Dance dance attribution: exploring the relationship between
dance and attractiveness in intial perceptions

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DANCE DANCE ATTRIBUTION: EXPLORING THE RELATIONSHIP BETWEEN DANCE AND ATTRACTIVENESS IN INITIAL PERCEPTIONS

A Thesis
Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Master of Arts

in
The Department of Communication Studies

by
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ABSTRACT

The current study examines the relationship between attractiveness and dance. By viewing dance as a form of social competence and self-presentation, the study attempts to place dance, a previously understudied area within, the context of communication research. Through the lens of implicit personality theory and the attractiveness stereotype, the paper examines the effects of physical attractiveness on perceived dance ability as well as the effects of dance ability on physical, social, and task attractiveness.
CHAPTER 1: INTRODUCTION

This chapter will introduce the two major constructs addressed in the current study, attractiveness and dance. First, I attempt to lay the groundwork for the current project by discussing the role of dance, an area of limited empirical study in communication research, by placing it within the frames of social competence and self-presentation. This project attempts to provide evidence of the importance of dance ability in the study of communication by drawing a line between dance as a form of social competence and attractiveness in initial encounters.

Why Study Attractiveness and Dance in Communication?

To date, very little dance-related research has been conducted in the social sciences. According to Desmond (1997), “Dance remains an undervalued and under theorized arena of bodily discourse. Its practice and its scholarship are, with rare exceptions, marginalized within the academy” (p. 29). While Desmond’s primary interests remain in critical studies, dance as a nonverbal behavior has the potential to cross academic boundaries between critical studies and the social sciences. In particular, study of dance has great implications for communication scholars because it serves as a form of self-presentation and a marker for social competence.

Social competence is comprised of countless communication constructs (e.g. self-monitoring, extraversion) and behaviors (e.g. appropriate use of space and gesture) characterizing an individual’s ability to act appropriately in interpersonal episodes (Rose-Krasnor, 1997). Communicators learn social behaviors for initial encounters, public speaking, talking to superiors, playing games, singing karaoke,
and any number of situations. These are just of few of the infinite contexts in which interpersonal interactions occur, each requiring a particular set of behaviors and competencies in order to meet social expectations.

For many individuals, particularly young adults, dance ability serves as an important part of social competence. Because the social settings for many college interactions take place at bars, clubs, or parties where dancing occurs, the ability to dance is inherently linked to much of the socializing in which students are engaged. Although dance is not necessarily considered a traditional form of communication, the act itself serves the communicative functions of self-presentation, marking availability and demonstrating liking through closeness and touch.

Dance in the social arena involves communicative performance at the dyadic, small group, and public spheres. At a close distance, social dance is often a communicative act between two individuals dancing in tandem as they try to lead, follow, mimic, and move in rhythm with each other. While dancing with friends, the individual communicates and receives cues from within the small group monitoring and reacting to their own movement. In a party or club setting, all dance, whether involving a dyad or small group becomes a seemingly public performance. Whereas talking can remain out of the range of public hearing in the social setting by lowering the voice to a whisper, dance as a physical behavior cannot leave the public eye without retreating from the social space. Because of the communicative possibility and in some cases inevitability of dance in all three of these contexts, participants in the act of social dancing are constantly involved in acts of self-
presentation and expressivity (Riggio et al., 1991). As a result, social dance becomes an area of social competence regularly invoked in college students and young adults.

Self-presentation is the process through which we create and maintain an identity in social or imagined social settings in order to gain influence over an audience, real or perceived (Jones & Pittman, 1982; Tedeschi & Norman, 1985; Schlenker, 2003). Social dance, particularly with young adults, serves a self-presentational function insofar as the way an individual dances marks her group involvement and her adaptability to particular audiences (Hanna, 1979). Though many people view dance as purely a form of personal expression, the subconscious influence of impression management tactics creates in dance a self-presentational resource (Tedeschi & Norman, 1985; Schlenker, 2003). The automacity of self-presentation allows the individual to present controlled impressions of his or her public identity while dancing, without conscious effort to do so (Schlenker, 2003). It is not coincidence that members of a particular subset of youth dance in similar manners. Just like the clothes one wears or the music one listens to, dance can act as a form of identifier that marks the individual as belonging or not belonging to a group (Hanna, 1979). A good dancer can adapt his or her movement style according to individual contexts; however, an individual who lacks the ability to control body movement also lacks the ability to conform to a particular form of dance associated with group membership and respond to social feedback by means other than the discontinuation of movement. Similarly, such a disability restricts the individual from adapting his dance style to appropriate social settings (e.g. music, venue, audience, level of intimacy, etc.).
Dance also serves as a form of social competence when faced with decisions of proximity, touch, gesture, and other forms of nonverbal immediacy. When demonstrating liking behaviors versus disliking behaviors, dancers use movement to control the space between partners and individuals around them. Dancing closer to an individual and making eye contact may elicit interaction and signal availability, while larger distances and closed body movements and positioning assist in warding off unwelcome intrusion (Hanna, 1979). Similarly, forms of dancing that involve touch with different body parts indicate varying degrees of liking to one’s dance partners and other observers.

In sum, social dance is a highly communicative nonverbal act with great social implications. Because of this, the study of dance remains important to the field of communication. Through dance, “social relations are both enacted and produced through the body, and not merely inscribed upon it” (Desmond, 1997, p. 33). In other words, individuals interact and produce and maintain identities through social dance.

Consequently, dance is a form of nonverbal communication (Hanna, 1988). Like gesture, paralanguage, and posture, the meanings and implications of this communicative form are abstract, but nonetheless important to our overall meaning making and impression formation. By unpacking the social and communicative implications of dance, the communication scholar gains insight into important areas of interpersonal relationships, including immediacy, attraction, and impression management, as well as impression formation in order to increase understanding and shared meaning in daily interactions.
In a dance setting, the way a person moves may be noticed by another individual long before first words are spoken. As a result, dance is often an aspect of initial impressions in particular venues. First impressions can be the beginning and end of relationships with potential significant others. Whether meeting a boss, classmate, potential friend, or potential partner, the initial impressions others make affect the ways in which they communicate in the future, as well as their decision whether or not to continue a relationship. The communicative aspects of first impressions are paramount to the ways in which people perceive and interact with strangers (Willis & Todorov, 2006). However, the factors contributing to initial perceptions are vast and often subconscious (Bruner & Taguiri, 1954; Schneider, 1973; Willis & Todorov, 2006). Understanding of how individuals form perceptions of others increases with every contributing factor uncovered by communication scholars.

Considering the role of dance in impression formation serves a pragmatic function of increasing general understanding of how specific social competencies affect perceptions of others. However, the most widely accepted factor affecting initial perceptions of others is physical attractiveness, primarily facial attractiveness (Eagly, Ashmore, Makhijiani, & Longo, 1991). Through the framework of Implicit Personality Theory (Bruner & Tagiuri, 1954), which suggests that humans make judgments of others based on what are considered to be their central characteristics, individuals use physical attractiveness to assign others to categories that are linked to stereotypical behaviors and attributes. Of all of the components associated with attractiveness, including body attractiveness, dress, and behavior,
Facial attractiveness has the strongest effect on initial impressions (Riggio, Widaman, Tucker, & Salinas, 1991). Facialy attractive individuals are stereotyped as being more confident, friendly, warm, extraverted, and socially competent (Dion, Berscheid, & Walster, 1972; Basilli, 1988). Therefore, when considering the role of dance in interpersonal perceptions, one must also consider facial attractiveness. Given the role of dance in social relations, individuals might also predict attractive targets to be competent dancers.

The current study attempts to bring together the extant literature on attractiveness, dance, and initial interactions to examine a potential link between dance and attractiveness in impression formation. By situating dance ability within the theoretical foundation of the Attractiveness Stereotype through the lens of Implicit Personality Theory, the study attempts to further the extant literature on the effects of attractiveness on perceptions of individual attributions and competencies.

