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A STUDY OF THE RELATIONSHIPS AMONG TEACHERS'  
IMMEDIACY OF DRESS FACTORS AND AFFECTIVE  
LEARNING FACTORS: A RELATIONAL  
COMMUNICATION PERSPECTIVE

THESIS

Presented to the Graduate Council of the  
University of North Texas in Partial  
Fulfillment of the Requirements

For the Degree of

MASTER OF SCIENCE

By

Mark Burks, B. A., M. S.

Denton, Texas

December, 1998

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This thesis examined the relationships among immediacy of dress factors and affective learning factors as they pertain to relational communication. College students ( $N = 482$ ) completed questionnaires indicating perceptions of selected nonverbal immediacy behaviors associated with their teacher's attire. The research predicted that there would be relationships between and among power and affinity of dress, dress immediacy and nonverbal immediacy. Further predictions were made concerning the associations among these variables, affective learning outcomes, and other teacher criteria. Analysis indicated that power of dress, affinity of dress and dress immediacy were viable nonverbal immediacy concepts which related to affective learning outcomes. Research findings indicated that certain instructor variables may also influence these relationships.

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## CHAPTER 1

### RESEARCH PROBLEM

#### Introduction

This chapter introduces the purpose of the study and defines the terms involved in the research. The significance of the study and theoretical base will also be presented in this chapter.

#### Purpose of the Study

This study examined the relationship among teacher's immediacy of dress factors and affective learning factors. Further, these factors were investigated from a relational communication perspective. The purpose of this study was to further the understanding of teacher' nonverbal immediacy behaviors as they related to teacher' attire and dimensions of affective learning.

The connection between nonverbal immediacy behaviors and affective learning has been well researched and is apparent (Andersen, 1979; Chaiken, Gillen, Derlega, Heinen, & Wilson, 1978; Kearney Knutson, 1979; Kearney & McCroskey, 1980; Kearney, Plax, & Wendt-Wasco, 1985; McDowell, McDowell, & Hyerdahl, 1980; Plax, Kearney, McCroskey, & Richmond, 1986). As well as positive learning outcomes, teachers that adopt or incorporate nonverbal immediacy behaviors into their classroom routines have generally benefited from improved student behavior and motivation (Andersen, 1979;



Christophel, 1990; Kearney, Plax, Hays, & Ivey, 1991; Kearney, Plax, Smith, & Sorensen, 1988). In the classroom, immediate behaviors have had the effect of reducing physical and/or psychological distance between the teacher and the students. There are a variety of nonverbal means for increasing immediacy and reducing distance. For example, smiles and positive head nods are two nonverbal behaviors that have the effect of reducing physical and/or psychological distance. Clothing, which is a form or type of nonverbal communication, may be another nonverbal means for reducing distance and increasing immediacy. More specifically, the clothes a person chooses to wear creates an image. Based on this image, others make judgments based on the type of clothing selected. So, the type of clothing selected may encourage or discourage communication, signal approach or avoidance, and may function as a symbolic indicator of similarity or power. With this in mind, teacher attire may be a viable classroom immediacy behavior.

### Definition of Terms

Nonverbal immediacy. Mehrabian (1969) initially conceptualized immediacy as those behaviors that enhance closeness to another. Andersen (1979) expanded this idea to incorporate nonverbal behaviors. According to Andersen (1979) nonverbal immediacy entails those behaviors that reduce physical and/or psychological distance between individuals. In the classroom, nonverbal behaviors can assist teachers in reducing both the physical and psychological distance that may exist between themselves and their students. Nonverbal behaviors may include smiling, increased eye contact, use of direct body orientations, positive head nods, reduced proximal distance, increased use of gestures and

movements (Andersen, 1979). The degree of nonverbal immediacy present between the teacher and the student is an important variable in the overall classroom environment.

Affective learning. Affective learning is one of three human learning dimensions or domains identified by Bloom (1956). According to Bloom (1956), the affective domain of learning refers to attitudes, beliefs, and values held by students toward the subject matter and the learning experience. From an instructional communication perspective, affective learning focuses on a student's positive or negative attitude toward the subject and/or the teacher.

Regular faculty member. For purposes of this study, a regular faculty member was regarded as any full-time or adjunct faculty instructor with the rank of assistant professor, associate professor or professor employed as a classroom instructor.

Graduate student teaching assistant. A graduate student teaching assistant, for purposes of this study, included those students enrolled in a graduate program qualified, capable, and willing to teach undergraduate classes. At the university where the research and data collection for this project occurred, almost all of the academic departments utilized graduate teaching assistants. Most these graduate students were employed as undergraduate classroom instructors teaching mainly lower division courses.

### Significance of the Study

This study focused on college classroom instructors, both regular faculty members and graduate student teaching assistants. Immediacy research indicated that certain types nonverbal immediacy behaviors may provide some advantages to classroom instructors

(Andersen, 1979; Kearney Knutson, 1979; Kearney & McCroskey, 1980; Kearney, Plax, & Wendt-Wasco, 1985; Kelley & Gorham, 1988; McDowell, McDowell, & Hyerdahl, 1980; Richmond, Gorham, & McCroskey, 1987). With this in mind, a teacher's attire is an easily manipulated nonverbal cue, which may enhance or improve nonverbal immediacy behaviors. It is still unclear and important questions need to be answered as to the effect teacher attire has on nonverbal immediacy, relational communication dimensions and affective learning. The study sought to gather, through the use of recognized and specially created measures, more extensive data on the relationship among these variables. With this data new perspectives and insights were gained that will benefit classroom instructors and aid in the overall learning process.

#### Theoretical Base

The study will not be highly theoretical, but will rely primarily on approach-avoidance and reinforcement-attraction concepts. One of the basic tenants of approach-avoidance suggests that individuals approach things they like and avoid unpleasant things

(Mehrabian, 1981). This concept can be expanded to include personal interactions. For example, individuals may approach others they like and avoid people they dislike.

Attraction operates in a similar manner. The reinforcement principle suggests that "we like people who reward us and we dislike people who punish us" (Berscheid & Walster, 1978, p.23).

Returning to the concept of immediacy, increased or higher immediacy behaviors can signal liking, approach, and/or reward, while decreased or lower immediacy

behaviors may indicate indifference, avoidance, and/or punishment. Because clothing is a form of nonverbal communication, students may perceive certain types of attire as being more immediate or less immediate. In other words, the type of clothing worn may signal approach or avoidance behaviors. In the classroom, students' perceptions of teacher attire may affect immediacy.

### Summary

This chapter introduced the purpose of the study, defined the terms involved in the research, the significance of the study and examined the theoretical base. The next chapter presents a review of literature expanding on teacher immediacy, dimensions of relational communication, and factors related to dress.

## CHAPTER 2

### REVIEW OF LITERATURE

#### Introduction

This chapter contained a review of the literature pertaining to teacher immediacy and various dimensions of relational communication. The chapter continues with a review of different clothing constructs, followed by a discussion of teacher attire, immediacy and learning. The chapter concludes with a rationale, hypotheses, and research questions that will guide this investigation.

#### Teacher Immediacy

One of the more important constructs to emerge out of the vast body of instructional communication research is the concept of immediacy. Immediacy was initially conceptualized by Albert Mehrabian. Mehrabian (1969) defined immediacy as those behaviors which enhance closeness to another. Further, immediacy behaviors reflect a positive attitude on the part of sender toward the receiver (Mehrabian, 1969). Andersen (1979) extended this definition to include nonverbal behaviors that decrease the physical and/or psychological distance between individuals. Moreover, nonverbal immediacy can signal relational perceptions of approach, friendliness, warmth and interpersonal closeness (Andersen, 1979; Gorham & Christophel, 1990; Kearney, Plax, & Wendt-Wasco, 1985). From an educational standpoint, interpersonal and communicative relationships between

teachers and students are crucial to the learning process and nonverbal immediacy has been shown to be an important variable in this relationship. With this in mind, a number of early studies pointed to the importance of this relationship.

Early research by Andersen (1979) investigated the link between immediacy and learning. More specifically, she examined nonverbal behaviors such as eye contact, gestures, relaxed body position, smiling, and movement considered immediate and their impact on teacher effectiveness. Results indicated that 46% of the variance of affect toward the instructor, 20% of the variance for affect toward the course and 18% of the variance in behavioral commitment were predicted by immediacy. However, a significant relationship between teacher immediacy behaviors and cognitive learning could not be predicted.

Replicating Andersen's (1979) study, McDowell, McDowell and Hyerdahl (1980) examined teacher nonverbal immediacy behaviors and various learning outcomes. The researchers used junior and senior high school subjects and found a significant correlation between student's perceptions of teacher immediacy behaviors and affect for the teacher and the course. Pointing to a possible connection between immediacy and cognitive learning, a moderate relationship was found to exist between teacher immediacy and final course grades.

In two other studies, Kearney Knutson (1979) and Kearney and McCroskey (1980) examined the impact of teacher communication style on various aspects of learning. One of the findings from these studies indicated that responsiveness, a construct composed of

nonverbal immediacy behaviors, was a significant factor in student affect for both the teacher and the subject matter.

Other research has further substantiated the importance of nonverbal immediacy in learning outcomes, especially affective learning outcomes. Kearney, Plax and Wendt-Wasco (1985) investigated the impact of teacher nonverbal immediacy and immediacy salience on affective learning outcomes in both people-oriented content classes and product or task content oriented classes. Their findings indicated that regardless of the course or course content teacher immediacy was significantly related to affective learning outcomes.

Although they were primarily concerned with teacher verbal control strategies, Plax, Kearney, McCroskey, and Richmond (1986) found that teacher nonverbal behaviors may influence students' perceptions of teacher verbal strategies. These findings coupled with other findings from the study indicated that increased teacher immediacy behaviors led to increased affective and behavioral learning. In other related research, Kearney, Plax, Smith and Sorensen (1988) found that college students reported greater willingness to comply with teachers who were perceived as immediate. Also, Kearney, Plax, Hays, and Ivey (1991) found that students were reluctant to assign blame to more immediate teachers. These findings indicate that students are more likely to comply with and respect more immediate classroom instructors.

Although previous research had indicated an apparent relationship between immediacy and learning-type outcomes, early research endeavors were unable to find a connection

between cognitive learning outcomes and immediacy (Andersen, 1979). In their groundbreaking, two-part study, Richmond, Gorham, and McCroskey (1987) first had students determine learning outcomes based on current and ideal learning situations. A variable labeled “learning loss” was created based on the difference between the two learning situations. In part two of the study, students were asked to evaluate an instructor from the previous semester and complete the Nonverbal Immediacy Behaviors Instrument, a modified version of the Behavioral Indicators of Immediacy (BII) (Andersen, 1979). Results from these studies found that nonverbal immediacy positively correlated with cognitive learning. The findings from this study were significant because they provided evidence of a possible connection between teacher nonverbal immediacy behaviors and cognitive learning.

In a related study, Kelley and Gorham (1988) looked at the effects of nonverbal immediacy on cognitive learning in an experimental situation. More specifically, the researchers were interested in the effects of physically immediate behaviors (e.g., reduced physical distance, forward leans, head nods and eye contact) on subject recall of information. There were four experimental conditions utilized: high physical immediacy with eye contact, high physical immediacy with no eye contact, low physical immediacy with eye contact and low physical immediacy with no eye contact. Results showed that physical immediacy was responsible for 11.4% of the variance on recall. The other variable, eye contact accounted for 6.9% of the variance on recall. Overall, the findings suggested a definite relationship between immediacy behaviors and cognitive learning.



Other researchers utilizing various experimental constructs have generally found a relationship between nonverbal immediacy behaviors and learning outcomes. For example, Jordan (1989) found that perceptions of teacher verbal and paralinguistic behaviors affected student cognitive learning. Chaiken, Gillen, Derlega, Heinen, and Wilson (1978) explored the effects of different types of proxemic behavior and found that teachers exhibiting close proxemic behaviors were perceived with the greatest affect.

As well as the nonverbal component of immediacy, Mehrabian (1971) also indicated a verbal component of the immediacy construct. Although not a variable in this study, verbal immediacy presents another avenue for reducing perceived psychological and/or physical distances. In the classroom, verbal immediacy can signal instructor' feelings for students. For example, "teachers who feel close to their students will use immediate pronouns like 'our,' 'we,' and 'us.' In this way teachers verbally show that they feel a part of their students and imply that they are working together toward a common goal" (Jordan, 1989, p. 1). In a related study, Sorenson (1980) made the first attempt at extending the study of immediacy to encompass an aspect of verbal behavior. In her study, she manipulated teacher self-disclosure statements and measured their impact on student perceptions of teacher immediacy. Results indicated that self-disclosure statements accounted for 28% of the total variance in the ratings of teacher immediacy. Also, verbal immediacy behaviors have been linked to learning outcomes. Richmond, Gorham, and McCroskey (1987) reported that "student's perceptions of teacher immediacy were influenced by verbal, as well as, nonverbal behaviors, and that these

behaviors contributed significantly to learning.” Researchers have continued to explore the immediacy construct by examining the interaction of teacher immediacy with various other classroom variables such as student motivation (Christophel, 1990), humor (Gorham & Christophel, 1990), teacher clarity (Powell & Harville, 1990), and solidarity (Andriate, 1982; Stewart & Wheelless, 1986). Other studies have dealt with diverse student populations and classroom environments, multicultural classrooms (Powell & Harville, 1990; Sanders & Wiseman, 1990), multicultural instructors (Neuliep, 1995), and international classrooms (McCroskey, Richmond, Sallinen, Fayer, & Barraclough, 1995). More recent studies have begun to explore the relationship between teacher attire, immediacy, and student learning. Morris, Gorham, Cohen and Huffman (1996) investigated the effects of graduate teaching assistants’ attire on students’ perceptions in an actual classroom situation. Meanwhile, Gorham, Cohen and Morris (1996) examined perceptions of immediacy based on the choice of instructor attire.

The studies mentioned above have generally indicated that immediacy is an important teaching consideration. Through the use of immediacy behaviors, teachers can enhance learning outcomes, improve student-teacher relationships and create positive learning environments.

As well as the classroom, immediacy is an integral part of relational communication. Immediacy behaviors indicate approach and avoidance, which affect the sensory involvement of the participants (Mehrabian, 1981). For example, people approach things

they like and avoid things they dislike, therefore, in an interaction immediacy behaviors communicate positive and negative evaluations of another person.

### Relational Communication

When thinking of relational communication, two important concepts should be included: nonverbal communication and immediacy. According to Hawes (1973, p.15), "Communication functions not only to transmit information, but to define the nature of the relationship binding the symbol users." Further, Burgoon and Saine (1978) claimed relational messages can indicate how individuals regard each other, their relationship, and themselves within the context of the relationship. These assertions are consistent with the generally held view that communication operates on two levels: a report or content level and a command or relational level (Bateson, 1958; Watzlawick, Beavin & Jackson, 1967). The report or content level of a message generally conveys data or information, while the command or relational level implies a metacommunicative function or how the message is to be taken. The command or relational aspect also reflects the relationship present among the communicators (Watzlawick, Beavin & Jackson, 1967). It has generally been acknowledged that the report or content meaning of a message is usually communicated through verbal means, while the command or relational meaning is usually conveyed through nonverbal means (Watzlawick, Beavin & Jackson, 1967). In an attempt to explain behavior as either nonverbal or verbal, Mehrabian (1971) argued that verbal cues were explicit in nature, while nonverbal cues seemed to be vague and lack explicit rules. Focusing on the implicit nature of nonverbal behaviors, Mehrabian (1981) identified

immediacy and status as two of the three main metaphors or perspectives by which people interpret nonverbal behaviors. Recall that Mehrabian described immediacy as expressing approach or avoidance in a relationship. Again, we approach things we like and avoid things we dislike. Conversely, status concerned the expression of dominance and power within relationships. Increased or high immediacy behaviors have been associated with increased liking or affinity, while decreased or low immediacy behaviors have been linked to control or power. In the interpersonal process, immediacy and status affect personal evaluations and communication decisions. This study focused on the relational aspects of the communication process along three important relational dimensions: control, affinity, and immediacy.

#### Relational Communication Dimensions

A number of research studies and perspectives have examined various relational message dimensions and there is generally a consensus on two major relational dimensions: control and affinity.

Control. Leary (1957) formulated a theory of personality. Leary conceived that most of the behaviors in his circular model could be accounted for along two dimensions: dominance-submission and love-hate (affection-hostility). In this theory, Leary suggested that there were five layers that make-up a personality structure. The outer most layer consisted of public communication, followed by interior layers consisting of the conscious self, private symbolization and interpersonal topics related to the unconscious. At the center of his model were moral judgments and ideals. From this model, Leary identified

and classified interpersonal behavior into sixteen mechanisms or reflexes. These sixteen mechanisms or reflexes were further configured into a circular representation, with adjacent mechanisms or reflexes having the greatest relationships to one another. Leary's theory and subsequent findings were important in that they stimulated other related relational research.

Early research by Bateson (1935, 1958) was instrumental in the later findings of Brown (1965) and Watzlawick, Beavin and Jackson (1967). Based on observations, Bateson (1935, 1958) found that subjects involved in symmetrical relationships emphasized equality between themselves, while subjects involved in complementary relationships maximized differences between themselves, usually through the use of dominant and submissive behaviors. Brown (1965) studied cultural and historical rules of address and found that address forms are governed by the same two underlying dimensions: solidarity and status. According to Brown (1965, p. 55), "social status accrues to a person in the degree that they possess characteristics valued by society." Solidarity was discussed in terms of closeness or remoteness, near or far, and in-group versus out-group (Brown, 1965). Put another way, Brown visualized status as occupying the vertical dimension of a social relationship model, while solidarity would occupy the horizontal dimension of the same model (Brown, 1965). Further, using Bateson's (1935, 1958) ideas on symmetry and complementarity, Brown theorized that solidarity was more symmetrical in nature, while status was more asymmetrical. In an attempt to differentiate between solidarity and status, Brown used five different types of relational criteria: personal characteristics,

spatial relations, sentiments, behavior, and symbols. Overall, solidarity was characterized by a similarity in attitude and income, closer proximal behavior, liking, frequent interactions and intimacy (Brown, 1965). Status was marked by a difference in attitude and income, further proximal distances, statements of authority, and differences in power and control (Brown, 1965). This study was significant for a number of reasons, first it added credence to Bateson's (1935, 1958) ideas on symmetry and complementarity and Leary's (1957) relational dimensions. Second, Bateson's ideas were conceptualized along relational dimensions of status and solidarity. Third, according to Brown, status and solidarity might be graphically represented along vertical and horizontal dimensions. Finally, generally some degree of both status and solidarity are present in any interactional setting.

