgment affects more molar judgments. Thus, moving pictures of foot movement might elicit high agreement regarding expressor anxiety when judges are shown foot cues alone. Foot cues might be totally ignored, however, in a real face-to-face situation. Foot cues do not "communicate" anxiety if they are not responded to. The issue of the true communicative nature of cues is being begged if cues are forced on what are labeled "naive" judges. This is the contention of Shapiro (1972) who analyzed the ratings of whole, head, or body sections of still photographs of five male counselors to answer: 1) Does high agreement between judges for a particular cue suggest that this cue is used when it is combined with other cues? 2) Are judgments of intensity of emotion particularly affected by body cues? The results of his analysis suggest that judges rating still photographs (on scales measuring empathy, activity, genuineness, potency, warmth, evaluation, and helpfulness) reach higher agreement rating bodies alone than faces alone. They do not use these

body cues, however, when given the opportunity to rate the whole person. Similarly, naive judges do not use body cues (to a significant level) in rating "activity" or "potency."

Voice Quality

Nonverbal vocal behavior is still another very important variable attended to in person perception. Nash (1971) designed a study to describe the ability of hospital staff and patients to perceive the emotional communication of others from tone of voice, independent of manifest content, and to determine the extent to which this skill in patients was influenced by two different types of hospital treatment. The study investigated the level of ability in four groups selected from the wards of a general hospital for acute illnesses: 51 psychiatric and 46 general medical patient-care and treatment personnel, and 56 psychiatric and 78 general medical inpatients. It also evaluated the effects of psychiatric and medical-surgical treatment on samples of 37 psychiatric and 29 medical-surgical inpatients. Level of ability was determined from subject responses to the Conn-Edwards Measure of Emotion Perception, a tape recording of content-standard vocal expressions which presents ten common emotions spoken by male and female speakers. To aid interpretation of her findings and further test the stability of the experimental instrument, Nash investigated level

of skill for a sample of 82, and test-retest changes for a sample of 37 non-hospitalized healthy adults.

Results supported the hypothesis of significant staff superiority to patients, but provided no evidence that psychiatric staff was more skilled than medical staff. Both categories of patients were equally poor and had significantly less skill than either staff or non-hospitalized healthy adults. The study failed to provide evidence that psychiatric treatment improved patient skill. Nash interprets these results as suggesting that on discharge from hospital as well as on admission, patients (independently of diagnostic classification) suffer a depressed responsiveness to emotional stimuli. Further, customary devices for making one's meaning clear, nuances of voice tone, etc., which are adequate for ordinary social situations, are inadequate for effective communication with patients.

The Speaking Voice and Personality Diagnosis . . . The possibilities of exploiting speaking voice for a personality diagnosis were examined by Bortz (1971), who studied the relations between the following groups of variables: (a) Measures of acoustic structure of voice; (b) Measures of phenomenological characteristics of voice; (c) Personality diagnoses on the basis of voice; (d) Variables of measuring personality with the help of tests and questionnaires. The results obtained from his analyses were that extraverted

speakers possess a higher ability of vocal expression than introverted speakers. Neurotic characteristics of a speaker are associated with a more favorable evaluation of his voice. Speakers judged to be intelligent, versatile, and well-balanced on the basis of their voice, possess a high flexibility of vocal expression. The physical variables of acoustic structure of voice covaried insignificantly with the personality of the speaker. No voice variable showed any significant relation with verbal intelligence of the speaker.

Voice Pitch, Tone, Rate . . . Phillis (1970) used 120 males and females in the fourth, fifth, eighth, ninth, eleventh and twelfth grades to rate two male speakers of each of six voice types (high pitch, low pitch, high loudness, low loudness, high tempo and low tempo) on three evaluative scales and three dynamism scales. She predicted that high pitch and high tempo speakers would be rated as more positively valued than high loudness speakers, and that high loudness and high tempo speakers would be rated as more dynamic than high pitch speakers. The latter prediction was confirmed by the data while the former was not. Differences between voices of the same type led to the conclusion that voice qualities, other than pitch, loudness and tempo, affected the ratings, especially those made on the evaluative scales.

In general, men who spoke loudly, or with high pitched voices, were rated as valued while those who spoke softly were not; men who spoke loudly or quickly were seen as more dynamic than speakers who spoke slowly or softly or with high-pitched voices.

The sex-of-judge affected both the evaluative and dynamism ratings of the voices. In the evaluative analysis, the sex differences were attributed to the extreme ratings of the females, especially of the high loudness and low loudness voices. The sex differences in the dynamism ratings were attributed to the sharper discrimination made by the males between the high pitch and low pitch voices. The females, on the other hand, discriminated more between high loudness and low loudness and high tempo and low tempo voices than did the males.

Age differences were also found in both the evaluative and dynamism ratings. There was a consistent developmental trend in the ratings of the voices on the evaluative scales. (Unfortunately, the nature and direction of the trend is not spelled out in the dissertation abstract.) With regard to the ratings of the voices on the dynamism scales, it was concluded that the youngest age group was the most accurate.

Voice Quality Profile and Loudness and Tempo . . . The Voice Quality Profile is based on the voice qualities of pitch, loudness and tempo. A previous study found a

relationship between Voice Quality Profile and MMPI profiles (Markel, 1969). Markel et al. (1972) extended the study of the relationship between voice quality and personality traits to a sample of normal adults, and examined the usefulness of a Voice Quality Profile based only on loudness and tempo. He obtained speech samples and 16 PF scores from 104 male college students. The speech samples were rated for loudness and tempo and four voice quality profile types were identified: loud-fast; loud-slow; soft-fast; soft-slow. Analysis of variance indicated a significant difference between the four groups on the 16 PF. On the basis of this study and a previous study using the MMPI, actuarial descriptions of the specific personality traits associated with each voice quality profile type were provided.

Loud-Fast - People with this Voice Quality Profile type tend to rely on personal resources to deal with stress. They tend to expect the worst from people and situations and to be intrapunitive when they encounter difficulties.

Loud-Slow - People with this Voice Quality Profile type are likely to be confident, competent, and competitive in most situations. They are rebellious, perhaps more for rebellion's sake than for philosophical reasons. They are probably not very introspective and may respond to stressful situations with hypochondriacal symptoms and concern with bodily function.

Soft-Fast - People with this Voice Quality Profile type are optimistic about the future and actively seek unique experiences. Because they do not conform blindly, their behavior is likely to be seen as rebellious but probably reflects their independence of thought and action. They are likely to be carefree much of the time and have the inner

resources and stamina to retain their composure even in stressful situations.

Soft-Slow - People with this Voice Quality Profile type are likely to be reckless and carefree in relatively controlled situations. However, when they encounter stress, they are likely to withdraw and become introspective. In such situations they may develop obsessional apprehensions and thus impose many internal constraints on their own behavior.

Molecular Approaches to Voice Quality . . . Duffy (1970) made a phonellescopic investigation of the pitch characteristics of 11-, 13-, and 15-year-old females. He presented data descriptive of the incidence, extent, and upper and lower limits of phenomena known as frequency breaks (FB's)-("voice breaks" of earlier studies). He discussed and compared his data with similar data from other studies of males and females of various ages. His results support the conclusion that the previously presumed relationship between FB's and perceived pitch breaks does not hold. FB's are not the physical correlates of the "cracking" of pitch which has been observed to accompany adolescent voice change. Data from a second phase of his study indicated that FB's are not perceived as a pitch phenomenon as has been assumed, but may be associated with the perception of "rough" vocal quality.

Beasley, Zemlin, and Silverman (1972) studied listeners' judgments of frequency shifted-time expanded (FD) and frequency shifted-time restored (TR) speech signals from a man and a woman. The stimulus items were 11 vowels embedded

in an /h-vowel-d/ context. These items were spoken by two normal male and two normal female adult speakers. The spoken items were then processed through five conditions (20% through 60% in 10% increments) of FD and TR, using an electromechanical time compressor. Twenty-nine normally hearing young adult listeners were required to rate the stimuli on semantic differential-type scales of Masculine-Feminine, Like-Dislike, and Intelligible-Unintelligible. The results, similar for both conditions, showed that the female speech sounded increasingly more masculine from 20% through 60%. This effect was most pronounced for the frequency-shifted-time-restored condition.

The results for the Like-Dislike scale suggested that the female speaker was preferred over the male. However, this preference was probably not unrelated to the results on the Intelligible-Unintelligible scale, on which the female was rated more intelligible.

Thus, these data support the contention that listeners subjected to frequency-shifted speech signals will choose to listen to a phonemically more intelligible speaker, in spite of possible phonetic quality distortions - i.e., the female speaker was rated more "male-like" (and hence the possibility of phonetic quality distortions) as the percentage of frequency shifting increased, yet she was also rated more intelligible (phonemically more intelligible)

and more likeable (related to more intelligible) than the male speaker. All of which underscores the contention that intelligibility is critical in a listener's preference for frequency-shifted speech.

Visual, Nonverbal Vocal, Verbal

More relevant for this experimenter are the studies which have sought to weigh the relative importance of each of the three channels through which human communicative behavior can be viewed as functioning: the visual, nonverbal vocal, and verbal, for person perception.

Visual Versus Non-Visual . . . Rinella, Ferguson, and Sager (1970) studied the effects of an interview in which all visual cues were blocked. In 2-person simulated employment interviews, blindfolded interviewers (N-119) perceived interviewees in general in the same ways as did seeing interviewers (N=256), when given in advance the set warm or cold. The one exception was on the trait "good-looking." Blindfolded interviewers were more apt to describe interviewees as good-looking (72%) than were interviewers who saw their interviewees (60%).

Relative Effectiveness of Visual and Nonverbal Vocal Assessed . . . Burns and Beier (1973) assessed the relative effectiveness of the nonverbal vocal and visual channels in influencing observers' judgment of communicative stimuli. Observers were asked to judge various portrayals of feeling

state on film, from which certain cue components had been systematically removed. Judgments from visual cues were found to be more accurate as measured against the (audio visual) criterion than were judgments from vocal cues. Accuracy was measured by scoring the responses of the experimental groups as to their agreement with those of a criterion group which had rated from audio visual input. Removal of cue components tended to depress accuracy, particularly the removal of visual cues.

The interactions across various mood states suggest that channels differ with regard to the amount of information they convey in the various mood states. Of particular interest is the category anxious, because it illustrates a reversal of prime influence from the visual to the vocal channel. These data seem consistent with the observation that people can be recognized as being anxious in many ways; for example, while a person may look "composed," anxiety is inferred from subtle variations of the voice. Accuracy scores for the category "seductive" also differ from the majority of moods and indicated equal effectiveness of the audio and visual modes. The data for the latter suggest that both cue categories were necessary for accurate communication of the mood state.

An important limitation of this study is the fact that the portrayals of emotions used were acted expressions.

They carried their meaning accurately in the sense that they were recognized with a high degree of reliability by the criterion group. The question remains: How do acted mood expressions compare with genuine mood expressions?

Facial Expressions Versus Voice Tone . . . Encoding and decoding nonverbal cues of emotion was the object of Zuckerman et al. (1975) investigation. Subjects ("senders") encoded six emotions twice, first via facial expressions and second via tone of voice. These expressions were recorded and presented for decoding to the senders and an additional group of judges. Results were as follows: (a) the ability (over all emotions) to encode and the ability to decode both visual and auditory cues were significantly related; (b) the relationship between encoding and decoding cues of the same emotion appeared low or negative; (c) the ability to decode visual cues was significantly related to the ability to decode auditory cues, but the correlations among encoding (and decoding) scores on different emotions were low; (d) females were slightly better encoders, and significantly better decoders, than males; (e) acquaintance between sender and judge improved decoding scores among males but not among females; (f) auditory decoding scores were higher than visual decoding scores, particularly among males; (g) auditory decoding scores were relatively high if sender and judge were of the same sex,

while visual decoding scores were relatively high if sender and judge were of opposite sexes; (h) decoding scores varied according to channel of communication and type of emotion transmitted.

Voice Tone and Face and Body Movements . . . Rosenthal et al. (1974) developed a test called the Profile of Nonverbal Sensitivity (PONS) which measures a person's ability to understand two kinds of wordless communication - tones of voice and movements of the face and body. The test consists of a 45-minute film which presents the viewer with a series of scenes such as facial expressions or a few spoken phrases that are audible as sounds and tones but not as words. Some of the scenes are both seen and heard. After each scene, a test-taker chooses the appropriate situational label from two labels offered on a standardized form. For example, the movie may show a woman's face for two seconds; she looks upset; she's saying something that sounds important, but the words aren't clear. Then the scene disappears. The test-taker can mark one of two characterizations: "expressing jealous anger" or "talking about one's divorce." There is only one correct answer for each scene (the one intended by the creators of the scene).

The point of the test is to find out which individuals and categories of people do well on the test and which do poorly. Eventually, the authors hope to know why. The PONS

used only sight and sound, but it uses them in 11 different ways. Some of these 11 "channels" of nonverbal communication are pure while others are mixed. The three pure video channels are face only, body only (neck to knees), and face plus body. There is no sound in these channels. The two pure audio channels are called "electronically content-filtered" and "randomized-spliced." These names refer to two methods of making the verbal messages incomprehensible. Besides the five pure channels, the PONS also tests sensitivity to six mixed channels, which are audio-visual combinations of the pure channels. A person's scores on the 11-channel test are plotted as one's profile of nonverbal sensitivity. In its original length, each scene of the PONS lasted about five and a half seconds, but the originators cut it to two seconds when they discovered, during preliminary trials, that test-takers were much too accurate.

An intriguing revelation of the Fast PONS is that accuracy improves with increased exposure time only for the easier and more obvious scenes; whereas, accuracy worsens for the more difficult scenes.

The PONS has corroborated the popular opinion that females are better than males at detecting nonverbal cues. This difference, however, narrowed significantly and even reversed itself, among men in occupations, or training for occupations, considered requiring "nurturant," artistic, or

expressive behavior. Females perform particularly well compared to males when body cues are included in the nonverbal stimuli. People under college age seem less sensitive to nonverbal messages than older people. The youngest children were relatively poor at reading facial cues.

Voice Quality Versus Voice Content . . . Scherer, London, and Wolf (1973) wanted to see which was more salient for a person's perception - voice quality or voice content. They had a standard speaker read "linguistically confident" and "linguistically doubtful" texts in both a "paralinguistically confident" and a "paralinguistically doubtful" manner.

The data suggest strategies for paralinguistic impression management (Goffman, 1959, 1969). For instance, the speaker relied on pitch to express paralinguistic confidence under Doubtful Text but not under Confident Text conditions. This finding suggests that speakers may "compensate" for lack of confidence cues in the linguistic channel by making extensive use of confidence cues in the paralinguistic channel.

Expressed confidence was perceived accurately in both linguistic and paralinguistic channels. There is evidence, too, that the cues used by subjects for their perceptions are the same as those used by the speaker to encode confidence: Subjects in the Confident Voice conditions correctly

perceived the speech as louder, faster, more fluent, and more expressive.

Both confidence manipulations led to higher ratings on self-confidence and self-assuredness; dominance was also attributed along with these more obviously confidence-related adjectives.

Confident Text but not Confident Voice led to higher ratings on the adjectives "conceited," "professional," and "businesslike," and to lower ratings on the adjective "personal." All of these attributes suggest a single dimension: professional task orientation (which at its extreme may bear semblance to conceit).

Confident Voice but not Confident Text led to higher ratings on the adjectives "enthusiastic," "forceful," "active," and "competent." It is interesting that competence is attributed on the basis of voice, while task-orientation is attributed on the basis of linguistic cues, since these traits are usually seen as highly related.

Somewhat higher ratings for the adjective "relaxed" in the Confident Voice conditions suggest that the paralinguistic cues associated with doubt (such as halting, hesitant speech) are interpreted as tension.

To summarize, then, this study suggests that confidence is expressed paralinguistically by increased loudness of voice, higher pitch level, shorter pauses, and a rapid rate of speech. Observers perceive and utilize these cues to

attribute confidence to the speaker.

Bugental's (1974) study, like Scherer's, is concerned with the resolution of evaluative inconsistencies between verbal and nonverbal channels of communication. When confronted with a message that contains approval in one channel and disapproval in another channel, what does the listener do? Does he give more credence to the nonverbal component? Does he place more faith in the actual spoken words? Or does he respond to the inconsistency itself as negative?

The results obtained from Bugental's study indicated that the trust the listener places in vocal intonation is highly variable but on a predictable basis. If the speaker (female) has an unpolished spontaneous delivery (which was found here to be associated with congruence between facial expression and voice tone), the approval or disapproval within the voice is believed, no matter what the individual is actually saying. Her verbal message may be approving or disapproving, evaluatively extreme or moderate, but only the voice is given any significant weight in the interpretation made. What appears to be occurring is a channel-discounting process; i.e., if the intonation is convincing, the content is disregarded.

If, on the other hand, the speaker has a slow, deliberate, polished delivery (which was found here to be associated with noncongruence between facial expression and voice),

the approval or disapproval within the voice fails to have any significant direct effects on the interpretation of the message.

If an individual "weighs his words" as he speaks, some ambivalence may be suggested to the listener, and the voice is discredited as a reliable source of information about the speaker's attitudes.

The extreme weight that Bugental found for credible voices is equivalent to the extreme weight that Argyle and his associates (Argyle, Alkema, and Gilmour, 1970; Argyle, Salter, Nicholson, Williams, and Burgess, 1970) found for nonverbal behavior as a whole in comparison with verbal content.

Verbal, Vocal, and Visual . . . Gartner (1972) compared three communication modes, verbal, vocal, and visual. The study used as information sources a videotape with sound, containing verbal, vocal, and visual cues; a videotape without sound, consisting of visual cues only; an audiotape containing verbal and vocal cues; and a transcript, comprised of only verbal cues. Four young married couples were videotaped discussing issues of concern to them; based on the videotapes, ten-minute segments were selected as the stimulus material. Audiotapes and transcriptions were made of these segments.

Twelve male and twelve female graduate students each observed a different couple in transcript, audio, video, and silent video conditions. Their task was to describe each member of each couple in as much detail as possible, enumerating descriptive statements and indicating the cues on which each descriptive statement was based.

The visual mode was found to differ from the other three information sources in the kind and amount of information conveyed. Specifically, the visual mode conveyed substantially more effective information but less overall information, less factual information, and less about personal traits other than emotional or interpersonal ones, then the other three sources.

The observed differences in amount of information appeared related to a complex interaction among three factors, the sex of the observer, the particular couple observed, and the information source. The first two factors were significant as main effects as was the third when statistical procedures were used to control for large individual differences among observers.

The most important cue characteristic noted was that of complexity. Although the cues cited included those commonly mentioned in this kind of research, such as facial expression, inflection, and verbal content, they tended to be elaborated in highly complex ways regardless of information source.

Observers reported most difficulty with the visual and transcript modes where they perceived a paucity of cues, felt a need to project in the face of insufficient information, and experienced thwarted expectations. Contrastingly, in the full video condition, observers seldom reported, and apparently did not attend to excess cues, specifically, visual and vocal ones.

Facial, Vocal, Gestural . . . The major concern of Deets' (1972) study was to determine which mode resulted in the most accurate perception of nonverbal communication. A videotape presented four actors projecting six emotions facially, vocally, gesturally, facial-vocally and gestural-vocally. Subjects were asked to identify the emotion and its degree of intensity for each of the 120 sequences in the videotape. In addition, latency of response, personal adjustment, and state anxiety data were collected for each subject.