Organization of Thesis

Chapter 1 has given a brief introduction to the topic as well as a brief look at the role of dance in interpersonal interactions. Chapter 2 provides a conceptual definition for facial attractiveness for the purpose of this study and reviews the extant literature on Implicit Personality Theory, the Attractiveness Stereotype, and dance as a social competency, followed by the rationale and hypotheses for the current study. Chapter 3 explains the methods and procedures for the current study, including the pilot study conducted prior to the final data collection. Chapter 4 reports the results of the data analysis. Chapter 5 discusses the theoretical
implications of the results discussed in Chapter 4 as well as the limitations to the study and suggestions for future research.
CHAPTER 2: REVIEW OF LITERATURE

This chapter reviews the extant literature on subjects important to the current study. First, a conceptual definition of facial attractiveness will be reviewed and discussed based on quantitative research conducted primarily in the field of evolutionary psychology. Second, a discussion of Implicit Personality Theory provides a framework for the attractiveness stereotype. Third, a review of past research on the attractiveness stereotype highlights the vast range of characteristics attributed to attractive individuals in impression formation. Finally, a brief review illuminates the link between attractiveness and dance in first impressions.

Conceptualizing Facial Attractiveness

The conceptualization of attractiveness for the purposes of research in the social sciences is widely debated. The belief that “beauty is in the eye of the beholder” has maintained prominence in popular conceptions of attractiveness, perhaps due in part to Darwin’s (1874) notion that standards of physical beauty are culturally based. In a review of facial attractiveness literature, Berscheid and Walster (1974) proclaimed, “there exists no compendium of physical characteristics, or configurations of characteristics, which people find attractive in others, even within a single society” (p. 186). Since that time, however, research has slowly revealed otherwise. In order to create a conceptual definition of attractiveness for the purposes of this study, conceptual components of attractiveness have been drawn from previous literature.
Facial Attractiveness and Averageness. Cunningham, Roberts, Barbee, Druen, and Wu (1995) theorized that perceptions of attractiveness are a “function of multiple categories of features, with different meanings and sources of influence” (p. 262). In a study of attractiveness across Taiwanese, Hispanic, Asian, and American black and white respondents, they were able to pinpoint particular facial features that led to increased perceptions of beauty regardless of the cultural heritage of the participant. All of these ethnic groups found female faces more attractive when they showed the babyfaced cues of small noses and large, widely spaced eyes, as well as signs of sexual maturity, such as high cheekbones, large smile, full lower lip, and a narrow face shape (Cunningham et al., 1995).

Langlois and Roggman (1991) were also convinced that Walster and Berscheid (1974) and Darwin (1871) were incorrect in their assumption about attractiveness and attempted to find a broad universal ingredient for beauty. They asked U.S. college students to rate a number of facial images for attractiveness. The images presented were comprised of a single original face and composite pictures of 2, 4, 8, 16, 32, and 64 faces. The results showed that ratings of facial attractiveness were positively correlated with the number of faces averaged together. Based on these findings, Langlois and Roggman theorized that average faces are seen as more attractive because they are perceived as prototypes of a face; as the authors put it, they are “more facelike” (1991, p. 119). These findings were consistent with previous research by Symons (1979), whose findings suggest that as part of natural selection, humans are attracted to mates that are close to the average within their population because they are less likely to have genetic mutations.
Langlois and Roggman (1991) also found that averageness increased the attractiveness ratings of images regardless of the attractiveness of the individual photos. Braun et al. (2000) used this information in creating their attractive and unattractive research images when conducting similar research, which showed positive correlations between the number of composite images and level of attractiveness for both males and females. However, within their research they also found that the attractiveness of the images being averaged was very important to overall results. In other words, in contrast to the averageness hypothesis suggested by Langlois and Roggman, averaging the faces of attractive individuals will yield even more attractive images, while averaging the faces of unattractive individuals will yield images that remain somewhat unattractive. With this in mind, Braun et al. (2000) used a composite of attractive faces in order to create the attractive images used in the proposed study.

**Facial Attractiveness and Babyfaceness.** Along with averageness, many scholars have found evidence that babyfaceness positively affects ratings of attractiveness. Research on babfaceness, however, has not been as straightforward. Though social scientists generally agree that babyfaceness and facial attractiveness both greatly affect perception (Keating, 1985; Zebrowitz & Montepare, 1992; Zebrowitz, Olsen, & Hoffman, 1993; Braun et al., 2000), the correlation between babyfaceness and facial attractiveness is widely debated. Zebrowitz and Montepare (1992) found no significant relationship between the two characteristics in childhood and adolescence and a positive correlation only for men in adulthood. In contrast, Keating (1985) found positive correlations between the attributes for
women, but not men. In two separate experiments, Cunningham (1986, 1990) found that attractive individuals maintain physical characteristics of both maturity and babyfaceness.

Braun et al. (2000) agreed with Cunningham’s findings and used them to conduct research on the percentages of babyfaceness within individual faces that make for the most attractive individuals. To do so, researchers used computer software to adjust the proportions of female faces to morph the characteristics of the faces to childlike schemes. Each picture represented a different percentage of childlike proportions to adult proportions. The results showed that even faces previously rated most attractive were made more attractive by increasing babyfaceness from 10%-50%.

**Facial Attractiveness and Symmetry.** The influence of symmetry on attractiveness has been discussed thoroughly in the areas of biology and evolution, as well as in popular entertainment. However, Braun et al. (2001) found that symmetry was related to facial attractiveness, but not as highly as suggested in the media. Through their research using computer generated facial images, they found that although highly asymmetrical faces are also seen as highly unattractive, unattractive faces are not necessarily asymmetrical. In other words, asymmetry is not the only factor that contributes to an unattractive face. The reverse is also true for symmetrical faces. That is, highly symmetrical faces can be deemed unattractive based on other characteristics, just as faces with slight asymmetry can still be deemed attractive. Their research has shown that the symmetry of the overall face shape has a stronger influence on attractiveness than individual asymmetry within
the face, an important finding that supports previous literature on the significance of fluctuating asymmetry in sexual selection (Gangestad, Thornhill, & Yeo, 1994; Fink, Manning, Naeve, & Grammer, 2004). This became a key component in the creation of the images used for the current project (Braun et al., 2000).

Averageness, babyfaceness, and symmetry all seem to play a role in the overall attractiveness ratings of individuals, with varying levels of influence. Though their influence is both supported and debated, Braun et al. (2000) have found significant evidence that these three elements combined can create the prototypes for attractive males and females. Using morphing computer software, the researchers have created prototypic attractive/ sexy and unattractive/unsexy males and females that were rated and standardized for experimental use. However, perhaps most interesting from Braun et al.’s (2000) attractiveness study is the finding that the male and female rated most attractive in every experiment was never a real person, but a computer generated image.

**Summary.** Using the aforementioned research, attractive individuals are considered those measuring above average in sexual maturity, symmetry, and averageness, with 10-50% babyfacedness. Individuals lucky enough to be born with these attributes have gained many benefits. One benefit particularly relevant to the present study is the fact that those men and women who exhibit external beauty are often assumed by others to have other positive qualities related to social competence. Explanations for this stereotype can be found in the framework of Implicit Personality Theory.
Implicit Personality Theory

Implicit Personality Theory (Bruner & Tagiuri, 1954) explains that humans develop a group of assumptions about a person upon learning his or her particular central characteristics. For example, humans often assume that attractive individuals are more socially competent (Duran & Kelley, 1988). In many ways, the theory attempts to explain stereotypes based on inherent associations. Seemingly, the theory also helps explain the many attributes associated with physical attractiveness, particularly in initial interactions when interactional partners and onlookers have little more to go on than physical characteristics (Schneider, 1973). According to Krzystofiak, Cardy, and Newman (1988), humans have a “cognitive filter” that causes them to organize and associate certain characteristics with others based on seemingly irrelevant or relevant cues (p. 516). These cues and their associated characteristics effect our initial perceptions of others (Schneider, 1973; Krzystofiak et al., 1988).

