

AN ABSTRACT OF THE THESIS OF

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the Clothing by the Viewer and Similarity to the Clothing
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Perception between people is part of the process of nonverbal communication. Person perception including body, facial expression, facial features, and clothing is part of the process that results in the formation of impressions of persons by each other.

The purpose of this study was to investigate clothing perception and develop methods of evaluating what is noticed about clothing in simulated first encounter situations.

This study investigated relationships between number and type of clothing clues, degree of liking for clothing viewed, and similarity of clothing of stimulus to subject (st/su).

Data were collected in the form of written responses by 255 (116 male and 139 female) subjects responding to fourteen stimulus slides of men's and women's clothing. Responses were analyzed for each clothing slide to determine the number of clothing clues and types of clothing clues mentioned. Clothing clue words were categorized into three categories: descriptive (D), inferred (I), and

evaluative (E). Two systems of coding the categories were developed: dominant and composite.

Relationships between the four variables, number of clues, types of clues, degree of liking for clothing viewed, and similarity of clothing of stimulus/subject, were examined using tests of mean, median, chi-square, and the Spearman Correlation Coefficient. Of the six null hypothesis, one was rejected, four were partially rejected, and one failed to be rejected.

There was no significant relationship between types of clothing clues mentioned and the degree of liking for the clothing viewed.

There was a partial relationship between the number of clothing clues and the similarity of clothing of stimulus/subject. Female subjects tended to give a greater number of clothing clues than male subjects when they were viewing similar (female) clothing slides, and also greater numbers of clothing clues when viewing dissimilar (male) clothing slides.

There was a partial relationship between number of clothing clues and degree of liking for clothing viewed. Nine of the fourteen clothing slides had no significant relationship between these variables.

There was a partial relationship between the types of clothing clues given and the similarity of clothing of stimulus/subject. Using the dominant coding system there was no relationship between these variables. Using the composite coding system there was no significant relationship for ten of the fourteen clothing slides.

There was a partial relationship between the degree of liking for clothing viewed and the similarity of clothing of stimulus/subject. Although there were some significant differences between same sex and different sex in the degree of liking, examination of the data shows that there is not consistency in same sex (similar) scoring higher or lower than opposite sex (different) on degree of liking for clothing slide viewed.

There was a significant relationship between number of clothing clues mentioned and type of clothing clue. Subjects using only descriptive words gave a significantly greater number of words. Subjects using only evaluative words gave significantly fewer words. Fewer subjects used words in the inferred category.

In summary, female subjects viewing female clothing slides tended to give significantly different scores when noting the number of clues and the degree of liking for a clothing slide. Male subjects viewing male clothing slides gave fewer numbers of clothing clues than did female subjects. Male and female subjects did not give significantly different types of clothing clues when responding to either male or female clothing slides.

This study shows that it is possible and useful to evaluate clothing perception to determine the number and types of clothing clues. The variables related to similarity and liking could be modified to achieve more determinant results. Additional studies can be undertaken to refine the methods and to investigate other variables related to clothing perception.

Perception of Clothing Clues; Its Relation to Liking
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to the Clothing Worn by the Viewer

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CHAPTER I

INTRODUCTION

Perception of persons by each other is one part of the process of nonverbal communication. Each individual will perceive the appearance of a viewed person from the perspective of his own past experience and his relationship to the current situation. The perception of the other person includes that person's body, facial expression, facial features, hair, and clothing. Goffman (1959) and Stone (1970) consider the messages communicated nonverbally by a person to be at least equal to, if not greater than, any verbal communication.

The act of perceiving another person is actually a reciprocal process. When two persons approach each other in a first encounter situation each person is viewed and is a viewer. The meanings communicated are dependent upon each person's prior experiences, current role, and active reference group. The potential structuring of the current situation also directs the meanings that are assigned to the situation and its participants by the participants.

Several studies (Conner, Peters and Nagasawa, 1975; Douty, 1963; Lasswell and Parshall, 1961) have investigated the part that clothing plays in the perception of persons. These studies have

shown that costume is a definite part of the process of perception that leads to the formation of impressions. Previous studies have also shown that clothing can affect the assignment of subjective as well as objective values by the viewer (Hoult, 1954; Lasswell and Parshall, 1961).

The previous studies mentioned have investigated clothing as a total entity in combination with the person and the surroundings. Rosencranz (1962) studied several types of clues with a focus on the clothing clues, in her utilization of a modified clothing TAT instrument. However, no systematic study has been found of the numbers and types of specific clothing clues that are used by viewers to evaluate the costume of another person. It is also possible that the number and types of clothing clues used to assess an unknown individual will vary depending on the viewer's liking or disliking for the stimulus person's clothing. The similarity or dissimilarity of the stimulus person's clothing to the clothing of the viewer may also cause a variation in the number and kinds of clothing clues used to assess the unknown person.

Statement of Problem

Studies in the area of first encounter situations and person perception have shown that the perception of the clothing of the unknown individual is important in the initial identification of the unknown person. The initial perceptual evaluation of the

unknown person results in a tentative assignment of the possible relationship of the participating individuals by determining their probable roles.

Previous studies in the area of person perception have shown that clothing is an important part of the perceptions that lead to the formation of the first impression (Conner, Peters and Nagasawa, 1975; Douty, 1963; Lasswell and Parshall, 1961). In the above-mentioned studies, clothing has been treated as a total entity in the evaluations of these impressions. There is presently no information concerning the parts of the costume that are most noted in making these evaluations. As Ryan (1966, p. 28) asked: "What is the influence of the viewer on the perception of others or how do individuals differ in their perception of a person, and does this differ with the clothing of the subject being viewed?"

The perceptions of individuals in situations of first encounter are determined by their prior experiences and their individual self-concepts. Thus, several persons perceiving the same object may see different aspects of the same object. Even if the individuals assign common meanings to the same perceived object, the fact that they see the different aspects of the same object indicate that the meanings attributed to the same object may differ.

The general problem area of investigation is to determine if clothing perceptions include the distinguishing of the entities of

a person's clothing when perceiving an unknown person for the first time.

Purpose of Study

The purpose of this study is to determine the number and types of clothing clues perceived by subjects in simulated first encounter situations. By determining the parts of the costume, or clothing clues, that are perceived in first impression situations, it is hoped that some information concerning the use of clothing clues in the formation of first impressions will be gathered.

The study will also attempt to determine if the degree of liking for and similarity of clothing of stimulus/subject is related to the number and types of clothing clues perceived in simulated first encounter situations.

The study will also seek to determine if there is a relationship between the types of clothing clues and the number of clothing clues mentioned by the viewer.

Null Hypotheses

Six null hypotheses have been formulated for the investigation of relationships between the four variables defined for this study.

H₀ 1 There is no relationship between number of clothing clues mentioned by the viewer and similarity of clothing of stimulus/subject (st/su).

- H_0 2 There is no relationship between types of clothing clues mentioned by the viewer and similarity of clothing of stimulus/subject (st/su).
- H_0 3 There is no relationship between number of clothing clues mentioned by the viewer and degree of liking for the clothing viewed.
- H_0 4 There is no relationship between types of clothing clues mentioned by the viewer and degree of liking for the clothing viewed.
- H_0 5 There is no relationship between degree of liking for clothing viewed and similarity of clothing of stimulus/subject (st/su).
- H_0 6 There is no relationship between types of clothing clues mentioned by the viewer and number of clothing clues mentioned by the viewer.

Assumptions

1. It is assumed that the subjects will be able to respond in writing to the directions and projected slides used in this study.
2. It is assumed that the subjects will respond truthfully to the request to write down the item or parts of clothing they see first when viewing the stimulus pictures.

3. It is assumed that the subjects will answer the questions regarding degree of liking honestly.
4. It is assumed that the subjects will have normal vision that will enable them to see the projected images.

Limitations

1. The conclusions of this study can only apply to American college students and cannot be applied to other age groups, or nationalities.
2. The responses from the collection of data for this study can only be evaluated in terms of the specific stimulus pictures presented.

Definitions

For the purpose of this study, the terms below will be defined as follows:

1. Clothing Clues: The parts or aspects of a costume that can be noted and identified by the viewer. These clues can be such items as color, line, name of costume part, and judgments or attributions of the clothing.
2. Number of Clothing Clues: The counted number of clothing clues that are noted and written down by the viewer. Each noticed item or aspect of that item of clothing was counted as one response.

3. Types of Clothing Clues: The categories of items or parts of items noted and written down by the viewer. This study has three categories of types of clothing clues: descriptive (D), inferred (I), and evaluative (E).

Descriptive--words relating to clothing items, colors, accessories, and parts of clothing

Inferred--responses indicating inference about activity, social state, or location

Evaluative --words relating to general impressions of clothing, including fashionability; judgments and evaluations of the perceived clothing

4. Categories of Clothing Clue Classification: Two systems of coding using the combinations of types of clothing clues will be used.

Dominant Coding--notes only the type of clothing clue most often noted in each response sheet; four possible dominant types of scoring, D, I, E, and Y (no dominance)

Composite Coding--takes into account all categories of responses noted on each sheet; seven possible combinations of responses, D, I, E, DI, DE, IE, and DIE

5. Similarity of Clothing of Stimulus/Subject (St/Su): For the purpose of this study, similarity will be defined as same sex of stimulus picture and subject. Thus, men's clothing slides will be judged similar to the male respondents' clothing, and women's clothing slides will be judged similar to female

respondents' clothing. Similarity will be referred to by the term Similarity of Clothing of Stimulus/Subject (St/Su).

6. Liking for: subjective judgment by respondents, based on reaction to totality of clothing presented in each clothing slide.

CHAPTER II

REVIEW OF LITERATURE

Nonverbal Communication

Communication between people is the result of messages being sent and received between participating parties. True communication can result only when the messages are subsequently decoded and meanings are shared and responded to. Harrison (1966) said, "every message must have an originator or source, must be received by someone, and must have some sort of content, and be put into a code" (p. 158). Ruesch and Kees (1956, p. 5) have also stated that communication is the result of sending and receiving signals, and transmitting information concerning the signals.

Communication between people in face-to-face situations takes place both verbally and nonverbally. It has been estimated that 65 percent of human communication is carried out in the nonverbal realm, leaving only 35 percent of communication to verbal messages (Harrison, 1966, p. 161). Thus, nonverbal factors are a major means of interpersonal communication, including the assignment of meaning to the interaction (Leathers, 1976, p. 4).

Nonverbal communication has been categorized in several ways. Harrison (1966, p. 165) has defined four dimensions of nonverbal communication: action, time, object, and space. The dimension of action occurs in time and the dimension of object occurs in space.

Ruesch and Kees (1956, p. 189) developed a categorization of nonverbal communication that is composed of the areas of sign language or gestures, action movement, and object language. Object language includes all intentional and nonintentional displays of material objects including clothing.

Leathers (1976, p. 20) also developed a three-part categorization of nonverbal communication but with slightly different categories. His system focuses on the sense used in perception. The three parts of Leather's system are: visual, auditory, and invisible. The visual category includes kinetic behavior or body movements, proxemic behavior or the use of social and personal space, and artifactual factors such as dress and cosmetics.

Perception

Visual perception is the vehicle for visual communication. The actual act of perceiving is the reception of the visual communication from the stimulus object. Visual communication or perception is generally the first mode of communication in interpersonal interaction. When people are communicating they are continually assessing material surroundings to identify others, their roles, statuses, and group memberships in order to give identification and subsequent meaning to the situation (Ruesch and Kees, 1956, p. 72).

Perception is the result of the individual's awareness of the

objects or conditions present in the situation. The actual act of perception is dependent on the impressions the objects make on the senses of the individual (Allport, 1955, p. 14). Allport concluded that "perception is a somewhat variable activity like breathing, digesting, or learning; a process by which individuals succeed in adapting themselves within the limits of tolerable error to the world in which they live" (p. 14). Because of the involvement of the perceiving individual in the perceptive process, the actual perception is an act of the perceiver (Allport, 1955, p. 43).

Shibutani (1961, p. 564) examined the reference group concept and determined that perception is selective and that the definition of the situation depends on the perspective of the individual. Individual differences in perception both are the cause of, and result in, individual differences that are the product of the different past experiences of each individual.

The act of perception involves the categorization of clues (Bruner, 1958, p. 686). The act of visual perception results in categorization of the visual stimulus and the assignment of tentative meaning to the perceived stimulus. The assignment of meaning is the result of the "assumption that all perceptual experiences are necessarily the end product of a categorization process" (p. 688). Bruner concludes that "the categorical placement of the object leads to the appropriate consequences in terms of the later behavior directed toward the perceived object" (p. 690).

The process of categorization of percepts is the result of the organism moving inferentially from clues to categorical identity (p. 695). Thus, it is from the perceived clues that the individual is able to categorize by placing objects in systems of categories according to past experiences of categorization, and the subsequent learning of the effect of the clues on the environment or situation in which the perceiver finds himself (Bruner, 1958, p. 642). As a result of the individual differences in perception and utilization of clues, observers will assign meanings that are in accord with their past experiences.

Because visual perception is a nonverbal act, the assignment of meaning to perceptual clues can also be nonverbal and in many cases takes place subconsciously. Myers and Myers (1973) stated that "nonverbal signals are often interpreted subconsciously just as they are often given off unconsciously" (p. 171). Leathers (1976) has expanded on the themes of the subconsciousness of nonverbal clues by stating that "nonverbal communication is instinctive and not learned" (p. 8). Because most nonverbal behavior is not consciously learned it is not consciously evaluated, making the evaluation of nonverbal perceptual clues somewhat problematic.

The recent increase of popular literature concerning various aspects of nonverbal interpersonal communication may be making people more conscious of the nonverbal aspects of human behavior. Because clothing is one aspect of the object nonverbal behavior that can be consciously manipulated, the language of clothing has

been the subject of numerous popular articles in books and magazines. There have been both scientific and popular studies of the effect of dress on others. As a result, the realm of nonverbal communication through dress may be studied and used in a practical way in daily life.

The Individual and the Perception of the Situation

The perception of the unknown person in first encounter situations actually results in seeing clues that identify factors such as gender, body shape and movement, hair, facial features and expressions, and clothing. Flugel (1930, p. 15) stated that if the individual was unknown, then clues concerning sex, occupation, nationality, and social standing were sought. He also said that if the individual encountered was known, then the clothing clues would be used to determine mood characteristics.