Watzlawick, Beavin and Jackson (1967) utilized Bateson's (1935, 1958) symmetrical and complementary interaction patterns to formulate their ideas on relational communication. Agreeing with previous research findings (Bateson, 1935, 1958; Brown, 1965), the researchers found that symmetrical interactions were characterized by equity and minimization of difference, while complementary interactions were characterized by a maximization of difference. This assertion led researchers to the axiomatic claim that "All communication interchanges are either symmetrical or complementary, depending on whether they are based on equality or difference." (Watzlawick, Beavin & Jackson, 1969, p. 70). This implied that a superior and inferior position are present in all communication exchanges. Further, the researchers claimed that "One partner does not impose a

complimentary relationship on the other, but rather each behaves in a manner which presupposes, while at the same time providing reasons for the behavior of the other” (Watzlawick, Beavin & Jackson, 1969, p. 69). This assertion implied that there is some degree of preestablished relational control that is determined by the interactants and the nature of their relationship. This research is significant in identifying the presence of a relational control or a power dimension, which is dictated by the participants.

Affinity. The other relational dimension previously mentioned was affinity or liking. Under the general concept of affinity there exists several closely related concepts (relational orientations or relational themes). Significant research related to affinity and other connected concepts were examined in this section.

According to Daly and Kreiser (1992, p. 123) “The goal of affinity is to generate, maintain or enhance liking of one person to another.” The role of affinity in human communication was first explained by McCroskey and Wheelless (1976) when they advanced the idea that affinity is the first function of communication. Further, McCroskey and Wheelless (1976) discussed affinity as playing a central role in conflict management and avoidance. Bell and Daly (1984) extended this initial work and explored communication strategies specifically intended to increase a liking or a positive feeling for a communicator. Bell and Daly identified this process as affinity seeking. In their study, the researchers sought to identify ways in which people might use communication try to get others to like them or develop affinity. To accomplish this task, brainstorming groups composed of teachers or students produced lists of things people say or do to get others

to like or dislike them. Out of this process, Bell and Daly identified a typology of 25 affinity seeking strategies. Among the 25-strategy affinity seeking typologies developed was nonverbal immediacy, an important and significant variable in this study. According to Bell and Daly, the strategy of nonverbal immediacy consisted of an affinity seeker signaling interest through various nonverbal cues, like smiling and frequent head nods. As well as signaling liking, immediacy functions to signal approachability in other communication contexts. The researchers best stated the importance of their findings, “the affinity-seeking construct provides a dynamic, communication-based approach to a topic that has long been central concern to social scientists—interpersonal attraction” (Bell & Daly, 1984, p. 111). In other words, affinity seeking strategies can create attraction through communication.

Another concept that has been shown to play a major role in the formation of affinity or liking is attraction. Walster and Walster (1976, p. 280) defined interpersonal attraction as “an individual’s tendency of predisposition to evaluate another person or symbol of that person in a positive way (or negative) way.”

An early researcher interested interpersonal attraction was Byrne (1971). Byrne was broadly interested in why individuals were attracted to one another. To explain the differences in attraction between people, he conceptualized the principle or theory of reinforcement to explain interpersonal attraction. Byrne believed that we like and are attracted to those people who reward us. Conversely, we dislike and are repelled by individuals who punish us. According to Byrne, rewards could come in the form of verbal



compliments or actual tangible goods, like gifts. Punishments, on the other hand, could include unfavorable comments or damaging experiences. Byrne further believed that a similarity in attitudes was especially rewarding and therefore a reliable indicator of whether people will like each other. Byrne's findings were later confirmed by Berscheid and Walster (1978) when they stated the, "The general psychological principle which threads throughout virtually all theories of interpersonal attraction is the principle of reinforcement: we like those who reward us; we dislike those who punish us" (p. 22).

Through their research on physical attractiveness, Berscheid and Walster (1974) found that physically attractive individuals were better liked than physically unattractive individuals. This research was significant because it pointed to a potential advantage physically attractive people may have in communication situations.

Extending this earlier research, Berscheid and Walster (1978) further examined the role of reinforcement theory in their writings on interpersonal attraction. Specifically, they were interested in the role of proximity and similarity in shaping interpersonal attraction and liking. The researchers found that proximity probably allows a person to gather more information on a person and to experience reinforcement, either positive or negative, from that person. Further, Berscheid and Walster suggested that similarity may consist of six dimensions: attitude, personality, intelligence, physical and social factors, and education. These studies are significant because they indicate the potential effect of physical and similarity attraction in the interpersonal process, especially affinity or liking.

As mentioned previously (Berschied & Walster, 1978) similarity or homophily can be an influencing factor in how and why communicators interact. Many researchers claim that communicator similarity or homophily increases the likelihood of communication and is one of the basic principles of interpersonal communication (McCroskey, Richmond & Daly, 1975; Rogers & Bhowmik, 1970; Rogers & Shoemaker, 1971). Homophily, a communication term, concerns the degree to which people share like attitudes, beliefs, personal characteristics and experiences. Conversely, heterophily is the degree to which pairs of interactants are different with respect to certain attributes.

Recall that Brown (1965) suggested that solidarity, may be a product of similarity (homophily). Based on these early conclusions, other researchers have sought to investigate the role of homophily in communication behavior. Rogers and Bhowmik (1970) examined homophily-heterophily from a source-receiver relationship. Based on this relationship, the researchers advanced a number of propositions concerning effects of homophily-heterophily on communication. Results generally indicated that homophily increased the chances for and the effectiveness of interpersonal communication.

Rogers and Shoemaker (1971) looked at the diffusion of new ideas and practices through communication. Further, diffusion is the process by which new ideas and concepts are communicated. One of Rogers and Shoemaker's main contentions was that communication was essential for social change. According to the researchers, one of the main problems in diffusing ideas is that interactants are usually heterophilous or different from one another (Rogers & Shoemaker, 1971). Ideally, for diffusion to be effective the

interactants should be more alike or homophilous. But for diffusion to occur, the researchers claim, some degree of heterophily must be present. This ideal point on the homophily-heterophily continuum was termed “optimal heterophily.” This study is significant because it suggested that even certain dissimilarities between homophilous individuals can enhance effective communication.

McCroskey, Richmond, and Daly (1975) extended the work of Rogers and Bhowmik (1970) and examined possible dimensions of perceived interpersonal homophily. To determine perceived homophily, the researchers developed a questionnaire. This questionnaire was administered and tested using high school, college and adult participants. Based on their findings, McCroskey, Richmond, and Daly identified four dimensions of perceived homophily: attitude homophily, value homophily, background homophily, and appearance homophily. Of these four dimensions, participants identified attitude homophily as the most important factor in perceived homophily

Closely related to homophily is the concept of solidarity. Recall that Brown (1965) identified solidarity as “often talked about in terms of being close or remote, near or far, the in-group versus the out-group” (Brown, 1965, p. 57). Wheelless (1976) defined interpersonal solidarity as a feeling of closeness between people created as a result of shared sentiments, similarities, and intimate behaviors.

Extending the work of Brown (1965), Wheelless (1976) conceived and refined a measure to investigate the link between self-disclosure and interpersonal solidarity. Results showed that self-disclosure and solidarity were positively related and that

higher levels of self-disclosure were associated with high solidarity ratings than with low solidarity ratings. Overall, these results suggested that people with strong solidarity feelings should also trust, like and self-disclose to one another. This study was conceptually significant because it identified two potentially interrelated components of interpersonal solidarity: trust and self-disclosure.

#### Clothing as Nonverbal Communication

Embodied in the domain of nonverbal communication is the idea of clothing. With this in mind, a major function of communication is the projection or creation of a favorable image. One way of nonverbally accomplishing this is through self-presentation. More specifically, clothes provide a nonverbal means by which individuals can create a desired image. Based on this image, others make judgments concerning the type of clothing selected. The type of clothing selected may encourage or discourage communication and/or signal approach or avoidance. Further, clothing may be used to create perceptions of similarity or authority. Also, personal attributes and personality judgments may be based on perceptions of clothing.

#### Effects of Similarity of Dress

As mentioned before, clothing is an important catalyst in the formulation and creation of perceived similarity. Numerous studies have been conducted relating clothing to similarity. Findings from these studies generally indicate a connection between what a person wears and how others relate to that person. Further, these findings add credence to a similarity hypothesis posited by Hensley (1981). This hypothesis relates to

reinforcement theory. More specifically, the perceived similarity of dress between interactants is seen as reinforcing (Hensley, 1981).

Suedfeld, Bochner, & Matas (1971) examined the effects of two different attire conditions, hippie-clothed and straight-clothed, would have on soliciting signatures at a peace demonstration. Despite using a similar petition, the hippie-clothed condition produced more signatures, more people who signed without looking at the petition, and attracted more unsolicited signatures than the straight-clothed condition. The results suggested that differences can be attributed to reference group similarity between those in the hippie attire condition and the subjects, peace demonstrators, and dissimilarity in the straight-attire condition. In-group members, as determined by their attire, were more effective than out-group members, in soliciting signatures. This study indicated that attire was an important means of communicating identity and thereby creating perceptions of similarity.

In a related study, Keasey and Tomlinson-Keasey (1973) utilized both male and female experimenters attired in either straight or hippie clothing conditions to petition subjects in two shopping centers, a naturalistic setting. Results from this study indicated that conventional attire facilitated the signing rate in male subjects, whereas hippie attire worn by a female experimenter depressed the signing rate in females. Also, straight-clothed petitioners received polite refusals (48% vs. 31%) or reasoned refusals (27% vs. 17%) significantly more than the hippie-clothed petitioners. In contrast, the hippie-clothed petitioners received evasive verbal responses significantly more than the straight-clothed

petitioners (52% vs. 22%). The trend reflected in the verbal responses of the nonsigners was to refuse straight-clothed petitioners and avoid the issue with the hippie-clothed petitioners. A significantly larger proportion of nonsigners physically avoided or ignored the hippie petitioners.

These findings are consistent with those found in other related research. Darley and Cooper (1972) investigated the impact of political campaigner's attire and appearance on campaign effectiveness. Results indicated that potential voters based their future political decisions on attire worn by campaign workers. Lambert (1972) examined female experimenter attire as it related to participants willingness to answer survey questions. Findings showed that older female subjects were more willing to answer questions posed by smartly dressed experimenters than those posed by untidily dressed experimenters. The findings reflect perceived similarity of dress as a significant factor in the outcome of this study. Bryant (1975) investigated the effects of dress on petition signing. Overall, the results appeared to contradict those found in similar studies, but dress similarity was a factor in one of the experimental conditions. The researcher stated that "results from the present study indicate that subjects are influenced by dress only when the petition is neutral and the beliefs involved are of little significance" (Bryant, 1975, p. 148).

In an attempt to establish social deviance as an experimental variable, Raymond & Unger (1972) used both white and black experimenters attired in either deviant and conventional clothing. Cooperation was measured by the experimenters ability to obtain

change for a dime. Results differed depending on the subset sampled. White subjects responded to deviance as a negative attribute without regard to the deviant's race. Both black and white deviants received the same reduction in cooperation compared to their conventionally attired counterparts. Black subjects differentiated between the two kinds of deviants. They declined to cooperate with the white deviant to same degree that the white subjects did, but showed an increase in cooperation with the black deviant. A major finding from this study was that differences in belief were more important determinants of discrimination than differences in race. The researcher argued that white subjects may have cooperated more frequently with black and white conventionals because they perceived them to have values in line with their own. Also, they suggested black subjects cooperated more with the black deviant more because their values may not differ significantly from their own.

These conclusions are further supported by Harris and Baudin (1973) who examined the effects of language and attire on the amount of assistance given to experimenters. Their results indicated that regardless of language, well dressed experimenters were helped more often than sloppily dressed experimenters. Unger and Raymond (1974) studied attire as it related to perceived value systems. Different attire was used to differentiate white conventional and deviant and black conventional and deviant experimenters. The researchers suggested that the appearance of youths, based on attire, seemed to be related to their value system.

The effects of attire on obtaining directions, studied by Schiavo, Sherlock, and

Wicklund (1974), provided further insight into similarity of dress. They attempted to assess the effect of attire upon responses for requests for directions. In the study, a 120 middle-aged women were approached by two female experimenters, either dressed in conventional or hippie attire. Responses were recorded into three categories: no directions, general directions, and detailed directions. Findings showed that attire was a significant factor in subject behaviors and helpfulness. More specifically, when approached by the conventional dressed experimenter, subjects were more likely to give detailed directions or provide helpful suggestions and were more willing to get involved with the person. The researcher suggested that attire affects behavior toward females in a way similar to that previously found for males (Raymond & Unger, 1972). The results of this study were consistent with other like studies (Crassweller, Gorden, & Tedford, 1972), in that attire influenced perceptions of similarity and attributions of personal characteristics and mediates interpersonal behavior.

Related research literature suggested that attire affects perceptions of similarity, which in-turn influenced behavior. Evidence for this view was provided by Hensley (1981). Hensley examined two theoretical explanations for the effect of attire on receiving aid. The underlying premise was that better dressed people would receive more assistance than dissimilar people. Although results indicated that the level of attire alone was not a factor in receiving assistance, similarity of dress played a role for well-dressed confederates receiving more money at the airport and poorly dressed confederates receiving more money at the bus station. These results can be interpreted as support for



the similarity hypothesis mentioned previously.

A relationship between perceived similarity of clothing and favorable outcomes is apparent from this research. Several other studies have generally supported the research detailed above. These studies examined various dimensions related to clothing similarity and length of conversation (Giles & Chavasse, 1975; Giles & Farrar, 1979), assistance in libraries (Kroll & Moren, 1977) and fashionability (Pinaire-Reed, 1979) these studies further indicate the importance of clothing to perceived similarity.

#### Effects of Authority of Dress

Also, mentioned was the notion that clothing plays an important role in the formation of impressions. More specifically, attire or dress functions as a symbolic indicator of status and power. According to Sybers and Roach (1962) one of the symbolic functions clothing serves is a symbol of our status. Further, Knapp and Hall (1992) state that one of the various functions clothing fulfills is the display of status or role. With this in mind, research generally indicated that clothing functions as an indicator of power or status.

One of the most visible symbols of status and authority is the uniform. According to Burgoon, Buller, and Woodall (1989) "uniforms denote status and control of resources. They signal the ability to reward and bestow favors or to punish and take away valued commodities" (p. 429).

In an interesting study, Bickman (1974a, 1974b) conducted two field experiments to investigate and measure the relative degree of social power that uniformed authorities possessed and to determine the basis of this power. In the first experiment, subjects were

given instructions by male experimenters dressed in either civilian attire, a milkman's uniform or a security guard's uniform. In this experiment, subjects were asked to pick up a small paper bag lying on the pavement, give someone a dime for a parking meter or comply with a posted sign. The results from this experiment showed that subjects were far more willing to comply when the instructions came from the uniformed security guard than from either the civilian or the milkman: 38% obeyed the security guard, 19% obeyed the civilian, and 14% obeyed the milkman. In the second experiment, designed to examine the basis of the security guard's power subjects were tested under surveillance or nonsurveillance experimental conditions. Subjects in the surveillance condition were asked to comply and were observed by the security guard. Subjects in the nonsurveillance condition were asked to comply and not observed by the security guard. Findings indicated that 83% of the subjects obeyed the security guard, while only 46% of the subjects obeyed the civilian regardless of whether or not the experimenter was present or not. The researcher found that the security guard's power was more than likely based on legitimacy or legitimate power (French & Raven, 1959). These findings are consistent with Joseph and Alex's (1972) claim that uniforms exert a primarily legitimate influence associated with a role. The power associated with a given role may be more closely related to the symbol of that role, the uniform. It may be that the uniform has a greater influence than the actual title or role itself.

In a closely related study, Bushman (1984) considered the effects on compliance of perceived symbols of authority. The researcher expanded on Bickman's (1974a, 1974b)

study, which found that the type of clothing worn by the person making a request would significantly influence whether another person complied with that request. Recall that Bickman's (1974a, 1974b) experimenters dressed in civilian attire, a milkman's uniform or a security guard's uniform. Subjects in Bushman's (1984) experiment were asked to comply with a request from a male experimenter dressed in three different dress conditions: sloppy, business suit, and a fire fighter's uniform. Experimental results showed a significant association between the type of experimenter clothing worn and subject compliance. More specifically, 45% of the subjects complied with the request from the sloppily dressed experimenter, 50% of the subjects complied when asked by the business attired experimenter, and 82% complied with the request made by the fire fighter. These findings are consistent with and reinforce Bickman's (1974a, 1974b) findings and conclusions.

In a later study, Bushman (1988) examined the impact uniformed female authority figures would have on behavior. A female confederate was dressed in a uniform, professional attire, or sloppy clothing. Again, the general experimental conditions were similar to those first conceptualized by Bickman (1974a, 1974b). Recall that Bickman (1974a, 1974b) used male experimenters to test the effects of various dress conditions on requests for compliance. For this experiment, female assistants dressed in one of the three conditions approached subjects and asked them to comply with a request. Results indicated that subject compliance was higher for the uniformed authority figure. Further, the results were significant because they indicated that a uniform can be a symbolic

representation of legitimate power (French & Raven, 1959) for both men and women, regardless of who is wearing the uniform. Moreover, these findings add credence to Joseph and Alex's (1972) earlier assertion that the uniform serves as a declaration of legitimacy and also endorse previous research (Bickman, 1974a, 1974b; Bushman, 1984).

Taking research in a slightly different direction, Long (1978) assessed the effects of uniform and religious status of interviewers on male and female Catholic and non-Catholic interviewees. The dependent variables in this study were length of interview and scores on four instrument measures. Results indicated that a subject spent more time answering questions posed by a nun wearing her habit than they did with the same nun dressed in lay clothing. Further, the researcher found religious dedication coupled with a clear symbol of that dedication (a habit) produced longer subject responses. Moreover, nuns wearing habits felt that interviewees took greater pains to qualify their responses than the responses that those nuns in lay clothing received. The researcher discovered that subjects were also found to skew their responses to conform more closely with the attitudes that they projected religious interviewers, nuns wearing a habit, were likely to hold. Also interesting, was the finding that non-Catholic subjects expressed more attitudes different or counter to public Catholic positions much more vigorously when responding to a lay attired nun than a religiously attired nun. Other results indicated that male subjects expressed significantly more negative attitudes toward religion and religious women when questioned by non-nuns than by nuns. Overall, subjects interacted with the uniformed nun

for a longer time indicating that the nun's uniform, as a statement of role and status, was affecting subject perceptions and responses.

The symbolic role the uniform has been further examined in other related research. Lawrence and Watson (1991) investigated the impact professional uniforms had in the fund raising attempts of charitable organizations. Their findings suggested that uniforms enhanced the acceptability of fund raising messages by establishing the relevant credentials of the speaker. Harris, Ramsey, Sims, and Stevenson (1974) assessed the effects of uniforms on the perceptions of female athletes. Results indicated that uniformed athletes were rated more favorably than athletes in casual attire. Singer and Singer (1985) examined the effect of police uniforms on people's perceptions of the wearer. They found that police officers photographed in their uniforms were perceived to be more competent, more reliable, more intelligent, and more helpful than when attired in other dress conditions.

While the effect of the uniform on status formation is apparent, other research has generally suggested that other types of clothing can influence status formation and affect behavior. In a classic study, Lefkowitz, Blake and Mouton (1955) showed that clothes not only serve a particular function, they can affect the behavior of others. Initially, the researchers found that pedestrians would violate traffic signal warnings more often when another pedestrian violated the warnings first. By manipulating the clothes worn by the experimenter, the researchers were able to show that pedestrians would significantly

violate traffic signal warnings more often when person ahead of them was dressed in a high clothing status condition than attired in a low clothing status condition.