The major findings were: 1) that the facial-vocal mode is the most accurate for perception of nonverbal, emotional messages; whereas, the gestural mode is least accurate; 2) the facial-vocal mode has the shortest latency times, tends to be interpreted as more intense than other modes, and has the smallest probability of error; 3) primary emotions (anger, surprise and pleasure) are better recognized and have shorter latency times than the complex

emotions (anxiety, jealousy and depression); and 4) the measures reflecting individual differences proved to be unrelated to the ability to receive nonverbal messages. In conclusion, when an emotion is communicated openly (no attempt at masking or deception), the facial-vocal mode is superior to each of the other modes used in this study.

Visual, Voice Quality, Voice Content . . . Two studies done by Howell and Jorgensen (1969, 1970) are important to this experimenter for a couple of reasons. One, they filmed their stimulus persons in natural unposed situations (feeling, as this experimenter, that acted emotions involve the use of theatrical-like communication cues that either do not occur in natural situations or are distorted and exaggerated. In most face-to-face relationships, people behave specifically to disguise feelings (Beier, 1966), while the task of actors is to communicate emotions clearly). And, two, they were interested (as is this experimenter) in determining which is the most salient mode of communication, transcript material, voice, or facial expression.

In their 1969 study, the authors developed a set of sound-on-film recordings of four women in natural unposed situations experiencing intense pleasant and unpleasant emotions. Judging subjects rated the emotions of the stimulus objects on semantic differential items.

It was found that (a) there was no sex difference in ability to judge emotions, (b) generally, pleasant feelings

were more accurately judged than unpleasant ones, and (c) the different communication modes (transcript material, voice, and facial expression) were somewhat redundant sources of information about affect state, although there were significant interactions between communication mode, emotional quality, and rated subjects.

Their 1970 study was a replication of their first but used dichotomous judgments rather than semantic differential ratings. It was found that (a) there was no difference between males and females in the accuracy of their judgments, (b) pleasant emotions were judged more accurately than unpleasant ones, (c) the audio-visual, audio, and visual modes all gave similarly accurate predictions about feelings, and judgments made from these three modes were all superior to judgments made from the transcript mode.

One Final Study . . . This study is important because it investigated the effect of the subjects' own emotional state on their perceptions of the emotional state of the stimulus persons. Schiffenbauer (1974) conducted this study and found that the subjects' own emotional state exerted a strong influence on their judgments of others' emotional states. Aroused subjects were more likely to attribute the emotion they were feeling and other similarly valenced emotions than were unaroused subjects. Also, the subjects' own emotional state influenced the intensity of emotion

they attributed to the slides, independent of the affect expressed in the slides. Both observed effects held for positive as well as negative emotional states of the subjects.

This Present Study

The present study, although exploratory in nature and not experimentally-controlled in the sense of the studies mentioned heretofore, does incorporate into its methodology and design some notable improvements.

Stimulus persons are videotaped while they are involved in relatively natural, unposed interactions, thus avoiding both pitfalls of static material and acted emotions.

The three modes of human communicative behavior (verbal, nonverbal vocal, and visual) are expanded into "four aspects of a person attended to" in person perception: 1) Appearance, operationally defined as what the subject (rater) perceives of the stimulus person (target person) that does not move; 2) Mannerisms, what the rater perceives of the target person and does move; 3) Voice Quality, how the target person says; and 4) Voice Content, what the target person says. The relative saliency of these four aspects for raters perceiving target persons involved in same and different sex interactions is investigated.

Not only the cues that raters attend to, when making perceptual judgments, are important, but the conclusions

they come to, as well. This study, therefore, attempts to search for dimensions of personality, which raters attribute to target persons, and name them.

Both the perceiver and the perceived need to be considered in any thorough study of the dynamics involved in person perception. The experimenter implements this by matching raters and target persons according to his variables of interest. Since sex differences in person perception are a major concern, the sex of both raters and target persons has been taken into account. And, because of the experimenter's interest in possible effects of masculinity-femininity and dominance-submissiveness on raters' perceptions, both raters and target persons are categorized as high masculine-low feminine (hmlf), low masculine-high feminine (lmhf), and high dominant (hd), low dominant (ld).

In this study, the target person does not interact with photographs or slides, but with another person (interactor) of the same or other sex.

Expectations

Because this study is exploratory in nature, and its methodology necessarily subjective at times, testing hypotheses is inappropriate. However, the experimenter had expectations about what would be indicated by the procedure. By doing an INDSCAL multidimensional scaling analysis of raters' perceptions of nonverbal and verbal behaviors

occurring in same and different sex interactions, the experimenter expects:

1) It will be possible for judges to agree upon dimensions of personality that the raters may be attributing to target persons involved in same and different sex interactions.

2) The dimensions of personality that the raters are judged to be attributing to target persons will vary as a function of the sex of the rater, target person, and interactor, and the rater- and target person-type.

3) It will be possible to determine the relative saliency of the four aspects of a person attended to by raters when attributing dimensions of personality to target persons involved in same and different sex interactions; and, Voice Quality, overall, will be the most salient aspect.

4) Raters instructed to perceive target persons along masculine-feminine lines will use dimensions of personality and aspects of a person attended to, similar to raters instructed to perceive target persons along dominant-submissive lines.

5) Raters will be able to guess, with better than chance accuracy, the sex of the person with whom the target person is interacting.

INDSCAL Multidimensional Scaling Method

In addressing himself to these expectations, the experimenter used the INDSCAL multidimensional scaling method, proposed by Carroll and Chang (1970) to analyze individual differences in multidimensional scaling via an N-way generalization of the "Eckart-Young" decomposition, which Ferisin (1971) showed can be used to advantage to study the determinants of individual differences in person perception.

The use of Multidimensional Scaling (MDS) has become wide-spread in recent years (Coombs, Dawes, and Tuersky, 1970). MDS adheres to the basic task of psychological scaling technique, "which is to search for some form of lawfulness, i.e., redundancy, in experimentally collected data. This redundancy, when it is present, permits a description of the items (perhaps also of the subjects) which is simpler than an exhaustive account of the response of every subject to every item and yet tells the experimenter everything he wants to know about his data" (Bennett and Hays, 1960).

Many of the forms of MDS are not new; they are improvements or variations upon existing models. However, the forms of MDS do have a broad common basis: the problem of finding N points whose interpoint distances can be matched or correlated in some way with the experimental dissimilarities or similarities of N objects (Kruskal, 1964).

A method of MDS using computers was developed by Shephard (1962). The purpose of Shephard's program was the conversion of a psychological scale, e.g. - the rating scale used in this experiment - into a metric configuration which would exhibit the data in a spacial representation. The prerequisites for the application of this method of MDS to a given set of N stimuli "is that there be supplied, for each set of N(N-1)/2 pairs of stimuli, some number specifying how closely these two stimuli are related psychologically. Such given numbers are called proximity measures; the objective of the analysis is to find an appropriate spacial configuration of the N stimuli, represented as points in a Euclidian space of minimum dimensionality" (Shephard, 1962).

Shephard's primary assumption is that the function relating proximity measures and corresponding distance is monotonic: a system of sets such that each set contains the preceding set, or vice versa.

The basic concepts of computerized iterative procedures are expounded by Coombs, Dawes and Tuersky (1970). Generally, what the program does is generate the points for an ideal configuration of the data and compare them with the rank order of distance given by the original data. The discrepancy between these two sets is then minimized by a repetition of the comparative procedure until the iterative process produces no further reduction in the discrepancy

between the points. The end result is "the configuration which represents the data best" (Kruskal, 1964).

It is from this final configuration that the experimenter must determine the nature of the dimensions and the weight placed upon them by the raters.

The type of analysis this experiment employs is symmetric proximity (Shephard, 1962). The raters are asked to compare the stimuli (target persons) and rank them as similar or dissimilar. "The point of the method is to discover the common underlying structure on which the model created supposes the raters' responses are based" (Bennett and Hays, p. 28).

METHOD

Subjects

The subjects for this experiment were undergraduate psychology students, who had volunteered to participate in a "Personality Inventory." One hundred eighty (male N=90, female N=90) were administered two tests, used in selection of subjects for later participation. Instructions were printed on each test. No time limit was set. However, no one took more than forty-five minutes to complete both tests. Two experimental credits were given to each participant. Some subjects from this initial pool were selected for additional participation, as discussed later.

Tests Used

Trait Evaluation Index (TEI). This instrument yields measures on 22 a priori "normal" personality traits plus seven supplementary scores. Each of its 125 items is a triad of positive-sounding personality-descriptive adjectives selected to be equated for social desirability. Each item requires the choice of the most and the least descriptive adjective of the three. The manual argues that the use of this item format effectively rules out the operation of the response sets of social desirability and acquiescence

and that its use of positively valued adjective traits minimizes defensiveness and task rejection.

The validity of the instrument has been evaluated by two separate procedures. In one instance, the TEI was administered to 87 college students who were later asked to rate themselves, using a five-point scale, on each of the test variables. The correlations were reasonably high, ranging between .52 and .79, with one exception; adaptability scored .31. In the second procedure, 49 college students took both the TEI and the Survey of Interpersonal Values. The correlations between the TEI and SIV scales are reported, and the significant correlations appear to be in the expected directions. Item validity was also calculated by measuring the relationship of each item to the scale in which it has been keyed. These scores are all significant at the .05 level or above.

"Split-half" reliabilities are fairly high, ranging from .70 to .92. Unfortunately, these are spuriously high to varying degrees, since the repetition of adjectives within scales treats what should be adjective (item)-specific error variance as if it were true trait variance. The high test retest coefficients support the idea that the trait <u>scores</u> are stable, but these scores contain varying amounts of item-specific variance.

Feminine and Masculine Orientation scales (two of the seven supplementary scales) were obtained empirically. The value of the TEI, in regard to measuring masculinity and femininity, is the fact that it yields two separate, but not independent, measures. Most other scales either measure masculinity and low scores are indications of femininity or vice versa. In addition, the items the TEI uses to measure masculinity and femininity are personality trait-oriented rather than interest-oriented.

What Are You Like? This Scale was devised by taking the Ascendance Scale (A), 30 items, from the Guilford-Zimmerman Temperament Survey (GZTS), and adding 25 filler items from the same Survey.

The GZTS puts into one schedule the 10 major "traits," GRASEOFTPM, that Guilford et al. have variously identified by factor analysis, and which have hitherto been included in separate inventories. It consists of 300 items, 30 for each of the "traits," each responded to with a yes, ?, or no. The responses are weighted only 0 or I.

Norms for the Survey were obtained for 9 of 10 traits on a college population of 523 men and 389 women. Norms for the remaining trait "T" were derived from a population of high school seniors and their parents. The authors state that various estimates of reliabilities were made, and a table is given showing the consensus. The coefficients vary between .75 and .85. The mean scores and the

SD are given separately for men and women, but except on the trait of masculinity there are no substantial differences between the sexes. The intercorrelations between the traits are generally small enough that there does not seem to be any question as to the existence of ten separate dimensions.

The (A) Scale measures ascendance and low scores are an indication of submissiveness. (Throughout the rest of this study, the word "dominance" will be used in place of "ascendance" because their meanings, in the context of the (A) Scale, seem relatively equivalent, and the word "dominance" seems more intelligible.) The positive qualities that the (A) Scale focuses upon are self defense, leadership, speaking with individuals, speaking in public, persuading others, being conspicuous, and bluffing. More than two-thirds of the items are concerned with the first three mentioned. Scoring weights of 0 and I were used. The maximum A score obtainable was 30.

Selection of Target Persons (TPs)

Table 1, on the following page, gives the range and mean of masculine and feminine scores on the TEI and the range and mean of (A) scores, for both males and females.

Those subjects who received higher masculine than feminine scores on the TEI, but whose (A) scores were near the Mean, were considered high masculine-low feminine

Table 1. Range and Mean of M and F Scores on TEI and Range and Mean of (A) Scores, for Males and Females

		TEI				
Range:	Males:	Low	High	Females:	Low	High
Masculine		2	21		0	22
Feminine		2	23		5	28
Mean:						
Masculine	10.9			7.1		
Feminine	11.4			15.1		
		(A)				
Range:		7	25		0	28
Mean:	16.3			15.1		

(hmlf)-types. The attempt was made to keep the margin between masculine and feminine scores as wide as possible, while holding the (A) score constant.

Those subjects who received lower masculine than feminine scores on the TEI, but whose (A) scores were near the Mean, were considered low masculine-high feminine (lmhf)-types.

Those subjects who received a high (A) score (as close to the range limit as possible), but whose masculine and feminine scores were relatively close to each other (again with the idea of holding them constant), were considered high-dominant (hd)-types.

Those subjects who received a low (A) score (as close to the range limit as possible), but whose masculine and feminine scores were relatively close to each other, were considered low-dominant (ld)-types.

Two males and two females of each type (hmlf, lmhf, hd, and ld), who qualified under the above stipulations, were randomly selected to be contacted on the phone by the experimenter. There were no refusals.

Each target person (TP), after expressing a willingness to continue to participate, was told the following: One person of each sex and type was told that the task would be to verbally interact with a person of the other sex for five minutes; one person of each sex and type was told that the task would be to verbally interact with a person of the same sex for five minutes. The TPs were assured that they would be monetarily rewarded for their participation.

Stimulus Material

The TP was met at the door of the room in which the interaction was to take place by the interactor (I). The interactors were a male and female psychology student, who were chosen by the experimenter to do "independent study work" for 3 course credits.

The room was of average size. It was below floor level, which minimized outside distractions. Two chairs faced each other, about 12 feet apart; a couple of extras

were scattered around to give the room a more casual affect. One microphone was on a table in the corner; another was suspended from the ceiling. Two very small windows were on the far wall; behind one was the television camera.

The I tried to help the TP relax by talking casually about matters of mutual interest. Then, the I said to the TP: "Now, for the next couple of minutes or so, I want you to talk about whatever you'd like. I will not respond, but I will be interested in listening to you." (This approach was taken instead of permitting the I to continue to interact with the TP because the Is could not master the technique of letting in and keeping out their voices by remote control.) The I's statement to the TP was the signal for the experimenter and his assistant, who were in the control room, adjacent to the interaction room, to begin the videotaping procedure.

The television camera was focused only on the TP so that the I was excluded from the picture. After about two minutes of recording, the experimenter left the control room and went to the interaction room to tell the TP to come back another evening; however, next time the interaction would be with an I of the other sex. There were no refusals. If this was the second interaction, the TP was thanked, given a dollar, and asked to keep what had taken place in confidence. (Confidentiality was, or course, also requested after the first interaction.)

The interactions of TP and I were so arranged, that all the male TPs and male I interactions, and all the female TPs and female I interactions, were recorded on tape No. 1. On tape No. 2, all the male TPs and female I interactions, and all the female TPs and male I interactions, were recorded. The tapes were edited for presentation to the raters, as later discussed.

Selection of Raters (Rs)

The same procedure that was used in selecting the TPs of each sex and type was used in selecting the Rs; however, more subjects were needed for each type. Forty-eight Rs were selected, 6 males and 6 females of each type.

The Rs were phoned by the experimenter and asked if they would be willing to participate. None refused. Then the experimenter read a list of the TPs (already procured) to the R; if any TP was known by the R, the R was disqualified; this happened in two cases. Rs, who knew none of the TPs, were told that approximately three hours would be required, and fair compensation provided. Confidentiality was requested at this time.

Rating Procedure

The two videotapes were edited for presentation to the Rs in the following way: By using the counter on the recorder, one-minute segments were selected from the middle

of the two-minute interaction of each of the 8 male TPS interacting with a male I; these one-minute segments were shown consecutively. Again, by using the counter, the first ten seconds of the one-minute segment of each of the interactions was selected; this action was taken to facilitate paired-comparison judgments. So that, ten seconds of the first male TP interacting was followed by ten seconds of the second male TP interacting; then, came a three-second blank space. Next, came the same ten seconds of the first male TP interacting, followed by ten seconds of the third male TP interacting; then, another three-second blank space. (The blank space was provided so that the experimenter, when showing the tape, would know when one interaction ended and another began; he stopped the tape at this point and gave the Rs time to make their judgments) The entire procedure was continued until the first male TP had been presented with each of the other seven male TPs.

The same procedure of presentation was followed in setting up the tape for the female TPs interacting with the female I, and, on the second tape, for TPs interacting with an I of the other sex.

For the viewing of the tapes, half of the Rs, of each sex and type, came on one evening, and half on another evening; thus, there were two rating sessions. Each R was given two packets of 3 by 5 cards. In the first packet

were an instruction card and sixteen rating cards. A sample of the instruction card (for each condition) and one of the rating cards is found in the Appendix.

On each of the sixteen cards, provision was made for the R to write a number opposite each paired-comparison. For example, the card for TP 1 was typed: TP 1 as Standard and below the title, 1 and 2 __, 1 and 3 __, 1 and 4 __, . . . up to 1 and 8 __. TP 2's card read: TP 2 as Standard: 2 and 3 __, 2 and 4 __, . . . 2 and 8 __, and then, 2 and 1 __. This system meant that each TP was used as a standard and was compared with a standard; 1 and 2 and 2 and 1 were kept as far apart as possible. Rating cards TP 1 through TP 8 were used by Rs to rate male TPs interacting with a male I. Rating cards TP 9 through 16 were used by Rs to rate female TPs interacting with a female I.

Since the instructions were the same for both packets, no instruction card was included in the second packet; otherwise, the rating cards were the same as the first packet.

The instruction cards were of three different types. One-third of the Rs (an equal number of hmlf, lmhf, hd, and ld males and females) received neutral (n) instructions: "How similar are each of these pairs?" Another third received (mf) instructions: "In regards to masculinity-femininity, how similar are each of these pairs?"

The remaining Rs' (ds) instructions were: "In regards to dominance-submissiveness, how similar are each of these pairs?"

The experimenter put a 1 to 9 scale on the blackboard and explained that a low number would mean that the pair was "most similar" and a high number would mean that the pair was "least similar."

The sequence of rating events took place in this way: The Rs sat around a black and white 23 inch television in a classroom so arranged that everyone could see and hear. Tape No. 1 (male TPs-male I, female TPs-female I) was played first. The Rs were urged to pay close attention to everything they saw and heard. The experimenter played through the eight one-minute segments of male TPs interacting with the male I. After this showing, the first packet was opened. The instruction cards were read by each R, privately. Then, the rating card, TP 1 as Standard was removed from the packet. The experimenter then told the Rs that they would be asked to make comparisons of the eight TPs, as they were again shown on the screen, according to the instructions they had received. They would be shown ten seconds of TP 1, followed by ten seconds of TP 2; then, the recorder would be stopped in order to give them time to make their judgment, according to their instructions, on the 1 to 9 scale.

After the first card had been completed (after TP 1 had been compared with the other seven TPs, a total of 56 paired-comparisons), the experimenter asked the Rs to try to guess the sex of the person with whom the TP had been interacting; their guess, together with a brief explanation, was to be written on the back of the TP's card. This same procedure was followed for the other TPs as well. The Rs were told that the TP might be interacting with either a male or female. After each TP's card had been completed, it was put back into the packet so that what the Rs had written on the front or back of it might not influence any future decisions.

Presentations of the eight female TPs interacting with the female I were handled in the same way as the above, and presented immediately after the male TP-male I segments. At the end of the showing of tape No. 1, the Rs took a ten-minute recess, but were asked not to discuss anything about the experiment during that time.

Tape No. 2, consisting of mixed sex interactions, was handled in the same fashion. However, when it came to the part where the Rs were to guess the sex of the I (since the TPs were being exposed to the Rs for the second time), the experimenter carefully pointed out that the two interactions in which the TPs took part might have been any of the following combinations: MM,MM; MF,MM; MM,MF; or MF,MF; FF,FF; FM,FF; FF,FM; or FM,FM.