The perceptions of visual clues by the individual are the basic factors of the nonverbal perception of visual objects, such as other persons, in interpersonal communication. Individuals are unique entities that compose the many groups that constitute a society or culture.

Only individuals, singly or jointly with one another, act. All else--society, culture, social norms, social structure, authority, power--is in the final analysis dependent upon the actions of individuals (Hewitt, 1976, p. 4).

In essence, it is the individual who acts in the process of perception.

The individual, however, is the product as well as the producer of the society of which he is a part. It is the individual who ultimately defines the situation in which he is interacting.

Human conduct takes place within situations that are defined by participants, who act toward one another, the situations themselves, and the objects they contain on the basis of their definitions (Hewitt, 1976, p. 105).

Social experiences provide the materials for the individual to define the situation and himself as part of the situation. The self is the result of the prior definitions of the situation that have been made by the individual (Goffman, 1959). Hewitt (1976) concludes that "individual consciousness of self, others, and the surrounding society is shaped by the social position of the individual" (p. 18).

Social positions that contribute to self-identity include ascribed statuses such as gender, religion, and ethnicity, and achieved statuses such as occupation and the social circles with which people customarily associate or identify (Hewitt, 1976, p. 18). The individual takes into social situations a self-concept that is the product of his past experiences and, in turn, provides the means by which he gathers clues that enable him to define and subsequently act in the present situation.

The initial identification of the situation is essentially a

case of visual perception. Stone (1970) stated, "identifications of one another are ordinarily facilitated by appearance and are often accomplished silently or nonverbally" (p. 394).

The definition of the situation is necessary in interpersonal encounters in order to structure the situation and enable any subsequent interaction to proceed in a meaningful way. "When an individual appears before others, he knowingly and unwittingly projects a definition of the situation, of which a conception of himself is an important part" (Goffman, 1959, p. 242). Goffman (1959) expanded on the importance of impression formation and the definition of the situation by stating:

Impression, in turn, has been treated as a source of information about unapparent facts and as a means by which the recipients can guide their response to the informant without having to wait for the full consequences of the informants' actions to be felt (p. 248).

The appearance of the individual is one of the main factors used in the initial structuring of the situation. Thus, social interaction is initially structured by the nonverbal clues that are perceived by the participants at the initiation of the situation. Goffman (1959) sums up the importance of the defining of the situation by concluding that:

Underlying all social interactions there seems to be a fundamental dialectic. When one individual enters the presence of others he will want to discover the facts of the situation. ... Full information about the situation and the person is rarely available; in

its absence the individual tends to employ substitutes--clues, tests, expressive gestures, status symbols, etc.--as predictive devices. In short, since the reality that the individual is concerned with is unperceivable at the moment, appearances must be relied on in its stead (p. 249).

Thus, the appearance of the individual is vital to the definition of the situation. Appearances are part of the clues that are perceived by the participants as they seek to identify and classify the objects that are present in a given situation. These objects are the components of which nonverbal clues are composed. The way in which the perceiving individual sees these nonverbal clues and assigns meaning to them in accordance with his past experiences determines the initial meaning that these clues will have. The meanings assigned to the perceived clues by specific individuals result in the definition of the situation and the direction that any subsequent action may take within that situation.

First Encounter Situations

First encounter situations are different from other types of situations because they involve persons who are meeting each other for the first time in interpersonal interaction. When nothing is specifically known about the individual seen for the first time, the viewer will utilize the conclusions from previous situations to make a tentative evaluation of the new situation. The initial conclusions from the first impression clues will need to be either

validated and accepted or invalidated and reassessed according to the meanings assigned to the clues from the interaction that follows the initial encounter.

The first line of communication in situations involving first impressions is most likely to be of the visual, nonverbal type. The use of visual objects (clues such as clothing) is more likely to be used in defining the situation when perceiving people that are unknown (Ryan, 1966, p. 13). Because clothing is more distinguishable at a distance than facial features or hands it is the clothes that we use as clues to form first impressions (Flugel, 1930, p. 15). If the encounter involves known persons there is less emphasis on clues that will identify the person and more emphasis on decoding clues that will indicate the mood and current situation of the known individual (Stone, 1970, p. 401).

The utilization of clothing clues is an important part of defining the situation in first encounters. "The function of clothing is to facilitate and organize encounters of strangers and casual acquaintances by making it possible to cast each other in social roles" (Stone, 1970, p. 399). Ryan (1966) stated that the importance of clothing in first encounters is to simplify the perception of others and the perception of the total situation.

Clothing and Nonverbal Communication

The noting of clues of the person encountered by the viewer is an important part in defining the situation. The definition

of the situation is important to any subsequent interpersonal interaction because it determines the type of interaction that will take place. When previously unknown persons are viewed, the person clues seen are part of object nonverbal communication.

Several studies have been conducted to determine the part that clothing plays in identification and attribution of person qualities in interpersonal communication.

Lasswell and Parshall (1961) addressed the topic of clothing, person, and perception of social class, and concluded that "probably the whole person is judged more by some elements from the clothes-posture-body-morphology-hands complex than by elements from the head-face-expression complex" (p. 413).

Ryan (1966, p. 8) wrote that clothing perception simplifies the perception of others and the total situation. Roach and Eicher (1973, p. 183) concluded that industrial societies depend on clothing clues in social encounters. Douty (1963, p. 201) summarized that clothing is viewed as an intimate part of a person's perceptual field and has the potential for affecting the interpretation of that person in the subsequent interaction.

Conner, Peters and Nagasawa (1975) investigated the effect of person and costume on the formation of first impressions and concluded that "costume has a greater effect on social impression than does person" (p. 40).

Using dress as the method of investigation, Hamid (1968, p. 905) studied the consistency of stereotypes and determined that

dress, rather than facial characteristics, influenced the impressions that were formed. A study on the effect of clothing on the status ratings of unknown men was conducted by Hoult (1954). He concluded that "clothing may play an important and measurable part in structuring the nature of interpersonal relationships under certain circumstances" (p. 328).

Buckley and Roach (1974, p. 95) investigated whether clothing is perceived as a significant symbol to communicate certain social and political attitudes, and concluded that appearance influences the evaluations of the observer and subsequent action directed toward the other person.

Thus, previous studies have shown that clothing does play an important part in the act of impression formation. The actual impression depends on the situation and the role taken by the observer. The self-concept and reference group orientation of the observer are especially critical in the case of first encounter situations because the prior experiences of the observer will determine his initial perception and subsequent evaluation of the situation.

Measurement of Clothing Perception

Perception of clothing is part of the process of person perception in nonverbal communication. Previously mentioned studies investigated the relationship between clothing, person, perceived

social aspects, and self-concept. Clothing has been shown to be an important part of perception in nonverbal communication.

Several studies have been conducted to investigate clothing perception and to develop methods for studying the perception of clothing. A measure for investigating the perception of line and design in clothing, based on the Gestalt theory of field dependence, was devised by Baer (1979, p. 292). This study found that differences in responses were related to academic class and assumed age differences. Specifically, older students were more discriminating and accurate in recalling perceived differences in line drawings of clothed persons (Baer, 1979, p. 301).

Clothing perception was investigated in two studies using Semantic Differential measurement devices. Atkins (1976) developed a Personal Clothing Review to evaluate a person's perception of others. Stimulus drawings and Maslow's list of personality variables were used in a Semantic Differential test to measure clothing perception of others (p. 103). Atkins, using female subjects, found an individual's perception of her own clothing was related to her self-concept, but the perception of others' clothing was related only for subjects who were in the career group, and not for subjects who were in the high school or college student groups (p. 106).

DeLong and Larntz (1980) used a Semantic Differential test in conjunction with color photographs to study the measurement of subjective responses to the clothed body form (p. 282). They found

that the Semantic Differential method did have potential value for determining differences within groups and between groups (p. 285).

DeLong (1977) developed a system for measuring clothing perception as a part of a class given to graduate students to increase their awareness and analysis of the costume body form. She used the method of collecting written responses from her subjects describing the clothing they viewed and analyzing these responses in terms of part-whole and morphologic-axiologic orientation. Pre- and post-course data collection sessions were used. When the two sets of data were compared, evidence was found of improved ability to respond to the total costume (p. 221).

Studies have used different data collection instruments and methods of analysis to quantify the analysis of the perception of clothing. These studies investigated several variables related to clothing perception. The investigators were also attempting to develop methods of analyzing clothing perception.

CHAPTER III

INSTRUMENT DEVELOPMENT AND DATA COLLECTION

The data for this study were collected in the form of written responses by the subjects in response to 14 stimulus slides showing a variety of men's and women's clothing. The data collection device was designed to enable the investigator to collect data from groups of 30-70 subjects at one time. The data collection instrument was developed in two parts: clothing slides shown to the subjects and the subject response form for the collection of demographic data, and measurement of the variables of similarity, number of clothing clues, categories of clothing clues, and liking for clothing viewed.

Development of Clothing Slides

Clothing selected for clothing slides to be viewed by the subjects represented the general mode of dress at Oregon State University. A variety of seven male and seven female costumes worn by a male and a female model were photographed with the background removed.

Clothing Viewed

Subjects were asked to respond to pictures of clothing that represented the general mode of student dress at the time on the Oregon State University campus. In preparation for selecting the clothing to be shown to the subjects, an informal observation survey

of student dress was conducted. Students were observed throughout the campus during the day, attending athletic events, and on weekends in restaurants and other places frequented by students.

A general list of types of clothing currently being worn by students was compiled from these observations. The general types of clothing worn by students ranged from very casual (jeans/tee shirts), to casual (pants/shirts or sweaters), to moderate dress (separates, skirts, pants, tops), to dressy attire (dresses, sport jackets), to semiformal (long dresses, suits).

The investigator wanted to show examples of clothing representing the variety of clothing currently being worn by students. There was no attempt to determine the most popular clothing or to show clothing in the ratio that it was being worn at any particular time by students.

Clothing Selected

The clothing selected for use in this study met the following criteria:

1. A variety of outfits ranging from casual to semi-formal.
2. A wide range of color, fabric, and number of clothing items.
3. No extreme clothing colors, styles, or types.
4. No special-use clothing, such as sportswear or outerwear.
5. Clothing accessorized, where appropriate, to complement the total outfit.
6. Clothing which fit model appropriately.

7. A total of fourteen outfits, seven outfits each for male and female models.
8. Male and female clothing corresponding to each other in degree of casualness or dressiness.

The final selection of clothing was determined by the following factors:

1. Total number of clothing slides limited by a possible fatigue factor during viewing, and the time limits of the data collection sessions.
2. Clothing ranging from very casual to semi-formal.
3. Clothing chosen from models' wardrobes.

Clothing Models

It was determined that the best way to present the clothing to the subjects would be slides of clothing on live models. The advantage of showing the clothing on live models is that this is how clothing is most often viewed. Rejected alternatives were using manikins or displaying only the clothing. By using photographed slides of live models the clothing would be viewed in its most natural condition.

Two students, one male and one female, were selected to model the clothing. For photographic purposes, the models were a little above average in height and basically "average" but pleasing in appearance. It was decided to use clothing outfits selected from the

models' wardrobes because both models had a large selection of clothing that met the criteria. Copies of the clothing slides can be found in Appendix A.

Slide Photography

The method of showing the clothing to the subjects was by projecting slides of the models wearing the selected clothing outfits. The use of photography made it possible to show the model without any interfering background that might distract the viewer or impart meaning to the clothing shown. The models were photographed on a seamless background with constant lighting. The models stood in the same position for all fourteen clothing selections photographed.

Slide Presentation

The slides were presented to the subjects in a randomly selected order for slides of male and female models. Male and female clothing were shown alternately. The slides were shown for 30 seconds each in Part A of the data collection, and for 5 seconds each in Part B of the data collection.

The slides were shown alternately with a blank space which was shown for an equal amount of time. The blank space served the purpose of separating one slide image from another, and also provided adequate light in the room for the subjects to complete writing.

Subject-Response Form, Data
Collection, and Scoring

The data for this study were collected from the written responses of 255 subjects responding to fourteen stimulus slides. Data were collected from the subjects concerning demographic information and four variables. The four variables were: similarity of clothing viewed to that customarily worn by the viewer, number of clothing clues, categories of clothing clues, and degree of liking for clothing viewed. The subject-response form can be found in Appendix B.

Demographic Data

The subjects supplied demographic information by checking the appropriate selections on the first page of the subject response form. Information was collected about the subjects' age, sex, academic class, academic major, community size, and current family income level.

Subjects were also requested to indicate if they were raised primarily in this country or another country. Those persons indicating that they were raised in a country other than the United States were not included in this study. It was felt that persons raised primarily in countries other than the United States might perceive the stimulus slides from a different cultural point of view.

Similarity of Clothing of
Stimulus/Subject (St/Su)

Information relating to the variable of similarity to clothing viewed was determined by the sex of the subject as indicated on the subject-response form. Similarity to clothing viewed

occurs when the subject responds to a stimulus slide of the same sex that they are. There are two categories of similarity; female subjects responding to female clothing slides, and male subjects responding to male clothing slides. There are two categories of dissimilar responses; female subjects responding to male clothing slides, and male subjects responding to female clothing slides.

Number of Clothing Clues

The number of clothing clues mentioned by each subject for each of the fourteen slides viewed was determined by counting the number of responses recorded by each subject for each clothing slide. Each subject-response form contained fourteen half-pages of paper. Each half-page was identified by slide number in the upper right-hand corner. The half-pages contained fifteen lines for subject responses.

The responses for each slide were counted to obtain the number of clothing clues noticed. Basically, one clue on each line was counted as one response. There are three exceptions to this basic guide which the investigator decided made the counting of the number of clues more accurate.

1. Connecting words were not counted. Examples of connecting words are: "and," "of," and "the."
2. Two words with different meanings written on one line were counted as two clothing clues. Examples of two words on one line counting as two clothing clues are: "black pants," "plaid shirt," and "tight sweater."

3. Words that did not have meaning unless they were considered with an adjacent word were counted as one clothing clue. Examples of two words counted as one clothing clue are "ill fitting" and "good looking."

The general guidelines for counting the number of clothing clues were: each noticed item or aspect of that item was counted as one response; and each judgment or attribution was counted as one response or clothing clue.

