A CORRELATIVE STUDY OF GENDER ROLE AND SOCIAL STYLE

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This study examines the concepts of social style and gender to determine if a relationship exists between the two constructs. The hypotheses suggested a direct relationship between the categories of the BSRI (masculine, feminine, androgynous, and undifferentiated) and the Social Style Analysis (driver, amiable, expressive, and analytical). Ninety-four participants completed two self-report surveys. Chi-square analysis performed on the data found a significant relationship between feminine and amiable as well as androgynous and expressive. While the analysis suggested that masculine/driver and undifferentiated/analytical were not independent, the relationship found was not significant.
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CHAPTER 1

INTRODUCTION TO THE STUDY

Introduction

Researchers in social sciences often examine people’s behavior and create categories of that behavior through which we hope to better understand the people and explain their behavior. Scholars in the field of communication studies are no different. Like other social scientists, we find categories to be helpful in understanding the communicative behavior of people. Although numerous categories are used to study and explain communicative behavior, this study will focus on two particular categories. The two focal categories are gender, as determined by sex role identity, and Social Style.

The parameters of gender often are debated within the social sciences. Since the work of Sandra Bem, however, many theorists and researchers have recognized a distinction between a person’s biological sex and her/his psychological sex or gender. Gender is defined in this study as an individual’s sex-role identity. Although we have worked towards separate definitions of gender and sex, confusion is still apparent in much research. Older research neglected to make that distinction more often than recent studies; the confusion still occurs, however, in studies that ask participants to mark their gender (sex) as either male or female or when a gender scale such as the Bem Sex-Role Inventory (BSRI) is not used (Allen, 1998). Although the broader public and some social scientists continue to use the terms sex and gender interchangeably, gender researchers reserve the terms male and female to describe biological sex and use alternate terms to
indicate psychological sex or gender. To avoid such confusion with regard to the present study, it is necessary to clarify what is meant by gender. Gender refers to sex-role as identified by the work of Sandra Bem (1974). Sex-roles are based on socially constructed and accepted male and female traits. The masculine and feminine traits fall along two separate continuums (or axes) on which individuals may be rated. These two axes can be arranged to form a four-quadrant matrix. The sex-roles that are delineated by these quadrants are masculine, feminine, androgynous, and undifferentiated. Each category will be further defined later.

Around the same time that Bem was creating the BSRI to identify gender, other researchers were developing a construct called Social Style. Instruments to determine Social Style were developed by measuring clusters of observable interpersonal behaviors and were based on research developed by behaviorist researchers in the 1950s and 1960s (Merrill & Reid, 1981). The Social Style scales allow researchers to categorize people based on how they interact with others (Snavely, 1981). David W. Merrill and Roger Reid (1981) identified and elaborated the concept of Social Style in the late sixties with the development of their Social Style Analysis scale. The analysis they developed categorizes people based on assertiveness and responsiveness. These two dimensions form the two axes that create a four-quadrant model, much like the BSRI. The four categories created in the Social Style scale are driver, amiable, expressive, and analytical. These four categories will be further defined later. Researchers from various fields including business, marketing, library information, and education have found the scale useful especially in aiding in effective methods of communication among diverse groups
of people (Baum & James, 1984; Bolton & Bolton, 1984; Darling, 1990; Darling & Cluff, 1987; Darling & McNutt, 1996; Taylor, Krajewski, & Darling, 1993).

Since their conception and elaboration, studies of gender and Social Style have been further studied in social science research. In spite of their frequent use, researchers rarely have compared the two. According to a meta-analysis by Brenda Pruett (1989) few studies examine the relationship between Social Style and sex differences, and none consider psychological sex differences as related to Social Style. Yet, researchers regularly use the scales to determine both sex-role and Social Style. Although both scales are widely recognized and used, research never has been conducted to determine whether a relationship exists between sex-role and Social Style.