Numerous studies exploring causes of stereotypes based on implicit personality theories have found that traditional personality variables (such as warmth, extraversion, and social competence) are not strongly related to initial trait perceptions (Schneider, 1973). Rather, seemingly less important variables such as attractiveness and speech have shown stronger effects. Passini and Norman (1966) explain implicit personality as a “core set of syndromes that is more or less common to most people of a similar background” (p. 48). In other words, a large number of individuals with similar backgrounds will hold a similar set of stereotypes for people they encounter based on a particular stimulus, such as attractiveness, dress,
or movement. This is what Passini and Norman refer to as “syndromal stereotypes” (p. 48). Following this conceptualization, they found that individuals with similar backgrounds were able to make judgments of targets’ personality traits, such as sociable-reclusive, responsible-undependable, and cooperative-negativistic, with virtually no interaction. Though these judgments showed little correlation to the targets’ self-appraisals, the participants showed high levels of agreement.

Stereotypes, however, are not always viewed as negative and naïve biases. Considering stereotypes in terms of implicit personality theory allows researchers to treat stereotypes as a regular part of everyday life (Schneider, 1973; Eagly et al., 1991). Similar to the ideas of Krzystofiat et al. (1988), Ashmore and Del Boca (1979) considered the usefulness of some stereotypes in sense making during initial encounters, as well as in understanding others’ behaviors. Considering stereotypes in terms of implicit personality theory, they defined the term as “a structured set of inferential relations that link a social category with personal attributes” (Ashmore & Del Boca, 1979, p. 225). In initial impressions, “attractive” is often considered a social category, which then leads to a number of associated attributes that help to generate what many scholars refer to as the “attractiveness stereotype” (Dion et al., 1972; Eagly et al., 1991).

Ambady and Rosenthal (1993) found that first impressions are often accurate appraisals of individuals’ personalities. They conducted three studies measuring accuracy of impression formation based on thin slices of time, including 6 second, 15 second, and 30 second clips. More recently, research by Willis and Todorov (2006) found that judgments of personality traits after only 100-ms of exposure
were strongly correlated to overall impressions of targets after prolonged exposure in the areas of social attractiveness, competence, trustworthiness, likeability, and aggressiveness. These studies demonstrate the overall predisposition of individuals to judge others based on physical appearance and nonverbal communication as well as the relative accuracy of impression formation based on unrelated implicit associations.

Krzystofik et al. (1988) consider implicit personality theory in terms of schematic processing to explain the effects of unrelated personality traits on overall ratings of an individual’s performance on specific tasks. Individual traits act as schemata, or knowledge structures that form the groundwork for inferences and associations based on limited amounts of information, particularly in initial interactions. Using implicit personality theories, perceptions of targets are shown to be affected by a number of components, including facial attractiveness, emotional cues, dress, and individual personality characteristics, such as expressiveness and communication competence (Schneider, 1973; Dion, 1972; Krzystofik et al. (1988, Bassili, 1981; Eagly et al., 1991). Even so, attractiveness is a principal feature when people form impressions of others (Eagly et al., 1991). Based on how attractive a person is, perceivers make assumptions about that individual’s implicit personalities, abilities, and lifestyles (Duran & Kelley, 1988). By considering attractiveness a central characteristic, researchers have used the theoretical framework of Implicit Personality Theory to find strong support for the Attractiveness Stereotype.
Attractiveness Stereotype

Previous literature on the effects of physical attractiveness on interpersonal perceptions and behavior has focused on a number of assumed stereotypes for good-looking individuals (Bercheid & Walster, 1974; Dion, Berscheid, & Walster, 1972; Eagly, Ashmore, Makhijani, & Longo, 1991; Landy & Sigall, 1974). Perhaps the most recognized and researched of these is the common, often subconscious belief that “what is beautiful is good” (Dion et al., 1972). In a germina study of the attractiveness stereotype, Dion et al. (1972) discovered the first of many findings demonstrating the effects of physical attractiveness on perceptions of social desirability and successful lifestyles. They had participants rate photographs of individuals based on a number of character traits (e.g., social desirability, occupational status, marital competence, parental competence). The photographs were rated ahead of time by judges and categorized based on their level of attractiveness (high, medium, low). Results showed that highly attractive individuals were attributed more positive personality traits and more successful lifestyles, including socially desirable personalities, greater occupational and marital competence, higher occupational statuses, greater social and professional happiness, and greater overall happiness.

In a meta-analysis of past research on the attractiveness stereotype, Eagly et al. (1991) found that the attribute assigned most prominently to physically attractive targets was social competence. However, Duran and Kelly (1988) found that social competence affects perceptions of attractiveness. According to their research using McCroskey and McCain's (1974) interpersonal attraction scale,
communication competence strongly influenced three types of attractiveness ratings, namely social, task, and physical attractiveness. Duran and Kelley measured the effect of communicative competence on perceived task attraction (our desire to work with or complete a task with an individual), physical attraction (our attraction to an individual’s appearance), and social attraction (our desire to be an individual’s friend or engage with them socially) in opposite sex dyads after a ten-minute interaction period. Communication competence accounted for 17% of the variance in perceived task attractiveness, 14% of variance in social attractiveness, and 8% in physical attractiveness, indicating that attractiveness may be good, but goodness is also attractive (Duran & Kelley, 1988).

Eagly et al. (1991) analyzed the results of previous research on the attractiveness stereotype in an attempt to show attributions associated with physical attractiveness vary according to the type of attribute being tested. To do so, they developed a content-analysis scheme to classify dependent variables related to physical attractiveness into categories of social competence, intellectual competence, concern for others, integrity, adjustment, and potency. Of the categories tested, the largest effect size was shown for social competence and the smallest for concern for others and integrity; characteristics of potency (power and dominance), adjustment (mental health), and intellectual competence (intelligence) had moderate effect sizes. Interestingly, attractive individuals were not rated lower than unattractive individuals in any of the categories listed. Subcategory analyses found only two negative attributes associated with attractive targets over
unattractive targets. Attractive individuals were considered more vain and less modest.

Bassili (1981) compared the work of Dion (1972) with that of Dermer and Thiel (1975) who found that attractive targets are also stereotyped as being more egotistical, snobbish, and materialistic than unattractive targets. Recognizing that these characteristics are not associated with goodness, Bassili worked to distinguish between the types of attributes associated with physical attractiveness. Through a series of three experiments, he distinguished between “goodness” (as proposed by Dion) and “glamour” when faced with the attractiveness stereotype. In doing so, Bassili found that judges rated attractive targets higher in attributes associated with a glamorous lifestyle, such as being exciting, interesting, and sociable than those associated with goodness, such as being kind, polite, sensitive, and genuine when compared to unattractive targets. He argues,

in western society, attractiveness has repeatedly been associated with glamour in movies, magazines, and advertising. It is possible that because of this association, good-looking people have been cast in an implicit role of symbols of glamour. At the very least, we feel that they satisfy an enormously important prerequisite for leading a glamorous life (Bassili, 1981, p. 251).

However, within this research, Bassili fails to conceptualize glamour as a lifestyle characteristic or glamorous as personality characteristic.