In later research, Bickman (1971) studied the impact of experimenter dress on the honesty of others. High and low status experimenters placed a dime in a phone booth and left. After a set period of time, subjects were asked if they had found a dime in the phone booth. High and low status was determined by the type of attire worn by the experimenter. Results showed that when the experimenter was dressed in the high status condition, 77% of the subjects returned the dime. However, when the experimenter was dressed in the low status condition, only 38% of the subjects returned the dime. These results provide further credence to the role of clothing status on the perceptions and behaviors others.

Klienke (1977) later investigated the effect of dress on compliance with specific requests. For this investigation, four female experimenters were either dressed neatly in skirts and nylons or dressed sloppily as panhandlers in jeans. Attired in the two different clothing conditions, experimenters approached various subjects at Logan International Airport in Boston to ask if they could borrow a dime. Results indicated that significantly more subjects complied with the neatly dressed experimenter's request more often than to the sloppily dressed experimenter's request (81% vs. 32%) and significantly more male subjects complied than female subjects (64% vs. 50%). The researcher posited that the perceived difference in clothing conditions reflected a perceived difference in legitimate status that contributed to the lower compliance request outcomes for panhandlers.

In other similar research, Fortenberry, MacLean, Morris and O'Connell (1978) examined to what extent mode of dress would influence observed behavior in a naturalistic setting, the corridor of a building. They predicted that mode of dress would serve as a perceptual cue and that individuals intruding in the personal space of conversationalists would behave in a more positive deferential manner when the mode of dress suggested higher status than when it suggested lower status. Findings indicated that positive deferential behaviors were observed more under the formal dress condition, and more negative deferential behaviors were observed under the casual dress condition. The researchers suggested that the findings lend support to the idea that dress serves as a perceptual cue for status, which resulted in differential behavior responses. The granting of deference, therefore entails an apparent attribution of superiority or inferiority.

Other related research has indicated that specific articles of clothing can be used as indicators of status. Green and Giles (1973) were interested in finding out the effect a tie would have on the length of subject's self-disclosures. They reasoned that a tie can be perceived as an indicator of status providing the wearer more respectability and responsibility in formal dress situations. The researchers, further, claimed that there may be a learned mediating relationship between the tie and the perceived importance or status of the wearer. Tie and non-tie wearing experimenters approached three different groups of subjects in three different naturalistic settings. The three groups consisted of a middle-class, a working class, and a general public sample. Subjects in the middle-class and general public samples were more willing to comply with tie wearing experimenters than

non-tie wearing experimenters. Subjects in the working class sample, did not differentiate between the two experimental conditions. Results indicated that the presence or absence of a tie appeared to affect whether another is prepared to self-disclose personal biographical information immediately or not.

Temple and Loewen (1993), utilizing six bases of power (French & Raven, 1959; Raven, 1965), investigated perceived female interpersonal power as a function of selected clothing. More specifically, the researchers wanted to find out what effect a jacket would have on perceptions of power. Results indicated that a woman wearing a jacket was perceived as more powerful than a woman not wearing a jacket. Further, the researchers found that a woman wearing a jacket was perceived to have greater expert and legitimate power than a woman not wearing a jacket.

In a similar study, Harris, James, Chavez, Fuller, Kent, Massanari, Moore, and Walsh (1983) studied the effects of five specific articles of women's clothing: formal skirt, formal pants, casual skirt, casual pants and jeans on requests to fill out a questionnaire and found no significant effects on compliance rates.

Research results from the above studies indicate that clothing plays a significant role in the creation of perceived status and power. From a power perspective, clothing generally provides the wearer with degrees of expert and legitimate power. Moreover, it is important to note that the creation and perception of clothing as status and power can influence the behaviors of others across a wide variety of situations.



### Other Perceptions of Dress

Recall that the type of clothing an individual wears plays an important part in how others perceive them. In other words, clothing can create differences in perceptions. For example, it has long been known that attorneys have encouraged clients to dress in a manner that will have the greatest impact on either a judge or jury. Other literature has focused on the role of clothing in the employment selection process (Molloy, 1975, 1977, 1988). A number of other studies have also investigated the impact of clothing on perceptions.

For example, Hamid (1968) examined perceptions as they related to various dimensions of dress. He found that models wearing make-up, brightly colored clothing and high hemlines were rated as sophisticated, immoral, and physically attractive. Bassett (1979) investigated the effects of source attire on the perception of credibility. Research findings indicated that source credibility was affected by source attire. More specifically, high status attire had a positive effect on the competence of both male and female sources. Bell (1991) looked at the effect of male dress styles on the perception of personal traits. Four male garment styles were selected: daring, casual, conservative, and formal. Results indicated that certain perceived personal traits were accorded to different types of clothing. The daring style was considered unattractive, unintelligent, but very popular. Formal style was perceived as attractive, intelligent, and popular. Casual dress style was seen as unattractive, unintelligent, and unpopular. Finally, the conservative style was

viewed as attractive and intelligent but not popular. These results further support the idea that others perceive and assign meaning based on the wearer's selection of clothes.

Moreover, in the classroom environment, instructor attire can be an important factor in students' perceptions of an instructor's personal characteristics. A number of studies have examined the influence instructor attire has on students' perceptions in general.

Chowdhary (1988) investigated the impact of a female instructor's attire on students' perceptions. In her study, one instructor taught two sections of the same course. In one section, the instructor wore Indian/Western attire and Western/Western attire for the other. Evaluations administered to students indicated that the same instructor while in Western/Western attire was perceived more positively as a teacher than when dressed in Indian/Western attire. In similar research, Butler and Roesel (1989) looked into the influence of a female teacher's clothing style on student's perceptions of approachability, respect, knowledge and overall acceptability. Their results overall indicated that informally dressed teachers were perceived as being more approachable, less knowledgeable, commanding limited respect and generally preferable while the formally dressed teacher was perceived as unapproachable and as an authority figure possessing the image of a teacher. In later research, Lukavsky, Butler and Harden (1995) examined the role of female instructor attire on students' perceptions. Their findings also indicated that an informally or moderately dressed instructor was rated as more approachable and flexible than a formally dressed instructor.

Butler and Roesel (1991) explored students' perceptions of different male instructor attire. The results from their study indicated that students perceived teachers differently based on the clothing they wear. An informally dressed teacher was perceived as friendly and approachable, but not seen as knowledgeable while a more formally dressed teacher was viewed as unapproachable but knowledgeable. The various studies in this area have generally pointed to the same conclusion. The clothes instructors chose to wear influences the way they are perceived by their students. Many of these perceptions are apparently related to concepts connected to this study such as nonverbal immediacy, and the effect clothing on perceptions of status and similarity. Also, it may be that instructor clothing choices do indeed reflect their personality and a number of studies have indicated this (e.g. Aiken, 1963; Rosenfeld & Plax, 1977; Taylor & Compton, 1968). Perceptions of the instructor personality never the less result from these choices and were important considerations in this study.

#### Teacher's Attire, Immediacy and Learning

As previously mentioned several studies have focused on the role of teacher's immediacy and clothing. In the classroom, teachers manage impressions for a number of reasons. There are a number of ways to form the "proper" impression. One avenue available is through the use of clothing. The type of attire worn by teachers can play a major role in shaping students' perceptions of those teachers. More specifically, clothing choice can influence the perception of teacher immediacy, which can ultimately impact learning outcomes.

Morris, Gorham, Cohen and Huffman (1996) investigated how graduate teaching assistants' attire affected students' perceptions in an actual classroom situation. Specifically, the researchers were interested in finding out, how the direct and interaction effects of attire and gender affected perceptions. These findings were then used to explore students' perceptions of homophily or degree of similarity between themselves and their instructors. For this experiment, four graduate students, two males and two females were attired in three different dress conditions: formal professional, casual professional, and casual. For males, formal professional consisted of dark business suits, white shirts with dark ties, and dress shoes. Formal professional attire for females consisted of tan/black skirted business suits, sheer hose and high-heeled pumps. The casual professional attire for males consisted of light colored, tan casual slacks, dark muted plaid sports shirt with no tie and brown leather casual shoes. For females this dress manipulation included a tan/black colored skirt and sweater with dress pumps. Casual attire for both males and females included faded, worn blue jeans, a light colored T-shirt under a plaid flannel shirt with sport or athletic shoes.

Perceptions of instructor attire were measured along five preestablished dimensions of source credibility: competence, character, sociability, composure, extroversion, and a source homophily dimension. While a significant finding suggested that formal professional attire was most closely associated with increased ratings of instructor competence, that was accounted for by female students' increased ratings of formally dressed female instructors. Conversely, for male students rating female instructors, there

was no significant impact of dress on any of the instructor perceptions under examination. Finally, the researchers found that the affects of homophily on instructor ratings accounted for a small amount of the total variance, but were unable to find any significant effect for dress conditions on overall ratings of homophily.

Gorham, Cohen and Morris (1996) extended the previous work (Morris, Gorham, Cohen, & Huffman, 1996) and explored whether instructor attire, separate or in combination with immediacy, affected learning outcomes. The experimental design and attire conditions for this study were similar to those first conceptualized in Morris and associates (1996). Specifically, the researchers were interested in finding out, how different instructor dress conditions, gender and/or immediacy influenced students' perceptions and cognitive learning. Finally, attire, immediacy, and/or rater gender data were used to determine the degree of perceived students' homophily. The results parallel previous findings (Morris, Gorham, Cohen, & Huffman, 1996) in that the greatest effect of attire appeared to be on judgments of instructor extroversion. Casually dressed teachers were rated as the most extroverted. Further, in assigning attributes of attitude homophily, male subjects responded more favorable to casually dressed instructors, while female subjects responded more favorable to casual professionally dressed instructors. Immediacy results indicated that high immediacy teachers were rated significantly more favorably on perceptual dimensions of extroversion, composure, character and competence. Similarly, the researchers found that female subjects were also more responsive to immediacy behaviors than were male subjects in assigning attributions of

attitude homophily. Additionally, learning loss was rated significantly lower in high immediacy than in low immediacy classes. These results suggested that immediacy and not the choice of instructor attire impacted the findings. Overall, the researchers found no indication that strategic choice of attire bolsters student ratings of nonimmediate teachers, or that “non professional” attire hurts judgments of immediate instructors.

Although, these studies are instrumental in examining the potential effects of instructor attire in the classroom, Morris et al. (1996) and Gorham et al. (1996) each examined instructor attire in unidimensional terms. More specifically, one of the areas of interest to the researchers was the relationship between perceptions of instructor attire and homophily. Their studies evaluated homophily using source credibility measures (McCroskey, Hamilton, & Winer, 1974; McCroskey, Jensen, & Valencia, 1973). But, recall that clothing literature suggests that attire can be used to form a number of impressions, to include similarity and power or status. Clothing in the formation of power or status was not considered in these studies. Also, either overlooked or unsubstantiated was the relationship between instructor attire and student learning outcomes, especially affective learning outcomes. Finally, teacher immediacy behaviors have been shown to be an important factor in creating positive learning environments. These studies were unable to address meaningfully the role that clothing had on the perceptions of immediacy.

In a more recent study, Roach (1997) looked at the effects of graduate teaching attire on student learning, misbehaviors and ratings of instruction. Student subjects were asked to rate and provide information regarding a previous teaching assistant instructed

class. Student perceptions of the instructor dress were measured using a seven-item semantic differential dress assessment instrument (e.g., informal-formal, wrinkled-pressed, inappropriate-appropriate, dirty-clean, professional-nonprofessional, neat-sloppy, and fashionable-unfashionable). Student learning was assessed using Gorham's (1988) affective learning measure and Richmond, McCroskey, Kearney, and Plax's (1987) cognitive learning measure. Student misbehaviors were measured using a 14-item instrument, a variation of a Plax and Kearney (1990) scale. Further, a student rating of instruction was utilized to measure instruction. The researcher used a clothing instrument developed by Rosenfeld and Plax (1977) to measure student clothing orientation. This instrument identified four clothing dimension categories: clothing consciousness, exhibitionism, designer, and practicality. Overall, the results from this study indicated that instructor attire was a significant factor in student cognitive and affective learning, and also in ratings of instruction. Also, instructors who dressed professionally or dressed above the casual attire levels of the students were less likely to encounter student misbehaviors.

Again, Roach's (1997) study was useful in examining the potential effects of instructor attire in the classroom, but certain questions were left unanswered. Specifically, the role of attire and immediacy were not examined in this study. Also, what influence does various categories of clothing (e.g. professional attire or sloppy attire) have on perceptions of the ideal classroom environment? Or is there an ideal point along this clothing continuum, where a category of clothing achieves the best classroom responses?

Overall, these studies are meaningful because they are specifically looking at the impact of graduate teaching assistant attire in the college classroom. Also, these studies indicated that teacher attire can be an influencing factor in student perceptions of homophily, immediacy, learning outcomes and classroom management.

### Rationale, Hypotheses and Research Questions

In previous research, recall that immediacy has been shown to be a significant factor in learning outcomes, both affective and cognitive (Andersen, 1979; Gorham & Christophel, 1990; Kearney Knutson, 1979; Kearney & McCroskey, 1980; Kearney, Plax, & Wendt-Wasco, 1985; Kelley & Gorham, 1988; Richmond, Gorham, and McCroskey, 1987). Further, these studies indicate that nonverbal immediacy is an important part of a teacher's behavior in the classroom environment. Of interest in this study, is the relation of the potential nonverbal immediacy communicated by teacher's clothing to more traditional means of looking at nonverbal immediacy and affective learning outcomes.

Recently several studies have investigated instructor's choice of attire, immediacy and learning outcomes (Morris, Gorham, Cohen, & Huffman, 1996; Gorham, Cohen, & Morris, 1996; Roach, 1997). While these studies were important and instrumental, they overlooked some issues and approaches important in possibly determining the role of teacher attire and nonverbal immediacy in the classroom. This study will address some of the important questions left unanswered in previous, related research (e.g., Gorham, et al., 1996; Morris et al., 1996; Roach, 1997).



One of the important questions to be examined in this study is the possibility of a new conceptualization. The study will explore instructor attire as relational communication on the dimensions of control and affinity, with nonverbal immediacy understood to be a salient component of the affinity or liking dimension of relational communication. Further, it has long been held that nonverbal communication is the dominant means of expressing relational communication. Therefore, clothing, which is a factor in nonverbal communication, should also have a role in communicating this relational component of nonverbal immediacy.

As mentioned previously, clothes provide a nonverbal means by which individuals can create a desired image or identification. Also, recall that others make judgments based on this image. So, the type of clothing an individual selects can signal approach or avoidance; closeness or distance. Clothing, therefore, can create perceptions of affinity, similarity, and closeness, as well as control, authority, and distance.

Remember that nonverbal immediacy as conceptualized by Mehrabian (1969) and Andersen (1979) include those nonverbal behaviors that decrease physical and/or psychological distance between people. Moreover, higher nonverbal immediacy behaviors can designate relational perceptions of approach and interpersonal closeness and lower nonverbal immediacy behaviors can signal perceptions of distance or avoidance. From a relational communication standpoint, higher nonverbal immediacy behaviors, those characterized by approach and closeness, can be associated with affinity or liking, while lower nonverbal immediacy behaviors, characterized by perceptions of distance or

avoidance, generally equate to perceptions of control or power. Also, perceptions of power may signal avoidance or approach, closeness or distance. Low power can decrease interpersonal distance, while high power may increase interpersonal distance. Therefore, it would be logical to assume that clothing can be used to reduce or increase interpersonal distance and appears to be a viable nonverbal immediacy cue. Based on these assertions, the following hypothesis is posed:

H1: Students' perceptions of teachers' power of dress and affinity of dress are significantly related to teachers' nonverbal immediacy.

If these relational dimensions of nonverbal power of dress and affinity of dress are related to perceptions of teachers' nonverbal immediacy then there ought to occur some nonverbal phenomenon that can be labeled or identified as dress immediacy. In other words, certain identifiable aspects of a person's dress may communicate some nonverbal immediacy. These identifiable aspects should correspond to some aspects of nonverbal immediacy as previously conceptualized and operationalized (Andersen, 1979; Richmond, Gorham, & McCroskey, 1987). While this is a difficult construct, it was possible to operationalize (see Appendix H). Utilizing Andersen's (1979) and Richmond, Gorham and McCroskey's (1987) scale items it was possible to create analogous or like-scale items (see Appendix H). For example, the original scale items, "The instructor smiles more during class than most other instructors," and "Smiles at the class while talking," were changed and restated as a dress immediacy scale item: "This instructor wears lighthearted and cheerful clothing." Or the original scale item, "This instructor is more distant from

students while teaching than most other instructors,” was changed to the corresponding item: “The way this instructor dresses is distant from my own clothing style.” Also, the original scale item “Stands behind podium or desk while teaching,” was changed to a corresponding dress immediacy scale item: “The way this instructor dresses creates more distance and status.” Other analogous items are conceptually feasible to construct. With this in mind, recall that it was hypothesized that control and affinity are related to immediacy. If this is the case, then nonverbal dress and nonverbal immediacy should be analogous and should be positively associated. Therefore it is hypothesized that:

H2: Students’ perceptions of teachers’ dress immediacy are positively related to teachers’ nonverbal immediacy behaviors.

Following the similar rationale (above) concerning the relational components of immediacy, it is further hypothesized that,

H3: Students’ perceptions of teachers’ power of dress and affinity of dress are significantly related to students’ perceptions of teachers’ dress immediacy.

Another relationship that the literature supported was the idea that nonverbal immediacy behaviors are related to dimensions of affective learning (Andersen, 1979; Chaiken, Gillen, Derlega, Heinen, & Wilson, 1978; Kearney Knutson, 1979; Kearney & McCroskey, 1980; Kearney, Plax, & Wendt-Wasco, 1985; McDowell, McDowell, & Hyerdahl, 1980; Plax, Kearney, McCroskey, & Richmond, 1986). If relationships existed among power of dress, affinity of dress and dress immediacy, and if these constructs are

analogous to nonverbal immediacy, then it is logical to assume that these variables are interrelated.

H4: Students' perceptions of teachers' power of dress, affinity of dress and dress immediacy are significantly related to affective learning factors.

In examining the variables, it is important to consider how all of these variables relate to one another. A research question will address the possible relationships among the variables in the study.

RQ1: What are the magnitudes and directions of the relationships among the variables in this study?

As well as examining the possible research variable relationships, it is also useful to explore how the variables in this study are influenced by certain teacher specific variables.

For this reason the following research question was posed:

RQ2: Do the relations of the dress and immediacy with the affective learning variables in this study differ due to: (a) perceptual differences in instructor gender (b) between regular faculty members and graduate student teaching assistants or (c) among combinations of instructor type and gender.

### Summary

This chapter reviewed literature concerning teacher immediacy, dimensions of relational communication, various aspects of dress and the impact of teacher's attire on immediacy and learning. Hypotheses and research questions were identified. Chapter 3 will describe the procedures that were to be employed to obtain the sample, the

measurements utilized to gather data, and the methods used to perform statistical analysis required to test each hypothesis and research question.

