THE STRENGTH OF ATTRACTIVENESS AND THE POWER OF VISUAL NONVERBAL COMMUNICATION WHEN RATING ONE'S COMMUNICATIVE COMPETENCE

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THE STRENGTH OF ATTRACTIVENESS AND THE POWER OF VISUAL NONVERBAL COMMUNICATION WHEN RATING ONE'S COMMUNICATIVE COMPETENCE

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Jennifer Gill, daughter of Charles and Madeleine Gill, was born July 14, 1982, in Silver Spring, Maryland. While attending University of Maryland, College Park for her undergraduate degree, she was a research assistant for Dr. Laura Janusik and Dr. Jonghan Kim. In April 2004, she presented at the International Listening Association's (ILA) Annual Conference held in Fort Myers, Florida. She graduated from University of Maryland with her Bachelor of Arts degree in Communication in May 2004. She began her graduate studies in August 2004 at Auburn University. While at Auburn, she published a book review in the International Journal of Listening and became very active in the organization. She was selected by ILA's President to be the Student Executive Board Member in September 2005 and is currently serving a two-year term. Also while at Auburn University, she worked as a graduate teaching assistant for various courses and solo taught Public Speaking and Communicating in Organizations. Jennifer assisted Dr. Margaret Fitch-Hauser and Dr. Sei-Hill Kim with their research from August 2004 until May 2006. She will graduate with her Master's in Communication in May 2006 and in she plans to pursue her PhD in the fall.

THESIS ABSTRACT

THE STRENGTH OF ATTRACTIVENESS AND THE POWER OF VISUAL NONVERBAL COMMUNICATION WHEN RATING ONE'S COMMUNICATIVE COMPETENCE

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The effect that actual communicative competence, attractiveness, and method of observation have on one's perceived competence was examined. Four hundred and thirty-three participants either watched video or listened to an audiotape of an interaction. Then they rated the communicative competence of the female speaker in the interaction, Sue. Sue was either attractive or unattractive and displayed either competent or incompetent behaviors. Results showed that attractiveness did not significantly affect how individuals perceived Sue's competence. Method of observation was not a statistically significant predictor of competent Sue's perceived competence, however, method of observation did significantly affect how participants rated incompetent Sue's perceived competence.

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I. INTRODUCTION

Numerous factors influence how people evaluate the competence of others. Two primary factors are nonverbal communication and physical attractiveness. It is important to research how individuals rate others' communicative competence in order to better understand the concept. Communicative competence is defined in this study as having the knowledge of appropriate communication practices and the skills and motivation to implement those techniques effectively while adapting to different communication situations. Over the past 20 years, communicative competence research has addressed everything from skills that are considered competent in the educational setting (Abbas & McLean, 2003; Kerssen-Griep, 2001) and in the workplace (Maes, Weldy & Icenogle, 1997; Sriussadaporn-Charoenngam & Jablin, 1999), to attempting to improve one's communicative competence (Light, Binger, Agate, & Ramsay, 1999; McGee & Cegala, 1998; Schoenbrodt, Kernis, & Gesell, 2003) and discovering what communicative competence entails in other cultures (Bradford, Meyers, & Kane, 1999; MacIntyre, Baker, Clement, & Donovan, 2003; Martin, Hammer & Bradford, 1994; Schoenbrodt et al., 2003; Sriussadaporn-Charoenngam & Jablin, 1999).

Research has also addressed relationships between competence and attractiveness (Duran & Kelly, 1988; Zakahi & Duran, 1984). Specifically, research suggests that individuals with higher communicative competence are viewed as more attractive (Duran

& Kelly, 1988), and conversely, that attractive individuals are perceived as more competent (Zakahi & Duran, 1984). Although competence and attractiveness have been empirically related, the strength of the impact of attractiveness when rating communicative competence is not yet known.

Another major aspect of the current research deals with the necessity of nonverbal communication, specifically visual vs. auditory nonverbal communication, when rating one's communicative competence. Wiemann (1977) explains that nonverbal communication plays a significant role when rating communicative competence. While communication is broken down into verbal and nonverbal, nonverbal communication can be divided into visual and auditory. Various nonverbal behaviors, from eye contact to volume, have been shown to heavily affect individuals' opinions of others (e.g. Abele, 1986; Beebe, 1974; Dion, 1981; 1986; Feingold, 1992; Jackson, Hunter, & Hodge, 1995; Kleinke, 1986; Malandro & Barker, 1989). The question which has not been addressed is which type of nonverbal communication is more influential when making these judgments: visual or auditory.

Therefore, this thesis will extend our understanding of competence by examining the strength of the impact of attractiveness and the power of visual nonverbal communication when evaluating one's communicative competence. To begin the exploration, previous research on communicative competence, attractiveness, and nonverbal communication will be discussed in chapter II. Chapter III will discuss the methodology used in this study, including the participants, research materials, and procedures used. The results of data analysis will be presented in chapter IV and chapter V will conclude this thesis with a discussion of the results found.

II. REVIEW OF LITERATURE

This chapter examines literature exploring the strength of the impact of attractiveness and visual nonverbal communication when assessing communicative competence. The literature is separated into three main sections: communicative competence, attractiveness, and nonverbal communication. At the end of this review, a hypothesis is projected and a research question is asked.

Communicative Competence

While the study of competence is rooted in the rhetorical tradition (Spitzberg & Cupach, 1984), academic research of competence began in the 1950s, and the actual term *communication competence* appeared in 1974 (Rubin, 1990). To date, many different terms have been used to describe communicative competence including social skills, conversational competence, social competence, interactional competence, interpersonal communication competence, and many more (Spitzberg & Cupach, 1984). Spitzberg (1993) attests that "competence plays a central role in the success and failure of all significant human relationships" (p. 38). Research has shown support for Spitzberg's claim by focusing on conflict management (Canary, Cupach, & Serpe, 2001; Gross & Guerrero, 2000; Olson, 2002), social support (Anders & Tucker, 2000), and conversational memory (Miller & deWinstanley, 2002).

Research in the field of communicative competence has named skills that are considered competent in the workplace (Maes et al., 1997; Sriussadaporn-Charoenngam

& Jablin, 1999), in educational settings (Abbas & McLean, 2003; Kerssen-Griep, 2001), and in medical consultations (Anderson & Sharpe, 1991; McGee & Cegala, 1998; McNeilis, 2001). For instance, Maes et al. (1997) found that listening, following instructions, giving feedback, and conversing were all skills that employees need to be competent in the workplace. In the educational setting, Kerssen-Griep (2001) suggests instructors are considered to be more competent when they exhibit immediacy, influence, and motivation towards their students. In another competency study, McGee and Cegala (1998) discuss how patients can increase their communication competency in medical consultations. They discovered that by training patients to refine their information seeking (e.g. correct use of direct and indirect questions) and information verifying (e.g. requests for repeats of information and summarizing information) strategies, patients' competency in medical consultations could be increased.

Additionally, competence research has explored ways to improve one's communicative competence (Light et al., 1999; McGee & Cegala, 1998; Schoenbrodt et al., 2003), discovered what competence entails in individuals who are learning how to speak English (Bradford et al., 1999; Sriussadaporn-Charoenngam & Jablin, 1999), and investigated relationships between competence and attractiveness (Duran & Kelly, 1988; Zakahi & Duran, 1984). When discussing the relationship between attractiveness and competence, research has suggested that attractive individuals are perceived as more competent (Zakahi & Duran, 1984), and that individuals with higher communicative competence are viewed as more attractive (Duran & Kelly, 1988).

Martin et al. (1994) examined which verbal and nonverbal behaviors are regarded as competent by Hispanic and non-Hispanic individuals. They determined that Hispanics

consider themselves competent when they implement nonverbal behaviors with individuals from different cultures, whereas non-Hispanics value nonverbal behaviors with individuals from their own culture. Likewise, Schoenbrodt et al. (2003) investigated ways to increase the communicative competence of Spanish-speaking children. The authors discovered that the implementation of narrative interventions (i.e. children creating narratives) increased the communicative competence of the children significantly.

There are also many different definitions of communicative competence. Phillips (1983) explains that "[d]efining competence is like trying to climb a greased pole. Every time you think you have it, it slips" (p. 25). An example of a competence definition is "[t]he ability of an interactant to choose among available communicative behaviors in order that he may successfully accomplish his own interpersonal goals during an encounter" (Wiemann, 1977, p. 198). While formulating a definition of communicative competence, Wiemann (1977) developed five dimensions to help explain the concept including affiliation/ support, social relaxation, empathy, behavioral flexibility, and interaction management skills. The author explains that each of these five dimensions can be defined by "discrete, molecular behaviors" (p. 198). For instance, the affiliation/ support dimension includes such behaviors as eye contact, head nods, and pleasantness of facial expressions, where the social relaxation dimension includes behaviors such as postural relaxation and rate of speech. According to Wiemann, these dimensions play an important role in an individual's communicative competence.

Over twenty years later, Gross and Guerrero (2000) define competence within conflict situations as "[h]ow effective and appropriate a person is perceived in a

situation" (p. 202). They emphasize the importance of effective communication, relational appropriateness, and situational appropriateness when defining competence. The authors explain that effective communication is helpful, successful, rewarding, and useful. "Behavior that is generally prosocial and constructive in nature" is considered to be relational appropriateness (p. 201). Situational appropriateness is defined as "the ability to carry on a smooth conversation and to successfully adapt to the needs of a given conversation (p. 201). Although numerous researchers have attempted to define communicative competence, like many communication concepts, no single accepted definition has emerged in the literature.

In order to fully understand the overall purposes of the current research, it is first necessary to explore research in the area of communicative competence, including the perspectives of the schools of communicative competence, the components involved, and how competence is measured.

Schools of Communicative Competence

There are two schools of communicative competence, the structuralist school and the functionalist school. Rubin (1990) explains that "the basic issue, stated in communication competence terms, is: Is competence a disposition or cross-situational tendency, or is it an event or state that changes with the situation and can be altered by instruction?" (p. 103). Researchers have long debated over which school provides the best outlook on communicative competence (e.g. Eadie & Paulson, 1984; Hart & Burks, 1972; Hart, Carlson, & Eadie, 1980; McCroskey, 1977; Phillips, 1983; Rubin, 1982). Each of these schools will be further explained below.

The structuralist school focuses on the idea that communicative competence is a trait. In other words, competence is in the individual and it is situation-free. A competent person is therefore, thought to be inherently competent and should be perceived as competent across all situations. For example, if Brandy is a competent person, she should always be considered competent, whether she is at work, at school, or on a date. According to Rubin (1990), "trait measurement examines personality or predisposition factors that influence communication, and, therefore, perceptions of competence" (p. 103). Various researchers have found support for the trait approach (e.g. Eadie & Paulson, 1984; Hart & Burks, 1972; Hart et al., 1980; McCroskey, 1977). For example, Hart and Burks (1972) identified rhetorical sensitivity as a trait that does not differ across situations; individuals either possess it or do not possess it. According to their study, individuals who were more rhetorically sensitive were also more adaptable and appropriate. Later, Eadie and Paulson (1984) discovered that rhetorically sensitive individuals were perceived as more competent. Although some research supports the trait approach, Rubin (1990) explains that the belief of individuals being inherently competent has begun to fade and that many researchers (e.g. Cupach & Spitzberg, 1983; Bradford et al., 1999; McGee & Cegala, 1998; MacIntyre et al., 2003; Monge, Bachman, Dillard, & Eisenberg, 1982; Phillips, 1983; Rubin, 1982; Schoenbrodt et al., 2003) now agree that competence is situational, following the functionalist school of thought.

The functionalist school views competence much differently than the structuralist school. This school claims that no one is competent all of the time. Competence is therefore a state; it changes from situation to situation. In this state approach, communicative competence is viewed as the ability to use appropriate communication

behaviors in a specific situation (Rubin, 1990). Back to the example, Brandy could be considered competent at work, but not at school. Like the trait approach, researchers have also found support for the state approach (e.g. Cupach & Spitzberg, 1983; Monge et al., 1982; Phillips, 1983; Rubin, 1982). Rubin (1982) created the Communication Competency Assessment Instrument to evaluate competence in the educational setting while Monge et al. (1982) developed a scale to measure competence in the workplace. Both of these measurements attempt to assess an individual's competence in a specific situation (i.e. educational and occupational settings). Cupach and Spitzberg (1983) compared the two approaches and found support for the functionalist school of thought. The authors explained, "situational measures of competence were better predictors of the outcome state of feeling good [than dispositional measures]" (p. 364). Also within the functionalist school is the belief that competence can be taught. Where the trait approach claims an individual is either competent or incompetent (i.e. you inherently have it or you don't), the state approach asserts that individuals may be taught basic speaking and listening skills to improve their competence. Another significant aspect of competence research is the debate over the elements that constitute communicative competence.

Components of Communicative Competence

Although there are many different ideas about the elements of communicative competence, six components continuously emerge in the literature. Some researchers (e.g. Backlund, 1982; Hale, 1980; McCroskey, 1982) believe, however, that certain components of communicative competence are more important than others. The most common components of competence are discussed below.