Much of the research concerning attractiveness in initial perceptions has focused on fixed variables, such as facial or body attractiveness and dress easily represented in a photograph (Dion et al., 1972; Dion & Dion, 1987; Bassili, 1981).
However, Riggio, Widamen, Tucker, and Salinas (1991) argue that this research “oversimplifies the conceptualization of attraction, viewing it as a unidimensional construct” (p. 424). In an attempt to identify the “dynamic components” of initial attraction, they used a combination of video and photographs to measure the effects of dynamic expressive style, facial beauty, body attractiveness, and attractiveness of dress (style) on overall attractiveness, initial impressions, and dating attractiveness. The results confirmed previous findings that facial attractiveness is of greatest importance in initial attraction. However, both facial beauty and dynamic expressive style were predictors of overall attractiveness in initial interactions. These findings are particularly significant to attractiveness research because they indicate that attractiveness in initial perceptions is not a unidimensional construct, but is made up of several components, including expressive behaviors.

Dance and Attractiveness

For Riggio et al. (1991), the consideration of attractiveness as a multidimensional construct opens up the possibility for other personality and behavioral traits to affect attractiveness in initial perceptions. One particularly influential characteristic is dynamic expressive style, which “represents a set of individual difference variables involving expressive skills, communication abilities, and self-presentational skills” (p. 426). These “self-presentational skills” could include a variety of situations and behaviors in social settings, including social dance ability. As discussed previously, dance is a form of self-presentation and expression. According to Tedeschi and Norman (1985), “self-presentations are influence tactics used to control the course of social interactions” (p. 293). In a social setting where
dance is involved, dance becomes a means of controlling social interactions through expressive action. The expressive movement controls the space between dancers, the amount of touch being exchanged, the group identity being performed, and the mood and attitude of the dancer (Hanna, 1979). As a result, attractive individuals assumed to be gifted in dynamic expressive styles might also be perceived as gifted in social dance ability (Riggio et al., 1991).

Bassili (1981) draws connections between attractiveness and glamour. However, he fails to make the distinction of glamour as a lifestyle characteristic or glamour as a personality characteristic. The possibilities for characteristics associated with glamorous lifestyles are numerous based on the notion of glamour portrayed by the media. When attractive individuals are featured in movies, magazines, and television, their glamorous lifestyles are associated with a number of activities, which for young adults, often includes dance. Young heiresses and movie stars are often depicted in news stories dancing in posh clubs. Beautiful students in high school and college movies, such as Can’t Hardly Wait (Thomas & Jopling, 1988) and House Bunny, (Faris & Wolf, 2008) are shown dancing at sorority balls and fraternity parties. Because social dance is often depicted as an aspect of a glamorous lifestyle, one might associate dance skill with attractiveness.

Hypotheses for Current Study

The previous literature on the attractiveness stereotype suggests that attractiveness is associated with a number of positive qualities, including communication competence and expressiveness (Dion et al., 1972; Duran & Kelly,
Because dance ability is both an expressive action and a form of social competence, attractiveness is predicted to affect perceptions of individual dance ability.

H1: Individual facial attractiveness will positively affect perceptions of individual dance ability in initial encounters.

The work of researchers such as Riggio et al. (1991) has noted the effects of positive self-presentation on perceptions of overall attractiveness. Based on these findings and the consideration of dance as a form of social competence and self-presentation, dance ability is predicted to positively affect ratings of attractiveness in initial encounters.

H2: Individual dance ability will positively affect perceptions of attractiveness in initial encounters.

H3: Dance ability and facial attractiveness will have an interaction effect on perceived attractiveness, such that attractiveness ratings will be highest for participants interacting with individuals high in both dance ability and facial attractiveness and lowest for participants interacting with individuals low in both dance ability and facial attractiveness.
CHAPTER 3: METHODS

This chapter addresses the methods of designing the instrument and data collection for the proposed study. The development of images and instruments used will be discussed first, followed by the procedures and results of the pilot study. Finally, adjustments made to the procedures of the pilot study in designing the proposed study will be addressed, as well as factor analyses of all scales used.

Choosing the Faces

In order to avoid possible external influences on perceptions of the pictured faces (such as clothing, lighting, hairstyle, etc.) the photographs used in both the pilot study and current study were computer generated by Braun, Gruendl, Marberger, and Scherber (2001). They created these images based on the extant literature on the elements of attractiveness including symmetry, “averageness,” and “babyfacedness.”

Braun et al. (2000) first had participants rate pictures of male and female targets (age 17-29) according to their perceived level of facial attractiveness. Based on the results, faces were categorized as attractive or unattractive. These pictures were combined and morphed using the elements of babyfacedness, averageness, face shape and symmetry to create prototypic attractive and unattractive male and female faces. Unattractive faces were only combined with other unattractive faces and attractive faces were combined with attractive faces. Babyfacedness was adjusted to higher levels in attractive images and lower levels in unattractive individuals. In agreement with previous findings, attractive faces were given slimmer face shapes and higher cheekbones as well as symmetrical face shapes and
features. (See Figures 1-4). Research using these images has shown that they are accurate manipulations of facial attractiveness (Braun et al., 2002).

Figures 1 and 2: Attractive and Unattractive Female (Braun, Gruendl, Marberger, and Scherber, 2001)

Figures 3 and 4: Attractive and Unattractive Male (Braun et al., 2001)

Pilot Study

**Participants.** At a public southeastern university, 160 undergraduate students (73 male, 45.6%; 82 female, 54.4%) participated in the study for extra credit in an introductory level communication class. Participants were between 18
and 30 years of age ($M=20.56, SD=6.54$). One-hundred and twenty-three (70.3%) reported being of European American descent, while 12 (6.9%) were African American, 6 (3.4%) were Asian American, 5 (2.9%) were Hispanic, and 3 (1.2%) reported their ethnicity as “other.” Eleven respondents did not report ethnicity.

**Procedure.** Participants were given a packet that contained black and white pictures of one male and one female image from Figures 1 through 4. In order to test for the effect of the variables of interest, eight scenarios were developed that manipulated the target’s sex, attractiveness, and reported dance ability using a 2x2x2x2 factorial design. Sex of the respondent was also an independent variable. Attractiveness and dance ability conditions were randomized between participants and sex of target, (e.g. attractive-male-dancer and unattractive-female-non-dancer, attractive-male-non-dancer and attractive-female-dancer, unattractive-male-dancer and attractive-female-dancer).

Female pictures were presented with the following description:

This is Michelle. Michelle is new to the area and a friend introduces you to her. In a brief conversation, you find out that Michelle is originally from Louisiana and a business major.

Male pictures were presented with the following description:

This is Justin. You met Justin while doing work at a coffee shop. In a brief conversation, you learn that he is from the area and a marketing major. In order to account for the effects of presumed dance ability on attractiveness, brief statements were added to the descriptions of the putative acquaintances on approximately half of the surveys ($n=83$). For the male faces, respondents were told, “Justin is also a great dancer.” Descriptions of female faces added the statement, “When talking to your friend, you find out that Michelle is also
a great dancer.” Faces with the aforementioned statements were considered to have assumed dance ability, while those with no mention of dance skill were considered to be without. T-tests confirmed the effects of the manipulated variables (see Tables 1 and 2).

Based on the descriptions, the respondents completed McCroskey and McCain’s Interpersonal Attraction Scale (IAS, 1974). The IAS uses 18 items, each measured on a 5-point Likert scale, to measure an individual’s attraction to a particular person described or seen based on three categories: social, physical, and task attraction (total $\alpha=.86$). Social attractiveness is measured by statements such as “I think he (she) could be a friend of mine.” Physical attractiveness scale items included statements such as “I think he (she) is quite handsome.” Task attractiveness included statements like “You could count on him (her) to get the job done” (Appendix 1 includes all items). Scores are totaled such that a higher total suggests a higher level of attractiveness on the part of the individual described as seen by the respondent.