## CHAPTER 3

### METHODOLOGY

#### Introduction

The preceding chapter provided a literature review regarding teacher immediacy, relational communication concepts and various concepts associated with attire. The hypotheses and research questions were also introduced. Further, this chapter will discuss the procedure employed to obtain the necessary sample, the measurements used to collect this data, and the methods utilized for the analysis of the hypotheses and research questions.

#### Sample and Procedure

A total of 585 undergraduate students enrolled in an introductory communication course at the University of North Texas were surveyed for this study. It was necessary to survey this number of students due to the criteria that the study's sample had to meet.

The researcher first obtained approval for the use of human subjects from the University of North Texas Institutional Review Board (see Appendix A). After receiving written instructions from the researcher, the course instructors distributed two types of survey measurement packets. For the purposes of this study, the measurement packets were divided by whether they referred to a regular faculty member or a graduate student

teaching assistant. The regular faculty member survey packet consisted of the following: A research participation coupon, a participation consent form and directions for the student respondent, 8 demographic questions concerning the participant's and regular faculty member's biological sex, chronological age, ethnic origin/background, the academic department, the course prefix and number, a 20-item perceived affective learning scale, a 14-item perceived nonverbal immediacy scale, a 21-item perceived dress immediacy scale, a 12-item perceived power of dress scale, and a 12-item perceived affinity of dress scale (see Appendix B).

The graduate student teaching assistant survey packet consisted of the following: A research participation coupon, a participation consent form and directions for the student respondent, 8 demographic questions concerning the participant's and graduate student teaching assistant's biological sex, chronological age, ethnic origin/background, the academic department, the course prefix and number, a 20-item perceived affective learning scale, a 14-item perceived nonverbal immediacy scale, a 21-item perceived dress immediacy scale, a 12-item perceived power of dress scale, and a 12-item perceived affinity of dress scale (see Appendix C).

Surveys were administered by the course instructors. Course instructors were given written instructions from the researcher and the primary course instructor (see Appendix D) and told to ask students if they were interested in participating in a voluntary survey. Test packets were systematically randomized so that participants were randomly given either a regular faculty member or a graduate student teaching assistant survey form,

asked to complete the survey packet and return the survey packet during the next class session. Before returning the survey, those interested students were instructed to fill out their name and their course instructor's name on an attached research participation coupon, tear off the attached coupon and turn it in separately from the measurement survey. This procedure was designed to insure anonymity and provided a means for awarding course research participation points (15 points out of a total 900 course points). Completed measurement surveys were returned to the researcher by course instructors.

Of the 585 measurement surveys distributed to course instructors, 443 measurement surveys (76%) were completed and returned on or before the initial deadline. 41 measurement surveys (7%) were completed and returned one week after the initial deadline. A total of 484 measurement surveys were returned to the researcher. Of the 484 measurement surveys returned, 2 surveys were incomplete or contained insufficient data for analysis, leaving 482 (82%) useable surveys. Of the 482 useable surveys, 29 surveys contained missing or incomplete affective learning scale data. As a result, 453 (77%) participants were used for statistical tests involving affective learning variables. Also, as a result of missing or incomplete demographic data, statistical tests involving these variables resulted in varying subject populations (see Design and Statistical Tests).

#### Preestablished Measurements

Affective Learning. Affective learning was measured using a semantic differential-type scale developed by Anderson (1979) (see Appendix E) from a measure originally



developed by Scott and Wheelless (1975). Affective learning has been conceptualized as an internalization of positive attitudes toward the content and the subject matter. Further, affect has been typically viewed as a significant factor in motivating student learning outside and beyond the classroom (see previous discussion). This instrument consisted of five constructs, each followed by four seven-point semantic differential response formats. This scale asked students to respond with their affect for the course content (one factor), behaviors (three factors), and the instructor (one factor). The 20-item self-report was given to students who were told to respond with a particular instructor and course in mind. For the purposes of this study, respondents were asked to “recall the last class you attended (other than COMM 1010) that was taught by a regular faculty member” (first survey type) or “recall the last class you attended (other than COMM 1010) that was taught by a graduate student teaching assistant” (second survey type). The Affective Learning Scale (Andersen, 1979) has consistently demonstrated high reliabilities across a wide variety of samples. Other researchers have recorded alpha reliability estimates from .86 to .98 (Gorham, 1988; Kearney & McCroskey, 1980; Kearney, Plax, & Wendt-Wasco, 1985; Plax, Kearney, McCroskey & Richmond, 1986; Richmond, 1990). As shown in Table 1, for 453 participants, an alpha reliability (Cronbach, 1951) obtained in this study for the 20-item Affective Learning scale was .92 for all scale items ( $M = 107.70$ ;  $S.D. = 20.41$ ; Range = 28 to 140). Reliabilities for the five subfactors were .80 for affect for recommended behaviors ( $M = 22.62$ ;  $S.D. = 4.20$ ; Range = 4 to 28), .82 for affect for course content ( $M = 22.44$ ;  $S.D. = 4.55$ ; Range = 4 to 28), .88 for affect for course

instructor ( $M = 22.94$ ;  $S.D. = 5.17$ ; Range = 4 to 28), .93 for likelihood of using recommended behaviors ( $M = 21.35$ ;  $S.D. = 5.82$ ; Range = 4 to 28), and .96 for taking another course, related content ( $M = 18.34$ ;  $S.D. = 8.18$ ; Range = 4 to 28).

Table 1  
Alpha Reliabilities for Affective Learning Scale

Individual Learning Factors	<u>n</u>	<u>Alpha</u>
Affect for Recommended Behaviors	453	.80
Affect for Course Content	453	.82
Affect for Course Instructor	453	.88
Likelihood of Using Recommended Behaviors	453	.93
Take Another Course, Related Content	453	.96
Combined Factors	453	.92

Nonverbal Immediacy. To measure students' perceptions of instructor nonverbal immediacy, Richmond, Gorham, and McCroskey's (1987) Nonverbal Immediacy Behaviors (NIB) Instrument (see Appendix F) was used to gather this information. The NIB Instrument is a modification of the 15-item Behavioral Indicators of Immediacy (BII) Scale developed by Andersen (1979). The NIB Instrument, on the other hand, utilizes a 14-item Likert-type-scale to measure actual nonverbal behaviors that an instructor might use while lecturing in front of a class. Also, consistent with Mehrabian's (1967, 1981)

ideas on immediacy, the NIB Instrument assesses student's perceptions of an instructor's approach-avoidance behaviors (e.g., eye contact, proximity, gestures, open-body position and movement). Further, based on perceived behaviors, students are asked to indicate a frequency of behavior; responses can range from 0 (Never) to 4 (Very often). Reliability estimates for the NIB Instrument have ranged from .73 to .89 (Christophel, 1990; Gorham, 1988; Gorham & Zakahi, 1990; Richmond, Gorham & McCroskey, 1987). For 482 participants, alpha reliability (Cronbach, 1951) obtained in this study was .77 for student's behavioral perceptions of teacher's nonverbal immediacy ( $M = 37.65$ ;  $S.D. = 7.94$ ; Range = 9 to 55).

#### Scales Developed for this Study

Three scales were developed for this study in attempts to measure the constructs of dress immediacy, perceived power of dress and perceived affinity of dress. Items for each scale were submitted to principal factors analysis with oblique rotation (Promax). Since unidimensional solutions were expected, the unrotated first factor was examined initially. Criteria for multiple factor extraction were an eigenvalue of  $\geq 1$ , scree analysis, the number of items retained, two items loading at  $\geq .10$  on each extracted factor, and the retention of additional items loaded at  $\geq .40$ . If a single factor was indicated by eigenvalue and scree analysis, all retained items were required to have loadings  $\geq .50$ . Subsequent "purity" runs of the factor analyses were completed for multiple-factor solutions in which multiple items were excluded to assess factor stability.

Dress Immediacy Scale. A Dress Immediacy Scale (DIS) Instrument (see Appendix G) was conceptualized and operationalized for this study. The measure is composed of an item-pool of 21 Likert-type items. This instrument was designed to assess students' perceptions about instructor immediacy as they pertain to an instructor's choice of clothing. Students were asked to respond to items based on the last class they attended (other than COMM 1010) that was taught by either a regular faculty member or a graduate student teaching assistant. Further, students were to report their perceptions of their instructor's nonverbal dress immediacy by indicating whether the instructor engaged in the specified behavior. Based on perceived behaviors, students were asked to indicate a frequency of behavior; responses could range from 0 (Never) to 4 (Very often). The DIS Instrument (see Appendix H) used the previously mentioned Richmond, Gorham, and McCroskey's (1987) Nonverbal Immediacy Behaviors (NIB) Instrument and Andersen's (1979) Behavioral Indicators of Immediacy Scale (BII). Utilizing both the NIB and the BII scales, the researcher and advisor were able to formulate a series of statements that reflected immediacy of dress (see Appendix H). Further, both of these previous instruments have proven reliabilities (Andersen, 1979; Christophel, 1990; Gorham, 1988; Gorham & Zakahi, 1990; Richmond, Gorham & McCroskey, 1987). For 482 participants, factor analysis (see Appendix I) produced a two-factor solution under criteria established with alpha reliabilities of .87 ( $M = 21.72$ ; S.D. = 8.59; Range = 0 to 40) for a 10-item first factor reflecting liveliness of dress (see Appendix J) and .75 ( $M = 17.59$ ; S.D. = 5.58; Range = 0 to 28) for a 7-item second factor reflecting informality of dress (see Table 2)

(see Appendix J). Four items did not meet the established criteria for factor analysis and were excluded from further computations (see Appendix I).

Perceived Power of Dress Scale. This scale was developed for this study in attempt to operationalize the power dimension of relational communication as reflected in dress. The initial scale consisted of an item-pool of 12, seven-point, bipolar semantic differential-type items (see Appendices B & C). Further, the items were the end-product of an extensive search through the thesaurus for synonyms of the relational concepts of power, control, dominance, status and authority. These items appeared to be the most pertinent and appropriate items for this construct. To complete this scale, respondents were to indicate their perceptions and feelings of how a particular instructor (the regular faculty member or the graduate student teaching assistant) typically dresses. The items used the following adjectives: “Unassertive” versus “Assertive;” “Informal” versus “Formal;” “Yielding” versus “Controlling;” “Low status” versus “High status;” “Noninfluential” versus “Influential;” “Commonly” versus “Authoritatively;” “Weak” versus “Strong;” “Powerless” versus “Powerful;” “Low class” versus “High class;” “Inferior” versus “Superior;” “Unimportantly” versus “Importantly;” “Submissive” versus “Dominant,” using these scale items. A single factor solution was extracted under the established criteria for the factor analysis. All items were retained (see Appendix K). Alpha reliability for the 12-item Perceived Power of Dress Scale was .94 using 482 participants ( $M = 48.58$ ;  $S.D. = 12.92$ ; Range = 12 to 83).

Table 2  
Alpha Reliabilities for the Dress Immediacy Scale Two-Factor Solution

Dress Immediacy Scale Factors	<u>N</u>	<u>Alpha</u>
Students' Behavioral Perceptions of Teacher's Dress Immediacy (10-item Factor)	482	.87
Students' Behavioral Perceptions of Teacher's Dress Immediacy (7-item Factor)	482	.75

Perceived Affinity of Dress Scale. This scale was developed for the study in attempt to operationalize the affinity dimension of relational communication as reflected in dress. The initial scale consisted of an item-pool of 12, seven-point, bipolar semantic differential-type items (see Appendices B & C). Again, the items were the end-product of an extensive search through the thesaurus for synonyms of the relational concepts of affinity, closeness, similarity, attraction, approachability and liking. These items appeared to be the most pertinent and appropriate items for this construct. To complete this scale, respondents were asked to indicate their perceptions and feelings of how a particular instructor (the regular faculty member or the graduate student teaching assistant) typically dresses. The items used the following adjectives: "Offends me" versus "Appeals to me;" "Contrasts to me" versus "Compares to me;" "Unlikable" versus "Likable;" "Different from me" versus "Same as me;" "Unfriendly" versus "Friendly;" "Does not resemble me" versus "Resembles me;" "Distant to me" versus "Close to me;" "Unattractive" versus

“Attractive;” “Dissimilar to me” versus “Similar to me;” “Unapproachable” versus “Approachable;” “Unlike me” versus “Like me;” “Unpleasant” versus “Pleasant,” using these scale items. A single factor solution was extracted under the established criteria for the factor analysis. Eleven items were retained (see Appendix L). Utilizing 482 participants, an alpha reliability of .93 ( $M = 46.81$ ;  $S.D. = 13.56$ ; Range = 11 to 77) was reported for the 11-item Perceived Affinity of Dress Scale.

Table 3  
Alpha Reliabilities of Measures

Measure	Alpha
Combined Affective Learning	.92
Nonverbal Immediacy	.77
Liveliness of dress	.87
Informality of dress	.75
Power of Dress	.94
Affinity of Dress	.93

#### Design and Statistical Tests

As mentioned previously, Cronbach’s (1951) alpha was computed to obtain reliability estimates for each measurement taken in this study. For tests of the hypotheses the

following statistics (one-tailed, at .05 level of significance) were used. Additionally, for the first three hypotheses the N was reduced by two due to unusable, incomplete surveys.

1. For the first hypothesis, utilizing 482 subjects, a multiple correlation (R) was used to determine the magnitude and direction of the associations of power of dress and affinity of dress with nonverbal immediacy .

2. Using 482 subjects for the second hypothesis, a multiple correlation (R) was used to assess the association, magnitude and direction, between dress immediacy factors and nonverbal immediacy.

3. For the third hypothesis, 482 subjects were used in a canonical correlation (R<sub>c</sub>) to determine the magnitude and direction of the association of power of dress and affinity of dress with dress immediacy factors.

For the fourth hypothesis and the research questions, 29 participants failed to sufficiently complete the affective learning scale and their data were excluded.

4. For the fourth hypothesis, 453 subjects were used in a canonical correlation (R<sub>c</sub>) to assess the magnitude and direction of the association of dress variables (power of dress, affinity of dress, and dress immediacy factors) with affective learning variables (behaviors recommended in the course, content of the course, course instructor, likelihood of engaging in behaviors recommended in the course, likelihood of enrolling in another related course, combined affective learning factors).

Due to incomplete or missing data, a Pearson's product-moment correlation matrix



using 453 subjects was computed among all variables to explore the first research question.

Pearson's product-moment correlation matrices were computed among all variables in the study to explore the second research question. Due to unreported demographic data the  $n$  for correlations based on instructor gender was 446 (Male  $n$  = 245, Female  $n$  = 201). Due to unreported data, the  $n$  for correlations based on instructor type was 453 (Faculty  $n$  = 225, TA  $n$  = 228). Due to unreported data, the  $n$  for the combination of gender and instructor type was 107 for male graduate student teaching assistants, 138 for male regular faculty members, 118 for female graduate student teaching assistants and 83 for female regular faculty members.

### Summary

This chapter has described the sample and the procedure that were used to obtain the data for the study. The measurements to be employed and the method of analysis were also explained. The next chapter will report the results obtained from the analysis of each hypotheses and research question.

## CHAPTER 4

### RESULTS

#### Introduction

The previous chapter presented the sample and procedures used to collect the data for this study. Also, the methods of analyses for the data were described. This chapter will report the results from the analysis of each hypothesis and research question.

#### Results for First Hypothesis

The multiple correlation ( $R = .39$ ) of the variables power of dress and affinity of dress with nonverbal immediacy was significant ( $F(2, 479) = 43.42, p = .0001$ ) and accounted for 15% shared variance. Further, each dress variable shared significant unique variance with nonverbal immediacy. The partial correlation of power of dress with nonverbal immediacy was significant ( $r = .10, p = .0168, r^2 = .01$ ). The partial correlation of affinity of dress with nonverbal immediacy was also significant ( $r = .33, p = .0001, r^2 = .11$ ).

#### Results for Second Hypothesis

The multiple correlation ( $R = .48$ ) of the liveliness dimension of dress immediacy and the informality dimension of dress immediacy with nonverbal immediacy was significant ( $F(2, 479) = 70.88, p = .0001$ ) and accounted for 23% shared variance. Each dress immediacy dimension variable shared significant unique variance with nonverbal

immediacy. The partial correlation of the liveliness dimension of dress immediacy with nonverbal immediacy was significant ( $r = .42$ ,  $p = .0001$ ,  $r^2 = .18$ ). The partial correlation of the informality dimension of dress immediacy with nonverbal immediacy was also significant ( $r = .11$ ,  $p = .0078$ ,  $r^2 = .01$ ).

### Results for Third Hypothesis

The canonical correlation used to test the third hypothesis revealed two significant canonical correlations. The first canonical correlation ( $R_c = -.69$ ) of power of dress and affinity of dress with dress immediacy factors was significant (Wilks' Lambda,  $F(4, 956) = 156.74$ ,  $p = .0001$ ) accounting for 48% shared variance. The weights and loadings (see Table 4) indicated only one "predictor" variable and only one "criterion" variable loaded meaningfully on their canonical variates (root).

The second canonical correlation ( $R_c = .55$ ) of power of dress and affinity of dress with dress immediacy factors was significant ( $F(1, 479) = 202.42$ ,  $p = .0001$ ) accounting for 30% shared variance. Again, the weights and loadings (see Table 4) indicated only one "predictor" variable and only one "criterion" variable loaded meaningfully on their canonical variates (root). Pearson's product-moment correlations, therefore, were the more appropriate tests (see Table 6).

### Results for Fourth Hypothesis

The canonical correlation used to test the fourth hypothesis revealed one significant canonical correlation. The canonical correlation ( $R_c = .52$ ) of power of dress, affinity of dress and dress immediacy factors with affective learning factors was significant (Wilks'

Lambda,  $F(20, 1473.53) = 8.45, p = .00005$ ) accounting for 27% shared variance. The weights and loadings (see Table 5) indicated that affinity of dress and liveliness of dress immediacy (primary contributors to the predictor variate) were correlated primarily with affect for recommended behaviors, affect for course content, and affect for course instructor (primary contributors to the criterion variate).

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Table 4  
Weights and Loadings of Canonical Correlations of Power of Dress and Affinity of Dress with Dress Immediacy Factors

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Predictors

	1st Canonical Correlation		2nd Canonical Correlation	
	Weights	Loadings	Weights	Loadings
Power of Dress	.0806	.9831	-.0100	.1833
Affinity of Dress	-.0142	.1234	.0761	.9924

Criteria

	1st Canonical Correlation		2nd Canonical Correlation	
	Weights	Loadings	Weights	Loadings
Liveliness	.0674	.3135	.1004	.9496
Informality	-.1767	-.8304	.0583	.5572

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Results for First Research Question

The first research question explored the magnitudes and directions of the relationships among the different variables in the study. This research question was examined with

Pearson's product-moment correlations. Fifty-two significant correlations were revealed in the correlation matrix (see Table 6).