The number of clothing clues was counted for each clothing slide. Each subject had a total of fourteen separate tallies of responses, one for each slide. The numerical range of response numbers for each slide was from zero to fifteen.

Categories of Clothing Clues

Categories of clothing clues were derived from the responses listed by the subject in Part A of the data collection process. Each word counted as a clothing clue was also placed in one of three categories.

The development of the system of categorizing clothing clues was experimental. When the study was planned, tentative categories were developed. A preliminary analysis of the categories of clothing clue words written down by subjects showed a much broader range of responses than anticipated.

The first step in developing a categorization system for

clothing clues elicited was to compile a list of all the clothing clue words mentioned by the subjects. It was then decided to place the words in three categories: descriptive, inferred, and evaluative. These categories were checked by submitting words and categories to faculty and graduate students in the Clothing, Textiles, and Related Arts Department at Oregon State University. Categories of clothing clues and examples of the clues are presented below.

Descriptive Category (D)

This category includes words relating to clothing items, colors, accessories, and parts of clothing. Following are sub-categories and selected examples of each sub-category.

1. Items of clothing (blouse)
2. Fabric (denim)
3. Colors, including color modifiers (light, blue, dark)
4. Accessories (belt)
5. Patterns or design motifs (checked)
6. Parts of clothing (sleeve)
7. Properties of clothing (clings, flowing, layered)
8. Dimensions of clothing (short, small, long, big)
9. Inferred fabric quality (sheer, soft, fuzzy)
10. Condition of clothing (clean, wrinkled, old)
11. Specifications of gender (male, female)
12. Reference to models' physical characteristics (posture, hair, legs)

Inferred Category (I)

This category includes responses indicating inference of activity, social state, or location. Following are sub-categories and selected examples of each sub-category.

1. Occasion (dance, interview)
2. Occupation (secretary)
3. Season or time of day (fall, evening)
4. Temperature (warm, hot)
5. Monetary value (inexpensive)
6. Geographic location (city, home, outdoors, indoors)
7. Age of person, clothing for certain age person (young)
8. Social class (white collar, middle class)
9. Type of clothing (sportswear, evening wear)

Evaluative Category (E)

This category includes words relating to general impressions of clothing, including fashionability. Subjects used words indicating judgment and evaluation of the perceived slide. Words in this category frequently indicated like, dislike, mood, style, and fashionability evaluations. Following are sub-categories and selected examples of each sub-category.

1. Style type (preppy, businesslike, leisurely)
2. Coordination, proportions (complementary, fits well, poor fit)
3. Functionality (impractical)

4. Impressions (respectable, silly, nurd)
5. Fashionability (casual, unattractive, pretty)
6. General clothing feeling (formal, dressy, casual attire)
7. Personality traits, mood (congenial, shy, introverted)
8. Appropriateness (inappropriate, appropriate)

Each clothing response was placed in one of the three categories. Responses to each slide could have words from any one or all three of the clothing clue categories developed. This made it necessary to use a coding system for the combinations of types of clothing clues responded to on each slide. Two coding systems were developed to facilitate the analysis of the types of clothing clues mentioned. A sample of words most frequently mentioned and the categories they were placed in can be found in Appendix C.

Dominant Coding

The first coding system for the combination of types of clothing clues is a dominant type system that only notes the type of clothing clue most often noted in each response sheet. Using the three categories of clothing clues there are four possible dominant types of scoring. These were assigned letters D, I, E, and Y. The Y was assigned if there was no dominant type of clothing clue category. No dominance occurs when there are two or more categories that have an equal number of most frequent responses. The categories and their number system are a nominal scoring system.

Composite Coding

The second coding system for the combination of types of clothing

clues is a composite type that takes into account all categories of responses noted on each slide response sheet. With three categories of clues possible there are seven combinations of responses possible. These combinations are: D, I, E, DI, DE, IE, and DIE. For the purpose of analysis each slide response sheet was assigned a code number corresponding to the combinations of responses on that sheet. Thus D=1, I=2, E=3, DI=4, DE=5, IE=6, and DIE=7. This number is identified as the composite type score. The categories and their numbering system are a nominal scoring system.

Liking for Clothing Viewed

After the subjects had viewed the fourteen slides the first time to record what they noticed about the clothing shown, they were told that they would view the slides a second time to enable them to complete the second section of the data collection. The second section of the data collection asked them to indicate their degree of liking for the outfit shown.

The subjects indicated their degree of liking or disliking for each clothing slide viewed by circling the appropriate number. A six-point scale was used to indicate the subject's degree of liking or disliking for the total outfit shown in the slide. This number became the raw score for each slide viewed.

The possible scores on the liking scale were arranged from 1 (dislike) through 6 (like). An even number of possibilities was listed to force the subjects to indicate a degree of liking or

disliking and did not include the possibility of a middle or neutral choice.

Pretest

The subject-response form, clothing slides, and data collection procedure were pretested on a group of students similar to those who would be participating in the study.

Thirty-five usable pretests from 20 female and 15 male students were used to evaluate the instrument and data collection procedure. Persons participating in the pretest tended to be older (21.7 years) than the subjects used in the data collection (19.8 years).

The subject-response form and clothing slides were not changed after the pretest. A focus slide was added to the beginning of the clothing slides to prevent any of the subjects from viewing the first slide in a different way than the following slides.

Data Collection

The data for this study were collected during regular class sessions from four undergraduate Sociology classes at Oregon State University during Fall Term, 1980, and Winter Term, 1981. Prior to the scheduled class meeting the room was prepared by setting up and focusing the projector and preparing the subject-response form for distribution.

After introductory comments, Appendix D, the investigator administered the data collection to the student subjects. Participation

in the data collection was voluntary. Any persons in the room who did not want to participate were instructed to turn over their subject-response form and return it at the end of the class sessions. Incomplete subject-response forms were not included in the study. There is no way to identify individuals participating in this study with their completed subject-response form. To prevent any association with clothing prior to the collection of data, the investigator was identified only as a graduate student.

Before the subjects were shown the slides the following instructions were read orally.

A series of slides will be shown to you. Pretend that you are seeing the person shown for the first time. Please list what you notice about the clothing in each slide example. Use only one response sheet for each slide. Be sure that the slide number and the response sheet number correspond.

Each slide will be shown for 30 seconds. After viewing each slide, please list on the appropriate response sheet what you notice about the clothing.

Write only one word per line.

After the instructions were read the subjects were able to ask questions for clarification. The instructions were also written on the second page of the subject response form.

Following the instructions, Part A of the data collection took place. Each slide was shown for 30 seconds. Following each slide the projection screen was illuminated but no slide was shown for 30 seconds. This blank illumination allowed enough light for the subjects to complete writing, and also acted as spacing between slides.

After the subjects had viewed the fourteen slides the first time, they were told that they would view the slides a second time to enable them to complete the second section of the data collection.

The following directions were printed in the subject-response form and read orally to the subjects prior to the second viewing of the slides.

The slides will now be shown a second time for you to indicate how much you like or dislike the clothing outfits shown. Please circle the number indicating how much you like or dislike the total outfit shown in each slide.

This time each slide will be shown for only 5 seconds. Be sure that the slide number and the item number on the response sheet corresponds.

The administration of the data collection took approximately 30 minutes, including passing out the subject-response forms, reading instructions, data collection, and collection of the responses at the end of the session.

CHAPTER IV

FINDINGS

Data collected for this study provided information for demographic description of the subjects, information pertaining to four variables, and six pairs of variables.

Demographic Findings

Demographic information for the purpose of describing the sample was collected from the subjects. Demographic information about the subjects include age, school year, school major, community size, and family income level.

Description of Sample

Data were collected from 269 students enrolled in undergraduate Sociology classes at Oregon State University. Data were collected from four different classes during a regularly scheduled class session, two during the Fall 1980 Term and two during the Winter 1981 Term.

Completed questionnaires from 255 subjects, 116 male and 139 female, were usable for this study. Fourteen questionnaires were not usable; ten of these were completed by persons indicating that they were raised primarily in a country other than the United States, and four were incorrectly or incompletely filled out.

Background demographic information for the purpose of describing

the sample was obtained by asking the subjects to check information on the first page of the data collection instrument (Appendix B). This information, with the exception of the item asking for the sex of the subject, was used to describe the subjects participating in this study and not as variables in the study; sex of subject was one of the variables explored.

Age of Subjects

Subjects ranged in age from 18 to 41 years old. The mean age of all subjects was 19.86 years. The majority of the subjects (58.5%) were 18 and 19 years old. The next largest group of subjects were between 20 and 25 years old (38.5%). Only 2.2% of the subjects were 26 years old or older (Table 1). A complete breakdown of the subjects by age can be found in Appendix E.

TABLE 1
Age of Subjects

Age	Male number	% ^a	Female number	% ^a	Total number	% ^a
18-19	61	24.0	88	34.5	149	58.5
20-25	52	20.4	46	18.1	97	38.5
26-up	3	1.2	5	2.0	8	2.2
Total	116	45.6 ^b	139	54.6 ^b	255	99.2 ^b

^aPercent of subjects in category of the total number of subjects

^bPercents may not equal 100% because of rounding off

Academic Class of Subjects

The greatest proportion of the subjects indicated that they were either freshmen or sophomores (74.5%). Juniors, seniors, and special students comprised 25.5% of the total. The proportion of men and women subjects in each class was similar. Only two female subjects indicated that they were special students (Table 2).

Academic School of Subjects

Subjects were enrolled in all eleven of the academic schools that enroll undergraduates at Oregon State University. The three academic schools not having subjects participating in this study enroll only graduate students. The School of Business had the highest percentage of subjects (26.3%). The schools of Liberal Arts, Science, and Education each had between 12% and 15% of the subjects. The remaining eight academic schools were represented by less than 10% of the total sample. Basically, the students participating in this study were from all academic schools enrolling undergraduate students at Oregon State University (Table 3).

Community Size of Subjects' Home

Subjects indicated the approximate size of the community in which they were raised. The greatest percentage (23.1%) indicated that they were raised in communities ranging in population from 10,001 to 25,000. A majority of the subjects (54.5%) indicated a

TABLE 2
Distribution of Subjects by Academic Class

Class	Male			Female			Total	
	number	% male	% ^a	number	% female	% ^a	number	% ^a
Freshman	49	42.2	19.2	57	41.0	22.4	106	41.6
Sophomore	36	31.0	14.1	48	34.5	18.8	84	32.9
Junior	22	19.0	8.6	24	17.2	9.4	46	18.0
Senior	9	7.8	3.5	8	5.8	3.1	17	6.7
Special	0	0.0	0.0	2	1.4	0.8	2	0.8
Total	116	100.0	45.6	139	100.0	54.6	255	99.2 ^b
Composite Freshman Sophomore	85	73.3	33.3	105	75.5	41.2	190	74.5
Composite Junior Senior Special	31	26.7	12.1	34	24.4	13.3	65	25.4

^aPercent of subjects in category of the total subject number

^bPercents may not equal 100% because of rounding off

TABLE 3
Distribution of Subjects by Academic School

Academic School	Male		Female		Total	
	number	% ^a	number	% ^a	number	% ^a
Agriculture	2	0.8	2	0.8	4	1.6
Business	34	13.3	33	12.9	67	26.3
Education	12	4.7	22	8.6	34	13.3
Engineering	20	7.8	2	0.8	22	8.6
Forestry	2	0.8	6	2.4	8	3.1
Health and P.E.	5	2.0	9	3.5	14	5.5
Home Economics	0	0	15	5.9	15	5.9
Liberal Arts	17	6.7	21	8.2	38	14.9
Pharmacy	2	0.8	8	3.1	10	3.9
Science	16	6.3	17	6.7	33	12.9
Interdisciplinary Studies	1	0.4	2	0.8	3	1.2
Undecided	5	2.0	2	0.8	7	2.7
Total	116	45.6	139	54.4	255	100.0

^aPercent of total sample

community size of 25,000 or less. The majority of the subjects participating in this study were from small communities and rural areas although larger towns and cities had the potential of supplying a far greater percentage of the sample for this study (Table 4).

TABLE 4
Distribution of Subjects by Size of
Community in Which They were Raised

Community Population	Male		Female		Total	
	number	% ^a	number	% ^a	number	% ^a
Rural to 2,500 pop	18	7.1	17	6.7	35	13.7
2,501 to 5,000 pop	9	5.1	9	3.5	18	7.1
5,001 to 10,000 pop	13	5.1	14	5.5	27	10.6
10,001 to 25,000 pop	27	10.6	32	12.5	59	23.1
25,001 to 50,000 pop	19	7.5	20	7.8	39	15.3
50,001 to 100,000 pop	11	4.3	14	5.5	25	9.8
Over 100,001 pop	19	7.5	28	11.0	47	18.1
No answer	0	0	5	2.0	5	2.0
Total	116	45.6	139	54.6	255	100.0

^aPercent of total sample

Family Income Level of Subjects

Subjects were requested to check the level of their current total family income. Because of the instructions, the class standing, and age of the students (mostly lower division and age 21 or under) it can be inferred that family is interpreted to mean the family of origin.

The majority of the subjects (87.8%) indicated family income levels from \$10,000 to \$40,000 in nearly equal proportions. One-quarter of the subjects (25.4%) indicated an income level of \$40,000 or higher (Table 5).

TABLE 5
Distribution of Subjects by
Family Income Level

Income	Male		Female		Total	
	number	% ^a	number	% ^a	number	% ^a
Under \$10,000	9	3.6	8	3.2	17	6.9
\$10,001 to \$20,000	30	12.1	25	10.1	55	22.2
\$20,001 to \$30,000	27	10.9	31	12.5	58	23.4
\$30,001 to \$40,000	18	7.3	37	14.9	55	22.2
\$40,001 to \$50,000	13	5.2	15	6.0	28	11.3
Over \$50,001	16	6.5	10	7.7	35	14.1
Total	113	45.6	135	54.4	248 ^b	100.0

^aPercentages are figured on the available information.

^bSeven subjects did not answer this item

Individual Variables

Data were collected about four variables: similarity of clothing of stimulus/subject (st/su), number of clothing clues, type of clothing clues, and liking for clothing viewed.