The showing and rating of the two tapes took approximately two and one-half hours. Each R was given three dollars and was asked to keep everything confidential until the entire experiment was completed and feedback could be given.

Analysis Procedure

In order to determine the optimum number of dimensions to work with for his study, the experimenter fed the numbers obtained from group 1 (all Rs rating male TPs interacting with male I) into the INDSCAL program and asked for an output for 2 to 4 dimensions. Two dimensional output showed a correlation between the ideal configuration of the data and the raw data of .61; a three dimensional output yielded a .71; a four dimensional output, a .73. Three dimensions were easier to work with, and its goodness of fit was almost as good as for four, so the experimenter decided to go with three throughout his study.

Data were analyzed on the basis of these groupings of raters:

Groups:	1.	48 Rs rating male TPs-male I
	2.	48 Rs rating female TPs-female I
	3.	48 Rs rating male TPs-female I
	4.	48 Rs rating female TPs-male I
	5-8.	24 Males rating M-M; F-F; M-F; F-M
	9-12.	24 Females rating M-M; F-F; M-F; F-M
	13-16.	16 (n) rating M-M; F-F; M-F; F-M
	17-20.	16 (mf) rating M-M; F-F; M-F; F-M
	21-24.	16 (ds) rating M-M; F-F; M-F; F-M
	25-28.	12 (hmlf) rating M-M; F-F; M-F; F-M
	29-32.	12 (lmhf) rating M-M; F-F; M-F; F-M
	33-36.	12 (hd) rating M-M; F-F; M-F; F-M
	37-40.	12 (ld) rating M-M; F-F; M-F; F-M

The INDSCAL program generates the points for an ideal configuration of the data and compares them with the rank order of distances given by the original data. The discrepancy between these two sets is then minimized by a repetition of the comparative procedure until the iterative process produces no further reduction in the discrepancy between the points. The end result is "the configuration which represents the data best" (Kruskal, 1964).

The correlations between distances in the raw data and distances in the final matrices were very satisfactory, ranging from .71 to .84.

After 25 iterations, the final matrices yielded coordinate points which best represented the relative positions of TPs and Rs on the three dimensions for each grouping. Whether one considers these coordinate points - distances - and expresses the results in terms of how far a TP or R is from the origin on a given dimension, and infers from this the importance that the TP or R attaches to the dimension, or, whether one considers these coordinate points - weights - and expresses the results in terms of how salient a given dimension is for a TP or R, is a function of whether one chooses to present the results spatially or in column-form by rank-ordering.

From the final matrices for the TPs and Rs, the experimenter was able to rank-order the TPs and Rs on three

dimensions for each grouping. He then presented these rank-orderings, one by one, to his three assistants (they knew only the sex of the target person and interactor, i.e., whether it was a MM, FF, MF, or FM combination; numbers and nicknames were used in place of divulging the target person-type; neither were the assistants told the sex or the rater-type for the grouping they were considering). Next, by comparing the TPs as they were so rank-ordered by the Rs with the videotaped presentation of each one of them singly and in paired-comparisons (just as the Rs had viewed them), the experimenter and his assistants tried to name the dimensions of personality that the Rs may have been attributing to the TPs, and also tried to surmise what aspects of the TP's person the Rs may have been attending to, in arriving at these dimensions.

The experimenter, here, would like to explain why he has consistently inferred the tentative quality of his findings by using the phrase, throughout, "that the raters may be attributing to target persons." It is an admission of, but not an apology for, the subjective strain that filters into the process of the judges (the experimenter and his assistants) trying to determine the basis, or bases, upon which the raters made their perceptual judgments of the target persons. However, to compensate for this inevitability, in addition to the information withheld from the

assistants (mentioned above), much deliberation went into each determination; whoever thought of a name for a dimension or an aspect of a person attended to, shared it with the rest; customarily, much debate followed, before it was consensually accepted or dropped; in addition, whenever a single TP seemed "out of order" for the dimension named, that dimension was discarded, and the whole process of searching, repeated: finally, in every case, a unanimity among the judges was demanded before the naming of a dimension or an aspect of a person attended to, was accepted.

RESULTS

Dimensions of Personality

It was possible for the experimenter and his assistants to determine and name the dimensions of personality that the raters may have attributed to the target persons involved in same and different sex interactions. These dimensions of personality for each grouping are listed below:

Rs	TPs	I	Dimensions
All	Males	Male	Reticent Gesticulative Other-Oriented
All	Males	Female	Soft Assertive Submissive
All	Females	Female	Soft-Spoken Sloppy Unsophisticated
All	Females	Male	Submissive Stereotypically-Feminine Sex-Appealing
Males	Males	Male	Rugged Self-Conscious Fragile
Males	Males	Female	Assertive Indoorish Pronounced
Males	Females	Female	Masculine Sheltered Personable

Rs	TPs	I	Dimensions
Males	Females	Male	Hard Aggressive Conventional
Females	Males	Male	Free-Flowing Boyish Deep
Females	Males	Female	Restrained Aloof Authoritative
Females	Females	Female	Dependent Unparticular Open
Females	Females	Male	Feminine Unsure Ladylike
n	Males	Male	Intelligent Youngish Uncomfortable
n	Males	Female	Unathletic Deliberate Unintelligent
n	Females	Female	Casual Personally-Involved Tasteless
n	Females	Male	Guarded Assertive Homebodied
mf	Males	Male	Open Fragmented Hard
mf	Males	Female	Deferring Passive Immature
mf	Females	Female	Unladylike Masculine Dependent

Rs	TPs	I	Dimensions
mf	Females	Male	Unpretentious Proprietous Expressive
ds	Males	Male	Dominant Self-Conscious Athletic
ds	Males	Female	Dominant Unappealing Intelligent
ds	Females	Female	Submissive Unassuming Passive
ds	Females	Male	Restricted Unemotional Socially-Conscious
hmlf	Males	Male	Forceful Cooperative Soft
hmlf	Males	Female	Soft-Spoken "Oldmanlike" Serious
hmlf	Females	Female	Fair of Hair Vacillative Hesitant
hmlf	Females	Male	Feminine Dependent Best-Dressed
lmhf	Males	Male	Gentle Imposing Self-Oriented
lmhf	Males	Female	Uninhibited Reflective Fragile
lmhf	Females	Female	Sincere Quiet "Hip"

Rs	TPs	I	Dimensions
lmhf	Females	Male	Subdued Self-Sufficient Open
hd	Males	Male	Articulate Gregarious Intelligent
hd	Males	Female	Muffled Soft "Heavy"
hd	Females	Female	Dependent Timid Conforming
hd	Females	Male	Affected Concommittal Submissive
ld	Males	Male	Spontaneous Hairless Solitary
ld	Males	Female	Aggressive Reserved Gentle
ld	Females	Female	Drab Unfeminine Individualistic
ld	Females	Male	Weak Natural Self-Conscious

The experimenter wanted to spatially represent the relative positions of the TPs and Rs, on each of the dimensions of personality, with two-dimensional graphs; but, practically, it was not feasible to do this because data points (especially for the Rs) were clustered too closely.

However, to give the reader at least an idea of how the TPs would look, if presented spatially, the experimenter has plotted the TPs' points for the first four groupings: (R-All, TP-M, I-M), (R-All, TP-M, I-F), (R-All, TP-F, I-F), and (R-All, TP-F, I-M). On the TP graphs, one from each category has been underlined to distinguish one of a pair from the other.

Where the TPs have been presented in column-form instead of graph, those TPs upon whom the Rs placed the greatest positive weight on a given dimension of personality are at the top. Those TPs receiving weights of $\pm$ .4 or more are marked with asterisks, and only these TPs have been commented on.

In the case of the Rs, those Rs who weighted a given dimension of personality $\pm$ .4 or more have been counted and totaled, and only these Rs have been commented on. The word "salient," which is used throughout the descriptions, refers to how important, or unimportant, a given dimension of personality was to the Rs perceiving the TPs.

The experimenter concedes that the above alternative way of presenting the data results does not indicate how much more than $\pm$ .4 the weights of the TPs or Rs were; but the more ideal way of presenting the data spatially would have required at least 120 graphs, the number of which was prohibitive.

For brevity's sake, the following abbreviations apply: TPs: R(All)TP(MM) means that we are considering the relative position of the TPs on a given dimension of personality, when all the Rs have rated the male TPs interacting with the male I. Rs: R(All)TP(MM) means that we are considering the relative position of the Rs on a given dimension of personality, when all the Rs have rated the male TPs interacting with the male I. The other groups' title abbreviations should be read accordingly.

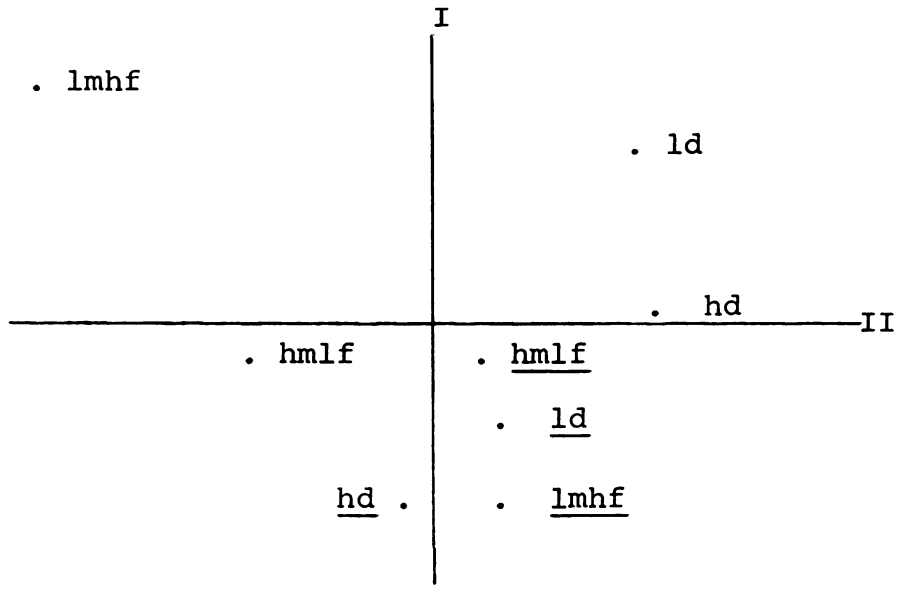

Figure 1. (a) TPs: R(All)TP(MM) - I=Reticent II= Gesticulative

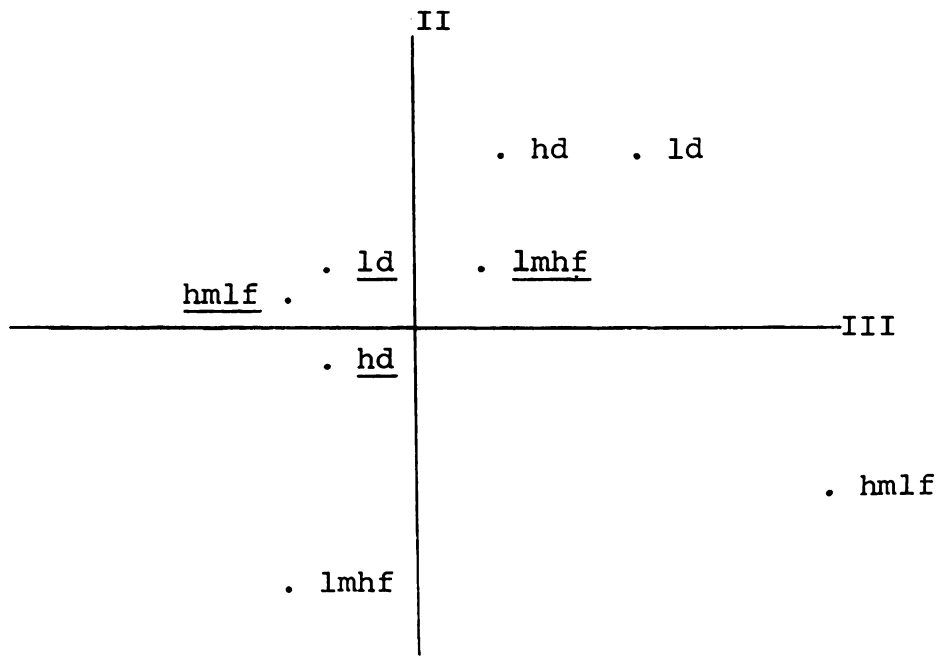

Figure 1. (b) TPs: R(All)TP(MM)- II=Gesticulative III=Other-Oriented

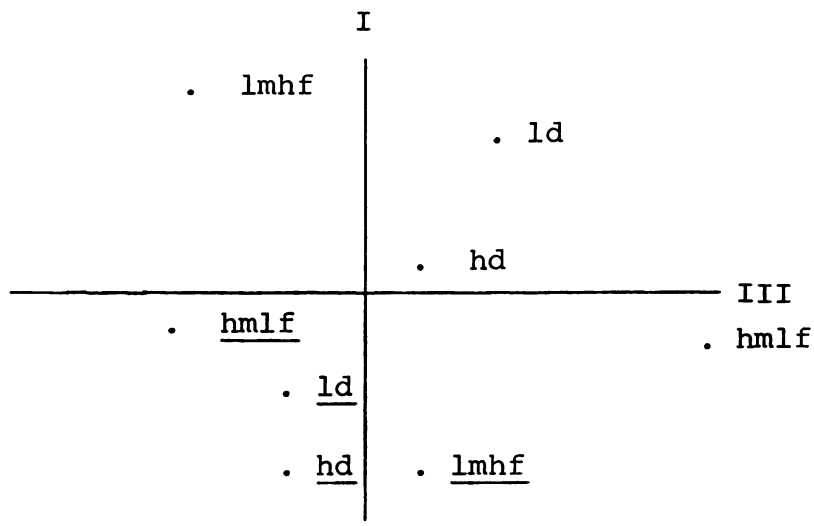

Figure 1. (c) TPs: R(All)TP(MM)- I=Reticent
III= Other-Oriented

I	II	III	
lmhf*	hd*	hmlf*	hmlf is not gesticulative
ld*	ld*	ld	but is other-oriented.
hd	lmhf	lmhf	lmhf is reticent but not
hmlf	ld	hd	gesticulative. lmhf is
hmlf	hmlf	hd	not reticent. hd is ges-
ld	hd	ld	ticulative. hd is not
lmhf*	hmlf*	lmhf	reticent. ld is reticent
hd*	lmhf*	hmlf*	and gesticulative.

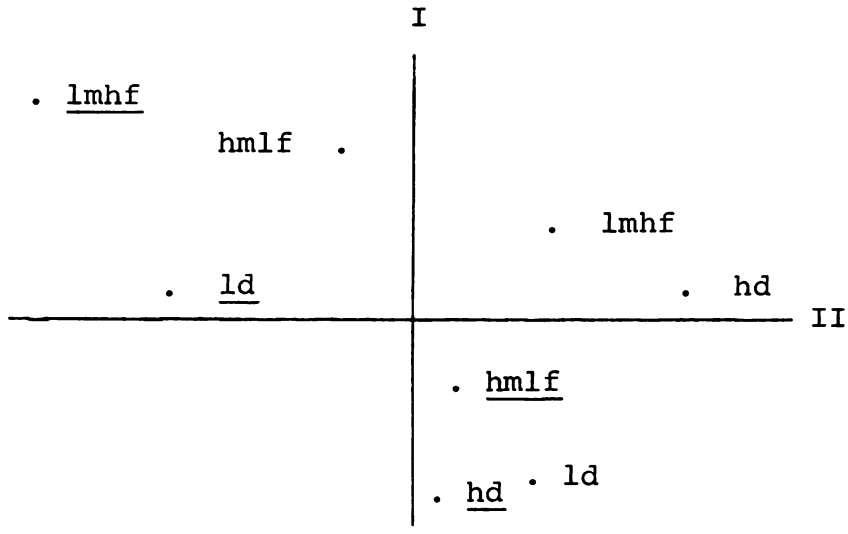

Figure 2. (a) TPs: R(All)TP(MF)- I=Soft II=Assertive

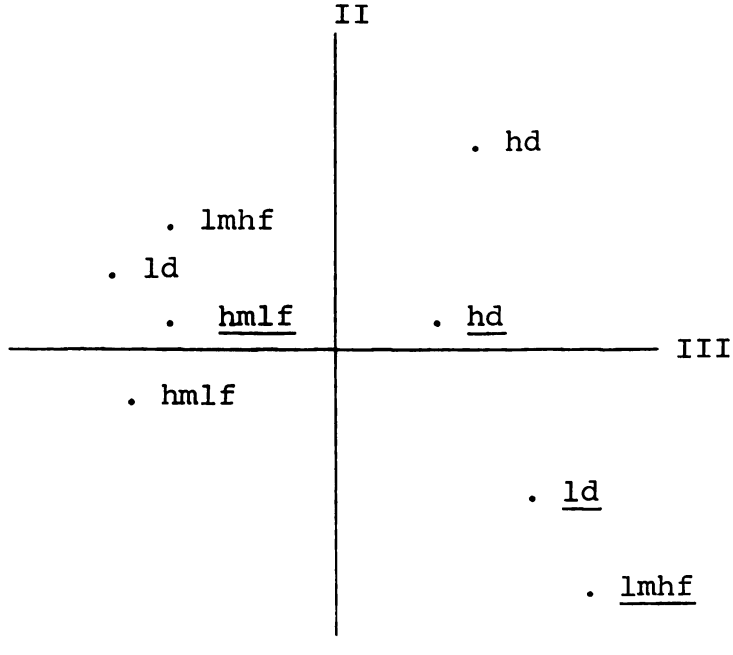

Figure 2. (b) TPs: R(All)TP(MF)- II=Assertive
III=Submissive

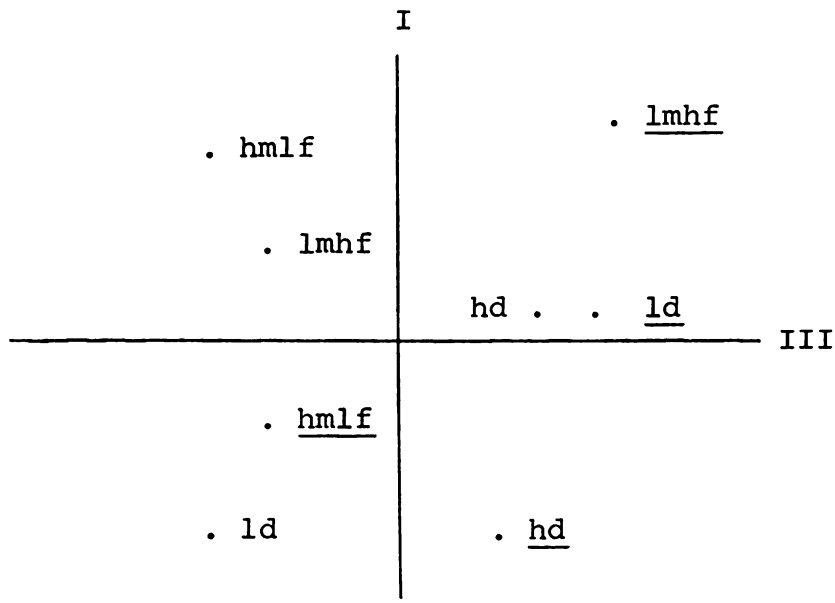

Figure 2. (c) TPs: R(All)TP(MF)- I=Soft III=Submissive

I	II	III	
lmhf*	hd*	lmhf*	hmlf is soft but not sub-
hmlf*	lmhf	ld*	missive. lmhf is soft and
lmhf	ld	hd	submissive but not asser-
hd	hmlf	hd	tive. hd is assertive.
ld	hd	lmhf	hd is not soft. ld is
hmlf	hmlf	hmlf	neither soft nor submis-
hd*	ld*	ld*	sive. ld is not assertive
ld*	lmhf*	hmlf*	but is submissive.