Table 5  
Weights and Loadings of Canonical Correlations of Power of Dress, Affinity of Dress and Dress Immediacy Factors with Affective Learning Factors

<u>Predictors</u>	Canonical Correlation	
	Weights	Loadings
Power of Dress	.0548	.5388
Affinity of Dress	.0217	.7671
Liveliness Dimension of Dress Immediacy	.0248	.7482
Informality Dimension of Dress Immediacy	.1108	.3752
<u>Criteria</u>		
	Canonical Correlation	
	Weights	Loadings
Affect for Recommended Behaviors	.0508	.7579
Affect for Course Content	-.0011	.6547
Affect for Course Instructor	.1572	.9805
Likelihood of Using Recommended Behaviors	.0176	.4890
Take Another Course, Related Content	-.0028	.2587

Table 6  
Correlations Among Variables \*\*

	Pwr Drs	Aff Drs	NV Imm	Liv Drs	Inf Drs	Aff Beh	Aff Cou	Aff Inst	Use Beh	Take Cou
Aff Drs	.30*									
NV Imm	.20*	.37*								
Liv Drs	.30*	.54*	.46*							
Inf Drs	-.52*	.23*	.24*	.26*						
Aff Beh	.25*	.31*	.38*	.29*	.11*					
Aff Cou	.20*	.26*	.35*	.23*	.12*	.63*				
Aff Inst	.27*	.39*	.57*	.38*	.20*	.63*	.59*			
Use Beh	.11*	.26*	.26*	.22*	.08	.37*	.52*	.39*		
Take Cou	.13*	.12*	.11*	.08	-.02	.24*	.36*	.23*	.41*	
Aff Lea	.25*	.34*	.42*	.30*	.12*	.71*	.79*	.72*	.74*	.71*

\* Significant,  $p < .05$ ,  $n = 453$ .

\*\* Pwr Drs = Power of Dress; Aff Drs = Affinity of Dress; NV Imm = Nonverbal Immediacy; Liv Drs = Liveliness Dimension of Dress Immediacy; Inf Drs = Informality Dimension of Dress Immediacy; Aff Beh = Affect for Behaviors Recommended in the Course; Aff Cou = Affect for Content of the Course; Aff Inst = Affect for Course Instructor; Use Beh = Likelihood of Engaging in Behaviors Recommended in the Course; Take Cou = Likelihood of Taking Another Course of Related Content; Aff Lea = Combined Affective Learning Variables

Table 7  
Correlations Among Variables\*\*

	Power of Dress	Affinity of Dress	Liveliness of Dress	Informality of Dress	Nonverbal Immediacy
Aff Beh	(M) .23* (F) .26*	.33* .28*	.30* .28*	.10 .13	.36* .42*
Aff Cou	(M) .22* (F) .17*	.31* .21*	.27* .19*	.10 <sub>a</sub> .16* <sub>a</sub>	.34* .37*
Aff Inst	(M) .32* (F) .21*	.47* <sub>a</sub> .29* <sub>a</sub>	.41* .36*	.14* .28*	.55* .60*
Use Beh	(M) .09 <sub>a</sub> (F) .15* <sub>a</sub>	.26* .26*	.17* .30*	.08 .09	.19* .33*
Take Cou	(M) .15* <sub>a</sub> (F) .13 <sub>a</sub>	.14* <sub>a</sub> .09 <sub>a</sub>	.05 <sub>a</sub> .14* <sub>a</sub>	-.05 .02	.11 .09
Aff Lea	(M) .26* (F) .24*	.38* .29*	.29* .34*	.08 <sub>a</sub> .17* <sub>a</sub>	.39* .46*

\* Significant,  $p < .05$ , Males,  $n = 245$ ; Females,  $n = 201$ .

\*\* M = Male; F = Female; Aff Beh = Affect for Behaviors Recommended in the Course; Aff Cou = Affect for Content of the Course; Aff Inst = Affect for Course Instructor; Use Beh = Likelihood of Engaging in Behaviors Recommended in the Course; Take Cou = Likelihood of Taking Another Course of Related Content; Aff Lea = Combined Affective Learning Variables

Pairs of correlation coefficients comparing males and females with the same subscript are significantly different ( $z \geq 1.96$ ) or one r nonsignificant.

### Results for Second Research Question

The second research question sought to examine if the association of power of dress, affinity of dress, and dress immediacy dimension variables with affective learning variables differed due to perceptual differences in instructor gender (see Table 7), between regular faculty members and graduate student teaching assistants (see Table 8), or among

combinations of instructor type and gender (see Table 9). This research question was investigated with Pearson's product-moment correlations. A number of significant correlations were revealed in the correlation matrices (see Tables 7, 8 & 9).

Table 8  
Correlations Among Variables\*\*

	Power Dress of	Affinity Dress of	Liveliness Dress of	Informality Dress of	Nonverbal Immediacy
Aff Beh	(F) .24* (T) .24*	.31* .32*	.30* .29*	.09 <sub>a</sub> .17* <sub>a</sub>	.34* .42*
Aff Cou	(F) .19* (T) .18*	.26* .26*	.31* .17*	.14* .14*	.36* .34*
Aff Inst	(F) .21* (T) .31*	.36* .42*	.36* .40*	.22* .24*	.50* .62*
Use Beh	(F) .07 (T) .13	.23* .31*	.23* .22*	.10 .11	.30* .21*
Take Cou	(F) .04 <sub>a</sub> (T) .18* <sub>a</sub>	.14* <sub>a</sub> .13 <sub>a</sub>	.11 .05	.10 -.09	.08 .11
Aff Lea	(F) .17* (T) .30*	.31* .40*	.31* .30*	.16* .13*	.37* .46*

\* Significant,  $p < .05$ , Faculty,  $n = 225$ ; Teaching Assistant,  $n = 228$ .

\*\* F = Regular faculty member; T = Graduate student teaching assistant; Aff Beh = Affect for Behaviors Recommended in the Course; Aff Cou = Affect for Content of the Course; Aff Inst = Affect for Course Instructor; Use Beh = Likelihood of Engaging in Behaviors Recommended in the Course; Take Cou = Likelihood of Taking Another Course of Related Content; Aff Lea = Combined Affective Learning Variables.

Pairs of correlation coefficients comparing regular faculty members and graduate student teaching assistant with the same subscript are significantly different ( $z \geq 1.96$ ) or one is nonsignificant.



Table 9  
Correlations Among Variables\*\*

		Power of Dress	Affinity of Dress	Liveliness of Dress	Informality of Dress	Nonverbal Immediacy
Aff Beh	(MF)	.23* <sub>a</sub>	.42* <sub>a</sub>	.40* <sub>a</sub>	.16 <sub>a</sub>	.41*
	(FF)	.26* <sub>b</sub>	.17 <sub>abc</sub>	.22* <sub>b</sub>	.01 <sub>b</sub>	.30*
	(MT)	.18 <sub>abc</sub>	.24* <sub>b</sub>	.19 <sub>abc</sub>	.08 <sub>c</sub>	.28* <sub>a</sub>
	(FT)	.29* <sub>c</sub>	.36* <sub>c</sub>	.33* <sub>c</sub>	.24* <sub>abc</sub>	.52* <sub>a</sub>
Aff Cou	(MF)	.24* <sub>ah</sub>	.36* <sub>a</sub>	.36* <sub>ac</sub>	.10 <sub>a</sub>	.36*
	(FF)	.09 <sub>ac</sub>	.14 <sub>abc</sub>	.25* <sub>bd</sub>	.24* <sub>abc</sub>	.36*
	(MT)	.16 <sub>bd</sub>	.25* <sub>b</sub>	.17 <sub>ah</sub>	.14 <sub>b</sub>	.30*
	(FT)	.19* <sub>cd</sub>	.26* <sub>c</sub>	.16 <sub>cd</sub>	.15 <sub>c</sub>	.37*
Aff Inst	(MF)	.26* <sub>a</sub>	.48* <sub>a</sub>	.48* <sub>a</sub>	.22* <sub>ab</sub>	.53* <sub>a</sub>
	(FF)	.14 <sub>abc</sub>	.14 <sub>abc</sub>	.22* <sub>a</sub>	.20 <sub>ac</sub>	.45* <sub>b</sub>
	(MT)	.35* <sub>b</sub>	.46* <sub>b</sub>	.36*	.11 <sub>bd</sub>	.55*
	(FT)	.25* <sub>c</sub>	.38* <sub>c</sub>	.42*	.36* <sub>cd</sub>	.69* <sub>ab</sub>
Use Beh	(MF)	.01	.24* <sub>a</sub>	.20* <sub>a</sub>	.14	.26* <sub>a</sub>
	(FF)	.21	.21 <sub>abc</sub>	.33* <sub>b</sub>	.02	.35* <sub>b</sub>
	(MT)	.17	.29* <sub>b</sub>	.15 <sub>abc</sub>	.03	.08 <sub>abc</sub>
	(FT)	.07	.32* <sub>c</sub>	.28* <sub>c</sub>	.18	.32* <sub>c</sub>
Take Cou	(MF)	.08 <sub>a</sub>	.16	.08 <sub>a</sub>	.06	.04
	(FF)	-.01 <sub>b</sub>	.10	.22* <sub>abc</sub>	.16	.12
	(MT)	.19* <sub>abc</sub>	.12	.01 <sub>b</sub>	-.19	.17
	(FT)	.16 <sub>c</sub>	.12	.08 <sub>c</sub>	-.01	.06
Aff Lea	(MF)	.19* <sub>a</sub>	.39* <sub>a</sub>	.35*	.16 <sub>a</sub>	.36*
	(FF)	.16 <sub>bcd</sub>	.20 <sub>abc</sub>	.33*	.16 <sub>b</sub>	.38*
	(MT)	.31* <sub>c</sub>	.39* <sub>b</sub>	.24*	.02 <sub>c</sub>	.39*
	(FT)	.27* <sub>d</sub>	.39* <sub>c</sub>	.34*	.23* <sub>abc</sub>	.51*

\* Significant,  $p < .05$ , Male Faculty,  $n = 138$ ; Female Faculty,  $n = 83$ ; Male Teaching Assistant,  $n = 107$ ; Female Teaching Assistant,  $n = 118$ .

**\*\* MF = Male Faculty; FF = Female Faculty; MT = Male Teaching Assistant; FT = Female Teaching Assistant; Aff Beh = Affect for Behaviors Recommended in the Course; Aff Cou = Affect for Content of the Course; Aff Inst = Affect for Course Instructor; Use Beh = Likelihood of Engaging in Behaviors Recommended in the Course; Take Cou = Likelihood of Taking Another Course of Related Content; Aff Lea = Combined Affective Learning Variables**

Groups (4's) of correlation coefficients comparing teacher type and gender with the same subscript are significantly different ( $z \geq 1.96$ ) or one  $r$  nonsignificant.

### Summary

This chapter reported the results obtained from the data analysis examining each of the hypotheses and research questions. The following chapter will summarize the findings from this chapter. Additionally, the next chapter will further interpret these findings.

## CHAPTER 5

### DISCUSSION

#### Introduction

The preceding chapter reported the results of the testing of hypotheses and the examination of research questions. This chapter provides a summary of the entire study, including a summary of the research findings. Further, this chapter interprets the results of the study, discusses limitations of the study, and addresses implications for future research.

#### Summary of the Study

This study explored the relationships among teacher's immediacy of dress factors and affective learning factors from a relational communication perspective. Further, the study examined the relationship of these variables as they related to perceptual differences in instructor gender, instructor type and among varying combinations of instructor gender and type. Four hypotheses and two research questions guided the overall study. Certain predictions were made which hypothesized that perceptions of teacher power of dress and affinity of dress would be significantly related to teacher nonverbal immediacy factors. Further, predictions were also made that hypothesized perceptions of teacher dress immediacy would be positively related to teacher nonverbal immediacy behaviors. Another prediction hypothesized that perceptions of teacher power and affinity of dress

would be significantly related to perceptions of teacher dress immediacy. Also, perceptions of teacher power of dress, affinity of dress and dress immediacy factors were compared to affective learning factors. It was predicted that teacher dress factors would be significantly related to affective learning factors. Finally, the research questions investigated differences among the research variables and differences among teacher gender, teacher type (regular faculty and graduate student teaching assistants), and combinations of teacher type and gender. These notions suggested that the relationships among the variables would differ overall and also differ based on perceptions of instructor gender, instructor type (regular faculty and graduate student teaching assistants), and combinations of instructor type and gender.

Five hundred and eighty-five undergraduate students enrolled in an introductory communication course at the University of North Texas were the potential pool of respondents for this study. The respondents were asked to complete one of two types of randomized survey packets. The survey packets were identified by whether they referred to a regular faculty member or a graduate student teaching assistant. After receiving instructions from the researcher, the surveys were administered and distributed by the course instructors. Next, interested participants were asked to complete one of the two randomized surveys (regular faculty member or graduate student teaching assistant), which contained demographic data, an affective learning scale, a nonverbal immediacy scale, a dress immediacy scale, and semantic differential-type power and affinity of dress

scales. Finally, respondents were instructed to return completed survey packets during the next class meeting.

Of the 585 measurement surveys distributed to course instructors, a total of 484 measurement surveys were eventually returned to the researcher (83% overall response rate). Of the total returned, two surveys were incomplete or contained insufficient data for analysis, leaving 482 surveys. Using data obtained from this sample, statistical analyses were performed to test the first three hypotheses. Additionally, of the 482 useable surveys, 29 surveys contained missing or incomplete affective learning scale data. As a result, only 453 surveys were used for statistical tests involving affective learning variables. Finally, various sample sizes were used to statistically explore the possible relationships posited in the second research question.

#### Summary of Research Findings

The first hypothesis predicted that perceptions of power of dress and affinity of dress would be significantly related to nonverbal immediacy behaviors. This hypothesis was supported. The results indicated that power of dress and affinity of dress were significantly related to nonverbal immediacy behaviors. Additionally, the results revealed that each of the dress measures shared a significant and unique relationship with nonverbal immediacy behaviors.

The second hypothesis predicted that perceptions of dress immediacy factors would be positively related to nonverbal immediacy behaviors. This hypothesis was supported. The liveliness dimension of dress immediacy and the informality dimension of dress

immediacy were both positively and significantly related to nonverbal immediacy behaviors. Also, further analysis indicated that each dress immediacy variable shared a significant and unique relationship with nonverbal immediacy behaviors.

The third hypothesis predicted that perceptions of power of dress and affinity of dress would be significantly related to perceptions of dress immediacy. This hypothesis was also supported. Based on statistical analysis, power of dress and affinity of dress were significantly related to dress immediacy factors.

The fourth hypothesis predicted that perceptions of power of dress, affinity of dress, and dress immediacy factors would be significantly related to affective learning factors. This hypothesis was supported. Statistical analysis indicated that affinity of dress and liveliness of dress immediacy were correlated primarily with three affective learning variables; affect for recommended behaviors, affect for course content, and affect for course instructor.

The first research question explored the magnitudes and directions of the relationships among the different variables under study. Statistical analyses revealed a large number of significant correlations. Among these correlations, several substantial and marked relationships were present. Power of dress and the informality dimension of dress immediacy indicated a substantial negative relationship. Also, substantial positive relationships were noted between the liveliness dimension of dress immediacy and affinity of dress and the liveliness dimension of dress immediacy and nonverbal immediacy.

Finally, several positive substantial and marked relationships were also present among the various affective learning and nonverbal immediacy variables.

The second research question explored if the associations of power of dress, affinity of dress, dress immediacy dimension variables and nonverbal immediacy behaviors coupled with affective learning variables differed due to perceptual differences in instructor gender, instructor type (regular faculty member and graduate student teaching assistant), and combinations of instructor type and gender. In these samples, statistical analyses revealed a large number of significant correlations.

### Measures

A preliminary step toward establishing the relationships posited in this study was the development of a three new measures as well as the use of two preestablished measures. The newly developed measures were an integral part of this research study without them it would not have been possible to measure various dress immediacy conceptualizations. The three scales were developed for this study in an attempt to measure the constructs of dress immediacy, perceived power of dress and perceived affinity of dress. Specifically, the scales created were the Dress Immediacy Scale (DIS) Instrument (see Appendix G), the Perceived Power of Dress Scale (see Appendix B & C) and the Perceived Affinity of Dress Scale (see Appendix B & C). The Dress Immediacy Scale (DIS), with Likert-type items, was developed to operationalize a new construct known as dress immediacy. Respondents indicated their perceptions of instructor immediacy as they related to an instructor's (regular faculty member or graduate student teaching assistant) choice of

clothing. The Perceived Power of Dress Scale, with bipolar semantic differential-type items, was developed in an attempt to operationalize the power dimension of relational communication as reflected through instructor dress. Respondents indicated their perceptions of an instructor's (regular faculty member or graduate student teaching assistant) nonverbal dress immediacy by indicating whether the instructor engaged in the behavior. The Perceived Affinity of Dress Scale, with bipolar semantic differential-type items, was developed to operationalize the affinity dimension of relational communication as reflected through instructor dress. To complete this scale, respondents indicated their perceptions and feelings of how a particular instructor (regular faculty member or graduate student teaching assistant) typically dresses.

Measurement analyses of collected data revealed a new 17-item two-dimensional Dress Immediacy Scale (DIS) (reflecting a 10-item liveliness of dress dimension and a 7-item informality of dress dimension). This analysis also produced a 12-item Perceived Power of Dress Scale, and a 11-item Perceived Affinity of Dress Scale. These new scales were suitable for use in subsequent tests of the hypotheses and analyses of the research questions.

Examination of alpha reliability estimates (Cronbach, 1951) for the newly developed measures (the 17-item two-dimensional Dress Immediacy Scale (DIS) Instrument, the 12-item Perceived Power of Dress Scale, and the 11-item Perceived Affinity of Dress Scale) indicated varying positive results. The 17-item two-dimensional Dress Immediacy Scale (DIS) Instrument utilized statements analogous to items in the two preexisting measures



(Andersen, 1979; Richmond, Gorham, & McCroskey, 1987) to create a series of statements that reflected immediacy of dress. This process produced content validity. The correlations with relevant variables (e.g., nonverbal immediacy) in the study produced construct validity. Reliability estimates for the two dimensions of this measure indicated an alpha reliability of .87 for the 10-item liveliness of dress dimension and .75 for the 7-item informality of dress dimension. These reliability estimates indicated that this new two-dimensional measure had fair to good repeatability. Further, the two dress immediacy dimensions identified added support to the notion that clothing may communicate nonverbal immediacy. The 12-item Perceived Power of Dress Scale developed to operationalize a power dimension of dress had a high alpha reliability of .94. Additionally, the 11-item Perceived Affinity of Dress Scale developed to operationalize an affinity dimension of dress had a high alpha reliability of .93. The reliability estimates indicated that these new measures displayed excellent internal consistency. The connection of these constructs to concepts underlying relational communication provided content validity. The correlations with relevant variables in the study (e.g., nonverbal immediacy) provided construct validity.

This study, therefore, produced useable measures of dress immediacy in the relational communication context. Moreover, these results provide further credence to the claim that clothing as nonverbal immediacy may be defined by the relational dimensions of power and affinity.