Appropriateness and Effectiveness

Appropriateness and effectiveness are two popular elements of communicative competence which are usually seen together in the research. According to Rubin (1990), "virtually every definition of communicative competence includes the mandate that communication be both appropriate and effective" (p. 108). Early researchers (e.g. Backlund, 1982; Hale, 1980; McCroskey, 1982) tended to argue over which element was most vital in defining communicative competence, but that debate has faded. Most contemporary researchers (e.g. Canary & Spitzberg, 1987; 1989; Carrell & Willmington, 1996; Cooper & Husband, 1993; Infante, Rancer, & Womack, 1997; Lakey & Canary, 2002; Rubin, 1990; Spitzberg & Cupach, 1984; Spitzberg, Canary, & Cupach, 1994) now agree that appropriateness and effectiveness are both necessary.

Appropriate communication has been described as following a society's norms in a situation (Spitzberg & Cupach, 1984). This component explains that in order for a person to be competent, s/he must be able to choose appropriate behaviors and communication techniques in certain situations. In many intercultural studies, researchers include appropriateness in their definitions of communicative competence (Schoenbrodt, et al., 2003; Sriussadaporn-Charoenngam & Jablin, 1999). For example, Schoenbrodt et al. (2003) define competence as "What is appropriate in one's culture or speech community" (p. 48) and Sriussadaporn-Charoenngam and Jablin (1999) define it as "involving appropriate tactical and strategic communication" (p. 388).

Effective communication, however, is normally defined in terms of achieving goals (Rubin, 1990). The effectiveness of an interaction depends on whether the goals of each participant was met. Many researchers (e.g. Canary & Spitzberg, 1987; 1989;

Carrell & Willmington, 1996; Cooper & Husband, 1993; Infante et al., 1997; Lakey & Canary, 2002; Rubin, 1990; Spitzberg & Cupach, 1984; Spitzberg et al., 1994) have defined communicative competence with effectiveness in mind. For instance, Lakey and Canary (2002) define interpersonal communicative competence as "an impression formed by an interaction partner of an actor's communication behaviors that are performed to achieve his/her goals while also to respect the partner's goals" (p. 221).

As stated earlier, while appropriateness and effectiveness are two separate components, many researchers (e.g. Canary & Spitzberg, 1987; 1989; Carrell & Willmington, 1996; Cooper & Husband, 1993; Infante et al., 1997; Lakey & Canary, 2002; Rubin, 1990; Spitzberg & Cupach, 1984; Spitzberg et al., 1994) group the two together when studying communicative competence. Spitzberg et al. (1994) argue that "the combination of these two criteria provides for a very useful conceptualization of optimal, or competent, interaction" (p. 185).

For instance, McGee and Cegala (1998) investigated communication that was most appropriate and effective for patients to use in medical consultations. They identify two forms of information exchange skills that patients need to be more communicatively competent. For instance, patients need good information-seeking skills and good information-verifying skills in order to be perceived as highly competent. In their study, patients received training on specific skills to implement and when it was appropriate to use them in a medical consultation. They were then told what goals needed to be met in their interactions with the physician in order for it to have been an effective consultation. Results showed that trained patients were viewed as more communicatively competent than untrained patients.

Similarly, Spitzberg et al. (1994) studied the relationship between perceived communicative competence and conflict styles. The researchers found that integrative conflict strategies (i.e. concern-for-issue) were considered to be more appropriate and effective, and thus, more competent. Oppositely, distributive strategies (i.e. self-oriented) were considered less appropriate and less effective, and therefore, incompetent. These two studies (i.e. McGee & Cegala, 1998 and Spitzberg et al., 1994) provide more support for the idea that appropriateness and effectiveness are *both* vital components of communicative competence.

Similar to McGee and Cegala (1998), many other researchers (e.g. Anderson & Sharpe, 1991; Cegala, Gade, Lenzmeier Broz, & McClure, 2004; Cegala & Lenzmeier Broz, 2003) in the medical consultation area have focused on competent skills between patient and provider during medical interviews. Cegala et al. (2004) indicated that, in general, patients and doctors agree on what constitutes competent communication. For instance, the authors found that both physicians and patients agree that patients should possess task-oriented behavior during medical interviews. Physicians explained that a competent patient comes to the appointment with a specific agenda and then adheres to that agenda. Likewise, patients feel that competent patients should "provide information about [their] medical problem, be prepared with an agenda, and ask questions" (p. 301).

When discussing appropriateness and effectiveness, communication is not classified as appropriate or not appropriate, nor is it classified as effective or not effective. Rather, the appropriateness and effectiveness of communication falls on a continuum (Spitzberg & Cupach, 1984). For example, shaking the hand of a person you only just met may be *more* appropriate than giving that new friend a hug. Giving that

person a hug is not purely inappropriate, it's simply *less* appropriate. In the same respect, communication can vary in its degree of effectiveness. A second prevalent group of components in communicative competence research includes knowledge, skill, and motivation.

Knowledge, Skill, and Motivation

Knowledge, skill, and motivation are three more components of communicative competence. McCroskey (1982) explains that competence involves developing "both a repertoire of skills and a body of knowledge" (p. 3). Knowledge consists of knowing what to do in a given situation (Amon, 1981; Goodall, 1982; Rubin, 1990). For example, Jamie may know what to say around his friends at school, but not know what to say around his boss at work. Skill is defined as choosing the correct behavior from an inventory of knowledge and actually applying it to a situation (Rubin, 1990; Wiemann, 1978; Wiemann & Backlund, 1980). Looking at Jamie, while he may know what to say around his friends, he also needs skills to be sure the correct message is communicated. Researchers have long supported the idea that competence involves an inventory of knowledge (e.g. Ammon, 1981; Goodall, 1982; Rubin, 1985; Wiemann, 1977) and a skills set to express that knowledge (e.g. Ammon, 1981; Rubin, 1985; Wiemann, 1978; Wiemann & Backlund, 1980). For instance, when discussing how to measure listening and speaking skills, Wiemann (1978) proposed "[i]t is not enough 'to know' what is appropriate behavior, but the student must also 'know how' to perform that behavior. In other words, neither cognitive nor performance knowledge alone is sufficient for literate behavior" (p. 314). While attempting to validate the Communication Competency Assessment Instrument, Rubin (1985) found a strong relationship between skill and

knowledge. Ammon (1981) also supports this notion, explaining that knowledge has an effect on communication implementation; skill is not the only influencing factor. In general, research has shown support for these two components of communicative competence.

Once individuals have a body of knowledge and an inventory of skills, they must still possess the motivation to use their knowledge and skill. The third component in this group, motivation, is the want or need to approach or avoid a communication event (Rubin, 1990). This want or need can change from situation to situation or from person to person, making it context-specific. For instance, Jamie may be more motivated to talk to Sarah than he would be motivated to talk to Art, or Jamie may be more motivated to talk about his successes in the music industry than talk about his failures in college. Although less popular (Rubin, 1990), many researchers support the view that motivation is an important aspect of communicative competence (e.g. Rubin, 1983; Rubin, Graham, & Mignerey, 1990; Spitzberg & Hecht, 1984). For instance, Rubin et al. (1990) discovered motivation to be highly influential in evaluations of communication skill. Similarly, Spitzberg and Hecht (1984) discovered that the strongest predictors of communication satisfaction were motivation and skill, not knowledge

It is possible to possess one of these three components (i.e. motivation, knowledge, and skill) and not the other two, or two of these components and not the remaining one. For example, Jamie may be very motivated to talk to Sarah and he may also have an inventory of knowledge about what he should talk about with her. However, he might not have the skill to use that motivation and knowledge. Let's say that Jamie is attempting to talk to Sarah and his word choice is inappropriate for the situation and he is

fumbling with his body gestures. When his friend Alex asks him what happened, Jamie says that he doesn't really know. He claims that he knew what to say and he wanted to say it, but for some reason, he just couldn't. In this situation, Jamie had motivation and knowledge, but no skill.

Many researchers have implemented one or more of these three concepts in their conceptualizations of communicative competence (Light et al., 1999; MacIntyre et al., 2003; McCroskey, 1982; 1984; Spitzberg & Hecht, 1984; Wiemann, 1977). For example, MacIntyre et al.'s (2003) research on French immersion students and Light et al.'s (1999) study about Augmentative and Alternative Communication (AAC) users support the notion that communicative competence involves knowledge, skill, and motivation. MacIntyre et al. (2003) conducted a study about the communicative competence of French immersion students. In order to be judged as communicatively competent in their second language, the students must first have the motivation to even communicate. The researchers claim that motivation is extremely important in the rating of intercultural communicative competence. Light et al. (1999) investigated ways to enhance communicative competence in individuals who use AAC. Examples of AAC are "a computer-based voice output communication aid, a communication board of pictures or traditional orthography, or gestures" (p. 242). The study found that participants practicing these techniques repeatedly and with different partners, not only learned how and when to use these techniques during the instruction, but also were able to enhance their 'long-term maintenance of the skill' and motivation to use the skills and knowledge. These results support the idea that having an inventory of knowledge, the skills to implement the

knowledge, and the motivation to want to implement the knowledge are important components of enhancing communicative competence.

Adaptability

Another critical subconstruct of communicative competence is communication adaptability. Spitzberg and Cupach (1989) explain that socially competent individuals are most often described as possessing adaptability. Communication adaptability has been defined as "the ability to perceive socio-interpersonal relationships and adapt one's interaction goals and behaviors accordingly" (Duran, 1983, p. 320). For example, Jay is at his friend Art's house. Jay and Art are talking about a concert they are going to this weekend. They are using slang and foul language. Art's mom comes in the room and asks them if they need anything from the store. Jay uses slang and foul language to explain that he does not need anything. Art's mom is appalled by Jay's word choice and storms out of the house. Jay is perplexed as to why she was upset. Jay has bad communication adaptability.

Duran's (1983) Communication Adaptability Scale measures this type of behavior. It assesses six dimensions of one's adaptability: social experience, social composure, appropriate disclosure, social confirmation, articulation, and wit. Duran claims that perceptions of communicative competence exist in one's ability to "perceive and adapt to the requirements posed by different communication contexts" (p. 320). Thus, when an individual possesses communication adaptability, s/he will in turn be viewed as communicatively competent.

Using Duran's (1983) instrument, McKinney and Kelly (1997) examined the relationship between one's conflict style and his or her communicative adaptability. The

authors center their research on a competence-based model of conflict proposed by Spitzberg et al. (1994). Although McKinney and Kelly (1997) do not utilize the exact conflict style titles described in Spitzberg et al.'s (1994) model (integrative, distributive, and avoidant), the three styles used are defined in similar ways (concern for issue, other, and self). The authors concluded, "other-oriented and issue-oriented styles of conflict are associated with [high] communication adaptability" (McKinney & Kelly, 1997, p.193).

Based upon the above examination of pertinent literature, communicative competence can be defined in the following manner: having the knowledge of appropriate communication practices and the skills and motivation to implement those techniques effectively while adapting to different communication situations. The final debate in communicative competence research deals with who should judge a communicator's behavior.

Judging Communicative Competence

According to Rubin (1990) and Bentley (1997), researchers have long debated over who should judge communicative competence. The three perspectives are the self, the other, and the third-party observer.

The Self as Rater

When the self is the evaluator, an individual will rate his or her own competence, sometimes without actually participating in an interaction. Some self-rated instruments assess one's personality traits or overall behaviors (following the trait approach) and others evaluate one's behaviors in specific situations (following the state approach). Just as the trait approach has lost its popularity over the years (Rubin, 1990), researchers have

begun to emphasize the lack of validity of self-report measures as well (e.g. Cupach & Spitzberg, 1983; McCroskey & McCroskey, 1988; Rubin, 1990; Rubin & Graham, 1988).

Once a researcher has determined that an individual should evaluate his/her own competence, a self-rated instrument must then be selected. Communicative competence instruments that are self-reported include Duran's (1983) Communicative Adaptability Scale (CAS) and Cegala's (1981) Interaction Involvement Scale (IIS). As explained earlier, Duran's CAS assesses six areas of interpersonal competence including, social experience (i.e. participating socially), social confirmation (i.e. maintaining the other's social image), articulation (i.e. implementing appropriate grammar), social composure (i.e. feeling relaxed in social situations), wit (i.e. utilizing humor to diffuse tension), and appropriate disclosure (i.e. adapting disclosures appropriately). Cegala's IIS evaluates how individuals perceive their involvement in interpersonal communication situations. Specifically, the instrument assesses perceptiveness (i.e. awareness of the meanings of messages), responsiveness (i.e. certainty in responding to others), and attentiveness (i.e. hearing and observing). Both of these instruments ask individuals to indicate the degree to which each statement applies to their general behaviors, following the trait approach.

However, using self-report measures is controversial. Researchers have long debated over whether the benefits outweigh the costs of using self-report measures (e.g. Brunner, 1984; Carrell & Willmington, 1996; Cupach & Spitzberg, 1983). The main advantage of using self-reported measures is the ease by which they can be completed. As stated earlier, participants do not have to engage in an interaction in order to complete the scale. Instead of having two participants interact and then fill out a self-report measure,

which takes time, researchers can give numerous participants self-report measures at once, shortening the time of the study and increasing the sample size at a faster rate.