Raters: R(All)TP(MM)

Dimension	M	F	n	mf	ds	hmlf	lmhf	hd	ld
Reticent	16	2	6	4	8	4	5	6	3
Gesticulative	9	19	9	12	7	6	7	7	8
Other-Oriented	4	20	9	7	8	5	6	5	8

All Rs considered Gesticulative most salient and Reticent least salient. Males considered Reticent most salient; females considered it least salient. Females considered Other-Oriented most salient (Gesticulative close behind); males considered Other-Oriented least salient. More females than males had weights of $\pm$ .4 or more. mf Rs considered Gesticulative most salient. ld Rs considered Gesticulative and Other-Oriented equally most salient and Reticent least salient.

Raters: R(All)TP(MF)

Dimension	M	F	n	mf	ds	hmlf	lmhf	hd	ld
Soft	15	7	8	9	5	5	6	6	5
Assertive	15	9	7	6	11	3	7	6	8
Submissive	7	10	5	7	5	7	1	4	5

All Rs considered Assertive most salient (Soft close behind) and Submissive least salient. Males considered Soft and Assertive equally most salient and Submissive least salient. Females considered Submissive most salient, Soft least salient. More males than females had weights of $\pm$ .4 or more. ds Rs considered Assertive most salient. hmlf Rs considered Assertive least salient. lmhf Rs considered Submissive least salient.

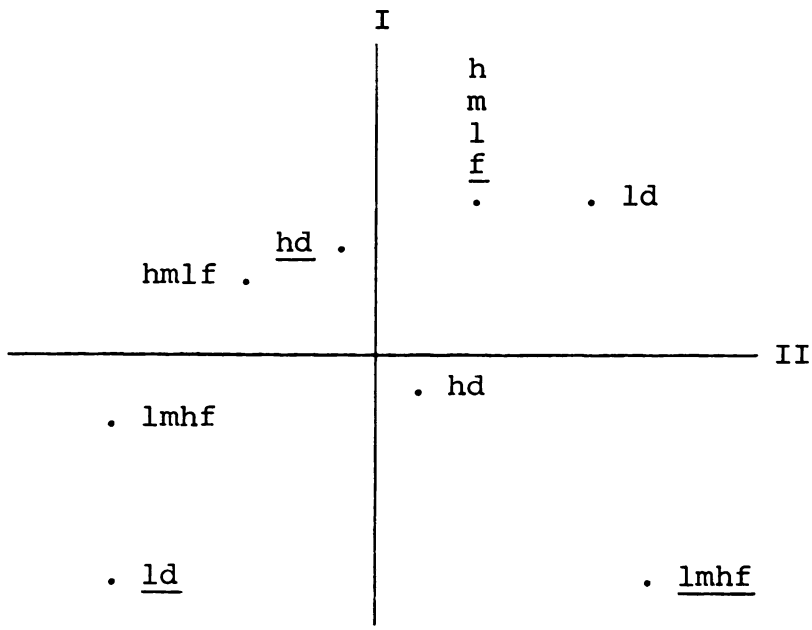

Figure 3. (a) TPs: R(All)TP(FF)- I=Soft-Spoken II=Sloppy

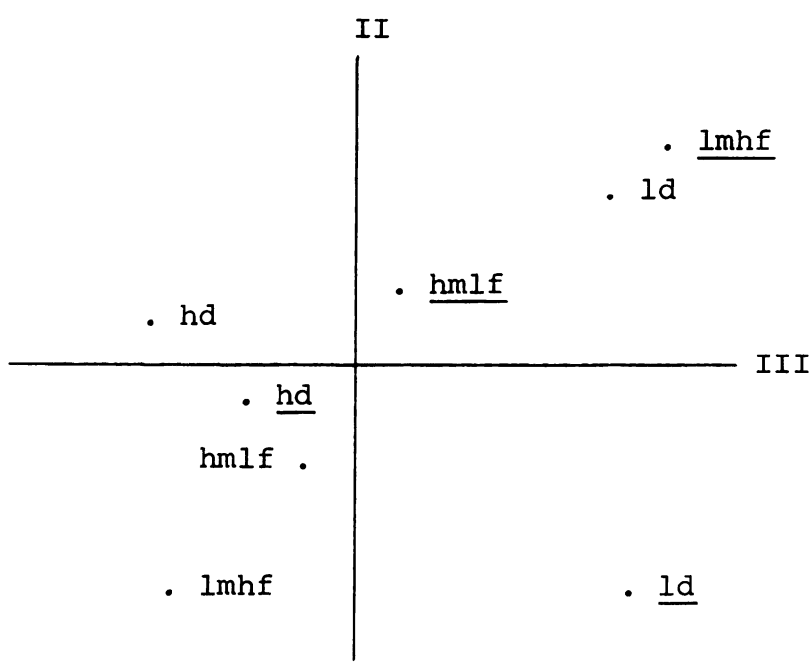

Figure 3. (b) TPs: R(All)TP(FF)- II=Sloppy III=Unsophisticated

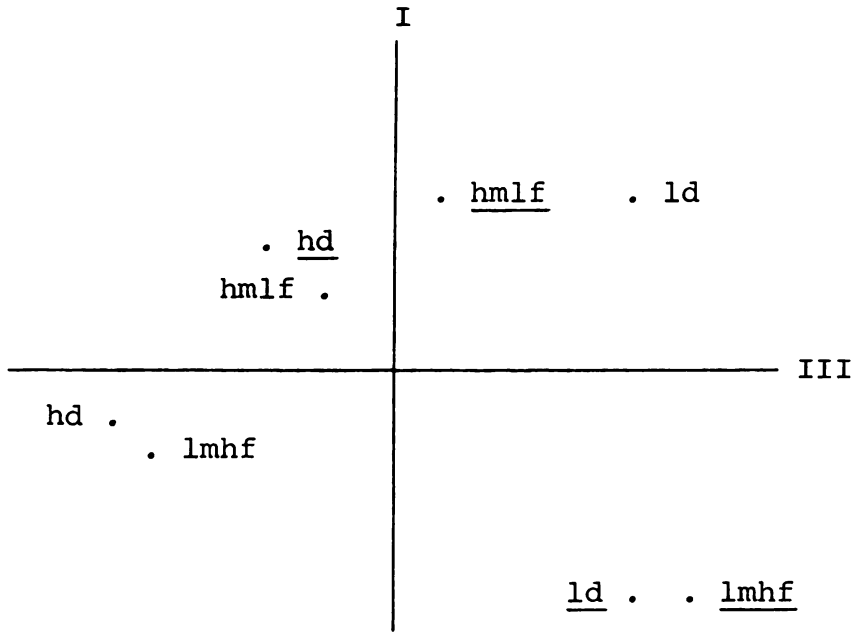

Figure 3. (c) TPS: R(All)TP(FF)- I=Soft-Spoken
III=Unsophisticated

I	II	III	
hmlf*	lmhf*	lmhf*	hmlf is soft-spoken. lmhf
ld*	ld*	ld*	is neither sloppy nor unsophis-
hd	hmlf	ld*	ticated. lmhf is both sloppy
hmlf	hd	hmlf	and unsophisticated but not
hd	hd	hmlf	soft-spoken. hd is not un-
lmhf	hmlf	hd	sophisticated. ld is soft-
ld*	lmhf*	lmhf*	spoken, sloppy and unsophisti-
lmhf*	ld*	hd*	cated. ld is neither soft-
			spoken nor sloppy but is
			unsophisticated.

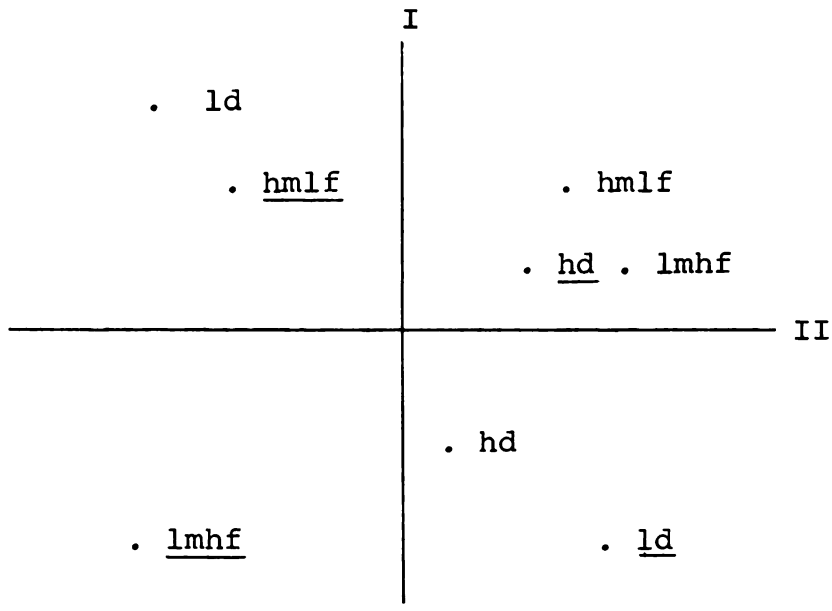

Figure 4. (a) TPs: R(All)TP(FM)- I=Submissive II=Stereotypically-Feminine

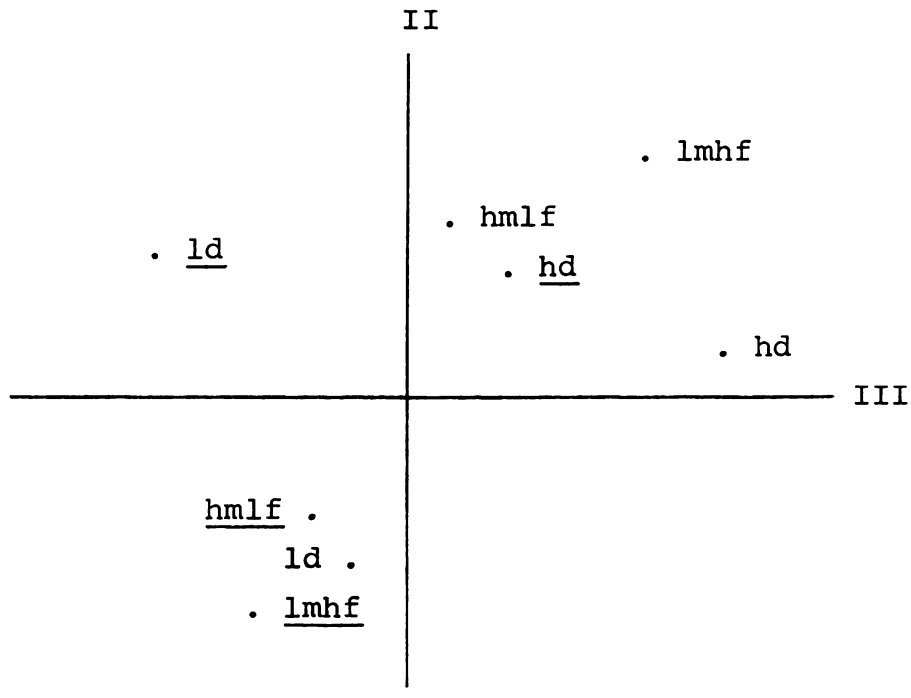

Figure 4. (b) TPs: R(All)TP(FM)- II=Stereotypically-Feminine III=Sex-Appealing

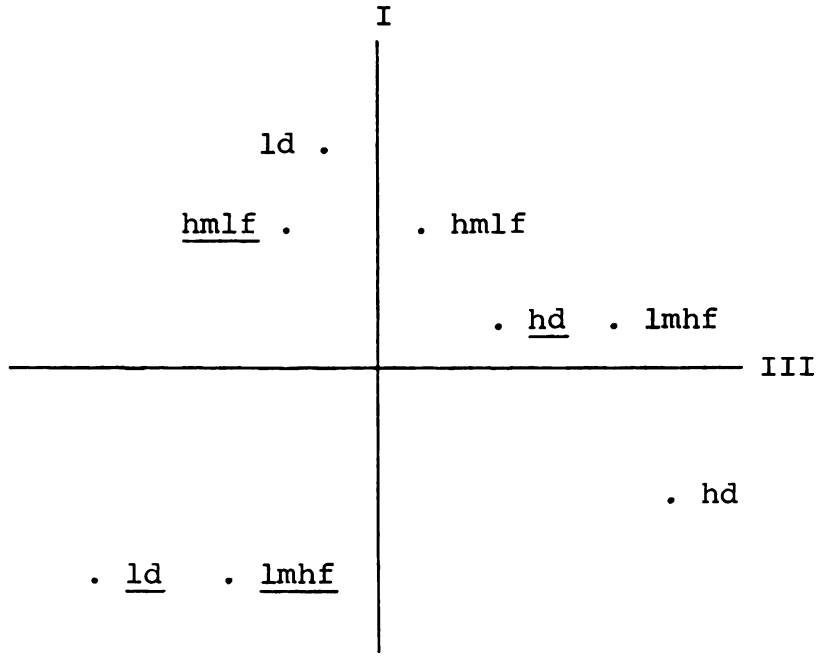

Figure 4. (c) TPs: R(All)TP(FM)- I=Submissive III=Sex-Appealing

I	II	III	
ld*	lmhf*	hd*	lmhf is both stereotypically-
hmlf	hmlf	lmhf*	feminine and sex-appealing.
hmlf	ld	hd	lmhf is neither submissive nor
lmhf	hd	hmlf	stereotypically-feminine.
hd	hd	ld	hd is sex-appealing. ld is
hd	hmlf	hmlf	submissive but not stereo-
lmhf*	ld*	lmhf	typically-feminine. ld is
ld*	lmhf*	ld*	neither submissive nor sex-
			appealing.

Raters: R(All)TP(FF)

Dimension	M	F	n	mf	ds	hmlf	lmhf	hd	ld
Soft-Spoken	8	11	6	3	10	4	5	3	7
Sloppy	8	12	7	11	2	4	4	6	6
Unsophisticated	11	4	6	6	3	4	4	4	3

All Rs considered Sloppy and Soft-Spoken most salient and Unsophisticated least salient. Males considered Unsophisticated most salient. Females considered Sloppy most salient. mf Rs considered Soft-Spoken least salient. ds Rs considered Soft-Spoken most salient and Sloppy least salient. Less ds Rs were $\pm$ .4 or more. ld Rs considered Unsophisticated least salient. More ld Rs were $\pm$ .4 or more.

Raters: R(All)TP(FM)

Dimension	M	F	n	mf	ds	hmlf	lmhf	hd	ld
Submissive	9	16	7	5	13	5	6	7	7
Stereotypically-Feminine	11	6	4	11	2	5	4	4	4
Sex-Appealing	9	12	9	6	6	5	7	3	4

All Rs considered Submissive most salient and Stereotypically-Feminine least salient. Males considered Stereotypically-Feminine most salient. Females considered Submissive most salient. More females than males had weights of $\pm$ .4 or more. n Rs considered Stereotypically-Feminine least salient. Mf Rs considered Stereotypically-Feminine most salient. ds Rs considered Stereotypically-Feminine least salient. lmhf Rs considered Stereotypically-Feminine least salient. hd and ld Rs considered Submissive most salient.

TPs: R(M)TP(MM)- I=Rugged II=Self-Conscious III=Fragile

I	II	III
hd*	lmhf*	hmlf*
ld*	ld*	lmhf
lmhf	hd	ld
ld	hmlf	hd
hd	hmlf	lmhf
hmlf	hd	ld
hmlf	ld	hd
lmhf*	lmhf*	hmlf*

hmlf is fragile. hmlf is not fragile. lmhf is not rugged but is self-conscious. lmhf is not self-conscious. hd is rugged. ld is both rugged and self-conscious.

Rs: R(M)TP(MM)

Dimension	n	mf	ds	hmlf	lmhf	hd	ld
Rugged	7	4	4	2	5	4	4
Self-Conscious	0	5	4	3	2	2	2
Fragile	4	3	3	2	3	3	2

Rugged, overall, was considered the most salient. n males considered Rugged most salient but did not consider Self-Conscious salient at all. mf and ds males considered Fragile least salient. Less n males were $\pm$ .4 or more. hmlf males considered Rugged least salient while lmhf, hd and ld males considered it most salient.

TPs: R(M)TP(MF)- I=Assertive II=Indoorish III=Pronounced

I	II	III
ld*	hmlf*	lmhf*
hmlf	lmhf*	hd
hd	lmhf*	hmlf
lmhf	ld	ld
hmlf	hd	ld
hd	hmlf	hmlf
lmhf*	hd*	lmhf
ld*	ld*	hd

hmlf is indoorish. lmhf is indoorish. lmhf is both indoorish and pronounced but not assertive. hd is not indoorish. ld is assertive but not indoorish. ld is not assertive.

Rs: R(M)TP(MF)

Dimension	n	mf	ds	hmlf	lmhf	hd	ld
Assertive	2	6	5	2	3	4	4
Indoorish	5	3	4	4	4	2	2
Pronounced	2	3	4	2	3	3	1

n males considered Indoorish most salient and Assertive and Pronounced equally least salient. mf males considered Assertive most salient and Indoorish and Pronounced equally least salient. hmlf males considered Indoorish most salient and Assertive and Pronounced equally least salient. hd and ld males considered Assertive most salient. ld males considered Pronounced least salient.

TPs: R(M)TP(FF)- I=Masculine II=Sheltered III-Personable

I	II	III
lmhf*	ld*	lmhf*
ld*	hmlf*	ld
ld	hd	hd
hmlf	hmlf	hmlf
hmlf	lmhf	hd
hd	hd	hmlf
lmhf*	ld*	lmhf*
hd*	lmhf*	ld*

hmlf is sheltered. lmhf is neither masculine nor personable. lmhf is both masculine and personable but not sheltered. hd is not masculine. ld is both masculine and sheltered. ld is neither sheltered nor personable.

RS: R(M)TP(FF)

Dimension	n	mf	ds	hmlf	lmhf	hd	ld
Masculine	6	6	1	5	3	3	2
Sheltered	2	2	4	1	1	3	3
Personable	2	2	5	1	4	2	2

Masculine, overall, was considered the most salient. Both n and mf males considered Masculine most salient and Sheltered and Personable equally least salient. ds males considered Masculine least salient and Personable most salient (Sheltered close behind). hmlf males considered Masculine most salient and Sheltered and Personable equally least salient. lmhf males considered Sheltered least salient.

TPs: R(M)TP(FM)- I=Hard II=Aggressive III=Conventional

I	II	III	
lmhf*	ld*	ld*	lmhf is not hard. lmhf is both
ld*	lmhf*	lmhf	hard and aggressive but not con-
hmlf	hd	hmlf	ventional. hd is neither hard nor
ld	lmhf	hd	conventional. ld is hard but not
hmlf	hd	ld	aggressive. ld is both aggressive
hd	hmlf	hmlf	and conventional.
hd*	hmlf	hd*	
lmhf*	ld*	lmhf*	

RS: R(M)TP(FM)

Dimension	n	mf	ds	hmlf	lmhf	hd	ld
Hard	6	8	1	5	4	3	3
Aggressive	4	3	6	3	2	4	4
Conventional	1	0	3	1	1	0	2

Hard, overall, was considered the most salient (Aggressive close behind). Conventional, overall, was considered the least salient. n males considered Hard most salient and Conventional least salient. mf males considered Hard most salient and Conventional not salient at all. ds males considered Aggressive most salient and Hard least salient. hmlf males considered Hard most salient and Conventional least salient. lmhf males considered Hard most salient and Conventional least salient. hd males did not consider Conventional salient at all.