## Interpretations of Results

### Interpretation of the First Hypothesis

The support received for the first hypothesis provided validating evidence to bolster the contention that aspects of clothing immediacy may be defined utilizing the relational communication concepts of power and affinity. In other words, clothing may be used to reduce or increase perceptions of distance and that clothing appears to be a viable nonverbal immediacy cue. Prior to this study, no data-based research existed that defined clothing as a component of nonverbal communication via relational dimensions of power and affinity. Further, to test these assertions, newly developed measures were used, the Perceived Power of Dress Scale and the Perceived Affinity of Dress Scale. The correlation of power of dress and affinity of dress with nonverbal immediacy was shown to be significant and accounted for 15% shared variance. Adding further support, power of dress and affinity of dress accounted for a significant unique shared variance with nonverbal immediacy, 1% and 11% respectively. The support received for the claim in the first hypothesis may provide an alternate way for exploring future teacher attire and nonverbal immediacy questions.

### Interpretation of the Second Hypothesis

The second hypothesis sought to expand the claim laid out in the first hypothesis. More specifically, if nonverbal relational dimensions of power of dress and affinity of dress were related to nonverbal immediacy then it may be possible to make an argument that some valid nonverbal phenomenon called dress immediacy may exist. Phrased

another way, there may be analogous identifiable aspects of a person's dress that may communicate nonverbal immediacy. Again, prior to this study, no data-based research existed that attempted to identify or define nonverbal components related to dress immediacy. To test the second hypothesis a newly developed measure was used. This new measure, the Dress Immediacy Scale (DIS) Instrument was operationalized using certain aspects of two previously established nonverbal immediacy measures (Andersen, 1979; Richmond, Gorham, & McCroskey, 1987) (see Appendix H). Factor analysis of the DIS Instrument uncovered two dress immediacy dimensions, one reflecting liveliness of dress and the other informality of dress (see Appendix I). The detection of two dress immediacy dimensions was interesting and may indicate that student respondents may equate liveliness and informality of dress with dress immediacy while excluding other potential sources of dress immediacy (e.g. perceptual distances created by clothing). The correlation of the linear composite consisting of liveliness dimension of dress immediacy and informality dimension of dress immediacy with nonverbal immediacy was significant and accounted for 23% shared variance. Further, each dress immediacy dimension shared a significant unique variance with nonverbal immediacy, the liveliness dimension accounting for 18% shared variance and informality dimension accounting for 1% shared variance. The results of the hypothesis support the existence of a new nonverbal immediacy construct identified as dress immediacy. Moreover, this concept may be further defined by dimensions of liveliness and informality.

### Interpretation of the Third Hypothesis

Study results regarding the third hypothesis provided validating evidence to substantiate the position that the relational communication components of power of dress and affinity of dress are related to dress immediacy dimensions of liveliness of dress and informality of dress. An initial prediction was made that perceptions of power of dress and affinity of dress would be significantly related to perceptions of dress immediacy. In this study, the hypothesis was supported by the results of a canonical correlation. The canonical correlation used power of dress and affinity of dress as predictor variables and the liveliness and informality dimensions of dress immediacy as criterion variables. The first canonical solution was significant ( $R_c = .69$ ; Wilk's Lambda,  $F(4, 956) = 156.74$ ,  $p = .0001$ ) and accounted for 48% of the shared variance. For the first canonical solution, the resulting weights and loadings indicated only one predictor and one criterion variable loaded meaningfully on their canonical variates (see Table 4). Specifically, canonical loadings indicated that power of dress (.9831) was negatively correlated with the informality dimension of dress immediacy (-.8304). A further examination of Pearson's product-moment correlations revealed similar results (see Table 6). The correlation of power of dress with the informality dimension of dress immediacy was  $r = -.52$ . These results support the notion that power of dress, a less immediate or distant behavior, and informality, a more immediate or proximate behavior, would be negatively associated with one another. The second canonical solution was also significant ( $R_c = .55$ ;  $F(1, 479) = 202.42$ ,  $p = .0001$ ) and accounted for 30% of the shared variance. For the second

canonical solution, the resulting weights and loadings also indicated only one predictor and one criterion variable loaded meaningfully on their canonical variates (see Table 4). Canonical loadings indicated that affinity of dress (.9924) was positively correlated with the liveliness dimension of dress immediacy (.9496). Pearson's product-moment correlations revealed similar results (see Table 6). The correlation of affinity of dress with the liveliness dimension of dress immediacy was  $r = .54$ . These results suggest that affinity of dress and liveliness of dress immediacy, both immediate or proximate conceptualizations, are related. This hypothesis provided a further confirmation that power of dress, affinity of dress and dress immediacy dimensions may be valid nonverbal concepts and that the newly operationalized measures created for this study may be valid and reliable means of investigating these concepts.

#### Interpretation of the Fourth Hypothesis

This study predicted that perceptions of power of dress, affinity of dress, and dress immediacy factors would be significantly related to affective learning factors. Previous research has indicated a relationship between nonverbal immediacy behaviors and affective learning (Andersen, 1979; Chaiken, Gillen, Derlega, Heinen, & Wilson, 1978; Kearney Knutson, 1979; Kearney & McCroskey, 1980; Kearney, Plax, & Wendt-Wasco, 1985; McDowell, McDowell, & Hyerdahl, 1980; Plax, Kearney, McCroskey, & Richmond, 1986). The results obtained supported the hypothesis and appeared to support previous research findings. A canonical correlation was used to verify predictions made in the fourth hypothesis. The canonical correlation used power of dress, affinity of dress, the

liveliness and informality dimensions of dress immediacy as predictor variables and five affective learning factors (affect for behaviors recommended in the course, affect for content of the course, affect for course instructor, likelihood of engaging in behaviors recommended in the course, likelihood of taking another course of related content) as criterion variables (see Table 5). Analysis of these variables revealed a single significant canonical correlation. The canonical correlation of power of dress, affinity of dress and dress immediacy dimensions with affective learning factors was significant ( $R_c = .52$ ; Wilks' Lambda,  $F(20, 1473.53) = 8.45$ ,  $p = .00005$ ) and accounted for 27% shared variance. Further, canonical loadings indicated that affinity of dress (.7671) and the liveliness dimension of dress immediacy (.7482) were correlated primarily with the affective learning factors; affect for behaviors recommended in the course (.7579), affect for content of the course (.6547), affect for course instructor (.9805). While not a strong canonical loading, power of dress revealed a significant loading (.5388). Conversely, the informality dimension of dress immediacy (.3752), likelihood of engaging in behaviors recommended in the course (.4890), and likelihood of taking another course of related content (.2567) all produced low canonical loadings. An analysis of bivariate correlations indicated similar results (see Table 6) to those produced by canonical correlation analysis. Both affinity of dress and the liveliness dimension of dress immediacy appeared to have the strongest relationships with the three affective learning variables mentioned above. Power of dress produced the strongest correlations with the affective learning variables; affect for behaviors recommended ( $r = .25$ ), and affect for course instructor ( $r = .27$ ).

Conversely, the informality dimension of dress immediacy when correlated with the affective learning factors; likelihood of engaging in behaviors recommended in the course ( $r = .08$ ) and likelihood of taking another course of related content ( $r = -.02$ ) produced the lowest correlations. It appears, that students most strongly associate more immediate dress concepts like affinity of dress and the liveliness dimension of dress immediacy with affect for course instructor. Additionally, power of dress appears to be associated with affective learning variables to a lesser degree. On the contrary, the informality dimension of dress immediacy appears to have the lowest association with affective learning dimensions. Further, these findings appear to parallel and support previous research findings and provide validating evidence for the claims presented in the first three hypotheses.

#### Interpretation of the First Research Question

Research question one inquired about the magnitudes and directions of the relationships among the different variables in the study. Statistical analyses of the first research question revealed a large number of significant correlations (see Table 6). Among the various correlations, several substantial and marked relationships were present. As noted previously, power of dress and the informality dimension of dress immediacy indicated a substantial negative relationship ( $r = -.52$ ). This negative relationship is consistent with previous research in that the two variables should be conceptually opposite of one another. Conversely, a substantial positive relationship was observed between the liveliness dimension of dress immediacy and affinity of dress ( $r = .54$ ). This relationship

was also consistent with previous research findings suggesting that affinity of dress and liveliness of dress immediacy should be conceptually similar. The liveliness dimension of dress immediacy also indicated a substantially positive correlation ( $r = .46$ ) with nonverbal immediacy. This relationship also appears consistent with previous research and suggests a further verification of the idea that clothing as nonverbal communication may be defined relationally.

Further examination of the variables indicated significant relationships among the research variables and affective learning variables. Collectively, affinity of dress and the liveliness dimension of dress immediacy, which seem to be conceptually similar, appeared to have the strongest and most significant relationships with affective learning variables. These results suggest that a student's overall perceptions of affective learning maybe most strongly related to an instructor's affinity of dress and liveliness of dress. Moreover, this finding may imply that instructors who dress in a more immediate way (e.g., affinity of dress and liveliness of dress) may, to some extent, be able to impact affective learning outcomes. Again, these findings appear consistent with previous research. Finally, analysis of the first research question indicated that several positive substantial and marked relationships were present among the various affective learning and nonverbal immediacy variables. These results were expected based on past research findings (Andersen, 1979; Chaiken, Gillen, Derlega, Heinen, & Wilson, 1978; Kearney Knutson, 1979; Kearney & McCroskey, 1980; Kearney, Plax, & Wendt-Wasco, 1985; McDowell, McDowell, & Hyerdahl, 1980; Plax, Kearney, McCroskey, & Richmond, 1986). Overall, the findings



from the first research question appear consistent with previous related research and provide further validating evidence to the other claims made in this study.

#### Interpretation of the Second Research Question

The second research question which sought to investigate if the associations among the research variables differed due to perceptual differences in instructor gender (see Table 7), instructor type (regular faculty member and graduate student teaching assistant) (see Table 8), and combinations of instructor type and gender (see Table 9). In these stratifications, statistical analyses revealed a several significantly different correlations.

When instructor gender was associated with the research variables (see Table 7), several significantly different relationships were revealed. Specifically, for male instructors, the relationship of affinity of dress to affect for instructor, and likelihood of taking another course of related content were significantly greater for male instructors than for female instructors. Additionally, for male instructors, the relationship of likelihood of taking another course of related content to power of dress produced a significantly higher association for male instructors than for female instructors. For female instructors the relationship of power of dress to the likelihood of engaging in behaviors recommended in the course was stronger than for male instructors. Liveliness of dress produced a significantly higher association for female instructors than for male instructors when compared to the affective learning variable; likelihood of taking another course. Also, for female instructors, informality of dress appeared to be significantly greater when correlated with affect for content of the course and combined affective learning variables

than for their male counterparts. Overall, the results suggest that for male instructors, affinity of dress may be a more important factor in creating instructor affect and increasing students' likelihood of taking another course, than it is for a female instructor. On the contrary, for female instructors, power of dress may be more important in increasing recommended course behaviors, while liveliness of dress may be a more important factor in increasing students' likelihood of taking another course. Finally, for female instructors informality of dress may play a more substantial role in affect for the course content and overall affective learning than for male teachers.

When instructor type was associated with the various research variables (see Table 8), three significantly different results were uncovered. For graduate student teaching assistants, the association of students' likelihood of taking another course with power of dress was stronger than for regular faculty members. Also, for graduate student teaching assistants, informality of dress may be more important in increasing affect for recommended behaviors (in the course). Finally, for regular faculty members, students' likelihood of taking another course was more strongly correlated with affinity of dress than for graduate student teaching assistants. It appears, at least in this stratification, that dress immediacy variables may indicate limited differences in relation to affective learning outcomes.

When instructor type and gender were combined and tested with the various research variables (see Table 9), several significant results were identified. Comparisons of power of dress with affective learning variables produced several interesting results. Affect for

behaviors recommended in the course appeared to be the least important for male teaching assistants. Further, comparisons of power of dress with affect for instructor and overall affective learning indicated that power of dress may have a less important association for female faculty members especially when compared to male teaching assistants. These findings suggest that power of dress may be a more important for teaching assistants, especially male teaching assistants. These conclusions are consistent with previous research (Roach, 1997).

Comparisons of affinity of dress with affective learning variables also produced several interesting results (see Table 9). Most notable was the pattern that emerged concerning female faculty members. Of the affective learning variables, affect for behaviors recommended in the course, affect for content of the course, affect for course instructor, likelihood of engaging in behaviors recommended in the course, and overall affective learning, the relationship to affinity of dress were lowest for female faculty members when compared with other instructor categories. Conversely, of the affective learning variables, affect for behaviors recommended in the course, affect for content of the course, and affect for course instructor, affinity of dress was most important for male faculty members when compared to female faculty members. It appears that affinity of dress may be more important to male faculty members in shaping student perceptions of affective learning, while less important to female faculty members. One explanation for these results may be that the perceptions of student respondents may in fact be shaped by like or similar clothing. A prevalent clothing trend among many male and female students has been to

dress in a like manner (e.g., blue jeans, T-shirt, athletic shoes, etc.). Many of these similarly attired students, regardless of gender, may have perceived more professionally attired female faculty members as being different or less similar to themselves.

Conversely, it may be that these same students may have perceived a similarity in dress for male faculty members, who may be perceived as dressing in a more casual manner.

Comparisons of the liveliness dimension of dress immediacy with affective learning variables also produced several interesting results (see Table 9). Again, based on the results, an interesting pattern surfaced concerning male faculty members. For the affective learning variables, affect for behaviors recommended in the course, affect for content of the course, and affect for course instructor, liveliness of dress immediacy produced the most significant associations for male faculty members. Also, emerging from the comparisons of the liveliness dimension of dress immediacy with affective learning variables was an interesting result related to female faculty members. For the affective learning variables, likelihood of engaging in behaviors recommended in the course and likelihood of taking another course of related content, liveliness of dress immediacy produced the most significant associations for female faculty members. A nonsignificant general trend appears to indicate that liveliness of dress immediacy may be more important to both male faculty and female faculty members in their impact on affective learning outcomes. More specifically, results indicated that for male faculty members liveliness of dress immediacy may be more associated with affect for the teacher, while for female

faculty members liveliness of dress immediacy may be more important in creating behavioral commitment to taking another course (Andersen, 1979).

Findings based on informality of dress immediacy and affective learning variables indicated several interesting relationships (see Table 9). Affect for behaviors recommended in the course appeared to be more important for female teaching assistants, while the least important for female faculty members. Further, relationships of informality of dress with affect for content of the course appeared to be more important for female faculty members than for male faculty members or male and female teaching assistants. The associations of informality of dress immediacy with affect for course instructor and combined affective learning appeared to be more important for female teaching assistants. These findings suggest that informality of dress immediacy may be more important for female instructors, regardless of instructor type.

A final examination of the results indicated an overall interesting finding. While variance results from the different hypotheses and research questions under examination appear, on the surface, to yield low results. The results may be more meaningful than they appear. Based on what was under study, other factors may have had an impact on the findings in this study. Other teacher variables not under consideration in this study (e.g., other nonverbal immediacy variables, verbal immediacy cues, presentation skills, grades, etc.) could have easily influenced the results. One factor that should have impacted the results was the timing of the study, this study was conducted late in a 16-week semester (week 11). It would be expected that clothing would have the most effect in the early or

initial part of the semester. Also, it would be anticipated that only extreme types of clothing styles (e.g., sloppy clothes and tuxedos) would have an effect on participants' perceptions of dress variables. Considering all the other potential variables that could have influenced the findings in this study, the results found in this study are very meaningful. Overall, in terms of affective learning dress does matter.

#### Limitations of the Study

Overall, all hypotheses and research questions were supported in this research study. However, there are several limitations of the study that should be acknowledged. Possibly the most significant limitation of this study was the use of self-reports as a means of collecting data. When student respondents report perceptions of certain teacher behaviors, these self-reports may be influenced by factors like personal bias, flawed memory, or other contributing factors. Future research endeavors relying on self-report data collection, may be improved through the observation and coding of certain teacher clothing behaviors by trained raters. Limiting student perceptions to a more current frame of reference (e.g. perceptions based only on the last class period you attended) may mitigate future data collection concerns associated with self-reports.

Another limitation possibly resulted from the design of the scales and the length of the survey measurement packet given to the respondents. Some of the student respondents failed to answer certain parts of the survey packet resulting missing data. One measure that appeared to cause respondents problems was the Affective Learning Scale (Anderson, 1979). Out of the 482 useable surveys, 29 surveys contained missing or incomplete

affective learning scale data, this was indicative of the problem. As a result, a reduced number of subjects ( $n = 453$ ) were used for statistical tests involving affective learning variables. One potential reason for the absence of data may have been a lack of understanding or uncertainty in how to fill out this particular scale. Finally, data collection may have been impacted by the overall length of survey itself. The survey packet consisted of five pages of demographic data and measurement scales. Of the 585 measurement surveys initially distributed to course instructors, 484 measurement surveys (83%) were completed and returned. This reduced response rate (101 surveys never returned) may have been the result of a lengthy survey. For the future research, a reduction in overall survey length may yield a greater response rate.

Finally, the timing of the data collection may account for some of the limitations in the study. The data collection for this research project occurred near semester's end. This time frame may have had a limiting impact on the data collected. Other bases for affective learning have more time to intervene. The relation of nonverbal immediacy to affective learning was lower than in other previous studies (e.g., Gorham, 1988; Kearney & McCroskey, 1980; Kearney, Plax, & Wendt-Wasco, 1985; Plax, Kearney, McCroskey & Richmond, 1986; Richmond, 1990). These studies collected data earlier in the semester. It is possible, then, that the use of clothing as nonverbal immediacy would have had a greater effect in the early stages of an encounter (e.g., around mid-term, the first few days of a classroom encounter, etc.) than in the later stages of that encounter. With this in mind, data collection at an earlier point in the semester may have yielded stronger results.

### Implications

This study extended previous research concerned with teacher clothing and nonverbal immediacy (e.g., Gorham, et al., 1996; Morris et al., 1996; Roach, 1997). By taking a new approach and examining nonverbal immediacy from a relational communication perspective, new insights into the role of nonverbal immediacy and affective learning outcomes were explored. A central finding of this research project was that there is evidence to validate that clothing as nonverbal communication may be defined by the relational communication concepts of power and affinity. Another equally important finding also indicated that there is evidence to validate that dress immediacy is a viable nonverbal immediacy behavior. Further, this study was not only an examination of hypotheses and research questions, but a testing ground for newly developed measures.

Some future research endeavors utilizing the measurements used in this study should focus on the issue of scale refinement. The dress immediacy scales developed for this study, the 10-item liveliness of dress immediacy scale, produced an alpha reliability of .87., while the other, the 7-item informality of dress immediacy scale generated an alpha reliability estimate of .75. Subsequent research should focus on refining the 7-item informality of dress immediacy scale to improve reliability, which in-turn may improve overall study results. One suggestion for any future scale refinements would be a more in-depth examination and redefinition of phrases that more accurately reflect informality of dress.