Similarity of Clothing of Stimulus/Subject (St/Su)

Similarity of clothing viewed to that customarily worn by the viewer is defined as subject responding to a clothing slide that is of the same sex as the subject. There are two categories of similarity; female subjects responding to female clothing slides, and male subjects responding to male clothing slides. There are two categories of dissimilarity; female subjects responding to male clothing slides, and male subjects responding to female clothing slides. Similarity will be designated by the term similarity of clothing of stimulus/subject (st/su). All subjects responded to a total of fourteen clothing slides. Seven of the clothing slides were of male clothing and seven clothing slides were of female clothing (Appendix A).

Number of Clothing Clues

Number of clothing clues was determined by counting the number of responses mentioned by each subject for each of the fourteen clothing slides viewed. Subjects were asked to list what they noticed about the clothing slides that they viewed. One word on

each line of the response sheet was counted as one clothing clue. The general guidelines for counting the number of clothing clues were: each noticed item or aspect of that item was counted as one response, and each judgment or attribution was counted as one response or clothing clue.

The number of clothing clues was counted for each clothing slide. Each subject had a total of fourteen separate tallies of responses, one for each slide.

The number of clothing clues mentioned by each subject for each slide ranged from zero to fourteen. The median number of clothing clues mentioned by all subjects for each slide was four (4) with the exception of slide three which had a median number of three (3) clues (Table 6).

TABLE 6
Median and Mean Scores for
Number of Clothing Clues

Female Clothing Slides			Male Clothing Slides		
Slide #	Median	Mean	Slide #	Median	Mean
1	4	4.15	2	4	4.25
3	3	3.87	4	4	4.55
5	4	4.47	6	4	4.31
7	4	4.55	8	4	4.08
9	4	4.73	10	4	4.63
11	4	4.33	12	4	4.45
13	4	4.02	14	4	4.29
combined \bar{X}		4.37	combined \bar{X}		4.30

The mean number of clothing clues given by all subjects for all clothing slides was 4.34 (Table 6). The mean number of clothing clues given by all subjects for female clothing slides was 4.37. The mean number of clothing clues given by all subjects for male clothing slides was 4.30.

Female subjects gave a greater mean number of clothing clues than male subjects when responding to both female ($\bar{X} = 4.71$) and male ($\bar{X} = 4.70$) clothing slides. Male subjects gave a lower mean number of clothing clues than female subjects when responding to both female ($\bar{X} = 3.82$) and male ($\bar{X} = 3.98$) clothing slides.

Overall, slides evoked nearly the same number of clothing clues for female ($\bar{X} = 4.37$) and male ($\bar{X} = 4.30$) clothing slides (Table 7).

TABLE 7
Mean Number of Clothing Clues for
Male and Female Subjects

Clothing Slides	Mean Number of Clothing Clues		
	male subj.	female subj.	all subj.
Female clothing slides	3.82	4.71	4.37
Male clothing slides	3.98	4.70	4.30
Combined clothing slides	3.90	4.71	4.34

Types of Clothing Clues

Each word mentioned by the subjects that was counted as a clothing clue was categorized as a type of clothing clue. There are

three categories of types of clothing clues:

1. Descriptive (D): Responses of named or descriptive words relating to clothing items, colors, accessories, and parts of clothing
2. Inferred (I): Responses indicating inference about activity, social status, or location
3. Evaluative (E): Responses indicating general impressions of clothing, including fashionability. Subjects indicated judgment and evaluation of the perceived slide.

Responses to each clothing slide could have words from any one or all of the clothing clue categories. Two coding systems were developed to facilitate the analysis of the types of clothing clues mentioned.

Dominant Coding

Dominant coding notes only the type of clothing clue used most often on each clothing slide response sheet. Using the three categories of clothing clues there are four possible categories. These categories were assigned the letters D (descriptive), I (inferred), E (evaluative), and Y. The Y was used if there was no dominant type of clothing clue category. No dominance occurred if two or more categories had an equal number of highest responses. All subjects responding to all slides had the following percentages of responses in each category (Table 8).

TABLE 8
Dominant Coding
Percent Responses in Each Category for All Subjects

All Subjects	Categories			
	D ^a	I ^b	E ^c	Y ^d
	%	%	%	%
Average percent female slides	43.93	3.69	38.11	14.20
Average percent male slides	40.80	3.31	42.64	13.23
Total average percent	42.37	3.50	40.38	13.72

^aDescriptive category

^bInferred category

^cEvaluative category

^dNo dominance

The most frequently used category was D (descriptive). This category had 42.37% of the responses to each slide by each subject. The next most frequently used category was E (evaluative); 40.38% of the responses to each slide were dominant in the evaluative category. The third most used category was Y (no dominance); only 13.72% of the responses for each slide by each subject fell in this category. The least used category was the one using words categorized as inferred (I), which was used only 3.5% of the time.

Composite Coding

Composite coding takes into account all responses categories noted on each slide response sheet. With three categories of types

of clues there are seven combinations of possible responses. These combinations are: D, I, E, DI, DE, IE, and DIE. All subjects responding to all slides had the following percentages of responses in each category (Table 9).

TABLE 9
Composite Coding
Percent Responses in Each Category for All Subjects

All Subjects	Categories						
	D	I	E	DI	DE	IE	DIE
	%	%	%	%	%	%	%
Average percent female slides	22.29	1.53	18.29	2.89	38.46	8.01	8.53
Average percent male slides	17.40	1.49	28.66	1.81	38.31	9.07	8.10
Total average percent	19.85	1.51	23.48	2.35	38.39	8.54	8.32

D = Descriptive category

I = Inferred category

E = Evaluative category

The most frequently used category (DE) was the one using a combination of descriptive and evaluative words. This category was used by 38.39% of the respondents in describing what they had seen. The second most used category was the evaluation type category (E) which was used by 23.48% of the respondents. The next most frequently used category was that using only descriptive (D) words. This was used

in 19.85% of the total responses. When responses for slides of male clothing are compared with those of female clothing the category DE (descriptive/evaluative) had the greatest percentage of responses for both male and female slides. Category E (evaluative) had the most difference with male clothing slides evoking a greater percentage of responses than the female clothing slides. Both male and female clothing slides had the lowest percent of responses in categories I (inferred) and IE (inferred/evaluative).

Three categories were used much less frequently. In descending order of use they were: Category IE (8.54%), category DIE (8.32%), and category I (1.51%). Data on each slide regarding categories used are presented in Appendix F (Dominant coding) and Appendix G (Composite coding).

Liking for Clothing Viewed

The subjects indicated their degree of liking for each clothing slide viewed by circling the appropriate number on a six-point scale. The possible scores ranged from one (dislike) to six (like). The number circled became the raw score for liking for each slide.

The median score for all subjects when viewing each clothing slide and indicating the degree of liking/disliking ranged from 1 to 5. There was a higher average median liking for female clothing slides (3.86) than for the male clothing slides (2.57). The average median liking score for all subjects viewing all clothing slides was 3.22. Median and mean liking scores for all subjects viewing all

clothing slides can be found in Table 10.

TABLE 10
Median and Mean Scores for
Liking of Clothing Viewed

Female clothing slides	Liking for Clothing Viewed			
	Median	Mean male subj.	Mean female subj.	Combined mean
1	2	2.77	2.21	2.46
3	4	3.96	3.85	3.90
5	5	4.42	4.34	4.38
7	4	4.43	3.76	4.06
9	4	3.89	4.41	4.17
11	4	3.60	3.74	3.68
13	4	3.62	4.09	3.88
Combined mean	3.86	3.81	3.77	3.79

Male clothing slides	Liking for Clothing Viewed			
	Median	Mean male subj.	Mean female subj.	Combined mean
2	2	2.25	2.60	2.44
4	4	4.10	4.06	4.08
6	3	3.36	3.55	3.46
8	4	3.36	3.00	3.16
10	1	1.90	2.63	2.30
12	3	2.89	3.28	3.10
14	1	1.64	1.33	1.47
Combined mean	2.57	2.79	2.92	2.86

The combined female clothing slides had higher mean liking scores than combined male clothing slides given by all subjects (Table 10). For all fourteen clothing slides six of the seven female clothing slides ranked 1 through 7 in greatest mean liking. Only one male clothing slide had a higher mean liking score than the combined mean liking score for all female clothing slides.

This study is not evaluating criteria for the degree of liking for clothing viewed other than for the specific variables of similarity, number of clothing clues, and type of clothing clues. Pictures of the clothing slides can be found in Appendix A.

Co-Variables

This study investigated relationships between six pairs of variables. The co-variables are: similarity of clothing of stimulus/subject (st/su) and number of clothing clues, similarity of clothing of stimulus/subject (st/su) and types of clothing clues, number of clothing clues and degree of liking for clothing viewed, types of clothing clues and degree of liking for clothing viewed, similarity of clothing of stimulus/subject (st/su) and degree of liking for clothing viewed, and number of clothing clues and types of clothing clues.

Similarity of Clothing of Stimulus/Subject (St/Su) and Number of Clothing Clues

Relationships between the similarity of clothing of stimulus/subject (st/su) and the number of clothing clues mentioned were examined using tests comparing the means and the medians. Mean and

median tests were run for each clothing slide and for the combined male and female clothing slides.

Mean number of clothing clues mentioned by female subjects when viewing female clothing slides was higher in all seven female clothing slides than the mean number of clothing clues mentioned by male subjects when viewing female clothing slides (Table 11). Mean number of clothing clues mentioned by female subjects when viewing male clothing slides was also higher for all seven male clothing slides than the mean number of clothing clues mentioned by male subjects when viewing male clothing slides.

For female subjects, similarity of clothing of st/su elicited a higher mean number of clothing clues. For male subjects, similarity of clothing of st/su elicited a lower mean number of clothing clues.

Median tests for each of the fourteen clothing slides were used to determine if there was a significant difference in the median number of clothing clues given by similar and different viewers. In the case of the female clothing slides there was a significant difference in the median number of clothing clues given by similar (female) and different (male) viewers in five of the seven clothing slides (Table 12). Female viewers gave the greater number of clues (Table 11). For male clothing slides there was a significant difference in the median number of clothing clues given by similar (male) and different (female) viewers in two of the seven clothing slides (Table 12). Again, female viewers gave the greater number of clothing clues (Table 11).

TABLE 11
Similarity of Clothing of Stimulus/Subject
(St/Su) and Number of Clothing Clues

Female clothing slides	Mean Number of Clothing Clues		
	Male subjects	Female subjects	Male and female subjects
1	3.63	4.58	4.15
3	3.54	4.14	3.87
5	4.03	4.84	4.47
7	3.86	5.13	4.55
9	4.19	5.19	4.73
11	3.84	4.73	4.33
13	3.64	4.71	4.37
Total mean	3.82	4.71	4.37

Male clothing slides	Mean Number of Clothing Clues		
	Male subjects	Female subjects	Male and female subjects
2	3.74	4.67	4.25
4	4.26	4.80	4.55
6	3.99	4.58	4.31
8	3.67	4.44	4.08
10	4.15	5.04	4.63
12	4.13	4.73	4.45
14	3.90	4.63	4.29
Total mean	3.98	4.70	4.30
Combined mean - male and female slides	3.90	4.71	4.34

TABLE 12
 Similarity of Clothing of Stimulus/Subject
 (St/Su) and Number of Clothing Clues

Female clothing slides	Median number clues	Median Test	
		χ^2	2-tailed p
1	4	7.576	.006*
3	3	2.562	.109
5	4	5.082	.024*
7	4	16.430	.000*
9	4	5.359	.021*
11	4	7.829	.005*
13	4	3.781	.052
Male clothing slides	Median number clues	Median Test	
		χ^2	2-tailed p
2	4	7.213	.007*
4	4	.214	.643
6	4	.785	.376
8	4	2.301	.129
10	4	3.994	.046*
12	4	2.476	.116
14	4	3.553	.059

*Significance level to $\leq .05$

Median tests for the combined male clothing slides and female clothing slides show that female subjects gave a significantly larger number of clothing clues above the median when viewing both female ($p = .001$) and male ($p = .002$) clothing slides (Table 13).

TABLE 13
Similarity of Clothing of Stimulus/Subject
(St/Su) and Number of Clothing Clues
Median of Combined Slides

Female clothing slides	Male subjects	Female subjects
above median	40	78
below median	76	61

Median number of clothing clues = 29
 χ^2 11.048 2-tailed p = .001*

Male clothing slides	Male subjects	Female subjects
above median	45	82
below median	71	57

Median number of clothing clues = 27
 χ^2 9.529 2-tailed p = .002*

*Significance level to $\leq .05$

Similarity of Clothing of Stimulus/Subject (St/Su) and Types of Clothing Clues

Dominant Coding

Dominant coding of the types of clothing clues mentioned considers only the most often used type of clothing clue given by each subject for each clothing slide. There are four possible categories of clothing clues: descriptive (D), inferred (I), evaluative (E), and no dominance (Y).

Relationships between dominant type of clothing clue categories mentioned and the similarity of clothing of stimulus/subject (st/su) were examined by using chi-square statistics at a significance level of $p \leq .05$. There were no significant differences between the type of dominant clothing clue given and the similarity of the clothing of st/su (Table 14). There is no relationship between the type of clothing clue given by the viewer and the similarity of clothing of st/su using the dominant type of clothing clue categorization.

Composite Coding

Composite coding of the types of clothing clues takes into account all types of clothing clues mentioned by each subject for each clothing slide. There are seven possible combinations of composite clothing clue categories: D, I, E, DI, DE, IE, and DIE. The categories are D (descriptive), I (inferred), and E (evaluative).

Relationships between the composite type of clothing clue categories mentioned and the similarity of clothing of stimulus/subject

TABLE 14
 Similarity of Clothing of Stimulus/Subject
 (St/Su) and Dominant Clothing Categories^a

Female clothing slides	χ^2	Significance level ^b
1	5.25769	.1539
3	5.70116	.1271
5	1.30036	.7290
7	6.67635	.0830
9	3.80679	.2831
11	6.59126	.0861
13	1.89940	.5935
Male clothing slides	χ^2	Significance level ^b
2	3.79703	.2842
4	2.48995	.4771
6	0.47366	.9246
8	1.72127	.6322
10	4.16972	.2437
12	5.07204	.1666
14	1.61346	.6536

^aFour possible categories (D, I, E, and Y)

^bSignificance level to $\leq .05$; df = 3

were examined by using chi-square tables at a significance level of $p \leq .05$. There were significant differences between the composite type of clothing clue given and the similarity of clothing of st/su in four of the possible fourteen cases; two for female clothing slides and two for male clothing slides (Table 15).