While the benefit to this method seems great, many researchers believe that the disadvantages are greater (e.g. Brunner, 1984; Carrell & Willmington, 1996; Cooper & Husband, 1993; Canary & Spitzberg, 1990; Cupach & Spitzberg, 1983; McCrosky, 1984; McCroskey & McCroskey, 1988; Rubin & Graham, 1988). A major disadvantage to using self-report measures is that participants often do not report their behaviors correctly (e.g. Canary & Spitzberg, 1990; Cupach & Spitzberg, 1983; McCrosky, 1984; McCroskey & McCroskey, 1988; Rubin & Graham, 1988). For instance, Canary and Spitzberg (1990) had students rate the competence of their partner in a conversation and then their own competence. Results showed that individuals rated themselves significantly higher than their partners rated them. Additionally, scholars such as Cooper and Husband (1993), Rubin (1990), and Spitzberg and Cupach (1984) feel that competence is based only upon perception. Since the self cannot perceive his or her own behavior, it is not possible for the self to judge his or her own communicative competence (Cooper & Husband, 1993; Rubin, 1990; Spitzberg & Cupach, 1984). Researchers have also challenged the validity of the method (Brunner, 1984; Carrell & Willmington, 1996; Jones, 1991; Rubin, 1985; Rubin & Graham, 1988; Rubin et al., 1990). For instance, Carrell and Willmington (1996) utilized both Duran's (1983) CAS and Cegala's (1981) IIS as self report measures. The authors compared individuals' self-report ratings and their actual competence, which was judged by trained raters. Their study found no relationship between self-reported and third-partyreported data; therefore, they concluded that the third-party observer data was more valid than the self-report data.

The Other as Rater

Instruments that have partners in an interaction rate the competence of the other communication partner use the other as rater method. Typically, in this type of study, a participant will engage in an interaction either with another participant (Gable & Shean, 2000; Gross & Guerrero, 2000; Lakey & Canary, 2002) or with a confederate or researcher (Janusik, 2003). For instance, Gable and Shean (2000) had two individuals participate in a fifteen-minute conversation before they evaluated their own competence and the competence of their conversation partners. Janusik (2003), on the other hand, had participants interact with a researcher before the researcher evaluated the participant's competence. Like many competence instruments, some other rated scales can be used in more than one way. For example, Sptizberg and Canary's (1985) Interpersonal Communication Competency Scale (ICCS) and Spitzberg and Hurt's (1987) Conversational Skills Ratings Scale (CSRS) are two instruments that can be other-rated or self-rated. Often with these instruments, participants will rate the competence of themselves and of their partners directly after the interaction (e.g. Gable & Shean, 2000; Gross & Guerro, 2000; Lakey & Canary, 2002).

Other-rating is viewed by many as an excellent way to judge communicative competence (e.g. Gable & Shean, 2000; Gross & Guerrero, 2000; Lakey & Canary, 2002; Janusik, 2003; Spitzberg & Hecht, 1984). The major benefit of this sort of rating is that, unlike self-raters, the evaluator is involved in the interaction. The rater is fully engaged in all of the nonverbal and verbal communication between the subject and him/herself, and thus can perceive the behavior of the person being evaluated. Also, the rater is not judging him/herself, like the self-report method, which is seen as inaccurate due to bias.

Although the benefits to other-raters are present, there are also disadvantages to using this method. Determining when to inform the rater that s/he is going to judge his/her partner is complicated. If the rater is told before the interaction, s/he could be distracted by the task of evaluating. But, if the rater is told after the interaction, s/he might have not paid enough attention to the communication. Another disadvantage is that the rater involved in the conversation may feel an obligation to evaluate the other person favorably because s/he developed a relationship, no matter how superficial, with that person through their conversation.

A Third-Party Observer as Rater

A third-party observer as evaluator is the final method in which communicative competence can be judged. There are two ways that competence can be ascertained within this category. First, an individual, usually a research assistant, is trained to look for certain communicative competence behaviors and communication techniques of one person in an interaction. And second, third-party participants observe an interaction between two people and then fill out a competence instrument for one person in that interaction. With both techniques, the rater will usually observe a pre-recorded interaction on a videotape or a present interaction through a one-way mirror.

Wiemann (1977) used this method in his original study, when he had third-party observers rate the communicative competence of confederates on videotapes. Central to the CCS is the notion that individuals have an abstract idea of which attributes constitute competence and that they use that notion to rate the competence of others. Wiemann's (1977) original 32-item scale is guided by five dimensions (i.e. affiliation/ support, social relaxation, empathy, behavioral flexibility, and interaction involvement) that the author

claims are essential to the measurement of communicative competence. While Wiemann's (1977) CCS was initially completed by a third-party observer, it can also be completed either by the self or the other. For instance, Cupach and Spitzberg (1983) and Query, Parry, and Flint (1992) had participants self-report their own communicative competence using Wiemann's (1977) CCS (see also Hazelton & Cupach, 1986; Cegala, Savage, Brunner, & Conrad, 1982). On the other hand, McLaughlin and Cody (1982) had participants rate their conversation partners' competence using the CCS.

Canary and Spitzberg's (1987) Conversational Appropriateness Scale (CAS) and Conversational Effectiveness Scale (CES) are two more instruments that can be selfrated, other-rated, or third party rated. "The effectiveness scale measures overall goal achievement, whereas the appropriateness scale measures both specific appropriateness (specific aspects or remarks of the interaction) and general appropriateness (more general suitability of behaviors)" (Lakey & Canary, 2002, p. 224). Research suggests that both scales possess high reliability and are internally consistent. Canary and Spitzberg (1987) found a coefficient alpha for the CAS of .85 and an alpha of .93 for the CES. Although these two scales are separate, as stated earlier, many researchers (Coakley, 1998; Cooper & Husband, 1993; Infante et. al, 1997; Rubin, 1990; Spitzberg & Cupach, 1984) claim that both appropriateness and effectiveness are vital components of communicative competence, and thus, these instruments are also usually used together in the research. For instance, Lakey and Canary (2002) had participants rate their own effectiveness and their conversational partner's appropriateness, along with numerous other communication measurements. Likewise, Canary and Spitzberg (1987) utilized both scales and discovered that individuals rate the competence of others by how appropriate their

communication is and they rate their own competence by the effectiveness of their communication.

Similar to the other techniques, the method of a third-party observer as evaluator carries its own advantages and disadvantages. An advantage to third-party rating is that, like self-rated scales, a large number of competence instruments can be completed at the same time, creating less bias among the participants controlling for environmental differences. For instance, a large number of third party raters can view a video of an interaction or watch a live interaction at the same time, allowing data to be collected at a faster pace. Another benefit of third parties rating competence is that they have an objective view of the interaction (Spitzberg, 1988); they are not emotionally involved with the person they are evaluating. They do not feel as though they have an obligation to that individual to be favorable towards him/her.

However, Spitzberg and Cupach (1984) explain, "the conversational partner is in the best position to know whether [conversational objectives] were obtained via appropriate interaction" (p. 94). They felt that the observers' lack of relationship with the interactant hindered their ability to make good assessments. This concern is the main disadvantage to third-party rating. However, individuals frequently make assessments of others who are not involved in their conversation. For example, Ryan, Oscar, and Ruth are in a restaurant eating dinner and they're waiting for the server to come take their drink order. Ruth points at the table next to them and whispers about how that woman must be their server. They all three watch and listen to the conversation between the server and the older couple. Oscar evaluates the server by telling Ryan and Ruth that she is rude and to be prepared when she comes to their table. Individuals are familiar with

assessing the communication of others on a daily basis. Therefore, it is the stance of this paper that a relationship is not necessary in order for one to rate another communicative competence.

In addition to the components of communicative competence, a number of additional factors, such as physical attractiveness, seem to influence the perceptions of competence. The next section will review the relevant literature in this area.

Attractiveness

Physical attractiveness is a particularly difficult concept to define. Although there are no fixed definitions of physical attractiveness in the literature, according to Hickson and Stacks (1993), research has shown that most individuals within a culture show high levels of agreement when deciding if individuals are considered physically attractive. For instance, Martin (1964) asked 50 white American men and 50 African American men to rate the physical attractiveness of African American women pictured in *Ebony* and *Sepia* magazines. Results showed that the American men, both white and black, generally agreed about which females they thought were attractive and unattractive (Rho correlation = .86). Martin explains "there is essentially a single cultural standard in polyracial American society for the judgment of female facial beauty" (p. 61). Later research has shown that perceptions of beauty do not even vary significantly over different cultures (e.g. Cunningham, Roberts, Wu, Barbee, & Druen, 1995; Langlois, Kalakanis, Rubenstein, Lavson, Hallam, & Smoot, 2000; Singh, 2006). For example, in a meta-analysis by Langlois, et al. (2000), the authors found that raters tend to agree on the attractiveness of others within cultures (r = .90 for ratings of adults and r = .85 for ratings of children, both ps < .05), across cultures (r = .94, p < .05 for ratings of adults), and

across ethnicities (r = .88, p < .05 for ratings of adults). Likewise, while using facial photographs of Hispanic, Black, Asian, and White women, Cunningham, et al. (1995) found exceptionally high consensus between Asian, Hispanic, and White students' ratings of female attractiveness (r = .93). Singh (2006) studied the ratings of female body types. The study included participants from the Azore Islands (inhabited by Caucasian people of European descent) and Guinea-Bissau (which is a former Portuguese colony in West Africa). Results showed high levels of agreement across cultures with participants viewing the normal weight figure as attractive (Kendall concordance coefficient W; W = .89). Campbell (2005) explains, "[t]he concept of physical attractiveness in contemporary society elicits visual images of persons who are somewhat beautiful and pleasing to the human eye" (p. 107).

Physical attractiveness is an extremely influential characteristic for one to possess. Hatfield and Sprecher (1986) state, "people believe good-looking people possess almost all the virtues known to humankind" (p. xix). Similarly, Langlois et al. (2000) explain, "attractiveness is an advantage in a variety of important, real-life situations" (p. 399). Research on attractiveness has revealed the many different contexts where beautiful individuals are treated superior. In their meta-analysis, Langlois et al. (2000) reported that attractive adults are considered to be more occupationally competent, well adjusted, and interpersonally competent than unattractive adults. Additionally, attractive individuals are graded more favorably by their peers for comparable academic work (Landy & Sigall, 1974), are given less punishment for the same crime (Soloman & Schopler, 1978), are awarded more money in court cases (Kulka & Kessler, 1978), elicit more positive job-related evaluations (Chaikin, Gillen, Derlega, Heinen, & Wilson, 1978)

and interpersonal behavior assessments (i.e. positive interpersonal behavior is described as friendly, likeable, and sociable) (Snyder, Tanke, & Berscheid, 1977), are considered to be more persuasive (Parekh & Kanekar, 1994), and more sexually desirable (Kruse & Fromme, 2005) than less attractive individuals. Beautiful individuals are also perceived as being better parents, having more prospects for their professional and social lives (Dion, Berscheid, & Walster, 1972), having lower levels of maladjustment (Cash, Kehr, Polyson, & Freeman, 1977), being more romantically desirable (Stroebe, Insko, Thompson, & Layton, 1971), and communicatively competent (Zakahi & Duran, 1984) than their less attractive counterparts. Attractiveness has also been shown to positively affect romantic partner choices (Adams, 1977; Hatfield & Sprecher, 1986; Jackson, 1992), initial impressions (Feingold, 1992; Jackson et al., 1995), instructors' judgments of a student's intelligence (Ritts & Patterson, 1992), and helping behavior (Benson, Karabenick, & Lerner, 1976). On the other hand, attractive individuals also have negative characteristics attributed to them. For instance, research has shown that attractive individuals are given harsher judgments of guilt in sexual harassment cases (Wuensch & Moore, 2004) and attractive women are thought to be more unfaithful (Singh, 2006) than their unattractive equals.

The phenomenon discussed above is often referred to as the beauty-is-good effect. According to Dion (1981, 1986), the strongest characteristics attributed to attractive individuals are interpersonal ease and social competence. Bassili (1981) supported Dion's (1981, 1986) argument when he explained that the essence of the beauty-is-good effect is extroversion and social vitality. There is a strong inclination to assign more positive characteristics to physically attractive individuals than to unattractive individuals (Perlini,

Marcello, Hansen, & Pudney, 2001). Researchers have attempted to explain this occurrence by referring to the halo effect (e.g. Nisbett & Wilson, 1977; Wetzel, Wilson, & Kort, 1981) and to implicit personality theories (e.g. Ashmore & Del Boca, 1979; Ashmore, 1981; Ashmore, Del Boca, & Wohlers, 1986).

The Halo Effect

The halo effect occurs when individuals who are exceptional in one part of their lives (e.g. attractiveness) are assumed to be gifted in other aspects of their lives as well (Fisicaro & Vance, 1994; Saal, Downey, & Lahey, 1980). For instance, if David perceives Shillah as very attractive, he may also perceive her as confident and charismatic. The halo effect has been a topic of research since 1920 when Thorndike researched the occurrence of the halo effect in individuals' ratings of others. Thorndike (1920) asked employees from two large corporations to rate a dozen of their superiors on a number of traits. Results showed strong correlations between numerous characteristics such as technical skill, intelligence, and reliability. Thorndike concluded by asserting that "even a very capable foreman, employer, teacher, or department head is unable to treat an individual as a compound of separate qualities and to assign a magnitude of these in independence of the others" (p. 27-28).