Statement of the Problem

Although the BSRI and the Social Style Analysis purport to categorize people based on unrelated phenomenon, strong surface similarities suggest that a correlative relationship may exist between the two scales. Research also suggests a relationship between sex-role and interpersonal behavior. Most recently, studies examining sex-role have found that it can influence leadership emergence (Moss & Kent, 1996), health behaviors (Shifren & Bauserman, 1996) and communicator style (House, Dallinger, & Kilgallen, 1998). Communication researchers (Staley & Cohen, 1988) also have studied sex differences and their effects on Social Style. Constance Courtney Staley and Jerry L. Cohen (1988) found significant differences between male and female participants’ self-perceptions on the assertiveness dimension of the Social Style scale. In communication research, Richmond and McCroskey (1990) have argued that gender and Social Style are
so directly related to one another that they can be measured by the same instrument. The problem with this argument is that no research can be found showing the direct link they claim exists. If Richmond and McCroskey are correct in their assertions, it would suggest that we simply are renaming gender for reasons of political correctness. If this is true then the danger exists of discriminating on the basis of gender but referring to it as a decision based on one socio-communicative behavior. If the two variables of gender and Social Style are not as directly related, as Richmond and McCroskey suggest, then it would demonstrate a need for the two separate scales. It would show further that Richmond and McCroskey are misguided in using the BSRI to measure communicative behavior. This study will examine the relationship between masculine/feminine dimensions of the BSRI and the assertive/responsive dimensions of the Social Style Analysis in hopes of remedying the confusion evident in recent communication research. With the work of recent researchers in mind, the present study seeks to determine whether a relationship exists between an individual’s perceptions of sex-role identity and her/his perceptions of her/his interpersonal communicative behaviors.

Definitions of terms

For greater clarification of what is meant by the components of this study it is necessary to define key terms. These definitions include: sex-role, Social Style, and the eight categories of the scales that will be used.

Among the ideas proposed for inclusion in this study, the most heavily debated topic is gender. It is also a topic whose definition tends to greatly effect how it is measured. For this study, I will utilize definitions that examine gender as psychological
and social rather than as biological sex. According to Durkin (1995), “gender role…depends at least in part upon social experiences, and on the ways the culture organizes gender differentiation” (p. 185). The present study will deal only with gender as an individual’s sex-role identity. Sex-role is determined by measuring how much an individual identifies with socially constructed and traditionally accepted ideas of appropriate masculine and feminine traits (Pearson, West, & Turner, 1995). Sex-role is co-constructed between an individual and the society in which she/he interacts. We learn how to act and how we are identified by interaction with the world around us. We mimic the behaviors and ideas of those that we come into contact with. Through this mimicry we develop an identity and a way of interacting with the world around us. Sex-role is one of the many concepts that develops in this manner. In the United States four traditionally accepted sex-roles are masculine, feminine, androgynous, and undifferentiated (Bem, 1974).

A person who falls in the masculine category identifies with traits generally deemed socially as more appropriate for a male sex role. Traits that tend to be strongly associated with masculinity include strong, ambitious, successful, rational, and emotionally controlled (Wood, 1999). An example of a masculine individual is someone who identifies him/her self as being assertive and competitive.

The feminine category indicates that the person identifies with traits that are socially appropriate for a female sex role. These traits would include such things as attractiveness, lack of aggression, emotional, nurturing, and concern with people and relationships (Wood, 1999). A feminine individual will identify as being more
compassionate and understanding.

Androgyny delineates individuals who strongly identify with traits appropriate for both male and female sex roles. An androgy nous individual may identify as both assertive as well as compassionate, nurturing as well as assertive, and both strong and sensitive (Wood, 1999).

An undifferentiated person identifies with traits that are neither masculine nor feminine. Rather than identifying with socially designated masculine and feminine traits, they identify with neutral traits such as intelligent, conscientious, and tactful. According to Bernd H. Schmitt and Robert T. Millard (1988) these individuals “are less likely to use gender as an organizing dimension” (p. 582) and are therefore less likely to identify with masculine and/or feminine adjectives.