The relationship between the type of composite clothing clue and the similarity of clothing of st/su was very weak. Considering the total results, there is probably no definite relationship between the variables type of clothing clue and similarity of clothing of stimulus/subject (st/su).

Number of Clothing Clues and Degree of Liking for Clothing Viewed

Possible relationships between the number of clothing clues given for each clothing slide and the degree of liking for that clothing slide were examined using the Spearman Correlation Coefficient. There is a significant positive correlation in five of the possible fourteen cases (Table 16). Four of the significant cases were for the female clothing slides and one case was for a male clothing slide.

TABLE 15
 Similarity of Clothing of Stimulus/Subject
 (St/Su) and Composite Clothing Categories^a

Female clothing slides	χ^2	Significance level ^b
1	6.06150	.4163
3	6.84138	.3358
5	15.50110	.0167*
7	13.61159	.0343*
9	6.97803	.3229
11	2.01355	.9184
13	5.26161	.5107
Male clothing slides	χ^2	Significance level ^b
2	7.38760	.2865
4	9.08031	.1691
6	3.22295	.7804
8	4.37391	.6262
10	11.51101	.0738
12	15.84432	.0146*
14	16.26822	.0124*

^aSeven possible categories (D, I, E, DI, DE, IE, and DIE)

* ^bSignificance level to $\leq .05$; df = 6

TABLE 16
 Number of Clothing Clues and Degree
 of Liking for Clothing Viewed

Female clothing slides	Spearman Correlation Coefficient	
	Probability [*]	Correlation coefficient
1	.400	-.0161
3	.008 [*]	.1519
5	.193	.0547
7	.196	-.0539
9	.016 [*]	.1353
11	.020 [*]	.1289
13	.001 [*]	.2091

Male clothing slides	Spearman Correlation Coefficient	
	Probability [*]	Correlation coefficient
2	.363	-.0221
4	.106	.0785
6	.257	.0412
8	.350	-.0244
10	.432	.0108
12	.035 [*]	.1138
14	.179	.0580

^{*} Significant to the $\leq .05$ level

Types of Clothing Clues and Degree of Liking for Clothing Viewed

Dominant Coding

Possible relationships between the dominant type of clothing clue categories (D, I, E, and Y) and the degree of liking for the clothing viewed were examined using a median test for each clothing slide (Table 17). There was no relationship at a $\leq .05$ significance level between the degree of liking for the clothing and the type of clothing clue given using the dominant type of clothing clue categorization system.

Composite Coding

Possible relationships between the composite type of clothing clue categories (D, I, E, DI, DE, IE, and DIE) and the degree of liking for the clothing viewed were examined using a median test for each clothing slide (Table 18). There was no relationship at a $\leq .05$ significance level between the degree of liking for each slide and the type of clothing clue given using the composite type of clothing clue categorization.

Similarity of Clothing of Stimulus/Subject (St/Su) and Degree of Liking for Clothing Viewed

Possible relationships between the similarity of clothing of stimulus/subject and the degree of liking for the clothing viewed were examined using median and mean tests for each clothing slide.

TABLE 17
Degree of Liking for Clothing Viewed
and Dominant Clothing Categories^a

Female clothing slides	Liking median	Median Test	
		χ^2	Significance level ^b
1	2	1.425	.700
3	4	5.338	.149
5	5	2.518	.472
7	4	3.836	.280
9	4	2.936	.402
11	4	7.213	.065
13	4	1.185	.757
Male clothing slides	Liking median	Median Test	
		χ^2	Significance level ^b
2	2	4.474	.215
4	4	5.187	.159
6	3	4.122	.249
8	4	4.456	.216
10	1	1.189	.756
12	3	0.888	.828
14	1	5.758	.124

^aFour possible categories (D, I, E, and Y)

^bSignificance level to $\leq .05$; $df = 3$

TABLE 18
Degree of Liking for Clothing Viewed
and Composite Clothing Categories^a

Female clothing slides	Liking median	Median Test	
		χ^2	Significance level ^b
1	2	11.338	.078
3	4	8.719	.190
5	5	3.350	.764
7	4	2.502	.868
9	4	6.381	.382
11	4	5.358	.499
13	4	4.284	.638

Male clothing slides	Liking median	Median Test	
		χ^2	Significance level ^b
2	2	8.748	.188
4	4	7.679	.263
6	3	1.011	.263
8	4	2.147	.906
10	1	7.846	.248
12	3	8.730	.184
14	1	10.081	.121

^aSeven possible categories (D, I, E, DI, DE, IE, and DIE)

^bSignificance level to $\leq .05$; $df = 6$

Both tests used a chi-square test with a two-tailed p value with a $\leq .05$ level of significance.

The median test tested for differences in the central tendency between the similarity of clothing of st/su and the degree of liking for the clothing shown in that slide.

In female clothing slides, using median tests to examine possible relationships between the similarity of clothing of st/su and the degree of liking for the clothing viewed, there was a significant relationship in five of the seven clothing slides (Table 19). In two cases (slides 1 and 7) female subjects had a significantly greater number of cases of lower liking scores than did male subjects. In one case (slide 9) female subjects had a significantly greater number of cases showing a higher degree of liking for the clothing slide than did male subjects. One slide (slide 11) had both male and female subjects with significantly lower liking scores. Slide number 13 had a significant number of dissimilar (male) subjects showing a lower than median number of liking scores (Table 19).

Although there are differences between same sex (female) and opposite sex (male) in scores on liking, examination of data in the median squares shows that there is not consistency in same sex (female) scoring higher or lower than opposite sex (male) on degree of liking for the female clothing slides.

In male clothing slides only one out of seven slides had significant difference in the degree of liking between similar (male) and different (female) subjects. In the fourteenth clothing slide

TABLE 19
Similarity of Clothing of Stimulus/Subject (St/Su)
and Degree of Liking for Clothing Viewed

Female clothing slides	Median	Median Squares		Median Test	
		Males (diff)	Female (same)	χ^2	Two-tailed p value
1	2	$\begin{array}{c c} a & 63 \\ \hline b & 53 \end{array}$	$\begin{array}{c c} 45 \\ \hline 94 \end{array}$	11.580	.001*
3	4	$\begin{array}{c c} a & 37 \\ \hline b & 79 \end{array}$	$\begin{array}{c c} 44 \\ \hline 95 \end{array}$	0.009	.925
5	5	$\begin{array}{c c} a & 23 \\ \hline b & 93 \end{array}$	$\begin{array}{c c} 32 \\ \hline 107 \end{array}$	0.216	.642
7	4	$\begin{array}{c c} a & 65 \\ \hline b & 51 \end{array}$	$\begin{array}{c c} 56 \\ \hline 83 \end{array}$	5.672	.017*
9	4	$\begin{array}{c c} a & 42 \\ \hline b & 74 \end{array}$	$\begin{array}{c c} 78 \\ \hline 61 \end{array}$	9.276	.002*
11	4	$\begin{array}{c c} a & 25 \\ \hline b & 91 \end{array}$	$\begin{array}{c c} 47 \\ \hline 92 \end{array}$	4.106	.043*
13	4	$\begin{array}{c c} a & 34 \\ \hline b & 82 \end{array}$	$\begin{array}{c c} 64 \\ \hline 75 \end{array}$	6.792	.009*

^aGreater than median

^bLess than or equal to median

*Significance level to $\leq .05$

a greater number of different (female) subjects showed a difference, liking the clothing slide significantly less than the median expectancy (Table 20).

The mean test used chi-square statistics with a significance level of $\leq .05$. When viewing female clothing slides there was a significant difference in the degree of liking for the clothing viewed in five of the seven clothing slides (Table 21). Because two-tailed p values were used, the direction of the significant difference can only be deduced from the median figures (Tables 19 and 20). When viewing male clothing slides, there was a significant difference in the degree of liking in three of the seven cases. Because the two-tailed p value was used, the direction of the significant difference can be deduced only from the median figures (Tables 18 and 19).

Number of Clothing Clues and
Types of Clothing Clues

Dominant Coding

Relationships between the dominant type of clothing clue categories (D, I, E, and Y) and the number of clothing clues mentioned were examined using a median test for each clothing slide.

In all fourteen clothing slides, the number of clothing clues mentioned was significantly related to the category of clothing clue used to describe the clothing slides (Table 22). In all fourteen clothing slides the number of clothing clues mentioned was higher than the median when descriptive (D) words were the main

TABLE 20
Similarity of Clothing of Stimulus/Subject (St/Su)
and Degree of Liking for Clothing Viewed

Male clothing slides	Median	Median Squares		Median Test	
		Males (same)	Female (diff)	χ^2	Two-tailed p value
2	2	$\begin{array}{c c} a & 43 \\ \hline b & 73 \end{array}$	$\begin{array}{c c} 67 & \\ \hline 72 & \end{array}$	2.757	.097
4	4	$\begin{array}{c c} a & 48 \\ \hline b & 68 \end{array}$	$\begin{array}{c c} 52 & \\ \hline 87 & \end{array}$	0.268	.605
6	3	$\begin{array}{c c} a & 42 \\ \hline b & 74 \end{array}$	$\begin{array}{c c} 67 & \\ \hline 72 & \end{array}$	3.243	.072
8	4	$\begin{array}{c c} a & 26 \\ \hline b & 90 \end{array}$	$\begin{array}{c c} 38 & \\ \hline 101 & \end{array}$	0.575	.448
10	1	$\begin{array}{c c} a & 56 \\ \hline b & 60 \end{array}$	$\begin{array}{c c} 71 & \\ \hline 68 & \end{array}$	0.102	.749
12	3	$\begin{array}{c c} a & 33 \\ \hline b & 83 \end{array}$	$\begin{array}{c c} 54 & \\ \hline 85 & \end{array}$	2.598	.107
14	1	$\begin{array}{c c} a & 50 \\ \hline b & 66 \end{array}$	$\begin{array}{c c} 28 & \\ \hline 111 & \end{array}$	14.636	.000*

^aGreater than median

^bLess than or equal to median

*Significance level to $\leq .05$

TABLE 21
 Similarity of Clothing of Stimulus/Subject (St/Su)
 and Degree of Liking for Clothing Viewed

Female clothing slides	Mean Test	
	χ^2	Two-tailed p value
1	23.96508	.0002*
3	16.58907	.0054*
5	8.86015	.1148
7	13.51076	.0190*
9	23.60939	.0003*
11	8.45831	.1327
13	17.77537	.0032*
Male clothing slides	Mean Test	
	χ^2	Two-tailed p value
2	13.60269	.0183*
4	5.64137	.3427
6	19.04434	.0019*
8	10.82883	.0549
10	4.40583	.4926
12	6.76420	.2388
14	23.33189	.0003*

*Significance level to $\leq .05$; $df = 5$

TABLE 22
 Number of Clothing Clues and Types of
 Clothing Clues - Dominant Coding^a

Female clothing slides	Median	Median Test	
		χ^2	Two-tailed p value
1	4	29.877	.000*
3	3	34.132	.000*
5	4	55.246	.000*
7	4	31.737	.000*
9	4	51.242	.000*
11	4	60.599	.000*
13	4	54.765	.000*

Male clothing slides	Median	Median Test	
		χ^2	Two-tailed p value
2	4	49.345	.000*
4	4	69.890	.000*
6	4	64.364	.000*
8	4	59.907	.000*
10	4	51.142	.000*
12	4	68.355	.000*
14	4	63.118	.000*

^aCategories D, I, E, and Y

*Significance level to $\leq .05$; df = 3

type of clothing clue category mentioned (Table 23). In all fourteen clothing slides the number of clothing clues mentioned was significantly lower than the median when the categories of evaluative (E), inferred (I), and no dominance (Y) were used (Table 23).

Composite Coding

Relationships between the composite type of clothing clue categories (D, I, E, DI, DE, IE, and DIE) and the number of clothing clues mentioned were examined using a median test for each clothing slide. The composite type of clothing clue categorization has a total of seven possible categories. Three of these categories contain only one type of word D (descriptive), I (inferred), and E (evaluative). When a slide description is categorized in any of these three categories, it contains only words that are in one category. The four remaining categories (DI, DE, IE, and DIE) contain combinations of the three basic clothing clue categories. A slide description placed in these categories contains words that have been placed in two or more of the basic categories.