TPs: R(F)TP(MM)- I=Free-Flowing II=Boyish III=Deep

I	II	III	
ld*	hmlf	ld*	lmhf is neither free-flowing,
lmhf	hmlf	lmhf*	boyish, nor deep. lmhf is deep.
hd	lmhf	hmlf	hd is not deep. ld is not boyish
hd	hd	hd	but is deep. ld is free-flowing.
hmlf	ld	ld	
ld	hd	hmlf	
hmlf	lmhf*	lmhf*	
lmhf*	ld*	hd*	

Rs: R(F)TP(MM)

Dimension	n	mf	ds	hmlf	lmhf	hd	ld
Free-Flowing	6	3	5	3	4	4	3
Boyish	5	2	2	3	2	2	2
Deep	0	2	3	2	1	1	0

Free-Flowing, overall, was considered the most salient. Deep, overall, was considered the least salient. n females considered Free-Flowing most salient (Boyish close behind) and Deep not salient at all. ds females considered Free-Flowing most salient but Boyish least salient. Less mf females were ± .4 or more. All four categories (hmlf, lmhf, hd, and ld) considered Free-Flowing most salient. lmhf and hd females considered Deep least salient. ld females did not consider Deep salient at all.

TPs: R(F)TP(MF)- I=Restrained II=Aloof III=Authoritative

I	II	III	
lmhf*	ld	hd*	hmlf is not restrained. hmlf
ld*	hmlf	lmhf	is not aloof. lmhf is restrain-
hd	lmhf	hd	ed and not authoritative.
hd	hd	ld	hd is authoritative. hd is
hmlf	lmhf	hmlf	not aloof. ld is neither
lmhf	hmlf*	ld	restrained nor aloof. ld is
hmlf*	hd*	hmlf	restrained.
ld*	ld*	lmhf*	

Rs: R(F)TP(MF)

Dimension	n	mf	ds	hmlf	lmhf	hd	ld
Restrained	4	2	5	2	4	3	2
Aloof	2	3	2	2	1	3	]
Authoritative	3	3	2	1	4	1	2

Restrained, overall, was considered the most salient. n and ds females considered Restrained most salient. mf females considered Restrained least salient. hmlf females considered Authoritative least salient. lmhf females considered Restrained and Authoritative most salient and Aloof least salient. hd females considered Restrained and Aloof most salient but Authoritative least salient. ld females considered Aloof least salient. More lmhf females had $\pm$ .4 or more.

TPs: R(F)TP(FF)- I=Dependent II=Unparticular III=Open

I	II	III
hd*	lmhf*	ld*
ld*	ld*	lmhf
hmlf	hmlf	hd
hmlf	hd	ld
hd	hd	hd
lmhf	hmlf	hmlf
lmhf*	ld	lmhf*
ld*	lmhf*	hmlf*

hmlf is not open. lmhf is neither dependent, unparticular, nor open. lmhf is unparticular. hd is dependent. ld is both dependent and unparticular. ld is not dependent but is open.

Rs: R(F)TP(FF)

Dimension	n	mf	ds	hmlf	lmhf	hd	ld
Dependent	5	2	3	2	4	2	2
Unparticular	5	3	3	5	2	2	2
Open	2	5	4	4	2	2	3

n females considered Dependent and Unparticular equally most salient but Open least salient. mf females considered Open most salient. hmlf females considered Dependent least salient but Unparticular most salient (Open close behind). lmhf females considered Dependent most salient. More hmlf females were ± .4 or more.

TPs: R(F)TP(FM)- I=Feminine II=Unsure III=Ladylike

I	II	III
lmhf*	hmlf*	lmhf*
hd	ld	ld
ld	hmlf	hmlf
hd	lmhf	hd
hmlf	hd	hd
hmlf	hd	hmlf
lmhf*	ld*	lmhf*
ld*	lmhf*	ld*

hmlf is unsure. lmhf is both feminine and ladylike. lmhf is neither feminine, unsure, nor ladylike. ld is not ladylike. ld is neither feminine nor unsure.

Rs: R(F)TP(FM)

Dimension	n	mf	ds	hmlf	lmhf	hd	ld
Feminine	2	3	3	2	1	4	1
Unsure	5	3	4	4	4	1	3
Ladylike	4	1	3	3	2	1	2

Unsure, overall, was considered the most salient. n females considered Unsure most salient (Ladylike close behind) but Feminine least salient. mf females considered Feminine and Unsure equally most salient but Ladylike least salient. Less mf females were $\pm$ .4 or more. hmlf females considered Unsure most salient (Ladylike close behind) but Feminine least salient. lmhf females considered Unsure most salient but Feminine least salient. hd females considered Feminine most salient but Unsure and Ladylike equally least salient. ld females considered Feminine least salient. Less hd and ld females were $\pm$ .4 or more.

TPs: R(n)TP(MM)- I=Intelligent II= Youngish III= Uncomfortable

I	II	III	
lmhf*	hmlf*	lmhf*	hmlf is youngish. lmhf is
hmlf	lmhf	hmlf	neither intelligent nor
ld	hd	ld	youngish but is uncomfortable.
hd	ld	hmlf	lmhf is intelligent. hd is
ld	ld	lmhf	neither intelligent nor uncom-
hmlf	hmlf	ld	fortable. hd is neither
hd*	hd*	hd*	youngish nor uncomfortable.
lmhf*	lmhf*	hd*	

Rs: R(n)TP(MM)

Dimension	M	F	hmlf	lmhf	hd	ld
Intelligent	3	3	3	1	2	0
Youngish	4	4	0	3	2	3
Uncomfortable	5	3	1	3	2	2

Males considered Uncomfortable more salient than females. hmlf Rs considered Intelligent most salient and Youngish least salient (Uncomfortable close behind). lmhf Rs considered Youngish and Uncomfortable equally most salient but Intelligent least salient. hd Rs considered Intelligent, Youngish, and Uncomfortable equally salient. ld Rs considered Youngish most salient (Uncomfortable close behind) but Intelligent not salient at all. lmhf Rs had more weights of $\pm$ .4 or better. hmlf Rs had less weight of $\pm$ .4 or better.

TPs: R(n)TP(MF)- I=Unathletic II=Deliberate III=Unintelligent

I	II	III
lmhf*	ld	lmhf*
hmlf*	lmhf	hmlf
lmhf	hmlf	hd
hd	hmlf	ld
ld	hd	hd
hmlf	hd	hmlf
hd*	lmhf*	ld
ld*	ld*	lmhf*

hmlf is unathletic. lmhf is not unintelligent. lmhf is both unathletic and unintelligent but not deliberate. hd is not unathletic. ld is not unathletic. ld is not deliberate.

Rs: R(n)TP(MF)

Dimension	M	F	hmlf	lmhf	hd	ld
Unathletic	5	4	3	2	2	2
Deliberate	4	5	1	3	1	4
Unintelligent	3	3	1	1	2	2

Unintelligent, overall, was considered least salient. hmlf Rs considered Unathletic most salient but Deliberate and Unintelligent equally least salient. lmhf Rs considered Deliberate most salient but Unintelligent least salient. hd Rs considered Unathletic and Unintelligent equally most salient but Deliberate least salient. ld Rs considered Deliberate most salient but both Unathletic and Unintelligent equally least salient. More ld Rs had weights of $\pm$ .4 or better.

TPs: R(n)TP(FF)- I=Casual II=Personally-Involved III= Tasteless

I	II	III
ld*	lmhf*	hmlf*
lmhf	ld*	hmlf
hd	ld	ld
hd	hmlf	lmhf
hmlf	hmlf	hd
hmlf	hd	lmhf
lmhf*	hd*	hd
ld*	lmhf*	ld*

hmlf is tasteless. lmhf is neither casual nor personally-involved. lmhf is personally-involved. hd is not personally-involved. ld is casual. ld is neither casual nor tasteless but is personally-involved.

Rs: R(n)TP(FF)

Dimension	M	F	hmlf	lmhf	hd	ld
Casual	4	4	0	2	2	4
Personally-Involved	4	4	3	3	1	1
Tasteless	1	5	1	2	1	2

Males considered Tasteless least salient; females considered Tasteless most salient. hmlf Rs considered Personally-Involved most salient but Casual not salient at all. lmhf Rs considered Personally-Involved most salient but Casual and Tasteless equally least salient. hd Rs considered Casual most salient but Personally-Involved and Tasteless equally least salient. ld Rs considered Casual most salient and Personally-Involved least salient. More females than males had weights of $\pm$ .4 or better. More lmhf and ld Rs had weights of $\pm$ .4 or better.

TPs: R(n)TP(FM)- I=Guarded II=Assertive III=Homebodied

I	II	III	
lmhf*	ld*	ld*	hmlf is not assertive. lmhf is
hd	lmhf	lmhf	guarded. lmhf is neither
hd	hd	hmlf	guarded nor homebodied. hd is
hmlf	lmhf	hmlf	not homebodied. ld is not asser-
hmlf	hd	ld	give. ld is not guarded but is
ld	hmlf	hd	both assertive and homebodied.
ld*	ld*	hd*	
lmhf*	hmlf*	lmhf*	

Rs: R(n)TP(FM)

Dimension	M	F	hmlf	lmhf	hd	ld
Guarded	5	7	3	4	3	2
Assertive	1	6	1	1	3	2
Homebodied	2	2	2	1	0	1

Females considered Assertive much more salient than males did. Both males and females considered Guarded most salient. Females considered Homebodied least salient. Many more females than males had weights of $\pm$ .4 or better. hmlf RS considered Assertive least salient. lmhf Rs considered Guarded most salient but Assertive and Homebodied equally least salient. hd Rs considered Guarded and Assertive equally most salient but did not consider Homebodied salient at all. ld Rs considered Homebodied least salient.

TPs: R(mf)TP(MM)- I=Open II=Fragmented III=Hard

I	II	III	
hmlf	lmhf*	ld*	hmlf is fragmented. lmhf is
lmhf*	hmlf*	hd	neither open nor hard but is
hmlf	hmlf	hmlf	fragmented. hd is not hard.
hd	lmhf	ld	lmhf is not open. ld is hard.
ld	ld	lmhf	
hd	hd	hmlf	
lmhf	hd	hd*	
ld*	ld	lmhf*	

Rs: R(mf)TP(MM)

Dimension	M	F	hmlf	lmhf	hd	ld
Open	5	5	2	4	1	3
Fragmented	2	3	1	1	2	1
Hard	4	1	1	0	2	2

Both males and females considered Open most salient. Males considered Fragmented least salient; females considered Hard least salient. hmlf Rs considered Open most salient but Fragmented and Hard equally least salient. lmhf Rs considered Open most salient but Hard not salient at all. hd Rs considered Fragmented and Hard equally most salient but Open least salient. ld Rs considered Open most salient but Hard least salient.

TPs: R(mf)TP(MF)- I=Deferring II=Passive III=Immature

I	II	III
lmhf*	lmhf*	lmhf*
ld*	ld*	lmhf
hd	hmlf	hmlf
hd	lmhf	hd
ld	hmlf	hmlf
hmlf	hd	ld*
lmhf	hd*	ld*
hmlf*	ld*	hd*

hmlf is not deferring. lmhf is deferring, passive and immature. hd is not passive. hd is not immature. ld is neither passive nor immature. ld is both deferring and passive but not immature.

Rs: R(mf)TP(MF)

Dimension	M	F	hmlf	lmhf	hd	ld
Deferring	3	4	2	1	0	4
Passive	3	4	1	2	2	2
Immature	5	1	1	1	3	1

Males considered Immature most salient; females considered Immature least salient. hmlf Rs considered Deferring most salient. lmhf Rs considered Passive most salient. hd Rs considered Immature most salient but Deferring not salient at all. ld Rs considered Deferring most salient but Immature least salient. More ld Rs had weights of $\pm$ .4 or better.

TPs: R(mf)TP(FF)- I=Unladylike II=Masculine III=Dependent

I	II	III
lmhf*	lmhf*	hd
hmlf*	ld*	ld
ld*	ld	hd
hd	hd	hmlf
hd	hmlf	hmlf
hmlf	hmlf	lmhf*
ld	hd	lmhf*
lmhf*	lmhf*	ld*

hmlf is unladylike. lmhf is neither unladylike nor masculine nor dependent. lmhf is both unladylike and masculine. hd is dependent. ld is both unladylike and masculine. ld is not dependent.

Rs: R(mf)TP(FF)

Dimension	M	F	hmlf	lmhf	hd	ld
Unladylike	3	5	3	1	3	1
Masculine	3	3	1	1	2	2
Dependent	1	3	1	1	1	1

Males considered Dependent least salient. Females considered Unladylike most salient. More females than males had weights of ± .4 or better. hmlf Rs considered Unladylike most salient. lmhf Rs considered all three dimensions as not being very salient. hd Rs considered Unladylike most salient but Dependent least salient. ld Rs considered Masculine most salient. Less lmhf and ld Rs had weights of ± .4 or more.

TPs: R(mf)TP(MF)- I=Unpretentious II=Proprietous III= Expressive

I	II	III	
ld*	lmhf*	ld*	lmhf is proprietous. lmhf is
lmhf*	ld*	lmhf*	both unpretentious and expressive
hmlf	hmlf	lmhf	but not proprietous. hd is not
ld	hd	hd	unpretentious. ld is unpreten-
hmlf	ld	hmlf	tious but not expressive. ld is
hd	hmlf	hmlf	both proprietous and expressive.
lmhf	hd	hd	
hd*	lmhf*	ld*	

Rs: R(mf)TP(FM)

Dimension	M	F	hmlf	lmhf	hd	ld
Unpretentious	6	3	2	1	3	3
Proprietous	1	5	1	1	2	2
Expressive	2	3	1	3	0	1

Males considered Unpretentious most salient. Females considered Proprietous most salient. Males considered Proprietous least salient. hmlf Rs considered Unpretentious most salient. lmhf Rs considered Expressive most salient. hd Rs considered Unpretentious most salient but Expressive not salient at all. ld Rs considered Unpretentious most salient but Expressive least salient.

TPs: R(ds)TP(MM)- I=Dominant II=Self-Conscious III= Athletic

I	II	III
hd*	lmhf*	hmlf
ld	hmlf*	hd
hmlf	hmlf	ld
lmhf	ld	lmhf
hmlf	hd	hd
hd	ld	hmlf
lmhf*	hd*	ld
ld*	lmhf*	lmhf*

hmlf is self-conscious. lmhf is neither dominant nor athletic but is self-conscious. lmhf is not self-conscious. hd is dominant but not self-conscious. ld is not dominant.

Rs: R(ds)TP(MM)

Dimension	M	F	hmlf	lmhf	hd	ld
Dominant	6	3	3	1	3	2
Self-Conscious	3	4	2	2	1	2
Athletic	4	4	2	4	0	2

Males considered Dominant most salient; females considered Dominant least salient. hmlf Rs considered Dominant most salient. lmhf Rs considered Dominant least salient. lmhf Rs considered Athletic most salient. hd Rs considered Dominant most salient. hd Rs did not consider Athletic salient at all.

TPs: R(ds)TP(MF)- I=Dominant II=Unappealing III=Intelligent

I	II	III
ld*	lmhf*	lmhf*
lmhf	ld	hmlf
hd	hmlf	hd
hmlf	hd	ld
hmlf	ld	lmhf
hd	lmhf	hd
ld*	hmlf	ld*
lmhf*	hd*	hmlf*

hmlf is not intelligent. lmhf is intelligent. lmhf is not dominant but is unappealing. hd is not unappealing. ld is dominant but is not intelligent. ld is not dominant.

Rs: R(ds)TP(MF)

Dimension	M	F	hmlf	lmhf	hd	ld
Dominant	5	4	2	1	4	2
Unappealing	3	3	0	3	1	2
Intelligent	3	2	2	2	1	0

Both males and females considered Dominant most salient. hmlf Rs considered Dominant and Intelligent equally most salient but did not consider Unappealing salient at all. lmhf Rs considered Unappealing most salient but Dominant least salient. hd Rs considered Dominant most salient but both Unappealing and Intelligent equally least salient. ld Rs considered Dominant and Unappealing equally most salient but did not consider Intelligent salient at all.

TPs: R(ds)TP(FF)- I=Submissive II=Unassuming III=Passive

I	II	III
ld*	ld*	hd*
hmlf*	lmhf*	ld
hd	ld	lmhf
hmlf	hd	hmlf
hd	hmlf	hmlf
lmhf	hmlf	ld
lmhf*	hd	lmhf*
ld*	lmhf*	hd*

hmlf is submissive. lmhf is not unassuming. lmhf is neither submissive nor passive but is unassuming. hd is not passive. hd is passive. ld is submissive. ld is not submissive but is unassuming.

RS: R(ds)TP(FF)

Dimension	M	F	hmlf	lmhf	hd	ld
Submissive	5	5	2	2	2	4
Unassuming	2	4	1	3	1	1
Passive	2	1	2	0	1	0

Both males and females considered Submissive most salient. Males considered Unassuming and Passive equally least salient. Females considered Passive least salient. hmlf Rs considered Unassuming least salient. lmhf Rs considered Unassuming most salient but did not consider Passive salient at all. ld Rs considered Submissive most salient, Unassuming much less salient, and Passive not salient at all.

TPs: R(ds)TP(FM)- I=Restricted II=Unemotional III= Socially-Conscious

I	II	III	
ld	lmhf*	hd*	hmlf is not socially-conscious.
hmlf	ld*	lmhf*	lmhf is both unemotional and
hmlf	hd	hd*	socially-conscious. lmhf is
hd	hmlf	hmlf	neither restricted nor unemotion-
lmhf	hmlf	ld	al nor socially-conscious. hd is
hd	ld	ld	socially-conscious. hd is not
lmhf*	hd*	hmlf*	unemotional but is socially-
ld*	lmhf*	lmhf*	conscious. ld is unemotional.
			ld is not restricted.

Rs: R(ds)TP(FM)

Dimension	M	F	hmlf	lmhf	hd	ld
Restricted	5	5	3	1	3	3
Unemotional	2	3	1	2	1	1
Socially-Conscious	4	2	3	2	0	1

Both males and females considered Restricted most salient. Males considered Unemotional least salient; females considered Socially-Conscious least salient. hmlf Rs considered Restricted and Socially-Conscious equally most salient but Unemotional least salient. lmhf Rs considered Restricted least salient. hd Rs considered Restricted most salient but Socially-Conscious not salient at all. ld Rs considered Restricted most salient but Unemotional and Socially-Conscious equally least salient. More lmhf Rs had weights of $\pm$ .4 or better; less hd Rs were $\pm$ .4 or more.

TPs: R(hmlf)TP(MM)- I= Forceful II=Cooperative III=Soft

I	II	III
ld	lmhf*	lmhf*
lmhf	ld	hmlf
hmlf	hd	lmhf
hd	ld	hmlf
hmlf	hmlf	hd
hd	hmlf	ld
lmhf*	hd*	hd*
ld*	lmhf*	ld*

lmhf is neither forceful nor cooperative but is soft. lmhf is cooperative. hd is neither cooperative nor soft. ld is not forceful. ld is not soft.