Research has identified the halo effect in a variety of other situations. For example, it has been discovered in school administrator's evaluations of their teachers (Hain & Smith, 1968; Henrikson, 1943), judgments of salesmen's selling abilities (Kornhauser & McMurray, 1938), traits attributed to liked and disliked individuals (Pastore, 1960), student's assessments of their teachers (Davidson, 1973; Remmers, 1934), perceptions of individuals who sit at the head of the table (i.e. seating

arrangement) (Davenport, Brooker, Munro, 1971; Pellegrini, 1971), ratings of leaders by boys at summer camp and in boy scout troops (Partridge, 1934), teacher's evaluations of their students (St. John, 1930; Remmers & Martin, 1944; Kajita, 1973; Booth & Taylor, 1973; Anastasiow, 1963; Caldwell & Mowry, 1934), determinants of career education programs' success (Gardner, 1974), allocation of referral reports to peers based on intellectual levels (Sattler & Winget, 1970), and tutors' evaluations of physical education student instructors' teaching ability (Oliver, 1956).

When specifically discussing an attractiveness halo effect, most literature names this phenomenon the attractiveness stereotype (e.g. Dion et al., 1972; Johnson & Pittenger, 1984; Landy & Sigall, 1974). For instance, Johnson and Pettinger (1984) studied the perceptions of elderly individuals by young and older adults. They found that young and old judges alike perceived the attractive elderly individuals as having more occupational achievement, positive life experiences and being more socially desirable than the unattractive elderly individuals. This study again demonstrates the role that attractiveness plays in individuals' perceptions of others. Like the halo effect, implicit personality theory is also used to explain the beauty-is-good effect.

Implicit Personality Theory

The halo effect and implicit personality theories are very similar in that they both attempt to explain how individuals make attributions about others. Implicit personality theories state that we group certain characteristics in our mental catalogue of personality traits (Ashmore, 1981; Ashmore & Del Boca, 1979; Ashmore et al., 1986). When an individual is perceived to have one attribute, he or she is perceived to have all the other attributes in that category. Eagly, Ashmore, Makhijani, and Longo (1991) explain,

"[i]mplicit personality theories are hypothetical cognitive structures whose primary components are personal attributes (e.g., personality traits) and inferential relations that specify the degree to which these attributes covary" (p. 110). The example discussed in the halo effect section would also be applicable to implicit personality theories. David sees that Shillah possesses one positive attribute (e.g. attractiveness), so David feels she must possess other positive attributes (e.g. confidence & charisma), which he groups together with attractiveness in his mental catalogue of personality traits.

A meta-analytic review of physical attractiveness on a variety of job-related outcomes by Hosoda, Stone-Romero, and Coats (2003) found support for implicit personality theory. Specifically in the workplace, attractiveness has been shown to influence perceived job qualifications (Dipboye, Fromkin, & Wiback, 1975; Quereshi & Kay, 1986), predicted job success (Morrow, McElroy, Stamper, & Wilson, 1990), and compensation levels (Frieze, Olson, & Russell, 1991; Roszell, Kennedy, & Grabb, 1989). For instance, in a study by Quereshi and Kay (1986), participants rated hypothetical resumes for three separate job positions. The authors discovered that attractive applicants were judged as more suitable for all three positions than unattractive candidates. In Morrow et al.'s (1990) research, 30 college students and 30 professional interviewers rated resumes. The authors found that overall; students rated the applicants more positively than the professionals rated the applicants. Additionally, the attractive candidates were perceived as possessing higher job success than the unattractive candidates by both students and professionals. Frieze et al. (1991) conducted a longitudinal study assessing the attractiveness of male and female MBA graduates in relation to their salaries. Results showed that on average, "men earned \$2,600 more for

each unit of attractiveness (on a 5-point scale), and women earned \$2,150 more" (p. 1039). Hosoda et al. (2003) explain that overall, "attractive individuals were found to fare better than unattractive individuals in terms of a [variety of job-related outcomes]" (p. 431). In addition, Eagly et al. (1991) found that attractiveness produces strong insinuations about some characteristics and weaker inferences about others. For example, their meta-analysis showed that while beauty encourages weak opinions about adjustment and potency, it produces strong inferences about social competence. Eagly et al. claim that this phenomenon can be explained by implicit personality theory.

Research has not yet addressed how strongly the beauty-is-good effect impacts the perception of an individual when that person obviously does not possess other positive characteristics. As explained, researchers have identified a number of characteristics attributed to physically attractive individuals (e.g. Dipboye, et al., 1975; Duran & Kelly, 1988; Eagly et al., 1991; Johnson & Pittenger, 1984; Zakahi & Duran, 1984). Specifically, research has suggested that attractive individuals are perceived as more competent than unattractive individuals (Zakahi & Duran, 1984) and that highly competent individuals are perceived as more attractive than those with lower competence (Duran & Kelly, 1988). Since it's already known that attractive people are viewed as competent and competent people are viewed as attractive, it seems logical that the next step should be to assess the strength of the impact of attractiveness when rating communicative competence. Is the impact of physical attractiveness strong enough to make an attractive incompetent individual still be perceived as competent? Conversely, will an unattractive competent person be viewed as incompetent because of his/her unattractiveness? Since attractiveness is largely based on appearance, nonverbal elements of communication are important contributors to perceptions of attractiveness.

Nonverbal Communication

"The way in which people move, talk, and gesture—their facial expressions, posture, speech—all contribute to the formation of impressions made about them" (Ambady & Rosenthal, 1992, p. 256). Research estimates that nonverbal behaviors account for between 65% and 93% of the total meaning of communication (Birdwhistell, 1970; Mehrabian, 1981). Head nods, eye contact, rate of speech, volume, and smiling are only a few nonverbal behaviors that affect this total meaning. Research has revealed the many inferences made about certain nonverbal behaviors. For instance, Feldstein, Dohm, and Crown (2001) found that participants rated speakers with similar speech rates to their own as more competent and more socially attractive than speakers whose speech rates were faster or slower than their own. Additionally, other studies have shown that individuals who maintain eye contact during job interviews, in the United States, are perceived more favorably than individuals who do not maintain eye contact (e.g., Burgoon, Manusov, Mineo, & Hale, 1985; Cook & Smith, 1975; Eng, 1995; Foddy, 1978; Russo, 1975: Tankard, 1970; Wheeler, Baron, Michell, & Ginsburg, 1979). These examples support the notion that nonverbal behaviors are significant features of communication.

While communication can be broken down into verbal and nonverbal communication; nonverbal communication can be further broken down into auditory and visual nonverbal communication. Examples of auditory nonverbal communication include loudness, tone, rhythm, resonance, rate of speech, hoarseness of voice, stuttering, pitch, duration, regularity, articulation, pronunciation, and silence. Examples of visual

nonverbal communication are eye contact, facial expressions, touch, posture, head nods, smiling, physical attractiveness, and proximity. All of these nonverbal behaviors are taken into account when an individual is evaluating another's communication. The question, which has *not* been addressed, is which one is more influential when making these judgments: visual nonverbals or auditory nonverbals.

Visual Nonverbal Communication

Visual nonverbal communication can have a positive or negative impact. For instance, if April is telling Stephanie about her car problems and Stephanie implements head nods while April is talking, April will view Stephanie positively because she thinks Stephanie is listening to her. On the other hand, if Stephanie does not use any head nods, April may think she is not listening and view her negatively. Of the visual nonverbal conduct, eye contact and physical attractiveness are two of the most studied concepts. According to Beebe (1974), the amount of eye contact given by a public speaker can affect the audience members' perception of his/her credibility.

Among other variables, amount of eye contact has been related to a person's self-esteem (Greene & Frandsen, 1979), sexual interest (Thayer & Schiff, 1977), and evaluations of a speaker (Beebe, 1974). Greene and Frandsen (1979) discovered that individuals with high self-esteem increase their eye contact when receiving positive messages and decrease their eye contact when receiving negative messages. Conversely, low self-esteem individuals do just the opposite; they increase eye contact for critical messages and decrease eye contact for positive messages. Regarding eye contact and sexual interest, men and women are perceived as sharing more sexual interest when they implement high eye contact as opposed to low eye contact (Thayer & Schiff, 1977).

Beebe (1974) investigated the effect of eye contact on the audience's evaluations of a speaker. The author found that when speakers engage in high levels of eye contact with their audience, they are more favorably evaluated than when they employ low levels of eye contact.

Physical attractiveness is another form of visual nonverbal communication. As explained, it is known that attractiveness plays a strong role in individuals' opinions of others (e.g. Adams, 1977; Benson et al., 1976; Cash et al., 1977; Chaikin et al., 1978; Dion, 1981; 1986; Dion et al., 1972; Feingold, 1992; Jackson et al., 1995; Kulka & Kessler, 1978; Landy & Sigall, 1974; Parekh & Kanekar, 1994; Ritts et al., 1992; Snyder et al., 1977; Solomon & Schopler, 1978; Stroebe et al., 1971; Zakahi & Duran, 1984). Therefore, physical attractiveness should enhance the strength of visual nonverbal communication. Whether its eye contact or attractiveness, visual nonverbal communication research has expressed how influential these behaviors are in our judgments of others. Another type of nonverbal communication is auditory nonverbal communication.

Auditory Nonverbal Communication

Auditory nonverbal communication is usually referred to as paralanguage or vocalics in the literature. Research has identified eight areas of vocalics including quality, loudness, pitch, duration, pronunciation, silence, regularity, and articulation. Hickson and Stacks (1993) explain each of these eight aspects of vocalics. They explain that quality refers to the tonality and reverberation of a speaker's voice. Loudness is not necessarily the volume of the voice, but instead it is concerned with the intensity of the voice. The range of a voice during a conversation is the pitch. Duration is the length of each sound

made and pronunciation refers to the rhythm, clearness, and rate of speech. Silence is the absence of sound and can be extremely powerful when implemented. Rate of speech and stress used within speech fall under regularity. Finally, articulation deals with the control of the sound being created and, like pronunciation, the clearness of that sound.

Vocalics have been shown to be indicators of social attractiveness (Street & Brady, 1982), competence (Hart & Brown, 1974; Street & Brady, 1982), persuasiveness (Hall, 1980; Mehrabian & Williams, 1969; Miller, Maruyama, Beaber, & Valone, 1976), and anxiety (Fisher & Apostal, 1964; Mahl, 1959; Rochester, 1973). Regarding one's rate of speech, Street and Brady (1982) revealed that moderately fast and very fast speakers were rated as more competent than slower speakers. Likewise, the authors discovered faster speakers were also judged as more socially attractive. Miller et al. (1976) discovered that a faster speech rate improves the success of persuasion attempts. According to Mahl (1959), there is a positive relationship between anxiety and use of vocal fillers (i.e. um, like, uh), stuttering, and repetitions; as the use of vocal fillers, stuttering, and repetitions increases, anxiety also increase, and vice versa. Later, Fisher and Apostal (1964) established that silent pauses have no effect on views of genuineness or anxiety. While the above research has shown relationships between certain variables and vocalics, Scherer (1979) identified specific vocal displays of emotion. For instance, the author claims that a slow tempo denotes boredom, disgust, or sadness while a fast tempo denotes fear, pleasantness, surprise, or anger. Similar to visual nonverbal communication research, vocalic research also supports the importance of paralanguage in forming impressions of individuals.

Hypothesis & Research Question

The review of literature has identified the many debates over communicative competence, the research on attractiveness, and the differences between visual and auditory nonverbal communication. However, research has failed to address the strength of the impact of attractiveness and the influence of visual nonverbal communication when assessing communicative competence. The hypothesis and research question are preceded by a rationale explaining the reasoning for the prediction.

As discussed in the literature review, previous research has revealed that individuals rate beautiful people more favorably than unattractive people in many different contexts. Specifically, research suggests that attractive individuals are perceived as more competent (Zakahi & Duran, 1984), and that individuals with higher communicative competence are viewed as more attractive (Duran & Kelly, 1988). The research discussed in the literature review in the area of the beauty-is-good effect clearly supports the positive impact of physical attractiveness on the perceived competence of an individual. Therefore, we can expect to find that an attractive individual is perceived as more competent than a less attractive person. Therefore, it is hypothesized that:

H1: Observers will rate an attractive speaker as more communicatively competent than an unattractive speaker.

The full extent of the hypothesis can be seen in figure 2.1 below.