In all fourteen clothing slides, the number of clothing clues mentioned was significantly related to the type of clothing clue used to describe the clothing slide (Table 24). In all fourteen clothing slides, the number of clothing clues mentioned that were placed in the descriptive (D) category was significantly higher than the median (Table 25). The number of clothing clues mentioned that were placed in the categories of inferred (I), evaluative (E), DI,

TABLE 23
Number of Clothing Clues and Dominant
Clothing Categories

Female clothing slides	Median Test			
	D ^a	I ^a	E ^a	Y ^a
1	^b 74 _c 67	0 5	19 54	4 30
3	70 34	2 8	43 46	10 40
5	67 29	2 4	28 97	7 21
7	78 41	2 10	29 59	11 25
9	73 28	1 10	39 70	5 28
11	74 35	2 7	22 76	12 32
13	70 38	3 8	24 72	2 32
Male clothing slides	Median Test			
	D ^a	I ^a	E ^a	Y ^a
2	^b 74 _c 67	1 4	21 84	6 23
4	68 22	2 7	26 99	8 23
6	69 29	0 12	24 86	8 25
8	69 39	2 7	17 83	5 31
10	68 32	2 7	22 82	12 30
12	83 37	2 10	15 73	7 27
14	68 26	0 3	30 96	5 25

^aDominant Categories: D (descriptive), I (inferred), E (evaluative), Y (no dominance)

^bAbove the median; pattern consistent throughout table

^cBelow or equal to median; pattern consistent throughout table

TABLE 24
 Number of Clothing Clues and Types of
 Clothing Clues - Composite Coding^a

Female clothing slides	Median	Median Test	
		χ^2	Two-tailed p value
1	4	21.141	.002 [*]
3	3	46.453	.000 [*]
5	4	73.874	.000 [*]
7	4	33.205	.000 [*]
9	4	36.781	.000 [*]
11	4	51.423	.000 [*]
13	4	41.767	.000 [*]

Male clothing slides	Median	Median Test	
		χ^2	Two-tailed p value
2	4	47.327	.000 [*]
4	4	75.482	.000 [*]
6	4	65.614	.000 [*]
8	4	52.761	.000 [*]
10	4	54.751	.000 [*]
12	4	50.207	.000 [*]
14	4	61.347	.000 [*]

^aCategories D, I, E, DI, DE, IE, and DIE

^{*}Significance level to $\leq .05$; df = 6

TABLE 25
Number of Clothing Clues and Composite Clothing Categories^a

Female clothing slides	Median Test						
	D	I	E	DI	DE	IE	DIE
1	^b 42 ^c 34	<u>0</u> 2	<u>4</u> 28	<u>1</u> 3	<u>47</u> 80	<u>2</u> 4	<u>1</u> 5
3	<u>46</u> 20	<u>0</u> 6	<u>8</u> 28	<u>2</u> 7	<u>40</u> 43	<u>7</u> 19	<u>22</u> 5
5	<u>33</u> 11	<u>0</u> 3	<u>4</u> 58	<u>0</u> 3	<u>47</u> 37	<u>5</u> 26	<u>15</u> 12
7	<u>41</u> 19	<u>0</u> 4	<u>5</u> 29	<u>4</u> 9	<u>49</u> 47	<u>3</u> 9	<u>18</u> 18
9	<u>37</u> 15	<u>0</u> 8	<u>14</u> 40	<u>6</u> 2	<u>45</u> 43	<u>6</u> 18	<u>10</u> 10
11	<u>34</u> 21	<u>0</u> 3	<u>4</u> 56	<u>0</u> 3	<u>51</u> 53	<u>5</u> 11	<u>8</u> 3
13	<u>23</u> 19	<u>0</u> 1	<u>2</u> 44	<u>5</u> 6	<u>52</u> 47	<u>5</u> 22	<u>12</u> 3
Male clothing slides	Median Test						
	D	I	E	DI	DE	IE	DIE
2	^b 32 ^c 21	<u>0</u> 2	<u>5</u> 52	<u>2</u> 1	<u>50</u> 47	<u>5</u> 24	<u>7</u> 6
4	<u>34</u> 8	<u>0</u> 2	<u>6</u> 64	<u>0</u> 4	<u>44</u> 52	<u>5</u> 16	<u>15</u> 5
6	<u>26</u> 12	<u>0</u> 7	<u>5</u> 52	<u>1</u> 4	<u>50</u> 41	<u>3</u> 26	<u>16</u> 10
8	<u>31</u> 16	<u>1</u> 5	<u>3</u> 53	<u>2</u> 2	<u>40</u> 53	<u>4</u> 22	<u>12</u> 9
10	<u>26</u> 6	<u>0</u> 3	<u>3</u> 43	<u>3</u> 7	<u>52</u> 63	<u>4</u> 17	<u>16</u> 12
12	<u>34</u> 18	<u>0</u> 4	<u>4</u> 49	<u>3</u> 2	<u>45</u> 44	<u>5</u> 18	<u>16</u> 12
14	<u>34</u> 11	<u>0</u> 2	<u>10</u> 75	<u>1</u> 0	<u>50</u> 50	<u>3</u> 9	<u>5</u> 3

^aComposite categories: D, I, E, DI, DE, IE, and DIE

^bAbove the median; pattern consistent throughout table.

^cBelow or equal median; pattern consistent throughout table

and IE was significantly less than the median number of clothing clues (Table 25). The categories DE and DIE had numbers of clothing clues that were both above and below the median.

Number of clothing clues is not independent of type of clues. Examination of the above-mentioned tables shows that subjects using only descriptive types of words used a greater number of words than the mean. Subjects using only evaluative or inferred types of words used fewer than the mean number of words. Subjects using combinations of different types of words tended to have less definite differences above and below the median. The actual number of words used appears to be related to the type of word used as shown by the numbers of responses above and below the median (Tables 23 and 25).

CHAPTER V

CONCLUSIONS AND DISCUSSION

This study investigated possible relationships between four variables: number of clothing clues, types of clothing clues, similarity of clothing of stimulus/subject (st/su), and degree of liking for clothing slide viewed. These four variables were examined using six null hypotheses. The hypotheses with the type of clothing clue variables were examined using two systems of categorization of the types of clothing clues. For hypotheses with the similarity variable two tests were employed. Of the six null hypotheses one was rejected, four were partially rejected, and one failed to be rejected.

Conclusions

H_0 1 There is no relationship between number of clothing clues mentioned by the viewer and similarity of clothing of stimulus/subject (st/su).

The null hypothesis is partially rejected.

Two tests of the hypothesis were used because of the two types of similarity of clothing of stimulus/subject. The first type of similarity is the result of female subjects responding to female clothing slides. The second type of similarity is the result of male

subjects responding to male clothing slides. In both cases dissimilarity results when the subject responds to clothing slides of the opposite sex.

The number of clothing clues given for each clothing slide viewed were analyzed using a two-sample median test to obtain a chi-square and a two-tailed p statistic with a significance level of $\leq .05$.

Similarity using female subjects and female clothing slides

When the seven slides of female clothing and number of clothing clues given by similar subjects (female) and dissimilar subjects (male) were examined, responses in the two subject groups were significantly different for five of the seven clothing slides (Table 11). For those five clothing slides, numbers of clues given were greater for similar (female) subjects than for dissimilar (male) subjects (Table 11).

Similarity using male subjects and male clothing slides

When the seven slides of male clothing and number of clothing clues given by similar subjects (male) and dissimilar subjects (female) were examined, responses in the two subject groups were significantly different for two of the seven clothing slides (Table 12). For those two clothing slides, number of clues given were greater for dissimilar (female) subjects than for similar (male) subjects (Table 11).

Thus, the null hypothesis is partially rejected because when

similarity dealt with males viewing male clothing slides the male viewers (similar) failed to give a significantly different number of clothing clues than the female viewers (dissimilar). In looking at the two tests of the hypothesis, female viewers tended to give a higher number of clothing clues both when viewing similar (female) and dissimilar (male) clothing slides.

H_0 2 There is no relationship between types of clothing clues mentioned by the viewer and similarity of clothing of stimulus/subject (st/su).

The null hypothesis is partially rejected.

Dominant coding system for types of clothing clues

Dominant coding of the types of clothing clues mentioned considers only the most frequently used type of clothing clue given by each subject for each clothing slide. Using the three categories of clothing clues, there are four possible categories: descriptive (D), inferred (I), evaluative (E), and Y. The Y is used if there is no dominant type of clothing clue category.

Relationships between the dominant type of clothing clue categories and the similarity of clothing of stimulus/subject (st/su) were examined by using chi-square statistics with a significance level of $\leq .05$.

There were no significant relationships between the similarity

of clothing of st/su and the type of clothing clues given when using the dominant coding system for types of clothing clues (Table 14). Thus, the similarity or dissimilarity of clothing of stimulus/subject is not related to the type of clothing clue used to describe the clothing viewed. The type of clothing clue used can be considered to be independent of the sex of the viewer and the male or femaleness of the clothing viewed.

Composite coding system for types of clothing clues

Composite coding of the types of clothing clues mentioned considers all types of clothing clues mentioned by each subject for each clothing slide. With three categories of clothing clues, there are seven combinations of possible responses: D, I, E, DI, DE, IE, and DIE.

Relationships between the composite type of clothing clue categories and the similarity of clothing of stimulus/subject (st/su) were examined using chi-square statistics with a significance level of $\leq .05$.

There was a significant relationship between composite type of clothing clue coding and similarity of clothing of st/su for four of the fourteen clothing slides (Table 15). Considering the total results, this shows a relatively weak relationship. The relatively large number of possible categories of types of clothing clues using the composite coding system (7 possibilities) could have contributed to the indeterminate type of response. Thus, the

similarity or dissimilarity of the viewer to the clothing slide viewed is not conclusively related to the type of clothing clue used to describe the clothing viewed.

H_0 3 There is no relationship between number of clothing clues mentioned by the viewer and degree of liking for the clothing viewed.

The null hypothesis is partially rejected.

Possible relationships between the number of clothing clues mentioned and the degree of liking for each clothing slide were examined, using the Spearman Correlation Coefficient. There was a significant positive correlation between the variables for only five of the fourteen clothing slides viewed, indicating a partial rejection of this hypothesis (Table 16). It can be concluded that a greater degree of liking for clothing slides will not necessarily result in more clothing clues being given by the subject. Additional studies could be undertaken to determine if the number of clothing clues was related to the degree of either liking or disliking versus a neutral opinion in terms of liking for the clothing viewed.

H_0 4 There is no relationship between types of clothing clues mentioned by the viewer and degree of liking for the clothing viewed.

The null hypothesis failed to be rejected.

Dominant coding system for types of clothing clues

Dominant coding of the types of clothing clues mentioned considers only the most frequently used type of clothing clue given by each subject for each clothing slide. Using the three types of clothing clues, there are four possible categories: descriptive (D), inferred (I), evaluative (E), and Y. The Y is used if there is no dominant type of clothing clue category used.

Relationships between type of clothing clue given, using the dominant coding system, and degree of liking for the clothing slides viewed were examined using median tests with a $\leq .05$ level of significance.

For all fourteen clothing slides, there was no significant relationship between types of clothing clues, using the dominant coding system, and the degree of liking for the clothing slides viewed (Table 17).

Composite coding system for types of clothing clues

Composite coding of the types of clothing clues mentioned considers all combinations of the three types of clothing clues mentioned by each subject for each clothing slide. With three types of clothing clues there are seven combinations of possible responses. These combinations are: D, I, E, DI, DE, IE, and DIE.

Relationships between the type of clothing clue given, using the composite coding system, and the degree of liking for the clothing slide viewed were examined using median tests with a $\leq .05$ level of significance.

For all fourteen clothing slides, there was no significant relationship between types of clothing clues, using the composite coding system, and the degree of liking for the clothing slides viewed (Table 18).

It can be concluded that the degree of liking for an individual clothing slide is not related to the type of clothing clues used to describe that clothing slide. Although subjects mentioned different types of clothing clues (descriptive, inferred, or evaluative) when viewing clothing slides, the type of clothing clue mentioned is not related to the degree of liking indicated for that clothing slide.

H_0 5 There is no relationship between degree of liking for clothing viewed and similarity of clothing of stimulus/subject (st/su).

The null hypothesis is partially rejected.

The tests of the hypothesis were used because of the two types of similarity of clothing of stimulus/subject. The first type of similarity is the result of female subjects responding to female clothing slides. The second type of similarity is the result of

male subjects responding to male clothing slides. In both cases dissimilarity resulted when the subjects responded to clothing slides of the opposite sex.

The hypothesis was tested with two kinds of tests. Possible relationships between similarity of clothing of st/su and the degree of liking for the clothing viewed were examined using a median test and a mean test for each clothing slide. The median test tested for differences in the central tendency between similarity of clothing of st/su and degree of liking for the clothing viewed. Both tests used a chi-square test with a two-tailed p value with a $\leq .05$ level of significance.

Similarity using female subjects and female clothing slides

When the seven slides of female clothing and degree of liking by similar (female) subjects and dissimilar (male) subjects were examined using median tests, responses in the two subject groups were significantly different for five of the seven clothing slides (Table 19). For three of the female clothing slides, similar (female) subjects had significantly lower liking scores than different (male) subjects. For two of the female clothing slides, similar (female) subjects had significantly higher liking scores than the dissimilar (male) subjects (Table 19).

When the seven slides of female clothing and degree of liking by similar (female) subjects and dissimilar (male) subjects were examined using mean tests, responses in the two subject groups

were significantly different for five of the seven clothing slides (Table 21).

Female clothing slides having significant differences between similar (female) and different (male) subjects for both mean and median tests were the same for slides 1, 7, 9, and 13. Slide 3 had a significant difference in mean scores between similar (female) and dissimilar (male) subjects. Slide 11 had a significant difference in median scores between similar (female) and dissimilar (male) subjects.

Similarity using male subjects and male clothing slides

When the seven slides of male clothing and degree of liking by similar (male) and dissimilar (female) subjects were examined using median tests, responses in the two subject groups were significantly different for one of the seven clothing slides (Table 20). For slide 14 similar (male) subjects had a significantly higher degree of liking than the dissimilar (female) subjects.

When the seven slides of male clothing and degree of liking by similar (male) and dissimilar (female) subjects were examined using mean tests, responses in the two subject groups were significantly different for three of the seven clothing slides (Table 21). For two of the three male clothing slides similar (male) subjects had the lower mean liking score. In the third case similar (male) subjects had significantly higher mean liking scores (Table 20).

Although there are some significant differences between same sex and different sex in the median and mean scores on liking, examination of the data shows that there is not consistency in same sex (similar) scoring higher or lower than opposite sex (dissimilar) on degree of liking for the clothing slide viewed. Five of seven female clothing slides had significant differences in mean liking scores between same (female) and different (male) subjects but, as mentioned above, there was no consistency in either similar or dissimilar subjects liking the clothing viewed. Three of the seven male clothing slides had significant differences in mean liking scores but again, there was no consistency in either male (similar) or female (dissimilar) subjects liking the clothing viewed better.

It can be concluded that the degree of liking for an individual clothing slide is only partially related to the similarity of the clothing slide to the viewer. Examination of the mean scores for each clothing slide in categories of male and female subjects show no pattern of similar or different viewers liking a similar or different clothing slide, either more or less and to a significant degree or not. Thus, the hypothesis is partially rejected. Without additional investigation the responses to this hypothesis that are significant can be considered inconclusive.

H_0 6 There is no relationship between types of clothing clues mentioned by the viewer and number of clothing clues mentioned by the viewer.

The null hypothesis is rejected .

Dominant coding system for types of clothing clues

Dominant coding of the types of clothing clues mentioned considers only the most frequently used type of clothing clue given by each subject for each clothing slide. Using the three types of clothing clues, there are four possible categories: descriptive (D), inferred (I), evaluative (E), and Y. The Y is used if there is no dominant type of clothing clue given.

Median tests using the chi-square statistic with a $\leq .05$ significance level were used to determine possible relationships between the type of clothing clues given and the number of clothing clues mentioned for each clothing slide.