Rs: R(hmlf)TP(MM)

Dimension	M	F	n	mf	ds
Forceful	3	3	1	2	3
Cooperative	1	2	2	0	1
Soft	2	1	1	2	0

Both males and females considered Forceful most salient. Males considered Cooperative least salient; females considered Soft least salient. n Rs considered Cooperative most salient but Forceful and Soft equally least salient. mf Rs considered Forceful and Soft equally most salient but did not consider Cooperative salient at all. ds Rs considered Forceful most salient but did not consider Soft salient at all.

TPs: R(hmlf)TP(MF)- I=Soft-Spoken II="Oldmanlike" III= Serious

I	II	III	
ld*	lmhf*	hmlf*	hmlf is serious. hmlf is not
lmhf*	hmlf	hd*	serious. lmhf is both soft-
hd	lmhf	ld	spoken and "oldmanlike" but
hd	ld	lmhf	not serious. hd is serious.
lmhf	hmlf	ld	hd is not "oldmanlike." ld is
hmlf	hd	hd	neither soft-spoken nor
hmlf	ld*	hmlf*	"oldmanlike." ld is soft-spoken.
ld*	hd*	lmhf*	

Rs: R(hmlf)TP(MF)

Dimension	M	F	n	mf	ds
Soft-Spoken	2	3	1	2	2
"Oldmanlike"	4	1	3	1	1
Serious	1	2	1	0	2

Males considered "Oldmanlike" most salient. Females considered Soft-Spoken most salient. Males considered Serious least salient. Females considered "Oldmanlike" least salient. n Rs considered "Oldmanlike" most salient but Soft-Spoken and Serious equally least salient. mf Rs considered Soft-Spoken most salient but Serious not salient at all. ds Rs considered Soft-Spoken and Serious equally most salient but "Oldmanlike" least salient. Less mf Rs had weights of $\pm$ .4 or more.

TPs: R(hmlf)TP(FF)- I=Fair of Hair II=Vacillative III= Hesitant

I	II	III	
ld*	hmlf*	ld*	hmlf is vacillative. lmhf is not
lmhf*	lmhf*	hd	vacillative. lmhf is both fair
ld*	ld	lmhf	of hair and vacillative but not
hmlf	hd	hmlf	hesitant. hd is not fair of hair.
hmlf	hmlf	hmlf	ld is both fair of hair and hesi-
lmhf	hd	hd	tant. ld is fair of hair but
hd	lmhf*	ld*	neither vacillative nor hesitant.
hd*	ld*	lmhf*	

Rs: R(hmlf)TP(FF)

Dimension	M	F	n	mf	ds
Fair of Hair	3	1	2	1	1
Vacillative	2	4	2	3	1
Hesitant	2	3	3	0	2

Males considered Fair of Hair most salient. Females considered Vacillative most salient. Females considered Fair of Hair least salient. n Rs considered Hesitant most salient. mf Rs considered Vacillative most salient but Hesitant not salient at all. ds Rs considered Hesitant most salient. More n Rs had weights of $\pm$ .4 or better.

TPs: R(hmlf)TP(FM)- I=Feminine II=Dependent III=Best-Dressed

I	II	III
hd*	ld*	ld*
lmhf	hd	lmhf
hd	hmlf	hd
hmlf	lmhf	hmlf
hmlf	hmlf	hd
ld	hd	ld
ld*	lmhf*	hmlf*
lmhf*	ld*	lmhf*

hmlf is not best-dressed. lmhf is neither feminine nor dependent nor best-dressed. hd is feminine. ld is not feminine but is dependent. ld is not dependent but is best-dressed.

Rs: R(hmlf)TP(FM)

Dimension	M	F	n	mf	ds
Feminine	4	2	2	2	2
Dependent	3	4	3	1	3
Best-Dressed	3	1	1	2	1

Males considered Feminine most salient; females considered Dependent most salient. Females considered Best-Dressed least salient. More males than females had weights of $\pm$ .4 or better. n Rs considered Dependent most salient but Best-Dressed least salient. mf Rs considered Dependent least salient. ds Rs considered Dependent most salient but Best-Dressed least salient.

TPs: R(lmhf)TP(MM)- I=Gentle II=Imposing III=Self-Oriented

I	II	III	
ld*	hd*	hmlf*	hmlf is not self-oriented.
hd	hmlf	ld	hmlf is self-oriented. lmhf
hmlf	lmhf	hd	is neither gentle nor self-
hd	ld	lmhf	oriented. lmhf is not imposing.
hmlf	ld	ld	hd is imposing. ld is gentle.
ld	hmlf	hd	
lmhf	hd	lmhf*	
lmhf*	lmhf*	hmlf*	

Rs: R(lmhf)TP(MM)

Dimension	M	F	n	mf	ds
Gentle	5	6	3	4	4
Imposing	4	5	3	2	4
Self-Oriented	4	5	2	4	3

Both males and females considered Gentle most salient. n Rs considered Gentle and Imposing equally most salient but Self-Oriented least salient. mf Rs considered Gentle and Self-Oriented equally most salient but Imposing least salient. ds Rs considered Gentle and Imposing equally most salient but Self-Oriented least salient.

TPs: R(lmhf)TP(MF)- I=Uninhibited II=Reflective III= Fragile

I	II	III
lmhf*	lmhf*	lmhf*
ld	ld*	lmhf
hd	hmlf	hd
hd	lmhf	hmlf
hmlf	hd	hmlf
hmlf	hd	hd
ld	ld*	ld*
lmhf*	hmlf*	ld*

hmlf is not reflective. lmhf is both uninhibited and reflective. lmhf is not uninhibited but is fragile. ld is neither reflective nor fragile. ld is reflective but not fragile.

RS: R(lmhf)TP(MF)

Dimension	M	F	n	mf	ds
Uninhibited	5	4	4	2	3
Reflective	1	2	1	1	1
Fragile	1	3	2	2	0

Both males and females considered Uninhibited most salient. Both males and females considered Reflective least salient. n Rs considered Uninhibited most salient but Reflective least salient. ds Rs considered Uninhibited most salient but Fragile not salient at all. More n Rs had weights of $\pm$ .4 or better.

TPs: R(lmhf)TP(FF)- I=Sincere II=Quiet III="Hip"

I	II	III	
lmhf*	hmlf*	ld*	hmlf is quiet. lmhf is neither
ld	ld*	lmhf*	sincere nor 'hip." lmhf is both
hmlf	hmlf	hd	sincere and "hip" but not quiet.
ld	hd	hd	hd is not sincere. ld is both
hmlf	lmhf	hmlf	quiet and "hip." ld is not
hd	hd	hmlf	quiet.
lmhf*	lmhf*	ld	
hd*	ld*	lmhf*	

Rs: R(lmhf)TP(FF)

Dimension	M	F	n	mf	ds
Sincere	4	3	2	2	3
Quiet	3	3	2	2	2
"Hip"	1	3	2	1	1

Males considered Sincere most salient but "Hip" least salient. Females considered all three dimensions equally salient. n Rs considered all three dimensions equally salient. mf Rs considered Sincere and Quiet equally most salient but "Hip" least salient. ds Rs considered Sincere most salient but "Hip" least salient.

TPs: R(lmhf)TP(FM)- I=Subdued II=Self-Sufficient II-Open

I	II	III
ld*	hd*	lmhf*
lmhf*	lmhf*	ld*
hmlf	hd	ld
hd	ld	hd
hd	ld	hd
hmlf	lmhf	hmlf
ld*	hmlf	hmlf*
lmhf*	hmlf*	lmhf*

hmlf is not open. hmlf is not self-sufficient. lmhf is both subdued and self-sufficient but not open. lmhf is not subdued but is open. hd is self-sufficient. ld is both subdued and open. ld is not subdued.

Rs: R(lmhf)TP(FM)

Dimension	M	F	n	mf	ds
Subdued	3	5	2	3	3
Self-Sufficient	3	1	1	1	2
Open	2	2	1	1	2

Males considered Subdued and Self-Sufficient equally most salient but Open least salient. Females considered Subdued by far most salient but Self-Sufficient least salient. n Rs considered Subdued most salient but Self-Sufficient and Open equally least salient. mf Rs considered Subdued most salient but Self-Sufficient and Open equally least salient. ds Rs considered Subdued most salient but Self-Sufficient and Open equally least salient. More ds Rs had weights of ± .4 or better.

TPs: R(hd)TP(MM)- I=Articulate II=Gregarious III=Intelligent

I	II	III	
hd*	ld*	lmhf*	hmlf is not intelligent. hmlf
lmhf	hd*	hmlf*	is intelligent. lmhf is neither
hmlf	ld	ld*	articulate nor gregarious nor
ld	lmhf	hd	intelligent. lmhf is intelli-
hmlf	hd	hd	gent. hd is gregarious. hd is
hd	hmlf	ld*	articulate. ld is not articu-
lmhf*	hmlf	hmlf*	late but is intelligent. ld is
ld*	lmhf*	lmhf*	gregarious but is not intelli-
			gent.

Rs: R(hd)TP(MM)

Dimension	M	F	n	mf	ds
Articulate	4	1	2	0	3
Gregarious	3	3	2	4	0
Intelligent	1	1	1	0	1

Males considered Articulate most salient. Females considered Gregarious most salient. Males considered Intelligent least salient. Females considered Articulate and Intelligent equally least salient. More males than females had weights of $\pm$ .4 or better. n Rs considered Articulate and Gregarious equally most salient but Intelligent least salient. mf Rs considered only Gregarious salient and Articulate and Intelligent not at all. ds Rs considered Articulate most salient but Gregarious not salient at all.

TPs: R(hd)TP(MF)- I=Muffled II=Soft III="Heavy"

I	II	III	
lmhf*	lmhf*	hmlf*	hmlf is "heavy." hmlf is not
ld*	hmlf	ld*	"heavy." lmhf is both muffled
hd	hd	lmhf	and soft. hd is not soft.
hmlf	lmhf	hd	ld is not soft. ld is both
hmlf	hmlf	hd	muffled and "heavy."
hd	ld	ld	
ld	ld*	lmhf	
lmhf	hd*	hmlf*	

RS: R(hd)TP(MF)

Dimension	M	F	n	mf	ds
Muffled	3	4	2	2	3
Soft	4	2	2	4	0
"Heavy"	0	1	1	0	0

Males considered Soft most salient. Females considered Muffled most salient. Males considered "Heavy" not salient at all. Females considered "Heavy" least salient. n Rs considered Muffled and Soft equally most salient but "Heavy" least salient. mf Rs considered Soft most salient but "Heavy" not salient at all. ds Rs considered Muffled most salient but both Soft and "Heavy" not salient at all. Less ds Rs had weights of $\pm$ .4 or more.

TPs: R(hd)TP(FF)- I=Dependent II=Timid III=Conforming

I	II	III	
ld*	hmlf*	ld*	hmlf is not dependent. hmlf
lmhf*	ld	lmhf*	is timid. lmhf is not depend-
hmlf	hd	hd	ent but is conforming. lmhf
ld	hmlf	ld	is neither timid nor conforming
hd	hd	hmlf	but is dependent. hd is not
hd	lmhf	hmlf	conforming. ld is dependent.
hmlf*	lmhf*	lmhf*	ld is not timid but is con-
lmhf*	ld*	hd*	forming.

Rs: R(hd)TP(FF)

Dimension	M	F	n	mf	ds
Dependent	2	1	0	3	0
Timid	2	3	2	0	3
Conforming	3	1	2	1	1

Males considered Conforming most salient. Females considered Timid most salient. Males considered Dependent and Timid equally least salient. Females considered Dependent and Conforming equally least salient. More males than females had weights of $\pm$ .4 or better. n Rs considered Timid and Conforming equally most salient but Dependent not salient at all. mf Rs considered Dependent most salient but Timid not salient at all. ds Rs considered Timid most salient but Dependent not salient at all.

TPs: R(hd)TP(FM)- I=Affected II=Noncommittal III=Submissive

I	II	III	
lmhf*	hmlf*	hd*	hmlf is not affected but is non-
hd	hmlf	ld	committal. lmhf is affected.
hmlf	lmhf	ld	ld is neither affected nor
hd	ld	lmhf	noncommittal nor submissive.
ld	hd	hmlf	hd is not submissive. hd is
hmlf*	hd	hmlf	submissive. ld is not affected.
lmhf*	lmhf*	lmhf*	ld is not noncommittal.
ld*	ld*	hd*	

Rs: R(hd)TP(FM)

Dimension	M	F	n	mf	ds
Affected	3	2	2	3	0
Noncommittal	2	4	3	0	3
Submissive	2	1	0	2	1

Males considered Affected most salient but Noncommittal and Submissive equally least salient. Females considered Noncommittal most salient but Submissive least salient. n Rs considered Noncommittal most salient but Submissive not salient at all. mf Rs considered Affected most salient but Noncommittal not salient at all. ds Rs considered Noncommittal most salient but Affected not salient at all.

TPs: R(ld)TP(MM)- I=Spontaneous II=Hairless III=Solitary

I	II	III
ld*	hmlf*	lmhf*
hd*	hmlf	hd
lmhf	lmhf	hmlf
hd	hd	hmlf
hmlf	hd	hd
hmlf	ld	lmhf
ld*	ld*	ld
lmhf*	lmhf*	ld

hmlf is hairless. hmlf is hairless. lmhf is neither spontaneous nor hairless but is solitary. hd is spontaneous. ld is neither spontaneous nor hairless. ld is spontaneous.

Rs: R(ld)TP(MM)

Dimension	M	F	n	mf	ds
Spontaneous	3	4	3	1	3
Hairless	3	2	3	2	0
Solitary	1	2	0	2	1

Males considered Spontaneous and Hairless equally most salient. Females considered Spontaneous most salient. Males considered Solitary least salient. Females considered Hairless and Solitary equally least salient. n Rs considered Spontaneous and Hairless equally most salient but did not consider Solitary salient at all. mf Rs considered Hairless and Solitary equally most salient but Spontaneous least salient. ds Rs considered Spontaneous most salient but did not consider Hairless salient at all. Less ds Rs had weights of $\pm$ .4 or more.

TPs: R(ld)TP(MF)- I=Aggressive II=Reserved III=Gentle

I	II	III
ld*	lmhf*	lmhf*
hd*	ld	hd
lmhf	hmlf	hd
hmlf	hd	ld
hmlf	lmhf	ld
hd	hmlf	lmhf
lmhf*	ld	hmlf*
ld*	hd*	hmlf*

hmlf is not gentle. hmlf is not gentle. lmhf is not aggressive but is both reserved and gentle. hd is aggressive. hd is not reserved. ld is aggressive. ld is not aggressive.

Rs: R(ld)TP(MF)

Dimension	M	F	n	mf	ds
Aggressive	2	2	1	1	2
Reserved	5	3	3	3	2
Gentle	1	2	1	2	0

Males considered Reserved most salient; females did too, only less so. Males considered Gentle least salient. Females considered Aggressive and Gentle equally least salient. n Rs considered Reserved most salient but Aggressive and Gentle equally least salient. mf Rs considered Reserved most salient but Aggressive least salient. ds Rs considered Aggressive and Reserved equally most salient but did not consider Gentle salient at all.

TPs: R(ld)TP(FF)- I=Drab II=Unfeminine III=Individualistic

I	II	III	
hmlf*	lmhf*	hd*	hmlf is drab. lmhf is neither
ld	ld*	lmhf	unfeminine nor individualistic.
hd	hmlf	ld	lmhf is not drab but is unfem-
hmlf	ld	hd	inine. hd is individualistic.
hd	hd	hmlf	ld is unfeminine. ld is
lmhf	hmlf	hmlf	neither drab nor individualistic.
lmhf*	hd	lmhf*	
ld*	lmhf*	ld*	

Rs: R(ld)TP(FF)

Dimension	M	F	n	mf	ds
Drab	3	5	3	1	4
Unfeminine	2	1	0	3	0
Individualistic	2	2	3	1	0

Males considered Drab most salient but Unfeminine and Individualistic equally least salient. Females considered Drab even more salient than the males but Unfeminine least salient. n Rs considered Drab and Individualistic equally most salient but did not consider Unfeminine salient at all. mf Rs considered Unfeminine most salient but Drab and Individualistic equally least salient. ds Rs considered Drab most salient but did not consider Unfeminine or Individualistic salient at all.

TPs: R(ld)TP(FM)- I=Weak II=Natural III=Self-Conscious

I	II	III
ld*	ld*	ld*
hmlf	lmhf*	lmhf*
hmlf	hmlf	hmlf
hd	ld	hmlf
lmhf	hd	ld
hd	hmlf	hd
lmhf*	lmhf*	hd
ld*	hd*	lmhf

lmhf is not natural but is self-conscious. lmhf is not weak but is natural. hd is not natural. ld is both weak and natural. ld is not weak but is self-conscious.

Rs: R(ld)TP(FM)

Dimension	M	F	n	mf	ds
Weak	4	4	3	1	4
Natural	3	2	2	3	0
Self-Conscious	1	3	2	2	0

Both males and females considered Weak most salient. Males considered Self-Conscious least salient. Females considered Natural least salient. n Rs considered Weak most salient but Natural and Self-Conscious equally least salient. mf Rs considered Natural most salient but Weak least salient. ds Rs considered Weak most salient but did not consider Natural nor Self-Conscious salient at all. Less ds Rs had weights of $\pm$ .4 or more.

Aspects of TPs Attended To

In naming the dimensions of personality, the experimenter and his assistants were also able to agree upon the aspect or aspects of the target persons that they thought the raters had attended to. The four aspects were: Appearance (a), Mannerisms (m), Voice Quality (vq), and Voice Content (vc).