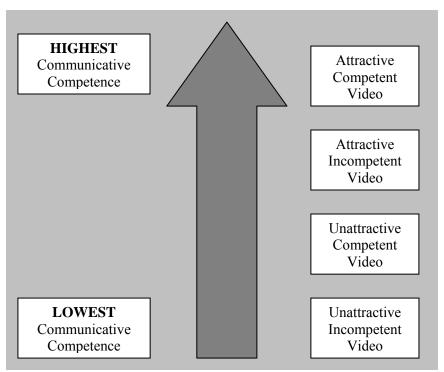


Figure 2.1: Illustration of Hypothesis

Wiemann (1977) explains that nonverbal communication plays a significant role in how people rate communicative competence. Wiemann explains each of the five dimensions of communicative competence (i.e. affiliation/ support, social relaxation, empathy, behavioral flexibility, and interaction management) by listing numerous verbal and nonverbal behaviors that are indicative of a communicatively competent and incompetent individual. Of the 21 suggestions Wiemann offers, 14 of them are nonverbal and only 7 of them are verbal. Clearly, nonverbal communication is extremely important in judging communicative competence. Two specific visual nonverbal elements that research suggests have an impact on individuals' perceptions of others are eye contact and physical attractiveness (e.g. Greene & Frandsen, 1979; Thayer & Schiff, 1977; Kleinke, 1986; Ritts et al., 1992; Snyder et al., 1977; Solomon & Schopler, 1978).

variables, it is still not known which of these types of nonverbal behavior is more influential. Therefore, the following research question is posed:

RQ1: Which type of nonverbal is more influential when rating one's communicative competence, visual or auditory?

The next chapter will focus on the methods, materials, and procedures used in this study.

III. METHODOLOGY

In order to address the hypothesis and research question posed in chapter 2, the following methodology was used in the current research.

Participants

A convenience sample of 161 male and 270 female undergraduate students (*N*= 433) (two participants did not report their gender) from a large southeastern university was used in this study. The average age of participants was 20 (*SD* = 1.57). In exchange for participation, extra credit was offered to students in three communication courses (COMM 1000, COMM 3500, & COMM 3600), and two public relations courses (PRCM 4510 & PRCM 3040). Teachers announced the extra credit opportunity during their class time and then students were given information about participation including that they would be observing an interaction between two individuals. They were then instructed on where to sign-up, where the study was taking place, and that the study would only take about 20 minutes. Students who wished to participate signed up for a study time on a bulletin board.

Design Measurements

In order to test the hypothesis and research question discussed in the previous chapter, a 2 x 2 x 2 factorial design was implemented. Actual communicative competence, attractiveness, and method of observation served as the independent variables and perceived communicative competence served as the dependent variable.

Stimulus Material

For the purpose of this study, video and audiotapes of the stimulus material were developed. A separate tape was made for each research condition. Two research assistants, one male and one female, served as actors in the interactions. A male and female were chosen as actors instead of a female-female or male-male couple to simplify the distinction between the two interactants on the audiotape. The ability to differentiate the two voices was critical in this study because participants were asked to rate the competence of only one of the conversationalists. The two research assistants each signed a memo (see appendix A) prior to the filming of the videos in which they agreed to be filmed and stated that they understood all of the purposes of this study. Each assistant was given a script to memorize and communicatively competent and incompetent behaviors to learn. The script was a conversation between two friends, Sue and Jamie, in which they talked about what they did over Christmas break.

Four different 5-6 minute videos were produced. In the first interaction, the female, Sue, was attractive and displayed communicatively competent conduct as described by Wiemann (1977). These behaviors include but are not limited to, pleasant facial expressions (i.e. smiling), eye contact, head nods, appropriate speaking turns (not contributing too much or too little to the conversation), having postural relaxation, have no speech disturbances (hesitations, ums, likes, etc.), "normal" rate of speech (not too fast or too slow), verbal responses indicating understanding ("I know how you feel," "Yeah I know," etc.), one person talking at a time, statements or nonverbals to show involvement ("uh-hu," head nods, laughing at jokes, "yeah," etc.), and no lengthy or frequent pauses. The attractiveness of the female in the video was based on what is considered attractive

in the Southeastern college town where the study took place. A focus group was conducted to gauge what constitutes attractiveness and unattractiveness in the southern college town. Descriptors such as fashionable clothing that's not too sexy, a thin figure, natural makeup, and straight, long, blonde hair emerged from the discussion as attractive characteristics. These descriptions were taken into account when dressing the attractive female interactant. In the stimuli materials, attractive Sue had straight blonde hair, wore natural makeup, and was dressed in a green fitted shirt, a black blazer, and fitted jeans.

The second interaction involved attractive Sue demonstrating communicatively incompetent behaviors. Wiemann (1977) described these incompetent behaviors as minimal eye contact, minimal pleasant facial expressions, minimal head nods, fidgeting with a pen, tapping foot, frequent speech disturbances, alternating too fast and too slow rates of speech, lengthy and frequent pauses, interruptions, no statements or nonverbals to show involvement, statements that show low attention like "what did you say?," and minimal enthusiasm in verbal responses.

In the third and fourth interactions, Sue was unattractive. The focus group also yielded a description of what constitutes an unattractive female in the small college town. These included, hair pulled back into a low pony tail, eyeglasses, baggier clothes or inappropriately sexy clothes, no makeup or "caked on" makeup, and a chubbier figure. In the stimulus materials, unattractive Sue had her blonde hair parted down the middle and pulled back into a low ponytail. She wore eyeglasses, no makeup, baggy jeans, and a tancolored baggy fleece. The final attractiveness/ unattractiveness of Sue was later verified in a pilot study. In the third interaction, Sue was unattractive and displayed competent conduct as identified by Wiemann (1977). Finally, the fourth interaction involved

unattractive Sue demonstrating the incompetent behaviors discussed above. The male in each interaction, Jamie, said the same thing and behaved in the same way for all of the interactions. The audiotapes were simply recordings of the videos. Thus, there were eight conditions, four videos and four audiotapes. The eight conditions are illustrated in Table 3.1 below.

Table 3.1: Summary of Conditions

	Attra	nctive	Unattractive		
	Competent	Incompetent	Competent	Incompetent	
Video	Condition 1	Condition 2	Condition 3	Condition 4	
	Attr/ Comp/ Video	Attr/ Incom/ Video	Unatt/ Comp/ Video	Unatt/ Incom/ Video	
Audio	Condition 5	Condition 6	Condition 7	Condition 8	
	Attr/ Comp/ Audio	Attr/ Incom/ Audio	Unatt/ Comp/ Audio	Unatt/ Incom/ Audio	

Scales

Using a third-party rating procedure, the researcher asked participants to fill out two scales, one in the pilot study and one in the actual study, to measure attractiveness and communicative competence. The third party rating procedure eliminated any feeling of obligation to be favorable towards the individual they were evaluating.

Attractiveness Scale

The attractiveness scale used in the current study consisted of a single 10-point Likert scale item (see appendix B). Participants were asked to rate the attractiveness of the female research assistant by looking at a picture. Participants used a 10-point Likert scale with 1 being least attractive and 10 being most attractive.

Competence Scale

The dependent variable, perceived communicative competence, was measured by a compilation of communicative competence scales (see appendix C). Statements were

taken from the Communicative Competence Scale (CCS) (Wiemann, 1979), the Conversational Appropriateness Scale (CAS) (Spitzberg & Phelps, 1982; Canary & Spitzberg, 1987), and the Conversational Effectiveness Scale (CES) (Spitzberg & Phelps, 1982; Canary & Spitzberg, 1987). Twenty-two statements, considered to be more pertinent to the current time period and age group of participants, were chosen from the three instruments. Examples included, "Sue seems rewarding to talk to," "Sue is an effective communicator," and "Sue was a smooth conversationalist." Participants were asked to rate each item on a Likert scale of 1 to 5 with 1 being strongly disagree and 5 being strongly agree. Cronbach alpha for the 22-item scale was .97, indicating that the scale had acceptable internal consistency. The alpha here is comparable to those obtained in previous studies. For example, Wiemann (1977) reported a .96 coefficient alpha for his Communicative Competence Scale. Likewise, coefficient alphas have ranged from .74 (Canary & Spitzberg, 1990) to .85 (Canary & Spitzberg, 1987) for the CAS instrument and from .87 (Canary & Spitzberg, 1989) to .93 (Canary & Spitzberg, 1987) for the CES instrument.

Procedures

Pilot Study

A pilot study was conducted to determine if the attractiveness variable had been manipulated successfully. Once participants met in the designated classroom, they were given informed consent forms (see appendices D & E), which they were asked to read and sign if they agreed to participate. Then, participants were either given a picture of attractive Sue or unattractive Sue and an attractiveness scale. They were asked to rate the attractiveness of the female in the picture on a scale from 1 to 10 with 1 being least

attractive and 10 being most attractive. Once participants finished the scale, they were given their extra credit slips and thanked for their time. An independent sample t-test showed a statistically significant difference between the ratings of attractive Sue (M = 8.03, SD = 1.17) and unattractive Sue (M = 5.05, SD = 1.39), t(136) = -13.48, p < .001. *Study*

A 2 x 2 x 2 design was used for the actual experiment. Once the participants arrived at the designated location, they were given an informed consent (see appendices D & E) and asked to sign at the bottom if they agreed to participate in the study. Participants were randomly assigned to one of the eight conditions illustrated in Table 3.1 above. To achieve random assignment, the researcher pulled a colored disk out of an opaque bag. Each color corresponded to a condition (red= condition one; purple= condition two; green= condition three; yellow= condition four; black= condition five; pink= condition six; blue= condition seven; orange= condition eight). The participants were told that they would be observing an interaction between two friends and that when the conversation was over, the researcher would pass out a survey. They were also told that while they were to observe the entire conversation most of the items on the survey dealt with Sue, so they should pay a little more attention to the female in the interaction. The participants either viewed a video or listened to an audiotape of one of the interactions. When the conversation was over, the researcher passed out the communicative competence scale and gave more directions. Participants were first informed that all of their responses were completely anonymous and that none of their responses could ever get tied back to their names. It was then explained that nonverbal communication included rate of speech, tone, pitch, etc. Then they were instructed to rate each item on a scale of 1 to 5 with 1 being strongly disagree and 5 being strongly agree. They were also told that when they were finished they could bring their scale up to the front and fill out an extra credit slip. Once all of the surveys were collected and the extra credit slips were completed, participants were given a debriefing sheet (see appendix F) and thanked for their time.

IV. RESULTS

Statistical tests were run to test the hypothesis and research question proposed in chapter two. This chapter presents the results of those statistical tests.

Data Analysis

Once the data was collected, it was entered into SPSS 11.5 for analysis. The data was analyzed using a combination of *t* tests and chi-squares. In all cases, the level of significance was set at .05. A Competence Score was created for each participant. The Competence Score was gained by calculating the mean for the 22 responses on each participant's Communicative Competence Scale (scores ranged from 1 to 5). A tertiary split of the mean competence scores was later done, splitting the scores into three equal groups (high competence, moderate competence, and low competence) for further data analysis.

Descriptive Statistics

There were eight conditions, four videos and four audiotapes (See Table 4.1 below). The highest mean competence score was found in condition one, where attractive competent Sue was viewed on the video (M = 3.99, SD = .52). Condition four, where unattractive incompetent Sue was viewed on the video, had the lowest mean competence score (M = 2.16, SD = .56). Table 4.1 displays a summary of the mean competence scores for each condition.

Table 4.1 Mean Competence Scores

Condition #	N	Mean	SD
1- Attractive/ Competent/ Video	48	3.99	.52
2- Attractive/ Incompetent/ Video	68	2.21	.58
3- Unattractive/ Competent/ Video	67	3.88	.53
4- Unattractive/ Incompetent/ Video	44	2.16	.56
5- Attractive/ Competent/ Audio	55	3.84	.41
6- Attractive/ Incompetent/ Audio	58	2.48	.65
7- Unattractive/ Competent/ Audio	45	3.92	.48
8- Unattractive/ Incompetent/ Audio	48	2.59	.52
TOTAL	427	3.12	.95

Hypothesis

The hypothesis predicted that attractive Sue (conditions one & two) would be perceived to be more communicatively competent than unattractive Sue (conditions three & four). To test the hypothesis, only the four video conditions (conditions one, two, three, & four) were used in the analysis. The video conditions were singled out because in the audio conditions, individuals could not see Sue's physical attractiveness. So, the audio conditions were irrelevant for this part of the analysis. As shown in Table 4.2 below, the means were opposite of the prediction; condition two (M = 2.21, SD = .58) had a mean that was much lower than condition three (M = 3.88, SD = .53). An independent samples t test of conditions two and three revealed a statistically significant difference between the two conditions, t (130) = -17.27, p < .001. Although statistically significant, the means were in the opposite direction as predicted, and therefore, did not support the hypothesis.

Table 4.2: Differences between Expected & Actual Findings in Video Conditions

	Expected Findings	Actual Findings
Highest Competence	Condition 1 (Attractive/ Competent)	Condition 1 $(M = 3.99)$
	Condition 2 (Attractive/ Incompetent)	Condition 3 $(M = 3.88)$
	Condition 3 (Unattractive/ Competent)	Condition 2 $(M = 2.21)$
Lowest Competence	Condition 4 (Unattractive/ Incompetent)	Condition 4 $(M = 2.16)$

In order to more clearly understand the data, a chi-square was conducted to further examine the four conditions. A chi-square test was chosen because there are only two levels of each independent variable as opposed to three levels that an ANOVA requires. The mean competence scores were divided into three groups (low competence, moderate competence, and high competence). Once the analysis focused only on the video conditions (the data was filtered by method of observation) and a tertiary split was conducted for the dependent variable, a layered chi-square test was run (the chi-square test was layered by attractiveness). Results showed that no participants rated competent Sue as having low competence whether she was attractive or unattractive. Likewise, no participants rated incompetent Sue as having high competence whether she was attractive or unattractive. The absence of definitive high competence scores with incompetent Sue and low competent scores with competent Sue likely contributes to the lack of statistical significance found with the chi square tests discussed below.