In addition, the respondents completed three separate questions concerning the perceived dance ability of the individual in questions based on their initial perceptions. Respondents rated Justin and Michelle on their social dance ability by rating their agreement/disagreement to the following statements on 5-point Likert scales: “He/she is probably a good dancer,” “He/she is probably awkward on the dance floor,” and “He/she probably has a good sense of rhythm” (for male respondents, $\alpha=.86$; for female respondents, $\alpha=.90$). Respondents also reported
demographic characteristics such as age, country of citizenship, racial background, and educational class.

The results of the pilot study supported the validity of the attractiveness manipulation, as well as the manipulated variable of dance ability (see Tables 1 and 2). Small variance was found between the sexes, such that the difference of attractiveness ratings between attractive and unattractive male images was lower than that of female images. This difference could lie in the general tendency of male respondents to rate male targets as neutral in terms of physical attractiveness within the pilot study (see next section for further explanation).

Table 1: Summary of Results of Attractiveness Manipulations

<table>
<thead>
<tr>
<th></th>
<th>Attractive Image</th>
<th></th>
<th>Unattractive Image</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
<td>$t$</td>
<td>$r^2$</td>
</tr>
<tr>
<td>Male Image (N=160)</td>
<td>3.35</td>
<td>(0.85)</td>
<td>2.9</td>
<td>(0.72)</td>
<td>5.12</td>
<td>.07</td>
</tr>
<tr>
<td>Female Image (N=160)</td>
<td>3.45</td>
<td>(0.73)</td>
<td>2.35</td>
<td>(0.67)</td>
<td>14.04</td>
<td>.38</td>
</tr>
<tr>
<td>$t$</td>
<td>1.13</td>
<td></td>
<td>7.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$r^2$</td>
<td>.003</td>
<td></td>
<td>.14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Summary of Results of Dance Ability Manipulations

<table>
<thead>
<tr>
<th></th>
<th>Dancer</th>
<th></th>
<th>Non Dancer</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
<td>$M$</td>
<td>$SD$</td>
<td>$t$</td>
<td>$r^2$</td>
</tr>
<tr>
<td>Male Image (N=160)</td>
<td>4.08</td>
<td>(0.76)</td>
<td>2.77</td>
<td>(0.63)</td>
<td>16.79</td>
<td>.46</td>
</tr>
<tr>
<td>Female Image (N=160)</td>
<td>3.92</td>
<td>(0.79)</td>
<td>2.89</td>
<td>(0.76)</td>
<td>11.89</td>
<td>.30</td>
</tr>
<tr>
<td>$t$</td>
<td>1.85</td>
<td></td>
<td>1.54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$r^2$</td>
<td>.001</td>
<td></td>
<td>.008</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Current Study

**Participants.** Because the population of interest is college-aged individuals, participants were recruited from CMST courses at LSU. All participants completed the survey as partial fulfillment of a research requirement to be counted toward their overall grade in their communication courses. An *a priori* power analysis indicated the need for 210 respondents to calculate the highest order interaction effect for the 2x2x2x2 factorial design (Cohen, 1988). The recruitment of 353 participants (144 male, 40.8%; 209 female, 59.2%) ensured the study was powered sufficiently to detect at least moderate effect sizes for all hypotheses.

Ages of the respondents ranged from 18 to 57 (\(M=20.44, SD=3.55\)). Respondents were given the opportunity to report multiple racial/ethnic identities. Of those provided, 285 (80.7%) reported being European American, 48 (13.6%) reported being African American, 17 (4.8%) were Asian, 12 (3.4%) were Hispanic, 6 (1.7%) were Native American, 2 (.6%) were Pacific Islander. Three-hundred and thirty-eight (95.8%) participants reported the United States as their country of origin.

**Procedures.** The current study replicated the pilot study, however, certain changes were made. In particular, color photos were used in a computer-based questionnaire instead of paper copies. Additionally, the vignettes were modified to reduce variability in factors not of interest to the study.
Rather than black and white photos, all pictures were presented in color following the results of Eagly et al.’s (1991) meta-analysis of attractiveness research, which showed that smaller effect sizes were found when black and white photos were used than when color photos were used. Also, computer-technology made use of the color photographs easier due to the cost of copying color photos when using hard copies.

The 5-point scale originally used in the IAS (McCroskey & McCain, 1974) was expanded and changed in order to avoid neutral answers common in survey studies due in part to face-saving techniques (Eagly et al., 1991). The new 6-point measure asked respondents to consider the target in question by indicating agreement on the following scale: “(1) Strongly Disagree,” “(2) Disagree,” “(3) Somewhat Disagree,” “(4) Somewhat Agree,” “(5) Agree,” “(6) Strongly Agree.”

One major issue faced in completing the pilot study was the seeming unwillingness on the part of many of the participants, particularly males, to rate members of the same sex on levels of physical attractiveness. This could also be a cause of the small mean differences found in the manipulation of male attractiveness. Because no reports of similar problems were found in previous studies, this problem was considered a result of errors in instrumentation. As a result, changes were made in the current study.

As opposed to the pilot study, which issued the McCroskey and McCain (1974) measure of interpersonal attraction scale following the given subcategories, the statements were randomized for the proposed study in order to decrease participant bias. Rather than having participants respond to several statements
about the target’s physical attractiveness consecutively, which could prime their answers, randomization between all items removed some of the emphasis from the physical attraction items. Also, 15 filler items were added to the questionnaire in order to reduce priming. These items consisted of statements involving personality traits irrelevant to the current study that have correlated with perceptions of attractiveness in previous research (e.g. extraversion and career success).

Additionally, extraneous variables within the vignettes were accounted for across all surveys by assigning the same vignette as well as the same name to each of the images. Rather than “Michelle” and “Justin,” all individuals (both male and female) were named “Alex.” All pictures were matched with the following description:

This is Alex. Alex is new to the area and a friend introduces you to her (him). In a brief conversation, you find out that Alex is originally from Louisiana and a business major.
The dependent variable of perceived dance ability was manipulated by including or excluding the sentence, “Alex is also a great dancer.”

Although some research supports the multidimensional factor structure of the IAM, the effectiveness of measuring the scale’s three subcategories is widely debated (Hill & Courtright, 1981). Therefore, a factor analysis was conducted on the correlation matrix from data collected for the present study before employing the three individual subcategories as separate dependent variables.

Based on past research (McCroskey & McCain, 1974) and principles of simple solution outlined by Thompson (2004), Principle Components Analysis with Varimax rotation (Kaiser, 1958) was used to determine the strength of the subscales as individual factors within the Interpersonal Attraction Measure. The Kaiser rule
and scree plot test were used to determine how many factors to extract (Thompson, 2004). Initial Eigenvalues and the resulting scree plot suggested extracting three factors, which were labeled Physical Attraction, Social Attraction, and Task Attraction. These factors accounted for 49%, 12%, and 7% of the item variance, respectively.

To determine which items were contributing to the factor structure, a .50/.30 criterion was used. Based on this rule (Thompson, 2004), five items were eliminated from the original scale (three from the original Social Attraction Scale and two from the original Task Attraction Scale). Specifically, the item “He (she) is a typical goof off when assigned a job to do” was deleted because it failed to produce adequate factor loadings on any of the three proposed factors. Although the item is categorized as “Task Attraction” in the original IAM, “I couldn’t get anything accomplished with him (her)” had factor loadings of .48 on the Social Attraction factor and .47 on Task Attraction factor. Finally, though “I would like to have a friendly chat with him (her)” was originally categorized by McCroskey and McCain as measuring Social Attraction, this item had a primary factor loading of .55 on the Physical Attraction factor and only .45 on Social Attraction.

After deleting these five items, a second PCA with Varimax rotation was run on the remaining items. The three factors emerged, explaining 45, 16, and 10 percent of the variance. Primary factor loadings for all items were above .5. The final factor loadings matrix representing the final solution is presented in Table 3.