Rs	TPs-I	Dimensions	a	m	vq	vc
All	M-M	Reticent		x	x	
		Gesticulative		x		
		Other-Oriented		x	x	x
All	M-F	Soft	x			
		Assertive				x
		Submissive		x		
All	F-F	Soft-Spoken			x	
		Sloppy	x			
		Unsophisticated	x	x	x	
All	F-M	Submissive			x	x
		Stereotypically-Feminine	x	x	x	x
		Sex-Appealing	x	x	x	x
M	M-M	Rugged	x			
		Self-Conscious		x	x	
		Fragile	x	x	x	
M	M-F	Assertive		x	x	x
		Indoorish	x			
		Pronounced	x			
M	F-F	Masculine	x	x	x	
		Sheltered	x	x	x	
		Personable		x	x	x
M	F-M	Hard	x	x	x	x
		Aggressive		x	x	x
		Conventional	x			

Rs	TPs-I	Dimensions	a	m	vq	vc
F	M-M	Free-Flowing			x	
		Boyish	x			
		Deep				x
F	M-F	Restrained		x	x	x
		Aloof			x	x
		Authoritative			x	
F	F-F	Dependent	x	x	x	x
		Unparticular	x			
		Open		x	x	x
F	F-M	Feminine	x	x	x	x
		Unsure		x	x	x
		Ladylike	x	x	x	x
n	M-M	Intelligent		x		x
		Youngish	x			
		Uncomfortable	x	x	x	x
n	M-F	Unathletic	x			x
		Deliberate				x
		Unintelligent	x			x
n	F-F	Casual	x			
		Personally-Involved		x	x	x
		Tasteless	x			
n	F-M	Guarded				x
		Assertive		x	x	
		Homebodied				x
mf	M-M	Open		x	x	
		Fragmented			x	
		Hard	x			
mf	M-F	Deferring		x		
		Passive		x		
		Immature	x			
mf	F-F	Unladylike	x	x		
		Masculine	x			
		Dependent			x	x
mf	F-M	Unpretentious		x	x	x
		Proprietous	x	x		
		Expressive		x	x	

Rs	TPs-I	Dimensions	a	m	vq	vc
ds	M-M	Dominant		x	x	x
		Self-Conscious		x	x	
		Athletic	x			x
ds	M-F	Dominant	x	x		x
		Unappealing	x			x
		Intelligent				x
ds	F-F	Submissive		x	x	x
		Unassuming		x	x	
		Passive			x	
ds	F-M	Restricted		x	x	
		Unemotional			x	x
		Socially-Conscious	x			
hmlf	M-M	Forceful	x	x	x	
		Cooperative		x	x	x
		Soft	x			
hmlf	M-F	Soft-Spoken			x	
		"Oldmanlike"	x	x		
		Serious		x		
hmlf	F-F	Fair of Hair	x			
		Vacillative	x	x		x
		Hesitant			x	
hmlf	F-M	Feminine	x	x	x	
		Dependent	x	x	x	x
		Best-Dressed	x			
lmhf	M-M	Gentle		x	x	
		Imposing	x	x	x	x
		Self-Oriented				x
lmhf	M-F	Uninhibited			x	
		Reflective		x	x	x
		Fragile	x			
lmhf	F-F	Sincere			x	x
		Quiet		x	x	
		"Hip"	x			
lmhf	F-M	Subdued			x	
		Self-Sufficient	x	x	x	x
		Open				x

Rs	TPs-I	Dimensions	a	m	vq	vc
hd	M-M	Articulate			x	
		Gregarious		x	x	x
		Intelligent	x			x
hd	M-F	Muffled			x	
		Soft	x			
		"Heavy"			x	x
hd	F-F	Dependent				x
		Timid			x	
		Conforming	x			
hd	F-M	Affected		x	x	x
		Noncommittal		x	x	x
		Submissive		x	x	
ld	M-M	Spontaneous			x	
		Hairless	x			
		Solitary		x		x
ld	M-F	Aggressive			x	
		Reserved		x	x	
		Gentle			x	
ld	F-F	Drab	x			x
		Unfeminine	x			
		Individualistic	x			x
ld	F-M	Weak			x	x
		Natural	x	x	x	x
		Self-Conscious	x	x	x	x

Guessing the Sex of the Interactor (I)

The Rs were asked to guess the sex of the I for each TP-I interaction. The following table shows how many of the total guesses they made were correct, especially comparing the totals for same and different sex interactions.

Table 2. Sex of I as Guessed by Rs for Same and Different Sex Interactions

Rs	TPs-I	Possible	Actual	Same Sex	Diff. Sex
All	M-M	384	169	351	
All	F-F	384	182		
All	M-F	384	159		359
All	F-M	384	209		
M	M-M	192	83	161	
M	F-F	192	78		
M	M-F	192	71		176
M	F-M	192	105		
F	M-M	192	86	190	
F	F-F	192	104		
F	M-F	192	88		192
F	F-M	192	104		
n-M	M-M	64	27	52	
n-M	F-F	64	25		
n-M	M-F	64	19		55
n-M	F-M	64	36		
n-F	M-M	64	29	66	
n-F	F-F	64	37		
n-F	M-F	64	34		69
n-F	F-M	64	35		
mf-M	M-M	64	28	55	
mf-M	F-F	64	27		
mf-M	M-F	64	27		64
mf-M	F-M	64	37		
mf-F	M-M	64	26	62	
mf-F	F-F	64	36		
mf-F	M-F	64	26		63
mf-F	F-M	64	37		
ds-M	M-M	64	28	54	
ds-M	F-F	64	26		
ds-M	M-F	64	25		57
ds-M	F-M	64	32		
ds-F	M-M	64	31	62	
ds-F	F-F	64	31		
ds-F	M-F	64	26		59
ds-F	F-M	64	33		

Table 2--continued

Rs	TPs-I	Possible	Actual	Same Sex	Diff. Sex
hmlf-M	M-M	48	24	38	
hmlf-M	F-F	48	14		
hmlf-M	M-F	48	23		45
hmlf-M	F-M	48	22		
hmlf-F	M-M	48	23	49	
hmlf-F	F-F	48	26		
hmlf-F	M-F	48	18		40
hmlf-F	F-M	48	22		
lmhf-M	M-M	48	21	42	
lmhf-M	F-F	48	21		
lmhf-M	M-F	48	20		43
lmhf-M	F-M	48	23		
lmhf-F	M-M	48	25	50	
lmhf-F	F-F	48	25		
lmhf-F	M-F	48	23		41
lmhf-F	F-M	48	18		
hd-M	M-M	48	22	41	
hd-M	F-F	48	19		
hd-M	M-F	48	15		44
hd-M	F-M	48	29		
hd-F	M-M	48	18	49	
hd-F	F-F	48	31		
hd-F	M-F	48	23		56
hd-F	F-M	48	33		
ld-M	M-M	48	16	37	
ld-M	F-F	48	21		
ld-M	M-F	48	13		37
ld-M	F-M	48	24		
ld-F	M-M	48	20	42	
ld-F	F-F	48	22		
ld-F	M-F	48	24		55
ld-F	F-M	48	31		

Summary of the Results

Sex Differences in Raters' Perceptual Judgments

A table, showing the dimensions of personality named for rater-groupings (5-12), will indicate sex differences in raters' perceptual judgments.

Table 3. Sex Differences in Raters' Perceptual Judgments

Grouping	Dimensions	Grouping	Dimensions
R(M)TP(MM)	Rugged Self-Conscious Fragile	R(F)TP(MM)	Free-Flowing Boyish Deep
R(M)TP(MF)	Assertive Indoorish Pronounced	R(F)TP(MF)	Restrained Aloof Authoritative
R(M)TP(FF)	Masculine Sheltered Personable	R(F)TP(FF)	Dependent Unparticular Open
R(M)TP(FM)	Hard Aggressive Conventional	R(F)TP(FM)	Feminine Unsure Ladylike

Sex Differences in Dimensions of Personality Considered Most or Least Salient

There were also sex differences between raters with respect to the degree of importance they assigned the various dimensions of personality. Again, a table will depict this best; the table will present the rater-groupings' results in which there were sex differences about which dimension of personality was most or least salient (see Table 4).

Table 4. Sex Differences in Dimensions of Personality Considered Most or Least Salient

Grouping	Dimensions	Most	Least
R(All)TP(MM)	Reticent	Males	Females
	Other-Oriented	Females	Males
R(All)TP(MF)	Soft	Males	Females
	Submissive	Females	Males
R(All)TP(FF)	Unsophisticated	Males	
	Sloppy	Females	
R(All)TP(FM)	Stereotypically-Feminine	Males	
	Submissive	Females	
R(n)TP(FF)	Tasteless	Females	Males
R(mf)TP(MM)	Fragmented		Males
	Hard		Females
R(mf)TP(MF)	Immature	Males	Females
R(ds)TP(MM)	Dominant	Males	Females
R(ds)TP(FM)	Unemotional		Males
	Socially-Conscious		Females
R(hmlf)TP(MM)	Cooperative		Males
	Soft		Females
R(hmlf)TP(MF)	"Oldmanlike"	Males	Females
	Soft-Spoken	Females	
	Serious		Males
R(hmlf)TP(FF)	Fair of Hair	Males	Females
R(hmlf)TP(FM)	Feminine	Males	
	Dependent	Females	
R(hd)TP(MM)	Articulate	Males	
	Gregarious	Females	
R(hd)TP(MF)	Soft	Males	
	Muffled	Females	
R(hd)TP(FF)	Conforming	Males	
	Timid	Females	
R(hd)TP(FM)	Affected	Males	
	Noncommittal	Females	
R(ld)TP(FM)	Self-Conscious		Males
	Natural		Females

Saliency of Dimensions for N, MF, and DS Raters

Table 5 will depict those dimensions of personality which the n, mf, and ds raters considered most or least salient.

Table 5. Saliency of Dimensions for N, MF, and DS Raters

Grouping	Dimensions	Most	Least
R(All)TP(MM)	Gesticulative	mf	
R(All)TP(MF)	Assertive	ds	
R(All)TP(FF)	Soft-Spoken	ds	mf
R(All)TP(FM)	Stereotypically-Feminine		n mf
R(M)TP(MM)	Rugged	n	
	Fragile		mf ds
R(M)TP(MF)	Indoorish	n	
	Assertive	mf	
R(M)TP(FF)	Masculine	n mf	ds
	Personable	ds	n mf
R(M)TP(FM)	Hard	n mf	ds
	Conventional		n mf
	Aggressive	ds	
R(F)TP(MM)	Free-Flowing	n ds	
	Deep		n
	Boyish		ds
R(F)TP(MF)	Restrained	n ds	mf
R(F)TP(FF)	Dependent	n	
	Unparticular	n	
	Open	mf	n
R(F)TP(FM)	Unsure	n mf	
	Feminine	mf	n
	Ladylike		mf
R(hmlf)TP(MM)	Cooperative	n	
	Forceful	mf ds	n
	Soft	mf	n ds

Table 5--continued

Grouping	Dimensions	Most	Least
R(hmlf)TP(MF)	"Oldmanlike"	n	ds
	Soft-Spoken	mf ds	n
	Serious	ds	n mf
R(hmlf)TP(FF)	Hesitant	n ds	mf
	Vacillative	mf	
R(hmlf)TP(FM)	Dependent	n ds	mf
	Best-Dressed		n ds
R(lmhf)TP(MM)	Gentle	n mf ds	
	Imposing	n ds	
	Self-Oriented	mf	n ds
R(lmhf)TP(MF)	Uninhibited	n ds	
	Reflective		n mf
	Fragile		ds
R(lmhf)TP(FF)	Sincere	n mf ds	
	Quiet	n mf	
	"Hip"	n	mf ds
R(lmhf)TP(FM)	Subdued	n mf ds	
	Self-Sufficient		n mf ds
	Open		n mf ds
R(hd)TP(MM)	Articulate	n ds	mf
	Gregarious	n mf	ds
	Intelligent		n mf
R(hd)TP(MF)	Muffled	n ds	
	Soft	n mf	ds
	"Heavy"		n mf ds
R(hd)TP(FF)	Timid	n ds	mf
	Conforming	n	
	Dependent	mf	n ds
R(hd)TP(FM)	Noncommittal	n ds	mf
	Submissive		n
	Affected	mf	ds
R(ld)TP(MM)	Spontaneous	n ds	mf
	Hairless	n mf	ds
	Solitary	mf	
R(ld)TP(MF)	Reserved	n mf ds	
	Aggressive	ds	n mf
	Gentle		n ds
R(ld)TP(FF)	Drab	n ds	mf
	Unfeminine	mf	n ds
	Individualistic	n	

Table 5--continued

Grouping	Dimensions	Most	Least
R(ld)TP(FM)	Weak	n ds	mf
	Natural	mf	n ds
	Self-Conscious		n ds

A look at the abcve results will show that the n-mf raters were in agreement 14 times; the n-ds raters, 21 times; the mf-ds raters, 4 times; and the n-mf-ds raters, 7 times.

Aspects of a Person Attended To

For those who might be interested in seeing the total number of times each aspect was used by each group of raters, Table 6 is provided.

Table 6. Number of Times Aspects of TPs Attended To by Rs

Rs	a	m	vq	vc
All	5	7	7	6
M	8	8	8	4
F	5	6	9	8
n	6	4	3	8
mf	5	7	5	3
ds	5	6	7	7
hmlf	8	7	6	3
lmhf	4	5	8	6
hd	3	4	8	7
ld	6	4	7	6
Totals	55	58	68	58

The Sex of the Interactor

Table 7 summarizes the guessing ability of the Rs. It gives the total number of correct guesses made by the Rs according to the various TP-I combinations.

Table 7. Number of Correct Guesses by Rs for TP-I Combinations

Rs							
M	F	M-M	F-F	M-F	F-M	Same Sex	Diff. Sex
1001	1145	676	725	632	828	1401	1460

DISCUSSION

Data Reproducibility

Since, to this experimenter's knowledge, the INDSCAL multidimensional scaling method had not been previously used in this way to study person perception, there was some initial uncertainty whether discriminative and interpretable results could be obtained. A small pilot study, using six stimulus persons and thirteen raters, yielded a goodness of fit of .78 on three dimensions. But even this encouraging result did not assure the success of applying such a scaling program to a study of much more generous proportions - a study involving sixteen stimulus persons, forty-eight raters, two interactors, and a three-dimensional analysis of forty different groupings.

The results, however, obtained in this present study, attest to the fact that the INDSCAL multidimensional scaling method can be used to considerable advantage in studying individual differences in person perception. For the forty different groupings exposed to a three-dimensional INDSCAL analysis, the correlations between distances in the raw data and distances in the final matrices were better than satisfactory, ranging from .71 to .84.

Expectations and Methodological Comments

Although there were no formal hypotheses, the experimenter had expectations which seem generally realized: 1) It was possible for judges to agree upon names for the dimensions of personality that the raters may have been attributing to target persons involved in same and different sex interactions; 2) The dimensions of personality that the raters were judged to have been attributing to target persons did vary as a function of the sex of the rater, target person, and interactor, and the rater-and target person-type; 3) It was possible to agree upon the relative saliency of the four aspects of a person attended to by raters when attributing dimensions of personality to target persons involved in same and different sex interactions; and, Voice Quality, overall, was the most salient aspect.

However, two expectations were not confirmed: 4) The raters instructed to perceive target persons along masculine-feminine lines did not use dimensions of personality, nor aspects of a person attended to, judged to be similar to raters instructed to perceive target persons along dominant-submissive lines; 5) The raters were wrong more often than right when guessing the sex of the interactor.

The procedures used are highly subjective. The subjective strain is especially evident in the process of determining and naming dimensions of personality and aspects of

a person attended to. Although, as described in the method section, the experimenter took considerable precautions to keep the process of determining and naming dimensions and aspects as objective as possible, there was no conceivable way to appreciably reduce the subjective factor; subjectivity is inherent in the particular methodology.

Method subjectivity might be responsible for the fact that so many different labels were used to describe the dimensions. The diversity may reflect the motivational set of the judges more than the diversity of the raters' perceptual judgments. However, it is just as conceivable that the judges could have been biased to go to the other extreme of taking the easier route of redundancy.

It is also possible that, in some cases, dimensions claimed to be different are really not different at all. They might be simply opposite ends of a bipolar dimension rather than two unidimensional continua (e.g., "rugged" and "fragile"). Or, they might well be describing the same dimension (e.g., "assertive" and "authoritative").

Although such distortions because of subjectivity are not denied, they do not detract from the merit of this study. What this study has sacrificed in the way of experimental control and objectivity of analysis, it has compensated for with the innovations that have evolved from its procedure and methodology.

Instead of focusing upon only one variable at a time, as most of the traditional, experimentally-controlled studies have done, this study considers several at one time - sex of rater, target person, interactor; rater- and target person-type; instructional set of raters (n, mf, ds).

Rather than using photographs or pictures of people as stimulus material, this study involves videotaping stimulus persons while they are involved in relatively natural, unposed interactions, thus avoiding both pitfalls of static material and acted emotions.

This study attempts to search for dimensions of personality, which raters may be attributing to target persons, and name them. At the same time it tries to determine the relative saliency of the cues for the raters attributing dimensions of personality to target persons.

Probably, the most significant contribution that this study makes to the area of person perception is the fact that it demonstrates that the INDSCAL multidimensional scaling method is viable and effective for the study of person perception. The minimum requirement of data reproducibility has been clearly demonstrated, and judges can agree about the dimensions produced by the method.

Ascertaining accuracy of judges' subjective judgments was not the purpose of this study. However, there are procedures by which such a next step could be easily undertaken.

A new set of judges could view the same tapes in the same manner as the "old" judges did, and results compared. Or, the personality dimensions arrived at could be used as semantic differential items for raters' judgments. Or, the TPs could rank-order themselves on the dimensions of personality, and these could be compared with the rank-orderings derived by the INDSCAL method.

Sex Differences in Raters

Within a particular grouping of raters, very frequently, female Rs considered a specific dimension most salient while male Rs considered it the least salient of the three dimensions, and, vice versa. Or, female and male Rs considered different dimensions most or least salient, within a particular grouping. Sometimes, the relative saliency that female and male Rs assigned dimensions was consistent with general stereotypic notions, and, sometimes, not. In any case, stereotypic consistency or inconsistency can be assessed from the perspective of both the perceiver and the perceived.

Is the relevant stereotype that which is applicable to the rater or that which is presumably assumed by the rater to be applicable to the target person? Is saliency of a dimension a function of what is important to the perceiver about himself or herself, or a function of what the perceiver expects of the other person? For example, if being

rugged is important to a man, will a dimension of ruggedness necessarily be important in his perceptions of women? It might be important to him to see a woman as low in ruggedness, or it might be irrelevant in his reactions to women. Both variation as a function of the TP and as a function of the R seem to have occurred in these data.

Will dimensions which are stereotypically inconsistent "stick out" in a rater's judgments, or be relegated to second place by a "press" to evaluate on stereotypically consistent dimensions? Again, both effects seem evident.

The terms "consistent" and "inconsistent" will be used here with reference to either the TP or the R alone, with acknowledgment that this is likely to be a temporary oversimplification.

Variation as a function of rater characteristics is of most current interest because the major thrust of this study is the systematic assessment of raters' perceptions of nonverbal and verbal behaviors occurring in same and different sex interactions. For example, in a grouping where the TP was a male, male Rs considered the dimension, Soft, most salient; female Rs considered it least salient. Inasmuch as the TP was a male, this is stereotypically inconsistent for the male Rs, but stereotypically consistent for the female Rs. In this same grouping, female Rs considered the dimension, Submissive, most salient; male Rs

considered it least salient. This is stereotypically consistent for both female and male Rs.

In another grouping, where the TP was a female, male Rs considered the dimension, Stereotypically-Feminine, most salient; female Rs considered the dimension, Submissive, most salient. This is stereotypically consistent for both male and female Rs. However, in another grouping, where the TP was a female, male Rs considered the dimension, Unemotional, least salient; female Rs considered the dimension, Socially-Conscious, least salient. This is stereotypically inconsistent for both male and female Rs.

Type Differences in Raters

The same issues and patterns with respect to sex role consistency are relevant for the personality dimensions considered most or least salient according to rater-type. For example, in a grouping where the TP was a male, hmlf male Rs considered the dimension, Cooperative, least salient (stereotypically consistent for hmlf male Rs); hmlf female Rs considered the dimension, Soft, least salient (stereotypically consistent for hmlf female Rs). In a grouping where the TP was a female, hmlf male Rs considered the dimension, Feminine, most salient (stereotypically consistent for hmlf male Rs); hmlf female Rs considered the dimension, Dependent, most salient (stereotypically inconsistent for hmlf female Rs, unless one supposes that they

were "impressed" with the contrast in the females they were perceiving, relative to themselves).

There is a problem of interpretation when one comes across dimensions such as Dependent for hmlf female Rs, or, Timid for hd female Rs, or, Soft for hd male Rs, where, in each case, the sex of the TP and R is the same. Are these Rs being stereotypically inconsistent because these dimensions presumably are not most salient for them, or, are these Rs being stereotypically consistent in that they are perceiving as salient the opposite end of a bipolar dimension? Both interpretations seem equally acceptable at this point.

Type Differences in Target Persons

Just as the raters were not always consistent with general stereotypes, neither were the target persons. For example, in one grouping, a lmhf female TP is seen as both stereotypically-feminine and sex-appealing (both stereotypically consistent); the other lmhf female TP is neither submissive nor stereotypically-feminine (both stereotypically inconsistent); a hd female TP is considered sex-appealing (stereotypically consistent); a ld female TP is submissive (stereotypically consistent); but not stereotypically-feminine (stereotypically inconsistent); the other ld female TP is neither submissive (stereotypically inconsistent) nor sex-appealing (stereotypically consistent). Even within matched pairs, there is stereotypic inconsistency.