A 2 x 2 x 3 layered chi-square test indicated that the relationship between high actual competence, attractiveness, and perceived competence approached statistical significance, χ^2 (1, n = 115) = 3.476, p = .062. Further examination revealed that within the evaluations where competent Sue was rated as highly competent, 48% of them were when she was attractive and 52% were when she was unattractive (see Table 4.4). In the moderate condition of competent Sue, 30% of the ratings were when she was attractive and 70% were when she was unattractive. The chi-square test also showed that competent attractive Sue was rated as moderately competent 25% (n = 12) of the time and highly competent 75% (n = 36) of the time. Whereas, competent unattractive Sue was rated as moderately competent 41.8% (n = 28) of the time and highly competent 58.2% (n = 39) of the time. This distinction indicates that individuals felt as though competent attractive Sue was highly competent more often than competent unattractive Sue. The direction of the data, although not statistically significant, suggests that there is some merit to the hypothesis. The relationship between low actual competence, attractiveness, and perceived competence, there were no significant findings, χ^2 (1, n = 112) = .083, p > .05. Table 4.4 below presents the complete results of the layered chi-square test.

Table 4.3: Perceived Competence by Actual Competence and Attractiveness

		tence			
Actual	Attractiveness	Low	Moderate	High	
Competence		(n = 72)	(n = 80)	(n = 75)	TOTAL
	High (n = 48)				
High	Row		25.0%	75.0%	100%
	Column		30.0%	48.0%	
(n = 115)	Low $(n = 67)$				
	Row		41.8%	58.2%	100%
	Column		70.0%	52.0%	
	TOTAL		100%	100%	
	High (n = 68)				
Low	Row	63.2%	36.8%		100%
	Column	59.7%	62.5%		
(n = 112)	Low (n = 44)				
·	Row	65.9%	34.1%		100%
	Column	40.3%	37.5%		
	TOTAL	100%	100%		

Note. $\chi^2(1, n = 115) = 3.476$, p = .062 for relationship between high actual competence, attractiveness, and perceived competence; and $\chi^2(1, n = 112) = .083$, p = .773 for relationship between low actual competence, attractiveness, and perceived competence.

Research Question

The research question asked which type of nonverbal communication, visual or auditory, would influence participants more when rating Sue's communicative competence. Since the audiotapes were simply recordings of the videos, differences in means between the audio and video recordings of the same interaction should be related to method of observation.

Initial observations of the mean competence scores revealed several interesting findings. While conditions one and five are the same interaction, the video condition (M = 3.99, SD = .52) has a higher mean competence score than the audio condition (M = 3.84, SD = .41). Likewise, conditions three and seven are the same interaction yet the video condition (M = 3.88, SD = .53) has a lower mean competence score than the audio condition (M = 3.92, SD = .48). Table 4.3 below illustrates the differences in means regarding all eight conditions.

Table 4.4: Mean Competence Scores between Audio and Video Conditions

Description of Conditions	Means	Direction
Condition 1: Competent / Attractive / Video Condition 5: Competent / Attractive / Audio	1 (<i>M</i> = 3.99, <i>SD</i> = .52) 5 (<i>M</i> = 3.84, <i>SD</i> = .41)	Video had a higher mean than audio
Condition 2: Incompetent / Attractive / Video	2 (M = 2.21, SD = .58)	Video had a lower
Condition 6: Incompetent / Attractive / Audio	6 (M = 2.48, SD = .65)	mean than audio*
Condition 3: Competent / Unattractive / Video	3 (<i>M</i> = 3.88, <i>SD</i> = .53)	Video had a lower
Condition 7: Competent / Unattractive / Audio	7 (<i>M</i> = 3.92, <i>SD</i> = .48)	mean than audio
Condition 4: Incompetent / Unattractive / Video	4 (<i>M</i> = 2.16, <i>SD</i> = .56)	Video had a lower
Condition 8: Incompetent / Unattractive / Audio	8 (<i>M</i> = 2.59, <i>SD</i> = .52)	mean than audio**

Note: Conditions 5, 6, 7, & 8 are audio recordings of conditions 1, 2, 3, & 4. *p < .05; **p < .001

Although there are visible differences in the competence score means of the conditions illustrated in Table 4.3 above, more statistical tests are needed to determine whether the differences in means are statistically significant. First, independent sample t tests were run between each pair of conditions. An independent samples t test revealed that condition two (M = 2.21, SD = .58) statistically significantly differed from condition six (M = 2.48, SD = .65), t (123) = -2.53, p < .05. Likewise, a statistical significant difference was also found between condition four (M = 2.16, SD = .56) and condition eight (M = 2.59, SD = .52), t (88) = -3.86, p < .001. Conversely, an independent samples t test for condition one and five revealed that condition one (M = 3.99; SD = .52) did not statistically significantly differ from condition five (M = 3.84; SD = .41), t (101) = 1.67, p > .05. Additionally, an independent samples t test revealed no significant difference between condition three (M = 3.88, SD = .53) and condition seven (M = 3.92, SD = .48), t (107) = -.410, p > .05.

Chi square tests were then run to further examine the data. To account for all three independent variables (i.e. attractiveness, actual competence, & method of observation), a three-layered chi-square test was run for the research question. Results showed that no participants rated competent Sue as having low competence whether she was on the video or audiotape. Likewise, no participants rated incompetent Sue as having high competence whether she was on the video or audiotape.

The 2 x 2 x 2 x 3 chi-square test indicated that the relationship between low actual competence, high attractiveness, method of observation, and perceived competence (conditions three & seven) was statistically significant, χ^2 (2, n = 126) = 6.656, p < .05. Specifically, within the evaluations where incompetent attractive Sue was rated as having low competence, 63.2% (n = 43) was when she was viewed on the video, and 36.8% (n = 25) was when she was listened to on the audiotape. This finding reveals that individuals rated incompetent attractive Sue as possessing low competence more often when they viewed her on the videotape than when they listened to her on the audiotape. Within the evaluations where incompetent attractive Sue was rated as having high competence, none occurred when she was viewed on the video, and when she was listened to on the audiotape, two participants rated her as having high competence. Again, this shows that when individuals saw incompetent attractive Sue on the video they never thought she was highly competent, but two subjects thought she was competent when they just listened to the conversation.

The relationship between low actual competence, unattractiveness, method of observation, and perceived competence (conditions four & eight) was also statistically significant, χ^2 (2, n = 92) = 11.451, p < .01. Incompetent unattractive Sue was rated as

having low competence 65.9% of the time (n = 29) when she was viewed on the video, and 34.1% of the time (n = 15) when she was listened to on the audiotape. This finding demonstrates that individuals perceived incompetent unattractive Sue as having low competence more often when they viewed her on the video than when they listened to her on the audiotape. Within the evaluations of incompetent unattractive Sue, no one rated her as highly competent when she was viewed on the video, but one person did rate her as competent when s/he listened to the audiotape. Once more, this finding shows that when individuals saw incompetent unattractive Sue they never thought she was highly competent, but one individual thought she was highly competent when s/he listened to the conversation.

In the condition where Sue was actually competent, the relationship between high actual competence, high attractiveness, method of observation, and perceived competence (conditions one & five) was not statistically significant, χ^2 (1, n = 103) = 2.045, p > .05. Similarly, the relationship between high actual competence, unattractiveness, method of observation, and perceive competence (conditions two & six) was also not statistically significant, χ^2 (1, n = 112) = .439, p > .05. Table 4.5 below summarizes the complete results of the two-layered chi-square test for the research question.

i able 4.5. Felce	Competence by	by Actual Competence, Attractiveness, & Method				1
A 4 T		Perceived Competence Method of Low Moderate High				
Actual					High	mom . T
Competence	Attractiveness	Observation	(n = 112)	(n = 180)	(n = 141)	TOTAL
	High	Video $(n = 48)$				
High	(n = 103)	Row		25%	75%	100%
		Column		36.4%	51.4%	
(n = 215)						
		Audio $(n = 55)$				
		Row		38.2%	61.8%	100%
		Column		63.6%	48.6%	
		TOTAL		100%	100%	
	Low	Video $(n = 67)$				
	(n = 112)	Row		41.8%	58.2%	100%
		Column		63.6%	57.4%	
		Column		02.070	27.170	
		Audio $(n = 45)$				
		Row		35.6%	64.4%	100%
		Column		36.4%	42.6%	100 /0
		Column		30.470	42.070	
		TOTAL		100%	100%	
	High	Video $(n = 68)$				
Low	(n = 126)	Row	63.2%	36.8%		100%
2011	(120)	Column	63.2%	44.6%		20070
(n = 218)		Column	03.270	11.070		
(11 210)		Audio $(n = 58)$				
		Row	43.1%	53.1%	3.4%	100%
		Column	36.8%	55.4%	100%	100 / 0
		Column	30.070	33.470	10070	
		TOTAL	100%	100%	100%	
	Low	Video $(n = 44)$				
	(n = 92)	Row	65.9%	34.1%		100%
	(, , ,	Column	65.9%	31.9%		
		Corumn	00.570	31.570		
		Audio $(n = 48)$				
		Row	31.3%	66.7%	2.1%	100%
		Column	34.1%	68.1%	100%	13070
	1	Column	57.170	00.170	100/0	I

Note: χ^2 (1, n = 103) = 2.045, p = .153 for the relationship between high actual competence, high attractiveness, method of observation, & perceived competence; χ^2 (1, n = 112) = .439, p = .508 for the relationship between high actual competence, unattractiveness, method of observation, & perceive competence; χ^2 (2, n = 126) = 6.656, p < .05 for the relationship between low actual competence, high attractiveness, method of observation, & perceived competence; and χ^2 (2, n = 92) = 11.451, p < .01 for the relationship between low actual competence, unattractiveness, method of observation, & perceived competence.

V. DISCUSSION

The discussion of these results will proceed in three stages. First, the results of the hypothesis and research question will be explained and evaluated. Second, the weaknesses and limitations of this study will be discussed. Finally, suggestions for future research will be provided.

Results & Evaluation

Statistical tests described in the last chapter did not find support for the hypothesis, but there were significant findings revealed after exploring the research question. Amount of attractiveness did not affect the way an individual rated Sue's communicative competence. Regarding the research question, method of observation did not affect the way individuals rated Sue's competence. However, method of observation did affect the way participants rated Sue's *in*competence. Below is an evaluation of the results found for the hypothesis and the research question.

Hypothesis

The hypothesis proposed that individuals would perceive attractive Sue as more competent than unattractive Sue, regardless of her actual communicative competence.

This hypothesis was not supported. The independent samples t test showed a statistically significant difference between condition two (attractive/ incompetent/ video) and condition three (unattractive/ competent/ video). Although this finding was statistically

significant, it was in the opposite direction as predicted. It was expected that condition two would have a higher mean competence score than condition three. Since this was not the case, this finding did not support the hypothesis.

The chi-square test results approached significance (p = .062) with the relationship between high actual competence, attractiveness, and perceived competence. There were many interesting results within this almost significant relationship. For instance, competent attractive Sue was perceived as highly competent (n = 36) much more often than she was perceived as moderately competent (n = 12), whereas competent unattractive Sue was rated highly competent (n = 39) and moderately competent (n = 28) about the same number of times. Although not statistically significant, these results suggest that while Sue was actually competent in both conditions, she was slightly more likely to be rated as highly competent when she was attractive than when she was unattractive. Conversely, there were no significant findings in the relationship between low actual competence, attractiveness, and perceived competence. Thus, there was no difference between how individuals rated incompetent attractive Sue and incompetent unattractive Sue.

Previous research explains that high competence is attributed to attractive individuals (Zakahi & Duran, 1984). Therefore, when attractive Sue displayed incompetent behaviors, participants might have been so surprised by this breach of typical attractive-person behavior that they focused in on her actual competence and were not affected by her attractiveness. A better way to explain this phenomenon is with Expectancy Violations Theory (EVT) (Burgoon & Jones, 1976). Burgoon and Jones (1976) explain that expectancies are normative patterns of behavior that are specific to an

entire culture or subculture. According to the theory, when our expectancies are violated, we could feel discomfort, anxiety, or embarrassment (Burgoon & Jones, 1976). A great deal of research has supported the idea that anxiety occurs when expectations are violated. For instance, Sawada (2003) found that when individuals' personal space was intruded upon, their heart rates increased. Likewise, Bevan (2003) applied EVT to sexual resistance found between cross-sex friends and between dating partners. Bevan found that participants experienced a more negative and unexpected expectancy violation when the sexual resistance was from a dating partner than when it was from a cross-sex friend. In the current study, participants may have expected an attractive female to be communicatively competent. While they may not have felt *anxiety*, as stated, participants may have been so shocked by the violation of expectancies that they focused on Sue's actual competence. Although in this study, attractiveness did not statistically significantly affect how individuals rated the speaker's competence, it is important to note that attractiveness does play a small role.