In all fourteen clothing slides, there was a significant relationship between the types of clothing clues given and the number of clothing clues (Table 22). In all fourteen clothing slides the number of clothing clues mentioned was greater than the median in a significant number of cases when descriptive (D) words were the main type of clothing clue category mentioned. The number of clothing clues mentioned when inferred (I), evaluative (E), or no dominance (Y) was less than the median in a significant number of cases (Table 23).

Composite coding system for types of clothing clues

Composite coding of the types of clothing clues mentioned by

each subject for each slide considered all types of clothing clues mentioned. With three categories of clues there are seven combinations of possible categories. These categories are: D, I, E, DI, DE, IE, and DIE.

Relationships between the type of clothing clue given and the number of clothing clues mentioned were examined for each clothing slide with median tests using the chi-square statistic with a $\leq .05$ level of significance.

In all fourteen clothing slides the number of clothing clues mentioned was greater than the median in a significant number of cases when descriptive (D) words were the only type of clothing clue words used. When only evaluative (E) words were used the number of clothing clues mentioned was below the median a significant number of times. A combination of descriptive and evaluative words (DE) used to describe a clothing slide did not have a dominant number of clothing clues either greater than or less than the median. The remaining clothing clue categories (I, DI, IE, and DIE) were used much less frequently. Categories I, DI, and IE had a tendency to have fewer than the median number of clothing clues. The category DIE had a more even distribution of cases above and below the median (Table 25).

It can be concluded that there is a significant relationship between the type of words and the number of words used to describe a clothing slide. Persons using only descriptive words tended to use a greater number of words. Persons using only evaluative words

tended to use fewer words to describe what they noticed. Fewer subjects used inferred (I) words, with the result of low cell numbers that made the chi-square statistic questionable. Subjects using inferred (I) words also tended to use fewer words than the median.

Discussion

The study of nonverbal communication includes the perception of clothing as part of the identification of unknown persons. Clothing functions as a means of defining the situation when strangers and casual acquaintances encounter each other (Stone, 1970, p. 399). Douty (1963, p. 201) concluded that clothing is a part of the perceptual field and is a factor in the interpretation of persons in subsequent interactions.

Previous studies investigating relationships between clothing, person, and perceived social aspects determined that clothing is significant in defining the situation (Conner, Peters, and Nagasawa, 1975; Hamid, 1968; Hoult, 1954; and Buckley and Roach, 1974).

Discussion of Conclusions

The methods developed in this study for the quantitative analysis of the number and type of clothing clues were used to determine possible relationships for six hypotheses using four variables. Of

the six null hypotheses, one was rejected, four were partially rejected, and one failed to be rejected. This study was able to reach some tentative conclusions about the perception of clothing. Additional study needs to be undertaken to verify and refine these methods of analyzing clothing clues and to validate the relationships between the variables in this investigation.

The relationship between the number of clothing clues and similarity of clothing of stimulus/subject (st/su) was significantly different for seven of the fourteen clothing slides. Female subjects gave a significantly different mean number of clothing clues when viewing five of seven similar (female) clothing slides. Male subjects gave a significantly different mean number of clothing clues when viewing two of seven similar (male) clothing slides. Examination of the data shows that female subjects gave a higher mean number of clothing clues than male subjects did when viewing all fourteen clothing slides. This indicates that female subjects were more verbal than male subjects when they wrote down what they noticed about the clothing viewed. Females may be more verbal or may notice more about the clothing of others. Traditionally, in the American culture, females are more oriented toward clothing than males. Additional studies of this cultural difference would be of interest.

Relationships between similarity of clothing of stimulus/subject (st/su) and type of clothing clue given were inconclusive. When the dominant categorization system for types of clothing clues was used

there was no significant relationships between similarity of clothing of st/su and type of clothing given. When the composite categorization system for types of clothing clues was used, four of the fourteen clothing slides had significant differences. Thus, a very weak relationship, if any, exists between the variables type of clothing clue and similarity of clothing of stimulus/subject. Additional investigation is needed to show conclusively whether or not a relationship exists.

Partial and inconclusive relationships were shown between the variables number of clothing clues and degree of liking for clothing viewed. Five of the fourteen clothing slides had a significant relationship between these variables. Additional investigation of these variables is indicated.

The relationship between degree of liking for the clothing viewed and similarity of clothing of stimulus/subject is also partial and inconclusive. Five of the seven female clothing slides and three of the seven male clothing slides had a significant relationship between these variables.

The degree of liking for the clothing viewed was not related to the type of clothing clue given. This indicates that the degree of liking for clothing viewed does not affect the types of clothing clues given. Thus, a subject's perception of clothing does not depend on how much that particular clothing is either liked or disliked. DeLong (1977) also concluded that viewers would describe clothing in a variety of ways regardless of their expressed like

or dislike for that clothing.

Additional investigation might be done to determine if intense liking or disliking as compared to no feeling (neutral) about clothing affects the type of clothing clue used.

The number of clothing clues is significantly related to the type of clothing clues given. Subjects given descriptive types of clues gave a significantly greater number of clues. Subjects giving evaluative and inferred types of clues gave significantly fewer clues. This indicates that a person describing physical aspects of what is seen such as color, pattern, or name of garment will use more words than a person using evaluative words such as pretty, casual, and fashionable. The evaluative words are representative of nonverbal evaluations that may include several aspects of a given clothing slide, yet only the evaluative word is written down. This would support the theory that a great deal of communication between persons is carried out in the nonverbal realm, with a relatively small proportion of the total communication resulting in verbal communication.

To summarize, the three hypotheses which included the variable similarity of clothing of stimulus/subject are all partially rejected. There were two types of similarity in this study: female subjects viewing female clothing slides, and male subjects viewing male clothing slides. Both of these types of similarity were considered as part of the variable similarity of clothing of st/su.

The results of the analysis of each slide for each of these hypotheses indicate that the difference in responses may actually be related to female subjects and male subjects each viewing both female and male clothing slides. Female subjects may have similar responses to both male and female clothing slides. Male subjects may also have similar responses to both male and female clothing slides.

The hypothesis which examined the relationship between the number of clothing clues and the degree of liking for the clothing slide viewed was also partially rejected. In the opinion of the investigator, the intensity of either liking or disliking as compared to a neutral feeling toward a clothing slide may be an area of future investigation.

This investigation showed that the type of clothing clues used to describe a clothing slide was not related to the degree of liking for that clothing. A subject will use the same types of clothing clues to describe clothing viewed independent of the degree of liking for each clothing slide.

There was a relationship between the number of clothing clues and the type of clothing clues. A more thorough examination of the specific words in each of the three categories of clothing clues and possible differences in the amount of verbalization between subjects might provide more information in this area.

Discussion of Method

Several studies (Atkins, 1976; Baer, 1979; DeLong, 1977; and DeLong and Larntz, 1980) have investigated clothing perception and developed methods of quantifying clothing perception.

One objective of this study of clothing clue perception was to develop methods of evaluating clothing perception. The investigator used two methods of evaluating the individual clothing clues elicited from subjects recording their perceptions of unknown persons in simulated first encounter situations.

The first method of evaluation was to count the number of clothing clues elicited from the subjects in response to viewing slides of clothed models. The second method of evaluation was to categorize the individual clothing clues. Clothing clues were placed in three categories: descriptive (D), inferred (I), and evaluative (E).

Two systems of evaluating the three types of clothing clues were developed. The dominant system evaluated clothing clues by considering only the type of clothing clue used most frequently for each clothing slide. The composite system evaluated clothing clues by considering all of the three possible types of words used to describe an individual clothing slide.

A similar technique for collecting and evaluating clothing clue perception was used by DeLong (1977). She collected data by instructing subjects to write down what they noticed about the

clothing slides viewed. A system similar to the system used in this study was used for categorizing clothing clues although different variables were being investigated. DeLong analyzed clothing clue responses in terms of part-part, part-whole, and morphologic-axiologic orientation. The morphologic category is similar to the descriptive category used in this study. The axiologic category is similar to the inferred and evaluative categories used in this study.

DeLong (1977) also investigated the variable of most liked and least liked clothing viewed. In contrast, this study had subjects indicate their degree of liking for each of the fourteen clothing slides viewed.

A wide variety of words are used by subjects to describe the same fourteen stimulus clothing slides. This is similar to DeLong (1977) who commented that her results showed there was no common language used when viewing clothing slides to indicate any similar viewing experience.

Although a wide variety of words were used to describe the same clothing slides, it was possible to categorize and evaluate the responses.

In conclusion, this study has provided information about the number and types of clothing clues given as part of the process of the perception of the clothing of unknown persons. This study supports theories of nonverbal communication that indicate that perception of similar stimulus objects by different viewers results

in a variety of impressions depending on the perspective and individuality of each viewer.

The method of categorization of the types of clothing clues mentioned offers a means of analyzing what people notice about the clothing of others without giving the subject a list of pre-selected word descriptions to guide their responses. Refinements of the methods used in this study can be utilized to develop analyses that are more definite and informative.

CHAPTER VI

RECOMMENDATIONS

Recommendations are made for use of this study, suggested improvements of this study, and future studies related to this study.

Use of Study

This study can be used to increase the understanding of what people notice about the clothing of others in simulated first encounter situations. When the subjects were instructed to "write down what you notice about the clothing on the clothing slide," they did not have a prepared list to guide their perceptions. The clothing clue words mentioned by the subjects were words used by the subjects to describe what they noticed. This study offers descriptions of clothing as seen by persons not necessarily related to clothing, clothing studies, or the academic discipline of clothing and textiles.

The method that was developed for this study for classifying the clothing clue words can be used in other studies that seek to analyze what is noticed by persons viewing the clothing of others in simulated first encounter situations.

Improvement of Study

Categories of clothing clues can be modified. The three category system, descriptive (D), inferred (I), and evaluative (E), can

be improved by combining the inferred and evaluative categories. There were relatively few words in the inferred category. This meant that statistical findings may not have been as accurate as they could have been. In retrospect, the inferred and evaluative categories both reflect implied meaning and could be combined into one category. The use of two categories of clothing clues would strengthen evaluations and permit more definitive statistical methods to be used.

The variable similarity should be reorganized so that the same subject is being evaluated for differences between same and different stimuli. This study evaluated differences between same and different subjects responding to the same stimuli.

The demographic variables of age, academic year, academic major, community size, and family income level could be incorporated into the statistical analysis to provide a more complete analysis of the four variables investigated in this study.

Recommendations for Future Study

Possible variations of this study including variations of subjects and clothing slides are numerous. Such studies could provide additional information about what people notice about the clothing of others. Suggested variations of both subjects and clothing slides include: age groups, educational level, socioeconomic groups, cultural groups, occupational groups, and rural-urban groups.

The variable fashionability was not a part of this study. The perceived fashionability of clothing could be a variable to be included in a similar study.

The liking scale could be rearranged to aid in the determination of possible differences in liking. This study used a six-point like-dislike scale. Analyses were testing for differences in means. In the opinion of the investigator, the differences in liking as related to the other variables investigated may be in the intensity of liking or disliking compared to a neutral or no opinion expression by the subject.

This study could be replicated with the exception of the number of clothing clue categories. If only the descriptive (D) and evaluative (E) categories were used, the analysis might show differences in a more definite way. By using two categories of clothing clues, the system of categorization is simplified. The dominant system would have three categories (D, E, and Y), and the composite system would have three categories (D, E, and DE).

CHAPTER VII

SUMMARY

Perception of the clothing of unknown persons is an important part of nonverbal communication, and the establishment of tentative roles between participating individuals. Previous investigations have treated clothing as a total unit when evaluating perceptions of persons and clothing. Clothing has been determined to be an important factor in person perception. There presently is little information concerning the parts and attributes of clothing that are most noted in making evaluations of first impressions. The general problem area of investigation is to determine what aspects of clothing are noticed when perceiving an unknown person for the first time.

The purpose of this study was to investigate four variables related to the perception of the clothing of unknown persons in simulated first encounter situations. The number and types of clothing clues recorded by subjects when viewing stimulus clothing were analyzed. This study also investigated the similarity of clothing of stimulus to subject and degree of liking for stimulus clothing.

Relationships between these four variables were investigated using six null hypotheses. The six null hypotheses are:

H_0 1 There is no relationship between number of clothing clues mentioned by the viewer and similarity of clothing of

stimulus/subject (st/su).

- H_0 2 There is no relationship between types of clothing clues mentioned by the viewer and similarity of clothing of stimulus/subject (st/su).
- H_0 3 There is no relationship between number of clothing clues mentioned by the viewer and degree of liking for the clothing viewed.
- H_0 4 There is no relationship between types of clothing clues mentioned by the viewer and degree of liking for the clothing viewed.
- H_0 5 There is no relationship between degree of liking for clothing viewed and similarity of clothing of stimulus/subject (st/su).
- H_0 6 There is no relationship between types of clothing clues mentioned by the viewer and number of clothing clues mentioned by the viewer.

Data for this study were collected in the form of written responses by subjects responding to fourteen stimulus slides showing a variety of men's and women's clothing. The data collection instrument was developed in two parts: clothing slides and subject response form.

Clothing to be used as the stimulus clothing was selected to represent a variety of the general mode of student dress at this

time on the Oregon State University campus. Clothing selected ranged from very casual through semi-formal. There was no attempt to determine the most popular clothing, or to select clothing in the ratio that it was being worn by students.

It was determined that the best way to present the clothing to the subjects would be slides of clothing on live models. The use of slides enables the position of the models and the background to be controlled. The use of slides made it possible to collect data from large groups of subjects during four data collection sessions.

Fourteen clothing slides (seven male and seven female) were presented to the subjects in a randomly selected order, alternating male and female. The slides were shown for 30 seconds each for the first part of the data collection and for five seconds each for the second part of the data collection.

Data were collected from the written responses of 255 subjects (116 male and 139 female). Data were collected concerning demographic information and four variables.

The subjects supplied demographic information by checking appropriate selections on the first page of the subject response form. Information was collected about the subjects' age, sex, academic class, academic major, community size, and current family income level. Potential subjects raised in a country other than the United States were not included in the study. Except for the item indicating sex of subject, the demographic variables were used

only to describe the subjects.