Another possible future area of research would be to examine the impact of the various dress immediacy variables over a period of time. This study examined the research variables at one point in time, near the end of a semester. Future research investigations should examine the effects of these same variables over a period of time. It may be that an early facilitating or first impression variable may exist that could yield different results.

This study sought to understand the impact of selected dress immediacy variables on affective learning variables. Future research efforts may be better served by comparing the impact of the same dress immediacy variables with cognitive learning variables. It is possible that these same research variables may also yield different results when compared with cognitive learning outcomes.

Finally, another potential area for future research would be the formulation of a clothing profile for male and female instructors. This clothing profile could potentially identify certain current clothing styles that could enhance clothing immediacy behaviors and possibly affective learning outcomes.

### Summary

This chapter provided a summary of the entire research project and a summary of the results obtained from the testing of hypotheses and research questions. The researcher's interpretations of the results were included in this chapter as well as a measurement section. Finally, the study's limitations and implications for future research were discussed.

## APPENDIX A



University of North Texas  
*Sponsored Projects Administration*

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April 10, 1998

Mr. Mark Burks  
6221 Barcelona Dr.  
Arlington, TX 76016

Re: Human Subjects Application No. 98-068

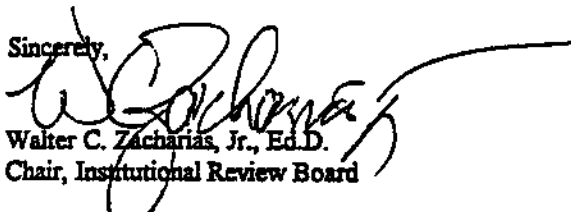
Dear Mr. Burks:

As permitted by federal law and regulations governing the use of human subjects in research projects (45 CFR 46), I have conducted an expedited review of your proposed project titled "A Study of the Relationship Among Teacher's Immediacy of Dress Factors and Affective Learning Factors: A Relational Communication Perspective." The risks inherent in this research are minimal, and the potential benefits to the subjects outweigh those risks. The submitted protocol and informed consent form are hereby approved for the use of human subjects on this project.

The UNT IRB must re-review this project prior to any modifications you make in the approved project. Please contact me if you wish to make such changes or need additional information.

If you have questions, please contact me.

Sincerely,

  
Walter C. Zacharias, Jr., Ed.D.  
Chair, Institutional Review Board

WZ:sb

cc: IRB Members

## **APPENDIX B**

Dear possible participant:

We are collecting data for research conducted by a graduate student. We are asking your permission to include your responses in this study. Your participation is completely voluntary and students may withdraw at anytime without penalty, prejudice or loss of benefits. Further, your responses will be completely anonymous and confidential, you cannot be identified in any way. No known physical, psychological, or social risks are anticipated during the course of this research project. The data collected will be analyzed in terms of means, correlations, etc. There will be only one questionnaire which will take approximately 20 minutes to complete. If you choose to participate, simply return the questionnaire to your instructor or TA.

This is a study about the manner in which your instructor normally dresses while in class. You will be asked questions related to your perceptions of the course, observations of instructional techniques utilized during the semester, your instructor's attire and your grades in the course. The knowledge obtained in this study will assist teachers to gain a greater understanding of how clothing as it relates to other communication concepts can improve educational outcomes.

If there are any questions regarding this study or related procedures, please contact Mark Burks at (940) 565-3198.

This project has been reviewed and approved by the University of North Texas Institutional Review Board for the Protection of Human Subjects in Research, (940) 565-3940.

If you choose not to participate, simply return the questionnaire to your instructor.

## Questionnaire:

Purpose: We are collecting data for research conducted by a graduate student. We are asking your permission to include your responses in this study. Your participation is completely voluntary, and your responses will be completely anonymous. The data will be analyzed in terms of means, correlations, etc. Because you cannot be identified in any way, your responses will be confidential. There will be only one questionnaire. If you choose to participate, simply return the questionnaire to your instructor or TA.

This is a study about the manner in which your regular faculty member dresses while in class. AS YOU FILL OUT THIS QUESTIONNAIRE PLEASE RECALL THE LAST CLASS YOU ATTENDED (OTHER THAN COMM 1010) THAT WAS TAUGHT BY A REGULAR FACULTY MEMBER. PLEASE KEEP THAT CLASS AND THAT TEACHER, THE REGULAR FACULTY MEMBER, FIRMLY IN MIND AS YOU COMPLETE THE WHOLE QUESTIONNAIRE.

Your biological sex (circle):     1     Male             2     Female

Your chronological age:     \_\_\_\_ \_\_\_\_ years

Your ethnic origin/background:

Hispanic	_____	White, Not of Hispanic Origin	_____
Black, Not of Hispanic Origin	_____	Asian or Pacific Islander	_____
American Indian or Alaskan Native	_____		

Regular Faculty Member's biological sex (circle):     1 Male             2 Female

Your estimate of the Regular Faculty Member's chronological age: \_\_\_\_ \_\_\_\_ years

Regular Faculty Member's ethnic origin/background:

Hispanic	_____	White, Not of Hispanic Origin	_____
Black, Not of Hispanic Origin	_____	Asian or Pacific Islander	_____
American Indian or Alaskan Native	_____		

Which department is the class in? (e.g., English, History, etc.)

DEPT: \_\_\_\_\_

What is the prefix and number of the course?

PREFIX & NUMBER: \_\_\_\_\_

The following scales reflect feelings about the course and instructor

*Instructions:* Please respond to the following scales by recalling that same last class you attended (other than COMM 1010) that was taught by a regular faculty member. Circle one number on each set of bipolar scales to indicate your judgment or evaluation of the concept or idea about that class. (Note that in some cases the most positive number is a "1" while in other cases it is a "7.") Circling a number near a word (1 or 7) means that it is highly descriptive of your perceptions/feelings about the instructor's dress. A less extreme choice of a number represents a less strong or weaker perception/feeling. Circle toward the end of the scale that seems most characteristic of your perceptions/feelings about the way that instructor dresses. Circle 4 if the scale does not apply or you are undecided. Circle only one number per scale but please complete all 20 scales.

1. Behaviors recommended in the course:

Good	1	2	3	4	5	6	7	Bad
Worthless	1	2	3	4	5	6	7	Valuable
Fair	1	2	3	4	5	6	7	Unfair
Positive	1	2	3	4	5	6	7	Negative

2. Content/subject matter of the course:

Bad	1	2	3	4	5	6	7	Good
Valuable	1	2	3	4	5	6	7	Worthless
Unfair	1	2	3	4	5	6	7	Fair
Negative	1	2	3	4	5	6	7	Positive

3. Course instructor:

Good	1	2	3	4	5	6	7	Bad
Worthless	1	2	3	4	5	6	7	Valuable
Fair	1	2	3	4	5	6	7	Unfair
Positive	1	2	3	4	5	6	7	Negative

4. In "real life" situations, your likelihood of actually attempting to engage in behaviors recommended in the course:

Likely	1	2	3	4	5	6	7	Unlikely
Impossible	1	2	3	4	5	6	7	Possible
Probable	1	2	3	4	5	6	7	Improbable
Would Not	1	2	3	4	5	6	7	Would

5. Your likelihood of actually enrolling in another course of related content if your schedule so permits:

Unlikely	1	2	3	4	5	6	7	Likely
Possible	1	2	3	4	5	6	7	Impossible
Improbable	1	2	3	4	5	6	7	Probable
Would	1	2	3	4	5	6	7	Would Not

*Instructions:* On the scales below, please indicate your reaction to the way that instructor typically dresses. Please respond by recalling that last class you attended (other than COMM 1010) that was taught by a regular faculty member. Circle a number between each pair of words that best represents your perceptions and feelings of how that instructor typically dresses. Circling a number near a word (1 or 7) means that it is highly descriptive of your perceptions/feelings about the instructor's dress. A less extreme choice of a number represents a less strong or weaker perception/feeling. Circle toward the end of the scale that seems most characteristic of your perceptions/feelings about the way that instructor dresses. Circle 4 if the scale does not apply or you are undecided. Circle only one number per scale but please complete all 12 scales.

The way that instructor dresses (is):

Unassertive	1	2	3	4	5	6	7	Assertive
Formal	7	6	5	4	3	2	1	Informal
Yielding	1	2	3	4	5	6	7	Controlling
High status	7	6	5	4	3	2	1	Low status
Noninfluential	1	2	3	4	5	6	7	Influential
Commonly	1	2	3	4	5	6	7	Authoritatively
Strong	7	6	5	4	3	2	1	Weak
Powerful	7	6	5	4	3	2	1	Powerless
High class	7	6	5	4	3	2	1	Low class
Inferior	1	2	3	4	5	6	7	Superior
Unimportantly	1	2	3	4	5	6	7	Importantly
Dominant	7	6	5	4	3	2	1	Submissive

*Instructions:* On the scales below, please indicate your reaction to the way that instructor typically dresses. Please respond by recalling that last class you attended (other than COMM 1010) that was taught by a regular faculty member. Circle a number between each pair of words that best represents your perceptions and feelings of how that instructor typically dresses. Circling a number near a word (1 or 7) means that it is highly descriptive of your perceptions/feelings about the instructor's dress. A less extreme choice of a number represents a less strong or weaker perception/feeling. Circle toward the end of the scale that seems most characteristic of your perceptions/feelings about the way that instructor dresses. Circle 4 if the scale does not apply or you are undecided. Circle only one number per scale but please complete all 12 scales.

The way that instructor dresses (is):

Offends me	1	2	3	4	5	6	7	Appeals to me
Compares to me	7	6	5	4	3	2	1	Contrasts to me
Unlikable	1	2	3	4	5	6	7	Likable
Same as me	7	6	5	4	3	2	1	Different from me
Unfriendly	1	2	3	4	5	6	7	Friendly
Resembles me	7	6	5	4	3	2	1	Does not resemble me
Distant to me	1	2	3	4	5	6	7	Close to me
Unattractive	1	2	3	4	5	6	7	Attractive
Similar to me	7	6	5	4	3	2	1	Dissimilar to me
Approachable	7	6	5	4	3	2	1	Unapproachable
Unlike me	7	6	5	4	3	2	1	Like me
Unpleasant	1	2	3	4	5	6	7	Pleasant



*Instructions:* Below is a series of descriptions of things some teachers have been observed doing in some classes. Please respond by recalling that same last class you attended (other than COMM 1010) that was taught by a regular faculty member. For each item, please indicate on a scale of 0-4 how often that teacher in that class engages in those behaviors. Use this scale: never = 0, rarely = 1, occasionally = 2, often = 3, and very often = 4.

- \_\_\_\_\_ 1. Sits behind desk while teaching.
- \_\_\_\_\_ 2. Gestures while talking to the class.
- \_\_\_\_\_ 3. Uses monotone/dull voice when talking to the class.
- \_\_\_\_\_ 4. Looks at the class while talking.
- \_\_\_\_\_ 5. Smiles at the class while talking.
- \_\_\_\_\_ 6. Has a very tense body position while talking to the class.
- \_\_\_\_\_ 7. Touches students in the class.
- \_\_\_\_\_ 8. Moves around the classroom while teaching.
- \_\_\_\_\_ 9. Sits on a desk or in a chair while teaching.
- \_\_\_\_\_ 10. Looks at board or notes while talking to the class.
- \_\_\_\_\_ 11. Stands behind podium or desk while teaching.
- \_\_\_\_\_ 12. Has a very relaxed body position while talking to the class.
- \_\_\_\_\_ 13. Smiles at individual students in the class.
- \_\_\_\_\_ 14. Uses a variety of vocal expressions when talking to the class.

On the scales below, please indicate how that instructor typically dresses.

*Instructions:* Below are a series of clothing descriptions as they relate to that classroom instructor. Please respond by recalling that last class you attended (other than COMM 1010) that was taught by a regular faculty member. For each item, please indicate on a scale of 0 - 4 how the descriptions listed below relate to that classroom instructor's attire. Use this scale: never = 0, rarely = 1, occasionally = 2, often = 3, very often = 4.

- \_\_\_\_\_ 1. The way this instructor dresses catches my eye.
- \_\_\_\_\_ 2. This instructor wears uncomfortable or restrictive clothing.
- \_\_\_\_\_ 3. This instructor wears active types of clothing.
- \_\_\_\_\_ 4. This instructor wears very relaxed, casual clothing most of the time.
- \_\_\_\_\_ 5. This instructor wears lighthearted or cheerful clothing.
- \_\_\_\_\_ 6. The clothes this instructor wears are boring and do not get my attention.
- \_\_\_\_\_ 7. This instructor wears a variety of personally expressive clothing.
- \_\_\_\_\_ 8. This instructor tends to wear loose or lively clothing.
- \_\_\_\_\_ 9. This instructor seldom wears personally expressive clothing.
- \_\_\_\_\_ 10. This instructor wears more formal/traditional styles of dress.
- \_\_\_\_\_ 11. This instructor wears clothing which makes a positive impression.
- \_\_\_\_\_ 12. The way this instructor dresses is distant from my own clothing style.
- \_\_\_\_\_ 13. This instructor wears unimpressive types of clothing.
- \_\_\_\_\_ 14. This instructor tends to wear less lively or dull clothing.
- \_\_\_\_\_ 15. This instructor wears uncheerful or gloomy clothing.
- \_\_\_\_\_ 16. I personally find this instructor's clothing cheery or carefree.
- \_\_\_\_\_ 17. This instructor's clothing has actually touched or brushed me.
- \_\_\_\_\_ 18. The way this instructor dresses reduces the barriers of distance or status.
- \_\_\_\_\_ 19. This instructor wears monotonous, dull clothing.
- \_\_\_\_\_ 20. This instructor's clothing represents a barrier between us.
- \_\_\_\_\_ 21. The way this instructor dresses creates more distance or status.

## APPENDIX C

Dear possible participant:

We are collecting data for research conducted by a graduate student. We are asking your permission to include your responses in this study. Your participation is completely voluntary and students may withdraw at anytime without penalty, prejudice or loss of benefits. Further, your responses will be completely anonymous and confidential, you cannot be identified in any way. No known physical, psychological, or social risks are anticipated during the course of this research project. The data collected will be analyzed in terms of means, correlations, etc. There will be only one questionnaire which will take approximately 20 minutes to complete. If you choose to participate, simply return the questionnaire to your instructor or TA.

This is a study about the manner in which your instructor normally dresses while in class. You will be asked questions related to your perceptions of the course, observations of instructional techniques utilized during the semester, your instructor's attire and your grades in the course. The knowledge obtained in this study will assist teachers to gain a greater understanding of how clothing as it relates to other communication concepts can improve educational outcomes.

If there are any questions regarding this study or related procedures, please contact Mark Burks at (940) 565-3198.

This project has been reviewed and approved by the University of North Texas Institutional Review Board for the Protection of Human Subjects in Research, (940) 565-3940.

If you choose not to participate, simply return the questionnaire to your instructor.

## Questionnaire:

**Purpose:** We are collecting data for research conducted by a graduate student. We are asking your permission to include your responses in this study. Your participation is completely voluntary, and your responses will be completely anonymous. The data will be analyzed in terms of means, correlations, etc. Because you cannot be identified in any way, your responses will be confidential. There will be only one questionnaire. If you choose to participate, simply return the questionnaire to your instructor or TA.

This is a study about the manner in which your graduate student teaching assistant dresses while in class. **AS YOU FILL OUT THIS QUESTIONNAIRE PLEASE RECALL THE LAST CLASS YOU ATTENDED (OTHER THAN COMM 1010) THAT WAS TAUGHT BY A GRADUATE STUDENT TEACHING ASSISTANT. PLEASE KEEP THAT CLASS AND THAT TEACHER, THE GRADUATE STUDENT TEACHING ASSISTANT, FIRMLY IN MIND AS YOU COMPLETE THE WHOLE QUESTIONNAIRE.** (If you are not enrolled in another class with a graduate student teaching assistant, fill out this questionnaire on COMM 1010 and the graduate student teaching assistant in the recitation section).

**Your biological sex (circle):**    1    Male            2    Female

**Your chronological age:**    \_\_\_\_ \_\_\_\_ years

**Your ethnic origin/background:**

Hispanic	_____	White, Not of Hispanic Origin	_____
Black, Not of Hispanic Origin	_____	Asian or Pacific Islander	_____
American Indian or Alaskan Native	_____		

**Graduate Student Teaching Assistant's biological sex (circle):** 1 Male          2 Female

**Your estimate of Graduate Student Teaching Assistant's chronological age:** \_\_\_\_ \_\_\_\_ years

**Graduate Student Teaching Assistant's ethnic origin/background:**

Hispanic	_____	White, Not of Hispanic Origin	_____
Black, Not of Hispanic Origin	_____	Asian or Pacific Islander	_____
American Indian or Alaskan Native	_____		

**Which department is the class in? (e.g., English, History, etc.)**

DEPT: \_\_\_\_\_

**What is the prefix and number of the course?**

PREFIX & NUMBER: \_\_\_\_\_

The following scales reflect feelings about the course and instructor

*Instructions:* Please respond to the following scales by recalling that same last class you attended (other than COMM 1010) that was taught by a graduate student teaching assistant. Circle one number on each set of bipolar scales to indicate your judgment or evaluation of the concept or idea about that class. (Note that in some cases the most positive number is a "1" while in other cases it is a "7.") Circling a number near a word (1 or 7) means that it is highly descriptive of your perceptions/feelings about the instructor's dress. A less extreme choice of a number represents a less strong or weaker perception/feeling. Circle toward the end of the scale that seems most characteristic of your perceptions/feelings about the way that instructor dresses. Circle 4 if the scale does not apply or you are undecided. Circle only one number per scale but please complete all 20 scales.

1. Behaviors recommended in the course:

Good	1	2	3	4	5	6	7	Bad
Worthless	1	2	3	4	5	6	7	Valuable
Fair	1	2	3	4	5	6	7	Unfair
Positive	1	2	3	4	5	6	7	Negative

2. Content/subject matter of the course:

Bad	1	2	3	4	5	6	7	Good
Valuable	1	2	3	4	5	6	7	Worthless
Unfair	1	2	3	4	5	6	7	Fair
Negative	1	2	3	4	5	6	7	Positive

3. Course instructor:

Good	1	2	3	4	5	6	7	Bad
Worthless	1	2	3	4	5	6	7	Valuable
Fair	1	2	3	4	5	6	7	Unfair
Positive	1	2	3	4	5	6	7	Negative

4. In "real life" situations, your likelihood of actually attempting to engage in behaviors recommended in the course:

Likely	1	2	3	4	5	6	7	Unlikely
Impossible	1	2	3	4	5	6	7	Possible
Probable	1	2	3	4	5	6	7	Improbable
Would Not	1	2	3	4	5	6	7	Would

5. Your likelihood of actually enrolling in another course of related content if your schedule so permits:

Unlikely	1	2	3	4	5	6	7	Likely
Possible	1	2	3	4	5	6	7	Impossible
Improbable	1	2	3	4	5	6	7	Probable
Would	1	2	3	4	5	6	7	Would Not

**Instructions:** On the scales below, please indicate your reaction to the way that instructor typically dresses. Please respond by recalling that last class you attended (other than COMM 1010) that was taught by a graduate student teaching assistant. Circle a number between each pair of words that best represents your perceptions and feelings of how that instructor typically dresses. Circling a number near a word (1 or 7) means that it is highly descriptive of your perceptions/feelings about the instructor's dress. A less extreme choice of a number represents a less strong or weaker perception/feeling. Circle toward the end of the scale that seems most characteristic of your perceptions/feelings about the way that instructor dresses. Circle 4 if the scale does not apply or you are undecided. Circle only one number per scale but please complete all 12 scales.