The factor labels of Physical Attraction, Social Attraction, and Task Attraction proposed by McCroskey and McCain (1974) were retained. Reliability for each of the
individual subscales, as well as the overall attractiveness scale with the remaining items was computed using Cronbach’s alpha. Alphas ranged from moderate to high (See Table 4). As seen in Table 4, the scale values approached normality.

Though the factors used are correlated, the preliminary factor analysis indicated that the Interpersonal Attraction Measure contains three subscales that have moderate to high internal consistency. The simple factor structure indicated that McCroskey and McCain’s suggested titles of Physical Attraction, Social Attraction, and Task Attraction be retained for this sample of participants despite the widely debated factor structure.

The items making up the Dance Ability Scale for the current study were identical to those used in the pilot study. Preliminary reliability and factor analyses were computed, which indicated strong internal consistency, inter-item correlations, and a normal distribution of the means. Only one factor was extracted from a Principal Components Analysis with Varimax rotation, in which all items had factor loadings of .8 or above. The composite factor explained 79% of the item variance with a Cronbach’s alpha of .87. Descriptive statistics and factor loadings for Dance Ability are presented in Table 5.
Table 3: Factor loadings based on a principal components matrix with varimax rotation for the shortened form of the Interpersonal Attraction Measure consisting of 14 items (N=350)

<table>
<thead>
<tr>
<th></th>
<th>Physical Attraction</th>
<th>Social Attraction</th>
<th>Task Attraction</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>It would be difficult to meet and talk with him (her).</td>
<td>.203</td>
<td>.751</td>
<td>.169</td>
<td>.68</td>
</tr>
<tr>
<td>He (she) just wouldn't fit into my circle of friends.</td>
<td>.334</td>
<td>.678</td>
<td>-.007</td>
<td>.57</td>
</tr>
<tr>
<td>We could never establish a personal friendship with each other.</td>
<td>.125</td>
<td>.811</td>
<td>.138</td>
<td>.68</td>
</tr>
<tr>
<td>I think he (she) is quite handsome (pretty).</td>
<td>.892</td>
<td>.197</td>
<td>.079</td>
<td>.84</td>
</tr>
<tr>
<td>He/she is somewhat ugly.</td>
<td>.822</td>
<td>.269</td>
<td>.129</td>
<td>.77</td>
</tr>
<tr>
<td>He (she) is very sexy looking</td>
<td>.840</td>
<td>.096</td>
<td>.116</td>
<td>.73</td>
</tr>
<tr>
<td>I find him (her) very attractive physically.</td>
<td>.899</td>
<td>.182</td>
<td>.075</td>
<td>.85</td>
</tr>
<tr>
<td>I don't like the way he (she) looks.</td>
<td>.747</td>
<td>.360</td>
<td>.151</td>
<td>.72</td>
</tr>
<tr>
<td>He/she is not very good looking.</td>
<td>.864</td>
<td>.261</td>
<td>.109</td>
<td>.83</td>
</tr>
<tr>
<td>You could count on her/him getting the job done.</td>
<td>.081</td>
<td>.075</td>
<td>.789</td>
<td>.64</td>
</tr>
<tr>
<td>I have confidence in his (her) ability to get the job done.</td>
<td>.080</td>
<td>.052</td>
<td>.822</td>
<td>.69</td>
</tr>
<tr>
<td>If I wanted to get things done I could probably depend on him (her).</td>
<td>.113</td>
<td>.109</td>
<td>.814</td>
<td>.69</td>
</tr>
<tr>
<td>He/she would not be good to work with.</td>
<td>.132</td>
<td>.347</td>
<td>.529</td>
<td>.44</td>
</tr>
<tr>
<td>I think he (she) could be a friend of mine.</td>
<td>.400</td>
<td>.589</td>
<td>.245</td>
<td>.56</td>
</tr>
</tbody>
</table>

Table 4: Descriptive Statistics for the three Interpersonal Attraction Factors (N=350)

<table>
<thead>
<tr>
<th></th>
<th>No. of items</th>
<th>M (SD)</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Attraction</td>
<td>6</td>
<td>3.70(1.30)</td>
<td>-.23</td>
<td>-.52</td>
<td>.94</td>
</tr>
<tr>
<td>Social Attraction</td>
<td>4</td>
<td>4.20(.83)</td>
<td>-.73</td>
<td>.52</td>
<td>.78</td>
</tr>
<tr>
<td>Task Attraction</td>
<td>4</td>
<td>4.27(.66)</td>
<td>-.58</td>
<td>1.8</td>
<td>.76</td>
</tr>
</tbody>
</table>
Table 5: Factor Scores and Descriptive Statistics for Dance Items (N=350)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Items</th>
<th>Loadings</th>
<th>Communality</th>
<th>M(SD)</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dance</td>
<td>Ability</td>
<td></td>
<td></td>
<td>3.8(1.18)</td>
<td>-0.18</td>
<td>-0.69</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>He(she) is probably a good dancer.</td>
<td></td>
<td>.93</td>
<td>.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>He(she) is probably awkward on the dance floor.</td>
<td></td>
<td>.86</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>He(she) probably has a good sense of rhythm.</td>
<td></td>
<td>.86</td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 4: RESULTS

The current chapter presents the results of the study developed in Chapter Three. In doing so, I first outline the preliminary analyses including the power analysis and manipulation checks. Results of the data analyses and individual hypothesis testing will then be discussed.

Power Analysis

With a total sample size of 353 and alpha set at .05, power to detect the largest interaction effect within the ANOVA framework was .32 for a small effect \((f = .10)\), .98 for a moderate effect \((f = .25)\), and in excess of .99 for a large effect \((f = .40)\) (Cohen, 1988). Thus, all analyses were sufficiently powered to detect a moderate or greater effect size but underpowered to detect small effects.

Preliminary Analyses

Prior to hypothesis testing, preliminary analyses were run to test the validity of the attractiveness and dance ability manipulations (see Table 6). For attractiveness, a 2 (target sex) x 2 (target attractiveness) ANOVA was run with the physical attractiveness scale as the dependent variable. A main effect for target attractiveness confirmed that attractive targets \((M= 4.38, SD= .90)\) were rated as more physically attractive than the unattractive targets \((M= 3.02, SD= .91)\), \(F\ (1, 349) = 206.66, p < .001, \eta^2 = .36, \) partial \(\eta^2 = .37\). The main effect for target sex was not statistically significant, \(F\ (1, 349) = 2.30, p = .09\). There was, however, a statistically significant, albeit small, interaction effect between target sex and attractiveness, \(F\ (1, 349) = 10.28, p < .001, \eta^2 = .02, \) partial \(\eta^2 = .04\). Decomposition of this interaction was completed by running a series of independent samples t-tests. First, t-tests
were run with target attractiveness as the independent variable and physical attractiveness as the dependent variable, separately for male and female targets. Second, t-tests were run with target sex as the independent variable and physical attractiveness as the dependent variable, separately for attractive and unattractive pictures. Results of these t-tests as displayed in Table 6 show that (a) the magnitude of the difference between attractive and unattractive pictures was greater for female pictures than male pictures and furthermore, (b) the attractive female pictures were rated as more attractive than the attractive male pictures.