A considerable amount of previous research appeared to support the hypothesis. For instance, research has shown that individuals rate attractive people more favorably than unattractive people in a variety of different situations (e.g. Chaikin et al., 1978; Kruse & Fromme, 2005; Kulka & Kessler, 1978; Landy & Sigall, 1974; Soloman & Schopler, 1978; Snyder et al., 1977; Parekh & Kanekar, 1994). As explained in the literature review, attractive individuals are graded more favorably by their peers for comparable academic work (Landy & Sigall, 1974), are given less punishment for the same crime (Soloman & Schopler, 1978), are awarded more money in court cases (Kulka & Kessler, 1978), elicit more positive job-related evaluations (Chaikin et al., 1978), are

considered to be more persuasive (Parekh & Kanekar, 1994), and more sexually desirable (Kruse & Fromme, 2005) than less attractive individuals. Based on this previous research, it seemed logical to hypothesize that individuals would rate attractive Sue as more competent than unattractive Sue. However, the difference between previous research and the current study is that this study attempted to discover the strength of the impact of attractiveness, not simply if attractive individuals are perceived as being competent.

The findings of the current research suggest that the impact of attractiveness is not very strong. Again, it has been shown that individuals perceive attractive people as competent and unattractive people as incompetent (Zakahi & Duran, 1984). However, as shown in this study, when individuals implement actual competence or incompetence, their attractiveness ceases to prevail and does not have a significant effect on their perceived competence. Attractiveness, therefore, is still a valuable characteristic to possess, but in situations where other attributes are clearly displayed, attractiveness cannot mask true abilities.

The weak effect of attractiveness in this particular study may be related to the stimulus material— the attractiveness of Sue. First, the difference between the mean ratings of attractive Sue and unattractive Sue was only 2.98 points out of a 10-point Likert scale. The mean rating of attractive Sue was 8.03 (SD = 1.17) and 5.05 for unattractive Sue (SD = 1.39). Although statistically significant (t (136) = -13.48, p < .001), there may not have been a large enough perceptual impact for participants to truly discriminate. Other attractiveness studies have produced higher differences between their attractive and unattractive stimuli (e.g. Cash, et al., 1977; Solomon & Schopler, 1977).

For example, Cash et al. (1977) had 37 participants rate the attractiveness of 50 pictures and then the two photos with the highest attractiveness and the two with the lowest attractiveness were chosen for the experiment. On a 9-point Likert scale, Cash et al.'s (1977) two attractive photos had a mean rating of 7.69 (SD = 1.14), where their two unattractive photos had a mean rating of 2.30 (SD = 1.17); a difference of 5.39, much higher than in the current study. Solomon and Schopler (1977) also found a high difference between the mean ratings of their attractive individual and their unattractive individual. On a 7-point Likert scale, the attractive individual received a mean rating of 6.45 and the unattractive individual received a 2.60; a difference of 3.85. The current study, which utilized a 10-point Likert scale, might have yielded more diverse results if there had been a larger difference in the attractiveness of the two speakers (attractive Sue and unattractive Sue).

The low difference in the ratings of Sue could have been due to a number of factors. Unattractive Sue had her hair pulled back in a low ponytail, had on no makeup, wore glasses, and was dressed down, wearing a baggy tan-colored fleece and jeans. All of the participants who rated Sue's attractiveness and her competence consisted of college students, and as observed by the author, college students do not usually dress nicely to attend class. Many of them wear baggy pullover sweatshirts, fleece pants, flip flops, and even pajamas to school. This observation may explain why participants did not perceive unattractive Sue as *that* unattractive, after all, she looked like them. Participants also may have thought that Sue didn't always look like that and didn't need to be "fixed up" in the depicted situation, because so many of their peers dress so casually during the day. Additionally, Sue and Jamie, the two people in the interaction, were both young,

college-aged individuals. When the researcher initially introduced the stimuli, she explained that the two people in the interaction were friends discussing what they did over Christmas break. Just as participants may have related to unattractive Sue's hair and clothing choice, participants might have also related to Sue and Jamie's age, further solidifying the idea that unattractive Sue was probably in college and didn't necessarily look that way all of the time.

Another problem involves the pilot study. Each group of participants in the pilot study only rated the attractiveness of one photo, either attractive Sue or unattractive Sue. Participants could not rate the attractiveness of both photos because attractive Sue and unattractive Sue was the same person. Therefore, participants could not compare the photo they were rating with another photo. Previous studies have ascertained the attractiveness of an individual differently (e.g. Cash et al., 1977; Johnson & Pettinger, 1984; Landy & Sigall, 1974; Snyder et al., 1977). For instance, Landy and Sigall (1974) asked six male graduate students to rank order the photos of 15 females in terms of physical attractiveness. The authors then used the highest and lowest ranked photos in their study. In Johnson and Pettinger's (1984) study of the attractiveness stereotype and the elderly, the researchers had participants rate the attractiveness elderly individuals in 56 photos (28 female & 28 male) on a 7-point Likert scale. Then, six photos (3 female & 3 male) that were considered high, medium, and low in attractiveness were used in their second study. Likewise, Snyder et al. (1977) had males rate the attractiveness of 20 female photos, and then the researchers used the four pictures that were rated the most attractive and the four pictures that were rated the least attractive. There is a huge difference between the three studies mentioned above and the current study. In the

previous research discussed above, participants did not observe an interaction that involved the attractive individual. Participants would simply judge an individual on a number of variables with a photo of that individual present. The current research asked participants to observe an interaction that attractive/ unattractive Sue was involved in. This difference in methodology reveals the impracticality of using previous methods in the current study. For instance, it was important that attractive competent Sue and unattractive competent Sue acted in the same manner, because the only difference between those two conditions should have been Sue's attractiveness. If two different interactants were used, it would have been much more difficult to be certain that both of the competent interactions and both of the incompetent interactions were identical. While it would have been ideal to have participants choose an attractive and unattractive individual from a large sample of people, the method was unrealistic for the scope of this study.

The number of independent variable levels is another area of difficulty. Ideally, it would have been most beneficial to have high, medium, and low levels of actual competence and of attractiveness as opposed to simply high and low levels. As discussed earlier, participants might have been unable to focus when attractive Sue began acting incompetent because it was violating predisposed assumptions individuals have about attractive people. If there had been a third level of competence, results might have been different. Very attractive, yet moderately competent Sue may have been perceived as more competent than very unattractive, moderately competent Sue. Likewise, results may have also been different if there had been a third level of attractiveness. In the current study, Sue was either attractive or unattractive. A middle level of attractiveness could

have been beneficial. For example, moderately attractive, very incompetent Sue could have been perceived as less competent than very unattractive, very incompetent Sue.

Prior research supports the conclusion that three levels of attractiveness would have been useful (e.g. Eagly et al., 1991; Hosoda et al., 2003; Langlios et al., 2000). From their meta-analysis, Langlios et al. (2000) concluded that,

[A]ttractive and unattractive individuals are different in how they are judged, how they are treated, and how they behave. Because we [Langlios et al.] do not know whether either group is significantly different from individuals of medium attractiveness, we cannot determine whether the differences between attractive and unattractive individuals occur because attractiveness is an advantage, because unattractiveness is a disadvantage, or both. Future research should not limit itself to investigating only two levels of attractiveness. (p. 408)

Hosoda et al. (2003) conducted a meta-analysis of job-related effects of attractiveness. While Hosoda et al. agree that the absence of a medium attractive individual damaged their ability to compute a meaningful effect sizes, they also added that,

[T]here is no good reason to expect other than a linear relationship between attractiveness and various job-related outcomes. Thus, the absence of studies having targets of medium attractiveness does not appear to be a threat to the external validity of our [Hosoda et al.] findings. (p. 456)

There seems to be disagreement on whether to employ two or three levels of attractiveness. The decision, therefore, should be determined by the researcher. Since the current study already had problems manipulating Sue's attractiveness into two levels, it probably would have been very difficult to generate three levels of her attractiveness.

Research Question

The research question asked whether visual or auditory nonverbals would be more influential when rating one's communicative competence. Specifically, the question explored whether Sue would be judged as more or less competent when she was viewed on the video as opposed to when they listened to that same interaction on an audiotape. Significant relationships were discovered while investigating this research question.

Both independent samples t tests and chi square tests showed that method of observation did not affect how participants rated Sue when she was actually competent, but it did significantly affect how participants rated Sue when she was actually incompetent. Independent samples t tests revealed significance between the video and audio conditions where Sue was incompetent and attractive (p < .05) and where Sue was incompetent and unattractive (p < .001). Chi square tests discovered that incompetent attractive Sue was rated as having low competence more often when she was viewed on the video (n = 43) than when she was listened to on the audiotape (n = 25). In addition, incompetent attractive Sue was never rated as having high competence when she was viewed on the video (n = 0), but was perceived as having high competence a few times (n = 0)= 3) when she was listened to on the audiotape. Incompetent unattractive Sue was also viewed as possessing low competence more often when she was viewed on the video (n = 29) than when she was listened to on the audiotape (n = 15). These findings demonstrate that individuals were more certain of incompetent Sue's incompetence when they could see her than when they only listened to her on the audiotape. Sue's incompetent visual nonverbal behaviors (i.e. limited eye contact & head nods, distracting mannerisms, etc)

were more influential in participants' perceptions of her competence than just her incompetent auditory nonverbal behaviors (i.e. inappropriate volume, rate, pitch, etc).

Just as Wiemann (1977) explained, nonverbal behaviors play a large role in rating communicative competence. Due to the fact that eye contact and physical attractiveness are two nonverbal behaviors that have been shown to be extremely influential in individuals' perceptions of others (e.g. Abele, 1986; Parekh & Kanekar, 1994; Ritts et al., 1992), and they are both visual nonverbal behaviors, it was logical to predict that visual nonverbals would be more influential than auditory nonverbals when judging one's communicative competence. Results showed, however, that this was only true when an individual was rating an incompetent person, not a competent person.

A few suggestions can be offered to explain this absence of statistical significance with competent Sue. As addressed in the literature review, many studies have shown the positive impact eye contact has in certain situations such as job interviews (e.g. Burgoon et al., 1985; Cook & Smith, 1975; Eng, 1995; Foddy, 1978; Russo, 1975: Tankard, 1970; Wheeler et al., 1979) and public speeches (Beebe, 1974). Research has also demonstrated how eye contact positively relates to a person's self-esteem (Greene & Frandsen, 1979) and sexual interest (Thayer & Schiff, 1977). For example, Burgoon et al. (1985) discovered that participants "were more likely to hire interviewees who maintained a normal or high degree of eye gaze than those who averted eye gaze" (p. 133). Likewise, Eng (1995) researched employment interviews of elementary school teachers. Eng found that a significant predictor of a principle's preference of a candidate was the length of eye contact given by the applicant. A high amount of eye contact is associated with competence, whereas a low amount is associated with incompetence (Wiemann, 1977).

The author has observed that just as dressing down to attend class is a college-life norm, maintaining eye contact in interactions has also become a norm among college students. Based on the research explaining the importance of eye contact and the author's personal experiences with college students, competent Sue's implementation of good eye contact may not have increased her competence in the eyes of the participants, because it is expected to have good eye contact. However, incompetent Sue's low amount of eye contact may have been extremely detrimental to her perceived competence for the same reason, eye contact is expected. Expectancy Violations Theory (Burgoon & Jones, 1976) can also be used to explain the results found here. Just as eye contact is an expected behavior, other visual nonverbal behaviors are expectancies as well. For instance, head nods are an expected behavior when interacting with another individual. Because they are expected, when an individual implements head nods, they may not even be noticed. However, when an individual lacks head nods, it is noticed and the perceived competence of that individual decreases.

Due to the findings of the current study, it is reasonable to conclude that incompetent visual behaviors are more detrimental to an individual's perceived communicative competence than competent visual behaviors are beneficial.

Limitations

There were many ways in which this study could have been improved. As explained earlier, the low difference in ratings of attractive Sue and unattractive Sue, the method of rating Sue's attractiveness, and the number of independent variable levels were all limitations to this study. Another limitation concerns how the participants rated Sue's competence. As explained in the review of literature, there are three methods to

judge communicative competence; the self, the other, and the third-party observer. In the present study, the participants were third-party observers. Although Wiemann (1977) used this method in his original study, researchers have debated over whether this method is the best way to judge competence. Researchers have explained that the observers' lack a relationship with the interactant hinders their ability to make good assessments (Spitzberg & Cupach, 1984). With the other as rater, the evaluator is involved in the interaction and is fully engaged in all of the nonverbal and verbal communication between the subject and him/herself. While data can be collected at a much faster pace with third-party observers, it would have been ideal to have each participant interact with Sue. Due to time constraints, however, this was not possible.

The second limitation involves the communicative competence scale used. Although many scales that measure communicative competence (e.g. Communicative Adaptability Scale, Duran, 1983; Communicative Competence Scale, Wiemann, 1977) implement a 5-point Likert scale, in the current research, a 7-point scale could have been more useful. A 7-point scale would have allowed more variation in participants' responses. While a majority of participants who rated competent Sue selected fours and fives in this study, if a 7-point scale was utilized, responses could have ranged from five to seven for competent Sue.