In another grouping, a hmlf male TP is soft (stereotypically inconsistent) but not submissive (stereotypically consistent); a lmhf male TP is soft and submissive but not assertive (stereotypically consistent); a hd male TP is not soft (stereotypically consistent); a ld male TP is neither soft nor submissive (stereotypically inconsistent); the other ld male TP is not assertive but is submissive (stereotypically consistent).

Stereotypic Inconsistency

Consistencies come as no surprise if stereotypes reflect the reality of pressures and expectations on dimensions of judging self and others. However, one of the most exciting features of this study has been the uncovering of a large number of stereotypic inconsistencies. The above examples of Rs and TPs represent only a very small sampling of the sex role inconsistency that was found; neither did groupings by masculinity-femininity or dominance-submissiveness consistently meet general expectations of what dimensions might be expected to be attributed to them on the basis of their personality characteristics.

Clearly, stereotypes are not a mirror of reality of the way people are, at least with respect to the dimensions they use in making judgments of others. Maybe, people are more complicated, perhaps, sensitive to the nuances of other people, than are stereotypes.

Problems of subjectivity in judging might be responsible for the lack of consistencies. If so, this is testimony that subtle biases in judgment in the direction of judges' expectancies is not paramount or exceedingly pervasive; judges are assumed to be reasonably representative in sharing general cultural stereotypes.

Weakness of the basic classification dimensions used in this study might be responsible for the numerous inconsistencies, i.e., there may be a basic order in the data not directly tapped by the dimensions assumed relevant here. Stereotypes do not necessarily and consistently depict what is important to people. Sex, masculinity-femininity, and dominance-submissiveness may not have been critical variables to consider in person perception; these attributes may not be the most important ones operative in behaviors of interaction or in making perceptual judgments. Or, they might be highly relevant, but the inventories used to classify subjects may not be good measures of these attributes.

Another alternative is lack of consistency between self-reports and behaviors, with the lack of consistency of behavior from situation to situation; this frequent lack of relationship between behaviors and assessed personality attributes has been well noted by Mischel.

M-F and D-S Conditions Compared

It was expected that raters instructed to perceive target persons along masculine-feminine lines would use dimensions similar to raters instructed to perceive target persons along dominant-submissive lines. However, this was not the case. Generally, raters, under all three conditions (n, mf, ds) used different dimensions when perceiving target persons.

However, there are some similarities to be found when one takes a look at the relative importance that the raters (n, mf, ds) assigned certain dimensions (see Table 5, page 114): n and mf raters agreed 14 times; n and ds raters, 21 times; mf and ds raters, 4 times; and n, mf, ds raters, 7 times.

Notice that only 4 times did mf and ds raters agree upon the degree of saliency they assigned the dimensions. On the other hand, n and mf raters agreed 14 times, and, n and ds raters agreed 21 times. This would seem to refute the idea that mf and ds raters were perceiving TPs along similar lines. Rather, a relatively strong case could be made that raters, whose perceptions have not been instructionally biased (n raters), will "naturally" perceive target persons along masculine-feminine lines, and, especially, along dominant-submissive lines.

The implications of this are ironical, to say the least. Because, what this seems to be saying is that if

one biases raters to perceive along masculine-feminine or dominant-submissive lines, their perceptions will be quite different. But, if one allows raters to perceive as they will, without these instructional biases, their perceptions will quite often be along masculine-feminine, dominant-submissive lines.

This may be seen as supporting the experimenter's original suggestion that maybe what we mean when we say that someone "looks" masculine to us is that the person "looks" dominant to us, or, that when someone "looks" feminine to us that the person "looks" submissive to us. In this same vein, might it then not be more appropriate to talk about "masculine" women as "dominant," and "feminine" men as "submissive," rather than clinging to role stereotypes per se as categories of importance?

Certainly, the raters' perceptual set to be attune to masculinity-femininity or dominance-submissiveness affects judgments. Probably, individuals naturally differ in predispositions to use such sets. Future investigation of m-f and d-s relations in interpersonal perception seems warranted. For example, one paradigm would be to see if Rs can identify TPs according to types, hmlf, lmhf, hd, and ld; raters could be asked the basis on which they made their judgments of the TP's category. The raters might or might not be able to offer explanations which fit their judgments; this would be interesting in either case. Another procedure

would be to have subjects selected on the basis of varying combinations of high/low masculinity-femininity, and then have them rated on dominance-submissiveness; reversal of basis for subject selection and dimension of judgment is, of course, also appropriate. An interesting variation is to try to determine the relative difficulty of raters' distinguishing between TPs, for example, to see whether hmlf and hd TPs are harder to distinguish between than lmhf and ld TPs, or hmlf and lmhf TPs than hd and ld TPs.

Guessing the Sex of the Interactor

Guessing sex was built into the study to provide another index, in addition to the dimensions judgments, of whether target persons alter their behaviors.

Hiding the interactor's identity from the raters was responsible for the experimenter having to be content with something less than a full-blown interaction. The target person and interactor verbally interacted for a couple of minutes; but when the videotaping began, the camera was zoomed in on the target person and the interactor remained silent through the rest of the interaction. As previously mentioned, an alternative plan to have the interactors operate their own microphone by remote control had to be abandoned because the interactors could not master the technique.

While same and different sex interactions did have an effect upon the raters' perceptions of the target persons,

the identity of the interactor remained largely a mystery to them. As a whole, the raters did badly; they made more wrong guesses than right. Perhaps, they did so poorly because the instruction to guess the sex of the interactor was given verbally, rather than written like the rest. Also, it was mentioned by the experimenter after the raters had rated their first set of 56 paired-comparisons; so, at least for the first set, the sex of the interactor would not have been on their minds. But this rationale would then apply for the first set only.

The raters were also asked, again verbally, to give reasons why they guessed the way they did, and to write them on the back of the target person's card. Most of the raters neglected to do this; they guessed the sex of the interactor, but gave no reasons. This could mean that they were purely guessing, or that they were just too tired to carry through.

The four judges, when reviewing the tapes, did notice nuances of differences in the target persons' behaviors depending upon the sex of the interactor; but, of course, the judges knew in advance the sex of the interactor.

The results (see Table 7, page 117) indicate that: 1) Females are better guessers than males; 2) Raters, overall, are better at guessing the sex of the unseen I when the I is a different sex than the TP; 3) It is easier for raters to guess the sex of the I correctly when the TP is

a female, and, especially when the TP is a female and the I is a male.

Additional Ideas for Future Research

Perhaps, one could infer from No. 3, above, that the behaviors of a female change more perceptibly when she moves across sex lines in interactions, than do a male's - that the sex of the I is more important to females than males. This pattern is consistent with some trends in other research suggesting greater emotional "openness" in females' nonverbal expressions, and females' greater sensitivity to nonverbal behaviors. Designing a study which would test such inferences is just one example of what the experimenter hopes to do in future research.

Another off-shoot of this study that the experimenter would like to pursue involves having the raters rate themselves on the very dimensions they attributed to the target persons. Since both Rs and TPs were originally matched for sex and type, it would be interesting to see what relationship exists between raters' perceptions of themselves and others. The phenomenon of projection is an issue here. An interesting variation would be to see whether hd Rs are more accurate in picking out hds or lds, the question being whether one is more accurate when perceiving another the same or different; this, of course, could be tried with the other types as well, hmlf, lmhf, etc.

Summary

In sum, the analysis method has proved its potential worth in studies of person perception - data reproducibility and discriminable dimensions. Attributes of both raters and target persons are associated with presumed dimensions of judgments. However, there are both consistencies and inconsistencies with general stereotyped expectations of the role of person attributes in interperson perception. Suggestions are given for future research to investigate some of the interesting leads suggested in the present study.

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APPENDIX

TRAIT EVALUATION INDEX

Directions

There are 125 groups of traits on the following pages. Each group contains three descriptive words. Here is an example:

A Restrained
B Unexcited
C Gifted

Your task is to indicate which trait you consider to be MOST descriptive of you, and which one, within the group of three, is LEAST descriptive. There are no right or wrong answers. Choose words that describe you **as you are now** rather than those that may describe how you would like to be.

Mark your answers on the separate answer sheet. Make no marks in this booklet. Below is an example of proper marking of the answer sheet. In this case the individual indicated that **Gifted** is most descriptive of him, and that **Unexcited** is least descriptive.

Mark between the dotted lines under M for MOST and under L for LEAST. In each item you will have one MOST answer, one LEAST answer, and one blank. Make your marks heavy and dark. If you wish to change an answer, be sure to erase completely. Work quickly and carefully.

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1. A Educated
   B Honorable
   C Warm-hearted

2. A Friendly
   B Trustworthy
   C Considerate

3. A Eloquent
   B Easy-going
   C Proper

4. A Obliging
   B Cautious
   C Analytical

5. A Capable
   B Sportsmanlike
   C Respectable

6. A Cool-headed
   B Impartial
   C Courageous

7. A Opportunistic
   B Frank
   C Systematic

8. A Ethical
   B Conversable
   C Self-assured

9. A Self-reliant
   B Reasonable
   C Verbally-expressive

10. A Alert
    B Conscientious
    C Motivated

11. A Truthful
    B Tolerant
    C Well-mannered

12. A Tidy
    B Joyous
    C Obedient

13. A Friendly
    B Trustworthy
    C Considerate

14. A Tender-hearted
    B Unswerving
    C Unconventional

15. A Competent
    B Approachable
    C Achieving

16. A Unbiased
    B Flexible
    C Insightful

17. A Relentless
    B Charitable
    C Jovial

18. A Polished
    B Exact
    C Compliant

19. A Responsive
    B Patient
    C Hopeful

20. A Tasteful
    B Reputable
    C Straightforward

21. A Likeable
    B Honest
    C Accurate

22. A Learned
    B Willing
    C Hard-working

23. A Willing
    B Active
    C Unprejudiced

24. A Natural
    B Punctual
    C Happy

25. A Forthright
    B Good-natured
    C Inquiring

26. A Careful
    B Talented
    C Self-directing

27. A Persevering
    B Bright
    C Courteous

28. A Ambitious
    B Honest
    C Happy

29. A Polished
    B Exact
    C Compliant

30. A Untiring
    B Obliging
    C Smooth-spoken

31. A Helpful
    B Earnest
    C Communicative

32. A Versatile
    B Willing
    C Kind

33. A Wholesome
    B Prompt-acting
    C Inquisitive

34. A Jubilant
    B Brilliant
    C Unconforming

35. A Conversational
    B Sane
    C Genuine

36. A Articulate
    B Pleasant
    C Agreeable

37. A Intellectual
    B Self-sufficient
    C Spirited

38. A Cordial
    B Merry
    C Success-seeking

39. A Witty
    B Satisfied
    C Methodical

40. A Resourceful
    B Teachable
    C Compassionate

41. A Outgoing
    B Determined
    C Fair-minded

42. A Open-minded
    B Self-reliant
    C Verbally-expressive

43. A Adaptable
B Polite
C Dependable

44. A Intelligent
B Stable
C Sincere

45. A Jubilant
B Brilliant
C Unconforming

46. A Independent
B Good-humored
C Companionable

47. A Eager
B Benevolent
C Daring

48. A Even-tempered
B Competitive
C Individualistic

49. A Fluent
B Sharp-witted
C Studious

50. A Evaluative
B Accomplished
C Self-controlled

51. A Sensible
B Ambitious
C Quick

52. A Lively
B Cultivated
C Optimistic

53. A Assertive
B Refined
C Bold

54. A Reliable
B Mature
C Good-natured

55. A Precise
B Orderly
C Incorruptible

56. A Conscientious
B Sociable
C Reasonable

57. A Candid
B Alterable
C Scrutinizing

58. A Well-organized
B Insightful
C Unafraid

59. A Meditative
B Shrewd
C Talkative

60. A Persistent
B Plain-spoken
C Changeable

61. A Evaluative
B Accomplished
C Self-controlled

62. A Just
B Open-minded
C Enterprising

63. A Self-trusting
B Receptive
C Wise

64. A Correct
B Neat
C Humane

65. A Soft-hearted
B Meticulous
C Sedate

66. A Genial
B Smart
C Rational

67. A Sympathetic
B Able
C Bright

68. A Versatile
B Pleasant
C Self-coordinating

69. A Self-regulated
B Tolerant
C Wise

70. A Soft-hearted
B Self-interested
C Fortune-seeking

71. A Responsible
B Friendly
C Polite

72. A Agreeable
B Sane
C Confident

73. Unfaltering
B Proper
C Studious

74. A Witty
B Compliant
C Methodical

75. A Shrewd
B Meditative
C Tender-hearted

76. A Likeable
B Warm-hearted
C Motivated

77. A Genial
B Smart
C Rational

78. A Learned
B Neat
C Unafraid

79. A Self-trusting
B Honest
C Unbiased

80. A Mature
B Stable
C Reliable

81. A Trustworthy
B Adaptable
C Good-natured

82. A Contented
B Calm
C Energetic

83. A Smooth-spoken
B Obliging
C Unswerving

84. A Enterprising
B Honorable
C Accurate

85. A Respectable
B Rational
C Persevering

86. A Self-reliant
B Punctual
C Courteous

87. A Conversational
B Receptive
C Hopeful

88. A Easy-going
B Reflective
C Incorruptible

89. A Inquiring
B Correct
C Intellectual

90. A Independent
B Earnest
C Self-assured

91. A Cool-headed
B Driving
C Firm-minded

92. A Calm
B Orderly
C Satisfied

93. A Contented
B Calm
C Energetic

94. A Cultivated
B Wholesome
C Self-directing

95. A Self-sufficient
B Careful
C Inquisitive

96. A Proper
B Impartial
C Precise

97. A Fair-minded
B Cheerful
C Ethical

98. A Sociable
B Poised
C Decent

99. A Determined
B Patient
C Well-organized

100. A Relentless
B Systematic
C Frank

101. A Individualistic
B Willing
C Reputable

102. A Eloquent
B Exact
C Polished

103. A Self-sufficient
B Lively
C Cordial

104. A Alterable
B Watchful
C Eager

105. A Enthusiastic
B Respectful
C Courageous

106. A Sportsmanlike
B Quick
C Self-reliant

107. A Obliging
B Cautious
C Persistent

108. A Competent
B Decent
C Poised

109. A Sociable
B Poised
C Decent

110. A Individualistic
B Wholesome
C Careful

111. A Accomplished
B Articulate
C Well-mannered

112. A Fluent
B Energetic
C Tidy

113. A Straightforward
B Kind
C Willing

114. A Respectful
B Reflective
C Enthusiastic

115. A Well-behaved
B Humane
C Unprejudiced

116. A Moral
B Responsive
C Agreeable

117. A Just
B Alert
C Resourceful

118. A Watchful
B Firm-minded
C Driving

119. A Composed
B Aspiring
C Moral

120. A Cheerful
B Perceptive
C Confident

121. A Communicative
B Smart
C Approachable

122. A Agreeable
B Level-headed
C Well-behaved

123. A Outgoing
B Level-headed
C Flexible

124. A Active
B Good-natured
C Tasteful

125. A Respectful
B Reflective
C Enthusiastic

WHAT ARE YOU LIKE?

Answer the following statements either true or false. Answer as honestly as you can. In other words, answer as it really is for you rather than how you think it should be. Use + for true and 0 for false.

ds 1. In being thrown by chance with a stranger, you wait for him to introduce himself. __

ds 2. You are satisfied to let someone else take the lead in group activities. __

3. You hesitate to tell people to mind their own business. __

ds 4. You feel self-conscious in the presence of important people. __

ds 5. You like to sell things (that is, to act as a salesman). __

6. You are so shy it bothers you. __

7. You are often the life of the party. __

ds 8. You seek to avoid all trouble with other people. __

9. You are unhappy unless things in an organization go pretty much as you want them to. __

ds 10. When you are attracted to a person whom you have not met, you make an active attempt to get acquainted even though it may be difficult. __

ds 11. You have more than once taken the lead in organizing a project or a group of some kind. __

12. You would like to be a host or hostess for parties at a club. __

ds 13. You would like to take on important responsibilities such as organizing a new business. __

14. You are happiest when you get involved in a project that calls for rapid action. __

ds 15. When a person does not play fair you hesitate to say anything about it to him. __

ds 16. At the scene of an accident you take an active part in helping out. __

ds 17. You find it somewhat difficult to say "no" to a salesman who tries to sell you something you do not really want. __

18. You would rather apply for a job by writing a letter than by going through with a personal interview. __

19. You would rather stop and think things over before speaking up. __

ds 20. You avoid arguing over a price with a clerk or salesman. __

ds 21. You would rather work for a good boss than for yourself. __

22. It pays to "turn the other cheek" rather than to start a fight. __

ds 23. The thought of making a speech frightens you. __

24. You can express yourself more readily in speech than in writing. __

ds 25. If someone you know has been spreading untrue and bad stories about you, you see him as soon as possible and have a talk about it. __

26. You have often found it necessary to fight for what you believe to be right. __

ds 27. When you were a child, many of your playmates naturally expected you to be the leader. __

28. In group undertakings you almost always feel that your own plans are best. __

29. It bothers you to see someone else bungling a job that you know perfectly well how to manage. __

ds 30. You enjoy applying for a job in person. __

31. You have hesitated to make or accept dates because of shyness. __

32. If anyone steps ahead of you in line, he is likely to hear from you about it. __

33. You sometimes avoid social contacts for fear of doing or saying something wrong. __

34. When you resent the actions of someone you promptly tell him so. __

35. You are a listener rather than a talker in social situations. __

ds 36. When you find that something you have bought is defective, you hesitate to demand a refund. __

ds 37. You hesitate to walk into a meeting when you know that everyone's eyes will be upon you. __

ds 38. When you are served stale or inferior food in a restaurant, you say nothing about it. __

39. You very often seek the advice of other people. __

ds 40. You are rather good at bluffing when you find yourself in difficulty. __

ds 41. You can think of a good excuse when you need one. __

42. If you want a thing done right you must do it yourself. __

ds 43. You speak out in meetings to oppose those you feel sure are wrong. __

ds 44. You like to speak in public. __

45. You see to it that people do not take advantage of you. __

ds 46. If you hold an opinion that is radically different from that expressed by a lecturer, you are likely to tell him about it either during or after the lecture. __

47. You would rather plan an activity than take part in it. __

ds 48. When a clerk in a store waits on others who should come after you, you call his attention to the fact. __

ds 49. When you see someone in a public place you think you recognize, you ask him whether you have met before. __

50. Shyness keeps you from being as popular as you should be. __

ds 51. You take the lead in putting life into a dull party. __

52. You would rather spend an evening reading at home than to attend a large party. __

ds 53. You find it difficult to get rid of a salesman to whom you do not care to listen or give your time. __

54. It bothers you to have other people tell you what you should do. __

ds 55. You find it difficult to ask people for money or other donations even for a cause in which you are interested. __

Sample of Instruction Cards and Rs' TP Rating Card:

How similar are each of these pairs? 1 = most similar, 9 = least similar	(n)

In regard to masculinity-femininity, how similar are each of these pairs? 1 = most similar, 9 = least similar	(mf)

In regard to dominance-submissiveness, how similar are each of these pairs? 1 = most similar, 9 = least similar	(ds)

TP 1 as standard	
1 & 2 ___	
1 & 3 ___	
1 & 4 ___	
1 & 5 ___	Rating Card
1 & 6 ___	
1 & 7 ___	
1 & 8 ___	