The way that instructor dresses (is):

Unassertive	1	2	3	4	5	6	7	Assertive
Formal	7	6	5	4	3	2	1	Informal
Yielding	1	2	3	4	5	6	7	Controlling
High status	7	6	5	4	3	2	1	Low status
Noninfluential	1	2	3	4	5	6	7	Influential
Commonly	1	2	3	4	5	6	7	Authoritatively
Strong	7	6	5	4	3	2	1	Weak
Powerful	7	6	5	4	3	2	1	Powerless
High class	7	6	5	4	3	2	1	Low class
Inferior	1	2	3	4	5	6	7	Superior
Unimportantly	1	2	3	4	5	6	7	Importantly
Dominant	7	6	5	4	3	2	1	Submissive

**Instructions:** On the scales below, please indicate your reaction to the way that instructor typically dresses. Please respond by recalling that last class you attended (other than COMM 1010) that was taught by a graduate student teaching assistant. Circle a number between each pair of words that best represents your perceptions and feelings of how that instructor typically dresses. Circling a number near a word (1 or 7) means that it is highly descriptive of your perceptions/feelings about the instructor's dress. A less extreme choice of a number represents a less strong or weaker perception/feeling. Circle toward the end of the scale that seems most characteristic of your perceptions/feelings about the way that instructor dresses. Circle 4 if the scale does not apply or you are undecided. Circle only one number per scale but please complete all 12 scales.

The way that instructor dresses (is):

Offends me	1	2	3	4	5	6	7	Appeals to me
Compares to me	7	6	5	4	3	2	1	Contrasts to me
Unlikable	1	2	3	4	5	6	7	Likable
Same as me	7	6	5	4	3	2	1	Different from me
Unfriendly	1	2	3	4	5	6	7	Friendly
Resembles me	7	6	5	4	3	2	1	Does not resemble me
Distant to me	1	2	3	4	5	6	7	Close to me
Unattractive	1	2	3	4	5	6	7	Attractive
Similar to me	7	6	5	4	3	2	1	Dissimilar to me
Approachable	7	6	5	4	3	2	1	Unapproachable
Unlike me	7	6	5	4	3	2	1	Like me
Unpleasant	1	2	3	4	5	6	7	Pleasant

*Instructions:* Below is a series of descriptions of things some teachers have been observed doing in some classes. Please respond by recalling that same last class you attended (other than COMM 1010) that was taught by a graduate student teaching assistant. For each item, please indicate on a scale of 0-4 how often that teacher in that class engages in those behaviors. Use this scale: never = 0, rarely = 1, occasionally = 2, often = 3, and very often = 4.

- \_\_\_\_\_ 1. Sits behind desk while teaching.
- \_\_\_\_\_ 2. Gestures while talking to the class.
- \_\_\_\_\_ 3. Uses monotone/dull voice when talking to the class.
- \_\_\_\_\_ 4. Looks at the class while talking.
- \_\_\_\_\_ 5. Smiles at the class while talking.
- \_\_\_\_\_ 6. Has a very tense body position while talking to the class.
- \_\_\_\_\_ 7. Touches students in the class.
- \_\_\_\_\_ 8. Moves around the classroom while teaching.
- \_\_\_\_\_ 9. Sits on a desk or in a chair while teaching.
- \_\_\_\_\_ 10. Looks at board or notes while talking to the class.
- \_\_\_\_\_ 11. Stands behind podium or desk while teaching.
- \_\_\_\_\_ 12. Has a very relaxed body position while talking to the class.
- \_\_\_\_\_ 13. Smiles at individual students in the class.
- \_\_\_\_\_ 14. Uses a variety of vocal expressions when talking to the class.

On the scales below, please indicate how that instructor typically dresses.

*Instructions:* Below are a series of clothing descriptions as they relate to that classroom instructor. Please respond by recalling that last class you attended (other than COMM 1010) that was taught by a graduate student teaching assistant. For each item, please indicate on a scale of 0 - 4 how the descriptions listed below relate to that classroom instructor's attire. Use this scale: never = 0, rarely = 1, occasionally = 2, often = 3, very often = 4.

- \_\_\_\_\_ 1. The way this instructor dresses catches my eye.
- \_\_\_\_\_ 2. This instructor wears uncomfortable or restrictive clothing.
- \_\_\_\_\_ 3. This instructor wears active types of clothing.
- \_\_\_\_\_ 4. This instructor wears very relaxed, casual clothing most of the time.
- \_\_\_\_\_ 5. This instructor wears lighthearted or cheerful clothing.
- \_\_\_\_\_ 6. The clothes this instructor wears are boring and do not get my attention.
- \_\_\_\_\_ 7. This instructor wears a variety of personally expressive clothing.
- \_\_\_\_\_ 8. This instructor tends to wear loose or lively clothing.
- \_\_\_\_\_ 9. This instructor seldom wears personally expressive clothing.
- \_\_\_\_\_ 10. This instructor wears more formal/traditional styles of dress.
- \_\_\_\_\_ 11. This instructor wears clothing which makes a positive impression.
- \_\_\_\_\_ 12. The way this instructor dresses is distant from my own clothing style.
- \_\_\_\_\_ 13. This instructor wears unimpressive types of clothing.
- \_\_\_\_\_ 14. This instructor tends to wear less lively or dull clothing.
- \_\_\_\_\_ 15. This instructor wears uncheerful or gloomy clothing.
- \_\_\_\_\_ 16. I personally find this instructor's clothing cheery or carefree.
- \_\_\_\_\_ 17. This instructor's clothing has actually touched or brushed me.
- \_\_\_\_\_ 18. The way this instructor dresses reduces the barriers of distance or status.
- \_\_\_\_\_ 19. This instructor wears monotonous, dull clothing.
- \_\_\_\_\_ 20. This instructor's clothing represents a barrier between us.
- \_\_\_\_\_ 21. The way this instructor dresses creates more distance or status.

## APPENDIX D





University of North Texas  
Department of Communication Studies

Monday, April 6, 1998

Dear COMM 1010 Recitation Leaders,

**IMPORTANT ! Please read carefully.** We need your help with data collection for Mark Burks' thesis.

1. We want you to pass out the survey and coupon at Examination 2. That is, all COMM 1010 students will receive a survey on Wednesday and Thursday (April 8 and 9).
2. The students will complete the surveys at home.
3. When to Return the Surveys ? In order to earn the 15 points under "Bruner's Research Participation Points," a student *must* return the survey either:
  - \* at COMM 1010 lecture *this Friday*  
Friday, April 10  
10:00 a.m. or 11:00 a.m.  
Lyceum
  - \* at *first* COMM 1010 recitation next week  
Monday, Tuesday, or Wednesday (2 hour)  
April 13, 14, or 15

Please follow these guidelines very carefully.

THANK YOU !

Michael Bruner

COMM 1010 Recitation Leaders,

Please read the following survey instructions to your classes.

1. Ask if anyone would like to participate in this survey. Participation is voluntary.
2. Please give anyone interested a survey. Make sure the participants read the survey instructions before completing.
3. The students will complete the survey at home or after class.
4. In order to earn 15 RESEARCH or EVENT points, a student must return the survey either:

At the COMM 1010 lecture this Friday April 10, 1998. Either the 10:00 AM or the 11:00 AM lecture in the Lyceum. Please instruct students to hand in the surveys to Dr. Bruner either before or after lecture.

At the first COMM 1010 recitation meeting next week: Monday, Tuesday, or Wednesday (2 hour) April 13, 14, or 15. Student participants will hand in any completed surveys to their recitation leaders.

**Please remind students that RESEARCH or EVENT points are part of their overall course grade. They are not extra credit points.**

#### **NOTES:**

There are two different versions of the survey (One version asks questions about Graduate Student Teaching Assistants, while the other version asks questions about Regular Faculty Members). Please make sure surveys alternate as you hand them out to insure uniformity in data collection. (They should already be presorted).

If a student does not have a class taught by a Graduate Student Teaching Assistant have that person switch surveys with someone in the class or give that person a different version of the survey. If a student does not have a class taught by a Regular Faculty Member have that person switch surveys with someone in the class or give that person a different version of the survey.

Thank you for your help, I appreciate it very much!!!!

Mark (Burks)

## **APPENDIX E**

### Perceived Affective Learning Scale

*Instructions:* Please respond to the following scales by recalling the last class you attended. Circle one number on each set of bipolar scales to indicate your judgment or evaluation of the concept or idea about that class. Note that in some cases the most positive number is a "1" while in other cases it is a "7."

1. Behaviors recommended in the course:

Good	1	2	3	4	5	6	7	Bad
Worthless	1	2	3	4	5	6	7	Valuable
Fair	1	2	3	4	5	6	7	Unfair
Positive	1	2	3	4	5	6	7	Negative

2. Content/subject matter of the course:

Bad	1	2	3	4	5	6	7	Good
Valuable	1	2	3	4	5	6	7	Worthless
Unfair	1	2	3	4	5	6	7	Fair
Negative	1	2	3	4	5	6	7	Positive

3. Course instructor:

Good	1	2	3	4	5	6	7	Bad
Worthless	1	2	3	4	5	6	7	Valuable
Fair	1	2	3	4	5	6	7	Unfair
Positive	1	2	3	4	5	6	7	Negative

4. In "real life" situations, your likelihood of actually attempting to engage in behaviors recommended in the course:

Likely	1	2	3	4	5	6	7	Unlikely
Impossible	1	2	3	4	5	6	7	Possible
Probable	1	2	3	4	5	6	7	Improbable
Would Not	1	2	3	4	5	6	7	Would

5. Your likelihood of actually enrolling in another course of related content if your schedule so permits:

Unlikely	1	2	3	4	5	6	7	Likely
Possible	1	2	3	4	5	6	7	Impossible
Improbable	1	2	3	4	5	6	7	Probable
Would	1	2	3	4	5	6	7	Would Not

## APPENDIX F

### Nonverbal Immediacy Behaviors Scale

*Instructions:* Below is a series of descriptions of things some teachers have been observed doing in some classes. For each item, please indicate on a scale of 0-4 how often your teacher in that class engages in those behaviors. Use this scale: never = 0, rarely = 1, occasionally = 2, often = 3, and very often = 4.

1. Sits behind desk while teaching.
2. Gestures while talking to the class.
3. Uses monotone/dull voice when talking to the class.
4. Looks at the class while talking.
5. Smiles at the class while talking.
6. Has a very tense body position while talking to the class.
7. Touches students in the class.
8. Moves around the classroom while teaching.
9. Sits on a desk or in a chair while teaching.
10. Looks at board or notes while talking to the class.
11. Stands behind podium or desk while teaching.
12. Has a very relaxed body position while talking to the class.
13. Smiles at individual students in the class.
14. Uses a variety of vocal expressions when talking to the class.

## APPENDIX G

Item Pool for Perceived Dress Immediacy Scale

*Instructions:* Below are a series of clothing descriptions as they relate to your classroom instructor. Please respond by recalling the last class you attended (other than COMM 1010) that was taught by an instructor. For each item, please indicate on a scale of 0 - 4 how the descriptions listed below relate to your classroom instructor and their attire. Use this scale: never = 0, rarely = 1, occasionally = 2, often = 3, very often = 4.

- \_\_\_\_\_ 1. The way this instructor dresses catches my eye.
- \_\_\_\_\_ 2. This instructor wears uncomfortable or tense clothing.
- \_\_\_\_\_ 3. This instructor wears active types of clothing.
- \_\_\_\_\_ 4. This instructor wears very relaxed, casual clothing most of the time.
- \_\_\_\_\_ 5. This instructor wears lighthearted and cheerful clothing.
- \_\_\_\_\_ 6. The clothes this instructor wears are boring and do not get my attention.
- \_\_\_\_\_ 7. This instructor wears a variety of personally expressive clothing.
- \_\_\_\_\_ 8. This instructor tends to wear loose and lively clothing.
- \_\_\_\_\_ 9. This instructor seldom wears personally expressive clothing.
- \_\_\_\_\_ 10. This instructor wears more formal/traditional styles of dress.
- \_\_\_\_\_ 11. This instructor wears clothing which makes an impression.
- \_\_\_\_\_ 12. The way this instructor dresses is distant from my own clothing style.
- \_\_\_\_\_ 13. This instructor wears unimpressive types of clothing.
- \_\_\_\_\_ 14. This instructor tends to wear less lively and dull clothing.
- \_\_\_\_\_ 15. This instructor wears uncheerful or gloomy clothing.
- \_\_\_\_\_ 16. I personally find this instructor's clothing cheery and carefree.
- \_\_\_\_\_ 17. This instructor's clothing has actually touched or brushed me.
- \_\_\_\_\_ 18. The way this instructor dresses reduces the barriers of distance and status.
- \_\_\_\_\_ 19. This instructor wears monotonous, dull clothing.
- \_\_\_\_\_ 20. This instructor's clothing represents a barrier between us.
- \_\_\_\_\_ 21. The way this instructor dresses creates more distance and status.



## APPENDIX H

Derivation of dress items from previous nonverbal immediacy items in developing the Dress Immediacy Scale: (Andersen, 1979; McCroskey et.al., 1987)

Common items:

- \* This instructor engages in more eye contact with me when teaching than most other instructors.
- \*\* Looks at the class while talking.
- The way this instructor dresses catches my eye.
  
- \* This instructor has a more tense body position while teaching than most other instructors.
- \*\* Has a very tense body position while talking to the class.
- This instructor wears uncomfortable or tense clothing.
  
- \* This instructor gestures more while teaching than most other instructors.
- \*\* Gestures while talking to the class.
- This instructor wears active types of clothing.
  
- \* This instructor has a more relaxed body position while teaching than most other instructors.
- \*\* Has a very relaxed body position while talking to the class.
- This instructor wears very relaxed, casual clothing most of the time.
  
- \* This instructor smiles more during class than most other instructors.
- \*\* Smiles at the class while talking.
- This instructor wears lighthearted and cheerful clothing.
  
- \* This instructor engages in less eye contact with me when teaching than most other instructors.
- \*\* Looks at board or notes while talking to the class.

- The clothes this instructor wears are boring and do not get my attention.
- \* This instructor is more vocally expressive while teaching than most other instructors.
- \*\* Uses a variety of vocal expressions when talking to the class.
- This instructor wears a variety of personally expressive clothing.
- \* This instructor engages in more movement while teaching than most other instructors.
- \*\* Moves around the classroom while teaching.
- This instructor tends to wear loose and lively clothing.

#### Unique items:

- \* This instructor is less vocally expressive while teaching than most other instructors.
- This instructor seldom wears personally expressive clothing.
- \* This instructor engages in less movement while teaching than most other instructors.
- This instructor wears more formal/traditional styles of dress.
- \* This instructor directs his/her body position more toward students while teaching than most other instructors.
- This instructor wears clothing which makes an impression.
- \* This instructor is more distant from students while teaching than most other instructors.
- The way this instructor dresses is distant from my own clothing style.
- \* This instructor directs his/her body position less toward students while teaching than most other instructors.

- This instructor wears unimpressive types of clothing.
- \* This instructor gestures less while teaching than most other instructors.
  - This instructor tends to wear less lively and dull clothing
- \* This instructor smiles less during class than most other instructors.
  - This instructor wears uncheerful or gloomy clothing.
- \*\* Smiles at individual students in the class.
  - I personally find this instructor's clothing cheery and carefree.
- \*\* Touches students in the class.
  - This instructor's clothing has actually touched or brushed me.
- \*\* Sits on a desk or in a chair while teaching.
  - The way this instructor dresses reduces the barriers of distance and status.
- \*\* Uses monotone/dull voice when talking to the class.
  - This instructor wears monotonous, dull clothing.
- \*\* Sits behind desk while teaching.
  - This instructor's clothing represents a barrier between us.
- \*\* Stands behind podium or desk while teaching.
  - The way this instructor dresses creates more distance and status.
- \* Andersen, J. F. (1979). Teacher immediacy as a predictor of teaching effectiveness. In D. Nimmo (Ed.), Communication Yearbook, 3 (pp. 543-560). New Brunswick, NJ: Transaction Books.
- \*\* Richmond, V. P., Gorham, J. S., & McCroskey, J. C. (1987). The relationship between selected immediacy behaviors and cognitive learning. In M. L. McLaughlin (Ed.), Communication Yearbook, 10 (pp. 574-590). Beverly Hills: Sage.

## APPENDIX I

Two Factor Analysis for Dress Immediacy Scale		
Item Number	Factor 1 (Liveliness)	Factor 2 (Informality)
1	.44	.06
2	--*	--*
3	.19	.44
4	-.06	.67
5	.52	.47
6	.73	.22
7	.40	.30
8	.20	.56
9	--*	--*
10	-.00	.71
11	.50	-.15
12	--*	--*
13	.71	-.05
14	.84	.26
15	.68	.27
16	.61	.44
17	--*	--*
18	.13	.43
19	.84	.30
20	.23	.48
21	.23	.54

\* Items did not meet established criteria and were eliminated

## APPENDIX J

### Dress Immediacy Scale Dimensions

#### Liveliness Dimension of Dress Immediacy Items:

The way this instructor dresses catches my eye.  
 This instructor wears lighthearted and cheerful clothing.  
 The clothes this instructor wears are boring and do not get my attention.  
 This instructor wears a variety of personally expressive clothing.  
 This instructor wears clothing which makes an impression.  
 This instructor wears unimpressive types of clothing.  
 This instructor tends to wear less lively and dull clothing  
 This instructor wears uncheerful or gloomy clothing.  
 I personally find this instructor's clothing cheery and carefree.  
 This instructor wears monotonous, dull clothing.

#### Informality Dimension of Dress Immediacy Items:

This instructor wears active types of clothing.  
 This instructor wears very relaxed, casual clothing most of the time.  
 This instructor tends to wear loose and lively clothing.  
 This instructor wears more formal/traditional styles of dress.  
 The way this instructor dresses reduces the barriers of distance and status.  
 This instructor's clothing represents a barrier between us.  
 The way this instructor dresses creates more distance and status.



## APPENDIX K

Single Factor Analysis for Perceived Power of Dress Scale

Item Number	Factor Analysis
1	.65
2	.75
3	.58
4	.86
5	.72
6	.68
7	.79
8	.80
9	.80
10	.77
11	.84
12	.77

## APPENDIX L

Single Factor Analysis for Perceived Affinity of Dress Scale

Item Number	Factor Analysis
1	.69
2	.86
3	.77
4	.82
5	.51
6	.86
7	.79
8	.67
9	.86
10	-- *
11	.83
12	.68

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\* Item did not meet established criteria and was eliminated

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