Information relating to the variable similarity of clothing of stimulus/subject (st/su) was obtained by the subject indicating whether they were male or female on the subject response form. Similarity of clothing of stimulus/subject occurs when the subject and the clothing slide viewed are the same sex. There are two categories of similarity: female subjects responding to female clothing slides and male subjects responding to male clothing slides. Dissimilar responses occur when female subjects respond to male clothing slides and male subjects respond to female clothing slides.

The number of clothing clues mentioned was determined by counting the number of responses recorded by each subject for each of the fourteen clothing slides. Each subject had a total of fourteen separate tallies of responses. The numerical range of responses for each slide was from zero to fifteen.

Each word counted as a clothing clue was also categorized in one of three categories used to determine the type of clothing clue. The three categories of clothing clues are: descriptive (D)--words relating to clothing items, colors, accessories, and parts of clothing; inferred (I)--words indicating inference of activity, social state, or location; and evaluative (E)--words giving general impressions of clothing, indicating judgment and evaluation.

Two coding systems were used to evaluate the type of words used by each subject to describe each clothing slide. The two

coding systems are: dominant coding which considers only the category of words most often noted when describing a clothing slide, and composite coding which considers all categories of words used to describe a clothing slide. Possible categories using the dominant coding system are D, I, E, and Y. No dominance is categorized by a Y. Possible categories using the composite coding system are D, I, E, DI, DE, IE, and DIE.

Subjects were asked to indicate their degree of liking for each clothing slide on a six-point scale. Subjects viewed the slides a second time to enable them to respond to this item. The liking scale ranged from 1 (dislike) through 6 (like).

Relationships between similarity of clothing of stimulus/subject (st/su) and number of clothing clues were examined using tests comparing the mean and median for each clothing slide. Female subjects tended to give a greater number of clothing clues than male subjects when they were viewing similar (female) clothing slides. Male subjects tended to give fewer clothing clues than female subjects when viewing similar (male) clothing slides. Female subjects gave a greater mean number of clues ($\bar{X} = 4.71$) than male subjects ($\bar{X} = 3.90$) when viewing all fourteen clothing slides.

Relationships between similarity of clothing of stimulus/subject (st/su) and types of clothing clues were examined using chi-square statistics with a significance level of $\leq .05$. There was no relationship between similarity of clothing st/su and type of clothing clues using the dominant coding system. There were

significant relationships between similarity of clothing of st/su and type of clothing clue using the composite coding system in four of the fourteen clothing slides.

Relationships between the number of clothing clues given for each clothing slide and the degree of liking for that clothing slide were examined using the Spearman Correlation Coefficient. There was a significant positive correlation for five of the fourteen clothing slides.

Relationships between the types of clothing clues and degree of liking for clothing viewed were examined using a median test for each clothing slide with a $\leq .05$ significance level. There was no relationship between the degree of liking for clothing viewed and both the dominant and composite categorization systems for type of clothing clues.

Relationships between similarity of clothing of stimulus/subject (st/su) and degree of liking for clothing viewed were examined using median and mean tests with a $\leq .05$ significance level. In female clothing slides, the similarity of clothing of st/su and the degree of liking for the clothing viewed, there was a significant difference in five of the seven clothing slides. In male clothing slides only one out of seven slides had a significant difference between similar (male) and dissimilar (female) subjects. Examination of the data shows that there is not consistency in same sex scoring higher or lower than different sex on degree of liking for clothing slide viewed.

Relationships between the number of clothing clues and types of clothing clues were examined using a median test for each clothing slide. In all fourteen cases, there were significant relationships between the number of clothing clues and the type of clothing clue. These relationships were significant using both dominant and composite coding systems for categorizing clothing clues. The number of clothing clues mentioned was significantly higher when descriptive words were used. The number of clothing clues mentioned was significantly lower when evaluative and inferred types of words were used. Subjects using combinations of different types of words tended to have less definite differences above and below the median. The number of words used to describe a clothing slide were related to the type of word used.

In conclusion, one null hypotheses was rejected, four hypotheses were partially rejected, and one hypothesis failed to be rejected.

H_0 1 There is no relationship between number of clothing clues mentioned by the viewer and similarity of clothing of stimulus/subject (st/su). The null hypothesis is partially rejected.

H_0 2 There is no relationship between types of clothing clues mentioned by the viewer and similarity of clothing of stimulus/subject (st/su). The null hypothesis is partially rejected.

- H_0 3 There is no relationship between types of clothing clues mentioned by the viewer and degree of liking for the clothing viewed. The null hypothesis is partially rejected.
- H_0 4 There is no relationship between types of clothing clues mentioned by the viewer and degree of liking for the clothing viewed. The null hypothesis failed to be rejected.
- H_0 5 There is no relationship between degrees of liking for clothing viewed and similarity of clothing of stimulus/subject (st/su). The null hypothesis is partially rejected.
- H_0 6 There is no relationship between types of clothing clues mentioned by the viewer and number of clothing clues mentioned by the viewer. The null hypothesis is rejected.

This study has provided information about the number and type of clothing clues given as part of clothing perception. This study supports theories of nonverbal communication that indicate that perception of similar stimulus objects by different viewers results in a variety of impressions.

Future studies could be conducted to validate the method of categorizing clothing clues. The use of only two categories of clothing clues might enable more precise analytical methods to be

used. Modification of the variables degree of liking for clothing and similarity of clothing of st/su might result in more definite information about these aspects of clothing perception.

In conclusion, it is feasible to investigate and quantify the number and types of clothing clues that are perceived by persons in simulated first encounter situations. The information about the number and type of clothing clues and the degree of liking for perceived clothing and the relationship between similar and different viewers can all be used to understand better the perception of clothing.

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APPENDICES

APPENDIX A

Clothing Slides

The following pages contain prints copied from the slides that were projected for the collection of data. The order in which the slides were viewed was random, alternating female and male clothing slides. The fourteen prints are presented in the order in which they were shown to the subjects.



Slide 1



Slide 2



Slide 3



Slide 4



Slide 5



Slide 6



Slide 7



Slide 8



Slide 9



Slide 10



Slide 11



Slide 12



Slide 13



Slide 14

APPENDIX B
Subject-Response Form

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SUBJECT RESPONSE FORM

Please answer the questions below

1. Age ____
2. Sex: Male ____
Female ____
3. Academic Class (check one)
Fr. ____
Soph. ____
Jr. ____
Sr. ____
Grad. or special ____
4. Probable academic major or area of emphasis

5. Were you raised primarily in this country?
yes ____ or No ____
6. If "no" to question #5, in what country
were you raised? _____
7. In what size of community were you raised?
(check one)
Rural up to 2,500 pop ____
2,501 to 5,000 ____
5,001 to 10,000 ____
10, 001 to 25,000 ____
25, 001 to 50,000 ____
50,001 to 100,000 ____
more than 100,001 pop ____
8. Check the level of your current total family
income.
under \$10,000 ____
\$10,001 to \$20,000 ____
\$20,001 to \$30,000 ____
\$30,001 to \$40,000 ____
\$40,001 to \$50,000 ____
above \$50,001 ____

Appendix B, continued

Part A Instructions

A series of slides will be shown to you. Pretend that you are seeing the person shown for the first time. Please list what you notice about the clothing in each slide example. Use only one response sheet for each slide. Be sure that the slide number and the response sheet number corresponds.

Each slide will be shown for 30 seconds. After viewing each slide please list on the appropriate response sheet what you notice about the clothing.

Write only one word per line.

Appendix B, continued

Part B Instructions

The slides will now be shown a second time for you to indicate how much you like or dislike each of the clothing outfits shown. Please circle the number indicating how much you like or dislike the total outfit shown in each slide.

This time each slide will be shown for only 5 seconds. Be sure that the slide number and the item number on the response sheet correspond.

Appendix B, continued

Part B Response Form
Slide Number

- | | | | | | | |
|-----|---------|---|---|---|---|------|
| 1. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 11. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 12. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 13. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. | Dislike | | | | | Like |
| | 1 | 2 | 3 | 4 | 5 | 6 |

APPENDIX C

Sample of Words Used to Describe Clothing and
the Categories in Which They Were Placed

<u>Descriptive</u>	<u>Inferred</u>	<u>Evaluative</u>
baggy	academic	American cut
belt*	campus dress	attractive
black	church clothing	average
blazer	college*	big, too
blue	date	boring
collar	dinner dress	business-like
dark	everyday wear	casual*
flowered	inexpensive	comfortable
jacket	office worker	conservative
jeans	school outfit*	coordinated
knitted	secretary	drab
pants*	spring	fashionable
plaid	summer	formal (occasion)*
shawl	teacher	matching
shirt*	teenage	nice*
skirt*	upperclass	old-fashioned
sleeves	warm*	stylish
striped	winter	ugly
suit	work	uncomfortable
sweater	youthful	uncoordinated
tie		

* Most frequently used words in each category

APPENDIX D

Oral Instruction to Subject Participants

The following instructions and information were orally administered to the four groups of students who were potential subjects for the collection of data. The subjects were only told that the investigator was a graduate student and not the specific topic of the investigation.

"You are being asked to participate in the collection of data for my thesis. Participation is voluntary. Those not wishing to participate may return the questionnaire unanswered at the end of the session. If at any time you decide not to continue you may stop. Incomplete questionnaires will not be included in the data analysis. Your responses on the questionnaire are anonymous and in no way can be identified with you.

This data collection will be administered in three parts:

1. Demographic information
2. Clue perceptions of clothing slides
3. Indication of your degree of liking/disliking of the clothing shown

After you have completed the first plage of demographic data I will show you a series of slides. You will respond to each numbered slide on the paper with the corresponding number. The slides will be shown only a specific length of time.

After you have responded to the slides the first time, you will be shown the slides a second time. This second showing of the slides will be very brief. At this time you will respond to the third section of this device.

There are written instructions at the beginning of each section. There are no 'correct' responses to be anticipated by you in this questionnaire. Are there any parts of the instructions that need to be clarified at this time?"

At the beginning of each section of the data collection, the investigator read the written instructions in the questionnaire out loud.

At the completion of the session the students were thanked for their participation.

APPENDIX E

Distribution of Subjects by Age and Sex

Age	Male number	% ^a	Female number	% ^a	Total number	% ^a
18	30	11.8	45	17.6	75	29.4
19	31	12.2	43	16.9	74	29.0
20	21	8.2	21	8.2	42	16.5
21	14	5.5	14	5.5	28	11.0
22	9	3.5	6	2.4	15	5.9
23	4	1.6	3	1.2	7	2.7
24	3	1.2	2	0.8	5	2.0
25	1	0.4	0	0	1	0.4
26	1	0.4	1	0.4	2	0.8
27	1	0.4	0	0	1	0.4
29	0	0	1	0.4	1	0.4
30	1	0.4	1	0.4	2	0.8
35	0	0	1	0.4	1	0.4
41	0	0	1	0.4	1	0.4
Total	116	45.5	139	54.5	255	100.0

^aPercent of total sample

APPENDIX F

Dominant Types of Clothing Clues

Numerical Score and Percentages for Slides and All Subjects

Female clothing slides	Dominant Coding System			
	D	I	E	Y
	N ^a % ^b	N ^a % ^b	N ^a % ^b	N ^a % ^b
1	141 55.7	5 2.0	73 28.9	34 13.4
3	104 41.4	10 4.0	89 35.2	50 19.8
5	95 37.4	6 2.4	125 49.2	28 11.0
7	119 46.7	12 4.7	88 34.5	36 14.1
9	101 39.8	11 4.3	109 42.9	33 13.0
11	109 43.3	10 4.0	95 37.7	38 15.1
13	108 43.2	11 4.4	96 38.4	35 14.0

(Continued)

APPENDIX F (Continued)

Male clothing slides	Dominant Coding System			
	D	I	E	Y
	N ^a % ^b	N ^a % ^b	N ^a % ^b	N ^a % ^b
2	115 45.3	5 2.0	105 41.3	29 11.4
4	90 35.3	9 3.5	125 49.0	31 12.2
6	98 38.7	12 4.7	110 43.5	33 13.0
8	108 42.7	9 3.6	100 39.5	36 14.2
10	100 39.2	9 3.5	104 40.8	42 16.5
12	120 47.2	12 4.7	88 34.6	34 13.4
14	94 37.2	3 1.2	126 49.8	30 11.9

^aN Number of subjects using category; some subjects did not respond for some slides

^b% Percentages were determined for actual number of responses

APPENDIX G. Composite Types of Clothing Clues; Numerical Score and Percentages for Slides and All Subjects

Male clothing slides	Composite Coding System													
	D		I		E		DI		DE		IE		DIE	
	N ^a	% ^b	N ^a	% ^b	N ^a	% ^b	N ^a	% ^b	N ^a	% ^b	N ^a	% ^b	N ^a	% ^b
2	53	20.9	2	0.8	57	22.4	3	1.2	97	38.2	29	11.4	13	5.1
4	42	16.5	2	0.8	70	27.5	4	1.6	96	37.6	21	8.2	20	7.8
6	38	15.0	7	2.8	57	22.5	5	2.0	91	36.0	29	11.5	26	10.3
8	47	18.6	6	2.4	56	22.1	4	1.6	93	36.8	26	10.3	21	8.3
10	32	12.5	3	1.2	46	18.0	10	3.9	115	45.1	21	8.2	28	11.0
12	52	20.5	4	1.6	53	20.9	5	2.0	89	35.0	23	9.1	28	11.0
14	45	17.8	2	0.8	85	33.6	1	0.4	100	39.5	12	4.7	8	3.2

(Continued)

APPENDIX G (Continued)

Female clothing slides	Composite Coding System							
	D		I		E		DI	
	N ^a	% ^b	N ^a	% ^b	N ^a	% ^b	N ^a	% ^b
1	76	30.0	2	0.8	32	12.6	4	1.6
3	66	26.1	6	2.4	36	14.2	9	3.6
5	44	17.3	3	1.2	62	24.4	3	1.2
7	60	23.5	4	1.6	34	13.3	13	5.1
9	52	20.5	8	3.1	54	21.3	8	3.1
11	55	21.8	3	1.3	60	23.8	3	1.2
13	42	16.8	1	0.4	46	18.8	11	4.4

^aN Number of subjects using category; some subjects did not respond for some slides

^b% Percentages were determined for actual number of responses.