Suggestions for Future Research

While the current study did not support the idea that attractiveness prevails, methodological issues could have affected the results. Therefore, more research must be done to solidify our understanding of the strength of attractiveness. Similarly, procedural issues could also be responsible for why competent Sue's perceived competence was not

affected by the method of observation. Although much has been done already in the fields of attractiveness, competence, and nonverbal communication, below are several suggestions for future research.

Research should be developed that addresses the problems with the current study's methodology. The current author would like to create stimulus materials where the settings and interactants involved are not so suggestive of the day-to-day lives of college students, such as a meeting between professors. The author believes this would greatly increase the strength of attractiveness because participants generally expect professors to act in a certain professional way. Additionally, the number of independent variable levels, the method by which participants judged Sue's competence, the method by which attractive and unattractive Sue were chosen, and the amount of available responses on the measurement instrument are all problems that need to be addressed in future studies. With these methodological changes, scholars may be surprised by the strength of attractiveness and the great influence visual nonverbal behaviors have on rating one's communicative competence.

The author would also like to explore the strength of attractiveness in other situations. It would be fascinating to reexamine some previous perceptual attractiveness studies and assess the strength of that attractiveness. For instance, research has already shown that beautiful people are perceived as being better parents than less attractive people (Dion et al., 1972). It would be interesting to determine if individuals would still rate attractive targets as being better parents when they obviously display poor parenting skills. Likewise, Singh (2006) explained that attractive women are perceived as being more unfaithful than unattractive women. Again, research could observe how individuals

would rate an unattractive woman's faithfulness who was flirting with a man. The previous findings that suggest that attractiveness is a strong characteristic to possess (e.g. Cash et al., 1977; Dipboye et al., 1975; Johnson & Pettinger, 1984; Landy & Sigall, 1974; Quereshi & Kay, 1986; Snyder et al., 1977), fail to assess the strength of attractiveness as explained in the current study. Thus, there are an endless number of possibilities for future research in this respect.

Another area of communicative competence research that needs more development is the creation of new measurement scales. Most of the scales that are currently used were developed in the 70s and 80s. Although many of the scales have been shown to be reliable and valid, some of the language used in the scales could be considered outdated. For instance, the Conversational Appropriateness Scale (Spitzberg & Phelps, 1982; Canary & Spitzberg, 1987)) uses the word "proper" in one of its items, "her/his communication was very proper." The term "proper" is not part of everyday undergraduate student language. Also, there are a large variety of scales that measure different aspects of communicative competence, such as the Communicative Adaptability Scale (Duran, 1983) that measures "the ability to perceive socio-interpersonal relationships and adapt one's interaction goals and behaviors accordingly" (p. 320) and the Interaction Involvement Scale (Cegala, 1981) which measures "the degree to which people are engaged, cognitively and behaviorally, in their conversations with others" (Rubin, Palmgreen, & Sypher, 1994, p. 187). It would be interesting to develop an instrument that specifically measures only visual communicative competence. While Wiemann (1977) offered a number of positive visual nonverbal behaviors, a scale to measure these behaviors would be a great addition to the existent collection of

competence instruments. Likewise, an instrument should be developed to measure only auditory communicative competence. This study has shown that just paralanguage alone is not enough to judge communicative competence but more research should be done to determine whether visual nonverbal behavior alone is enough to judge communicative competence. For example in the current study, do sight and sound both have to be present? If the answer to is yes, then how do blind or deaf individuals judge communicative competence? Are they incapable? Or does a blind woman's lack of seeing enhance her ability to listen, beyond how a normal person, making her *very* capable of perceiving communicative competence when she is only listening to an interaction? These questions still need to be answered.

The controversy over who should rate communicative competence is also a great area for suggestions. Obviously, there will never be one single opinion about who should evaluate communicative competence because researchers have their own beliefs on the matter. However, it would benefit the field of competence research to have studies address this issue. Regarding the raters of competence, it would be interesting to see if communicatively competent raters judge others tougher than communicatively incompetent raters. Due to the fact that the rater is competent, does he or she expect more from others communicatively? Secondly, it would also be fascinating to determine if there is a relationship between the gender of the rater and the gender of the participant. Would males rate females as having higher communicative competence than they would rate other males? Do females perceive other females to have higher communicative competence than males? All of these suggestions for future research would greatly

benefit and advance the study of communicative competence, attractiveness, and nonverbal communication.

In conclusion, more research is needed to investigate the strength of the impact of attractiveness and the influence of visual nonverbal communication on judgments of one's competence. This study has shown that attractiveness is still a strong characteristic to possess. However, in situations where your other attributes are clearly displayed, attractiveness cannot considerably mask your true abilities. Concerning the research question, the author has concluded that incompetent visual behaviors are more detrimental to an individual's perceived communicative competence than competent visual behaviors are beneficial.

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APPENDICES

Appendix A

Research Assistant Memo

Imyself in an interaction and purpose and all of the proce	rate my attractivene	for this research project, participants will view a video of ess and communicative competence. I fully understand the ch project.
Participant Signature	Date	
Principal Investigator	Date	
	Researc	ch Assistant Memo
Imyself in an interaction and purpose and all of the proce	rate my attractivene	nat for this research project, participants will view a video of ess and communicative competence. I fully understand the th project.
Participant Signature	Date	
Principal Investigator	Date	

Appendix B

Researcher' Code:			Parti	cipant's	Code:	
	Attractiv	veness Rati	ng Sheet	-		
The researcher will show you a picture of a person, please rate that person on his or her physical attractiveness. Please use the 1 to 10 attractiveness scale below, with 1 being most unattractive, and 10 being most attractive. Circle your answer.						
1 2 3	4 5	6	7	8	9	10
Least Attractive						Most Attractive
For Researcher Use ONLY A B						
	Demogr	aphic Info	rmation			
You have been assigned a coor This will help to ensure confiappears at the top of this page will assist us in gaining a mix	dentiality. Your co	de will not the information	be able to	be matc w. Comp	hed to yo	our name. Your code
Age:	Gender:	Female	·	Male		
Estimated GPA from ALL college courses: (to 3 decimals)						
I am a (Circle one):	Freshman	Soph	omore	Junio	or	Senior

Appendix C

Researcher' Code:	Participant's Code:

Communicative Competence Scale (Wiemann, 1979; Spitzberg & Phelps, 1982; Canary & Spitzberg, 1987)

longry	Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
1.	Sue seems rev	warding to talk to			
2.	Sue can deal	with others effect	rively		
3.	Sue is a good	listener (verbal a	nd nonverbal)		
4.	Sue's persona	al relations are wa	arm and inviting		
5.	Jamie seemed	l comfortable thro	ough out the conv	ersation with Sue	's remarks
6.	Sue's verbal	communication is	appropriate		
7.	Sue's nonverl	bal communication	on is appropriate		
8.	Sue is polite				
9.	Sue is an effe	ctive communica	tor		
10.	Sue lets other	s know she under	rstand them		
11.	Sue can adapt	t to changing situ	ations		
12.	Sue understar	nds other people			
13.	Sue is a smoo	oth conversational	list		
14.	Sue's convers	sation was reward	ling to Jamie		
15.	Sue is relaxed	d and comfortable	when speaking (erbally and nonv	rerbally)
16.	Sue listens to	what people say	to her (verbal and	nonverbal)	
17.	Sue likes to b	e close and perso	nal with people		
18.	Sue is suppor	tive of others			
19.	Sue is a likab	le person			
20.	Sue is flexible	e			
21.	People can go	to Sue with their	r problems		
22.	Sue enjoys so	cial gatherings w	here she can mee	new people	
	omplete the in of participants	formation below.	Demographic In Completion is no		will assist us in gaining a

Age:	Gender:	Female	Male

Appendix D Auburn University

Auburn University, Alabama 36949-5211

Telephone: (334) 844-2727

Fax: (334) 844-4573

Department of Communication and Journalism 217 Tichenor Hall

INFORMED CONSENT FOR A RESEARCH PROJECT INVOLVING "Observing Communicative Competence"

You are invited to participate in a research study of communicative competence to be conducted by Jennifer Gill, M.A. Candidate in the Department of Communication and Journalism. I hope to learn about how communicative competence is observed by outsiders of an interaction. You were selected as a possible participant because you are currently enrolled in a Communication and Journalism course and are 18 years of age.

If you decide to participate, you will be participating in one session that will involve observing a short interaction between two individuals and filling out a communicative competence scale. Your participation will take approximately 30-45 minutes.

Your participation is strictly voluntary. Your name will not be associated in any way with the research findings, thus any information obtained in connection with this study will remain anonymous. You may withdraw from this study at any time by handing in your uncompleted research materials. However, once you have provided the anonymous information, (i.e. turned in the completed research materials), you will be unable to withdraw your data after participation since there will be no way to identify individual information. Finally, information collected through your participation may be published in a professional journal, and/ or presented at a professional meeting, etc. No individual responses will be presented or published.

Your instructor will determine the amount of extra credit you will receive for participating in this study. You are encouraged to check with your instructor regarding the amount of extra credit you will receive for participating in this study. By participating in this study, you will gain insight into how communication research is carried out. Finally, there are no foreseeable risks to you by participating in this study.

Your decision whether or not to participate will not jeopardize your future relations with Auburn University or the Department of Communication and Journalism.

If you have any questions I invite you to ask them now. If you have questions later, you may contact Jennifer Gill at gilljen@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER TO

For more information regarding your rights as a research participant you may contact the Office of Human Subjects Research by phone or e-mail. The people to contact there are Executive Director E.N. "Chip" Burson (334) 844-5966 (bursoen@auburn.edu) or IRB Chair Dr. Peter Grandjean at (334) 844-1462 (grandpw@auburn.edu).

Parent/ Guardian Signature	Date	Your Signature	Date
APPROPRIATE PARTIES SIG	GN BELOW.		
YOU PROVIDE WILL SERVI	E AS YOUR AGRE	EMENT TO DO SO. PLEASE HAV	E THE
PARTICIPATE IN THIS RESI	EARCH PROJECT.	IF YOU DECIDE TO PARTICIPAT	ΓE, THE DATA

Appendix E Auburn University

Auburn University, Alabama 36949-5211

Telephone: (334) 844-2727

Fax: (334) 844-4573

Department of Communication and Journalism 217 Tichenor Hall

Your Signature

INFORMATION LETTER FOR A RESEARCH PROJECT INVOLVING "Observing Communicative Competence"

You are invited to participate in a research study of communicative competence to be conducted by Jennifer Gill, M.A. Candidate in the Department of Communication and Journalism. I hope to learn about how communicative competence is observed by outsiders of an interaction. You were selected as a possible participant because you are currently enrolled in a Communication and Journalism course and are at least 19 years of age.

If you decide to participate, you will be participating in one session that will involve observing a short interaction between two individuals and filling out a communicative competence scale. Your participation will take approximately 30-45 minutes.

Your participation is strictly voluntary. Your name will not be associated in any way with the research findings, thus any information obtained in connection with this study will remain anonymous. You may withdraw from this study at any time by handing in your uncompleted research materials. However, once you have provided the anonymous information, (i.e. turned in the completed research materials), you will be unable to withdraw your data after participation since there will be no way to identify individual information. Finally, information collected through your participation may be published in a professional journal, and/ or presented at a professional meeting, etc. No individual responses will be presented or published.

Your instructor will determine the amount of extra credit you will receive for participating in this study. You are encouraged to check with your instructor regarding the amount of extra credit you will receive for participating in this study. By participating in this study, you will gain insight into how communication research is carried out. Finally, there are no foreseeable risks to you by participating in this study.

Your decision whether or not to participate will not jeopardize your future relations with Auburn University or the Department of Communication and Journalism.

If you have any questions I invite you to ask them now. If you have questions later, you may contact Jennifer Gill at gilljen@auburn.edu.

For more information regarding your rights as a research participant you may contact the Office of Human Subjects Research by phone or e-mail. The people to contact there are Executive Director E.N. "Chip" Burson (334) 844-5966 (bursoen@auburn.edu) or IRB Chair Dr. Peter Grandjean at (334) 844-1462 (grandpw@auburn.edu).

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER TO
PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA
YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. PLEASE HAVE THE
APPROPRIATE PARTIES SIGN BELOW.

Date

Appendix F

Debriefing Script

Thank you for participating in this study today. In a pilot study, the attractiveness of Sue was determined and in the media source you observed today, she was purposefully displaying either high or low communicatively competent behaviors. The communicative competence sheet you filled out will be used to determine relationships between communicative competence and attractiveness.

I would like to remind you that all of your scores and responses will be combined with other students' scores and responses, and they were coded with an individual code that cannot be tied back to you. This means that no one will be able to tie your scores back to your identity.

If, for any reason, you feel uncomfortable having your response used in this important research project, please **alert an experimenter immediately** and your scores will be deleted.

You are free to discuss any issues or reactions that you have with the researcher. You can also contact Jennifer Gill at gilljen@auburn.edu for further information on this study.

Finally, because we want our participants to be as natural as possible throughout the experiment, we would appreciate it if you did not talk about any parts of this experiment with other Auburn students. They may be future participants, and we would not want their performance affected in any way.

Again, we thank you for your participation today.