Table 6: Independent Samples t-Tests for the Decomposition of the Target Sex x Target Attractiveness Interaction Effects

<table>
<thead>
<tr>
<th></th>
<th>Attractive (N=177)</th>
<th>Unattractive (N=176)</th>
<th>t</th>
<th>p</th>
<th>r²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Image (N=176)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>4.13</td>
<td>3.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>.96</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Image (N=177)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>4.63</td>
<td>2.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>.76</td>
<td>.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>t</td>
<td>7.26</td>
<td>13.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p</td>
<td>.000</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>r²</td>
<td>.23</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additionally, an ANOVA was run to test the effects of target attractiveness on ratings of social attractiveness and task attractiveness. Results of the ANOVA showed that ratings of social attractiveness were higher for attractive targets (M= 4.42; SD= .80) than unattractive targets (M= 3.94, SD=.89), F(1, 352)=6.40, p<.001, r² = .07. Target attractiveness showed no statistically significant effects on task attractiveness, F(1, 352)=1.70, p=.09. Attractive targets (M= 4.33, SD=.64) showed no difference in ratings of task attraction than unattractive targets (M= 4.21, SD= .68).
For dance ability, a 2 (target sex) x 2 (target dance ability) ANOVA as run with the dance ability manipulation check as the dependent variable. A main effect for target dance ability confirmed that targets marked as “great dancers” ($M=4.52$, $SD=.99$) were rated higher in dance ability than targets who were not marked with dance relevant information ($M=3.22$, $SD=.97$), $F(1, 349)=157.23, p<.001, \eta^2 = .31$, partial $\eta^2 = .31$. The main effect for target sex was not statistically significant, $F(1, 349)=1.41, p = .24$, and there was also no significant interaction effect between target sex and dance ability, $F(1, 349)=.31, p = .58$.

Therefore, when testing the hypotheses targets were grouped according to the manipulated variables in order to run analyses. Prototypic attractive images were considered to represent highly attractive individuals. Additionally, targets marked as “great dancers” were assumed to be considered better dancers by the respondents.

Hypothesis Testing

H1 predicted that target facial attractiveness would positively affect perception of dance ability. An independent samples t-test found a moderate effect for attractiveness on the ratings of perceived dance ability $t(353)= 6.63, p<.001, r^2 = .11$. In support of H1, photographs with higher facial attractiveness ($M= 4.26$, $SD= 1.05$) were rated higher in dance ability than photographs with facially unattractive targets ($M= 3.48$, $SD= 1.16$).

H2 predicted that individual dance ability would positively affect perceptions of targets’ attractiveness. Independent samples t-tests did not find a significant effect for perceived dance ability on ratings of physical attractiveness, social
attractiveness, or task attractiveness. Those targets described as being “great dancers” showed no difference in ratings of attractiveness from targets that were not. Results of these analyses are shown in Table 7.

| Table 7: Results of Analyses for Dance Ability X Social, Physical, and Task Attraction |
|---------------------------------|-------|--------|--------|-----|-----|
|                                | M     | SD     | Std. Error | F   | p   |
| Social Attractive              | 4.16  | .86    | .064      | -.538| .59|
| Social Unattractive            | 4.20  | .90    | .068      |      |    |
| Physical Attractive            | 3.73  | 1.16   | .087      | .438 | .66|
| Physical Unattractive          | 3.67  | 1.09   | .083      |      |    |
| Task Attractive                | 4.24  | .67    | .051      | -.887| .38|
| Task Unattractive              | 4.31  | .65    | .049      |      |    |

The third hypothesis predicted an interaction effect between dance ability and target attractiveness on rating of overall interpersonal attraction, including the categories of social, physical, and task attraction. Three separate ANOVAs were run with social attraction, physical attraction and task attraction scales as the dependent variables. Interaction effects were not statistically significant for social attraction $F(1,353) = .071, p = .79$; physical attraction $F(1,353) = .92, p = .34$; or task attraction $F(1,353) = 1.55, p = .21$. 
CHAPTER 5: DISCUSSION

This chapter provides a brief summary of the hypotheses and results of the current study, followed by a discussion of the results with consideration to the review of literature. The discussion considers the implications of the current study to conceptualizing attractiveness and the attractiveness stereotype. The chapter concludes by addressing some of the limitations of the current study and providing suggestions for future research.

Summary of Hypotheses and Results

Hypothesis one predicted that individual facial attractiveness would positively affect perceptions of individual dance ability in initial encounters. Data analysis provided support for the hypothesis with a moderate effect size for attractiveness on dance ability ($r^2 = .11$). Hypothesis two predicted that individual dance ability would also positively affect perceptions of attractiveness in initial encounters. However, no effect was found. Hypothesis three also predicted an interaction effect between dance ability and facial attractiveness on perceived attractiveness. Again, no effect was found.

Conceptualizing Attractiveness

Social scientists in both communication and evolutionary psychology have moved toward a universal definition of attractiveness comprised of above average levels of symmetry, sexual maturity, and averageness with 10-50% babyfacedness (Braun et al., 2000; Gangestad et al., 1994; Fink et al., 2004; Langlois & Roggman, 1991). Cunningham et al. (1995) found support for this conception across several cultures, including Taiwanese, Hispanic, Asian, African American, and European
American respondents. The current study used Braun et al.’s (2000) models of attractive and unattractive male and female images based on the same universal conception. Preliminary analyses for the current study measured the ratings of physical attractiveness of the models and supported the conceptualization of attractiveness using the aforementioned features. Models with higher levels of symmetry, sexual maturity, babyfacedness, and averageness rated higher in attractiveness than those with lower levels.

Preliminary analysis also found that attractive female targets were rated as more attractive than attractive male targets and that the difference between attractive and unattractive targets was significantly larger in ratings for female than male targets. This finding is consistent with previous literature suggesting that the attractiveness stereotype is stronger for female targets than for male targets (Eagly et al., 1991). Examination of previous research suggests that these findings may be a result of media portrayal of women or that attractiveness is socialized to be more important to the gender role of women than men (Eagly et al., 1991).

Stereotyping Attractiveness

Implicit Personality Theory (Bruner & Tagiuri, 1954) helps researchers to consider stereotypes in terms of inherent associations. In initial encounters, human beings make assumptions about others based on what are considered their central characteristics (Schneider, 1973). In most cases, physical attractiveness is considered a central characteristic used to make assumptions about others in first impressions, particularly when little knowledge is known about the targets personality (Eagly et al., 1991).
Implicit Personality Theory (Bruner & Tagiuri, 1954) lays the groundwork for the attractiveness stereotype (Eagly et al., 1991), which suggests that humans believe “what is beautiful is good” (Dion et al., 1972). In past research, attractive individuals have been consistently rated higher in positive personality characteristics, as well as social and task competencies than their unattractive counterparts (Bercheid & Walster, 1974; Dion et al., 1972; Eagl et al., 1991; Landy & Sigall, 1974). In particular, Bassili (1988) found that attractive individuals are rated highest in characteristics associated with glamour and glamorous lifestyles comparable to those seen in the media.

In the present study, the facial attractiveness of the target accounted for 11% of the variance in participant ratings of target dance ability. The effects of target facial attractiveness on dance ability found in the current study supports the belief in the human tendency to group particular personality traits, which cause stereotypes and inherent cognitive associations as discussed in implicit personality theories (Bruner & Tagiuri, 1954) as well as the belief that “what is beautiful is glamorous” (Bassili, 1988). Respondents consistently rated attractive targets as better dancers than unattractive targets as proposed in the first hypothesis. These findings further support the attractiveness stereotype, suggesting that along with perceptions of expressivity, warmth, and other personality traits, individuals cognitively link attractiveness with dance ability.

One possible explanation for the findings is the link between attractiveness and social competence. Contradictory to previous literature (Landy & Sigall, 1974), preliminary analyses for the current study found no significant effects for physical
attractiveness on ratings of task attractiveness, but strong effects for facial attractiveness on social attraction, furthering the evidence for dance as a form of social skill. Individuals often implicitly link attractiveness and social competence under the assumption that attractive individuals have more social opportunities and as a result more practice socializing, which leads them to be better at the performing socially (Berschied & Walster, 1974). The respondents for the current study were college students at a major university, an institution in which parties, clubs, and therefore, dancing are a regular part of social nightlife (College Prowler, 2006). As a result, dance acts as a form of social competence helping to regulate social interactions on a regular basis. Because attractive individuals are thought to have more social opportunities, they may also have more social dance opportunities and therefore, be more comfortable and more proficient in social dance. Of course, this line of reasoning, though sensible, should be tested in future research.

The current study tested the effects of describing an individual’s dance ability on perceptions of their overall social, physical, and task attraction. Unfortunately, describing targets as “great dancers” did not significantly affect their ratings of attractiveness. When considering these results in terms of implicit personality theory, dance ability may not be viewed as a “central characteristic” of targets that would invoke other stereotypes (Schneider, 1973). Of course, this finding could be merely the result of methodological choices made for the current study. Certainly being told someone is a good dancer and actually being a witness to a person’s dance ability are vastly different pieces of social information. Thus,
studies that utilize actual video of putative acquaintances who are dancing well versus poorly could produce different results.

Supportive of this line of reasoning, recent research has found that seeing particular styles of movement performed does affect individual perceptions of physical attractiveness (Fink, Seydel, Manning, & Kappeler, 2007). For example, Grammer, Keki, Striebel, Atzmuller, and Fink (2003) viewed body movement and attractiveness in terms of both communication and evolutionary psychology. In a series of quasi-experiments, they found that although expressiveness increases attractiveness, it is also affected by it. They found that human gait, as well as social dance, was a marker for gender recognition and attractiveness. Individuals were able to pick out attractive individuals based on the way they walked and danced. The researchers theorized that these findings were based on current hormonal states, which affect basic motor patterns and motion quality, as well as symmetry, sex-specific genetic influences and overall hormonal patterns that affect muscle and fat distribution, all of which are also reflected in facial makeup and body movement.

Another possible explanation for the statistically non-significant findings may be a result of the use of the description “great dancer” as the manipulation of dance ability. Because “great” is a subjective term, different interpretations of what it means to be a “great dancer” could lead to varying perceptions of the target. Additionally, while students had the opportunity to review the descriptions of targets continuously while taking the paper based survey, with the computer-based version, students only read the description at the beginning of the survey and were not given the opportunity to review it. The images of the targets, however, were
shown on the computer-screen with every item. Seemingly, the administration of the computer-based survey may have diminished the overall effect of dance ability on the description of the target, while maintaining the significance of image attractiveness.

Limitations to Study

Several limitations to the current study exist. In particular, limited demographics restricted the overall ability to generalize across ethnicities. This study also focused on the attractiveness of white males and females, leaving out differences in perceptions of beauty across different races. This decision was made primarily due to availability of resources and sample size. The study was also conducted using a computer-based survey, which carries with it a number of inherent problems, including individual bias and face-saving techniques. For example, social desirability might cause respondents to rate unattractive individuals more favorably than they naturally would.

Suggestions for Future Research

In light of the limitations of the current study, future research could include images of males and females varying in demographics in order to account for differences in perceptions of attractiveness across ages and races. Other variables should also be taken into account, including the effects of self-esteem levels and perceived attractiveness of self on the respondents’ perceptions of attractiveness and dance ability of individuals described. Including these variables could account for respondent personality variables that affect initial perceptions in general, as well as perceptions of dance ability (Schneider, 1973).
Results of the current study revealed significant sex differences in ratings of male and female targets, such that attractive female images were rated more attractive than male attractive images and the range of ratings of female images was significantly greater than that of males. Previous research suggests these differences may be a result of gender role socialization and media exposure (Eagly et al., 1991). Future research may take these findings into account by including instruments to measure the effect of gender roles and media exposure on respondents’ ratings of target attractiveness.

The results of H2 suggest an area of research examining the effects of actual dance ability (rather than spoken or perceived ability) on perceptions of attractiveness (including social attractiveness) of others beyond just biological and sexual factors discussed in previous literature. A possible addition to this study would be a video element of dancing individuals to judge the effects of dance ability. Doing so puts the actual body movement at the forefront of the respondent’s mind, which may help researchers understand the actual effects of dance ability on initial perceptions of which individuals filling out computer surveys in a laboratory may not be aware.

Conclusion

Physical attractiveness affects the way we are treated, the way we are perceived, and ultimately, the way we live our lives (Dion et al., 1972; Kleck & Rubenstein, 1975; Krzystofiiak et al., 1988; Landy & Sigall, 1974; Willis & Todorov, 2006). The results of the current study can add one more variable to that list that constantly reminds us “what is beautiful is good” (Dion et al, 1972). This study has
reviewed the extant literature on Implicit Personality Theory in order to link perceptions of dance ability to facial attractiveness. At least in initial perceptions, we as humans are often stereotyped as being better or worse social dancers based on our level of attractiveness. Though mention of dance ability did not show statistically significant effects on perceptions of attractiveness, recent research has shown that actually viewing good dancing increases attraction to the target (Grammer et al., 2003), leaving room for further study in this line of research. However simple the structure of this particular study may be, understanding dance through the lens of communication reveals the implications of the social form for self-presentation, social competence, and impression formation.
REFERENCES


APPENDIX A: PILOT STUDY INSTRUMENT

Age: _____ Sex: M  F  Class: Freshman  Sophomore  Junior  Senior  Other

Country of Citizenship: United States  Other ________________

Racial Background/Ethnicity: Asian American  European American
African American  Hispanic  Other: _____________

This is Michelle. Michelle is new to the area and a friend introduces you to her. In a brief conversation, you find out that Michelle is originally from Louisiana and a business major.

*When talking to your friend, you found out that Michelle is also a great dancer.

Please respond to the following questions based upon your initial perceptions of the person described and pictured above based on the following scale:

1=Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

____1. I think he (she) could be a friend of mine.
____2. I would like to have a friendly chat with her/him.
____3. It would be difficult to meet and talk with him (her).
____4. He (she) just wouldn't fit into my circle of friends.
____5. We could never establish a personal friendship with each other.
____6. He/she would be pleasant to be with.
____7. I think he (she) is quite handsome (pretty).
____8. He/she is somewhat ugly.
____9. He (she) is very sexy looking
____10. I find him (her) very attractive physically.
____11. I don't like the way he (she) looks.
____12. He/she is not very good looking.
____13. He (she) is a typical goof off when assigned a job to do.
____14. You could count on her/him getting the job done.
____15. I have confidence in his (her) ability to get the job done.
____16. If I wanted to get things done I could probably depend on him (her).
____17. I couldn't get anything accomplished with him (her).
____18. He/she would not be good to work with.
____19. He/she is probably a good dancer.
____20. He/she is probably awkward on the dance floor.
____21. He/she probably has a good sense of rhythm.
This is Justin. You met Justin while doing work at a coffee shop. In a brief conversation, you learn that he is from the area and marketing major. *Justin is also a great dancer.

Please respond to the following questions based upon your initial perceptions of the person described and pictured above based on the following scale:

1=Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

___1. I think he (she) could be a friend of mine.
___2. I would like to have a friendly chat with her/him.
___3. It would be difficult to meet and talk with him (her).
___4. He (she) just wouldn't fit into my circle of friends.
___5. We could never establish a personal friendship with each other.
___6. He/she would be pleasant to be with.
___7. I think he (she) is quite handsome (pretty).
___8. He/she is somewhat ugly.
___9. He (she) is very sexy looking
___10. I find him (her) very attractive physically.
___11. I don't like the way he (she) looks.
___12. He/she is not very good looking.
___13. He (she) is a typical goof off when assigned a job to do.
___14. You could count on her/him getting the job done.
___15. I have confidence in his (her) ability to get the job done.
___16. If I wanted to get things done I could probably depend on him (her).
___17. I couldn't get anything accomplished with him (her).
___18. He/she would not be good to work with.
___19. He/she is probably a good dancer.
___20. He/she is probably awkward on the dance floor.
___21. He/she probably has a good sense of rhythm.
VITA

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