Gender in terms of sex-role categories has been outlined for the purposes of the present study into four distinct categories. The next section of definitions will focus on interpersonal behavior and communication. As gender and sex-role were defined, I will now define Social Style and the four components of Social Style.

According to Bolton (1984) “Social Style is a pervasive and enduring pattern of interpersonal behaviors” (p. 3). Social Style addresses effective and appropriate ways to describe and react to another person’s communication behavior (Snavely, 1981). Social Style is determined by a person’s level of assertiveness and responsiveness. A person’s Social Style is measured by the Social Style Analysis. The analysis divides people into four major categories (driver, amiable, expressive, and analytical).

A driver is both highly assertive and low responsive, indicating that s/he is more
task oriented and is more likely to tell others what to do rather than to ask questions. Drivers are described as independent, candid, decisive and efficient (Bolton & Bolton, 1984).

Amiables score low assertive and high responsive. They have a tendency to ask more questions of others rather than telling others what to do; amiables also tend to focus more on the people involved rather than on the task. Amiables are described as supportive, cooperative, diplomatic, patient and loyal (Bolton & Bolton, 1984).

Expressives score high responsive and high assertive. Like drivers they tend to be more tell assertive meaning that they are more likely to tell someone to complete a task rather than ask them to complete the task but, unlike the drivers, expressives are more people oriented. Expressives are described as outgoing, enthusiastic, persuasive, fun loving, and spontaneous (Bolton & Bolton, 1984).

Analyticals score low on both assertive and responsive. The analytical is very ask assertive, meaning that they are more likely to ask that a task be completed. They like to gather a great deal of information before making a decision and tend to be more involved with the task rather than with the relationship with others (Rhea, 2000). Analyticals are described as logical, thorough, serious, systematic, and prudent (Bolton & Bolton, 1984).

Significance of the Study

Gender research has examined relationships between gender role and leadership (Moss & Kent, 1996), health behaviors (Shifren & Bauserman, 1996), and communicator style (House et al., 1998). Moss and Kent found that masculine and androgynous group members more often emerged as leaders than did feminine or undifferentiated members.
Their findings would suggest that masculine and androgynous individuals more often are perceived as natural leaders. The research of Shifren and Bauserman found that androgynous individuals were more likely to report better health practices than individuals of other gender categories. Shifren and Bauserman’s research is significant in that they examined gender and its relationship to self-reported behavior patterns. House et al. (1998) found undifferentiated individuals tend to express concern for self and others equally, masculine individuals tend to stick to personal ideas without adapting or adjusting to others, and androgynous individuals tend to be concerned with appropriateness and other’s feelings. In each study the researchers were able to support their hypotheses and found a relationship. The findings of this research suggest a relationship may exist between gender identity and communicative behavior.

The research regarding Social Style also has been fruitful. The usefulness of Social Style in various administrative and management arenas has been documented on several occasions (Bolton & Bolton, 1984; Darling & Cluff, 1987; Taylor et al., 1993). Research also has found relationships between Social Styles and perceptions of trust, credibility, and power (Snavely, 1981). William Snavely and Glen Clatterbuck’s research found that expressives and amiables were perceived higher in interpersonal trust, higher in character, more supportive and more sociable then the other Social Styles. They also found expressives were perceived as more powerful and competent than the other styles. Finally, Staley and Cohen (1988) examined the relationship between sex differences and Social Style. They found that biological sex only effected responses to assertiveness. Male participants reported more assertive behavior than did female participants. After
Staley and Cohen ruled out a link between biological sex and communicative behavior they suggested research look at the relationship between gender role and communicative behavior.

There is a gap in research between research conducted on Social Style and gender role. Strong evidence exists suggesting a relationship between gender role and Social Style. In light of Snavely and Clatterbuck’s (1981) findings that suggest not all Social Styles are perceived equally in terms of competence, it becomes necessary to examine further other relationships such as gender role and Social Style. This study seeks to close the gap in research and to answer questions regarding the relationship between gender role and interpersonal behaviors.

Strong correlations between sex-role and Social Style would support the arguments made by Richmond and McCroskey (1990) that the masculine/feminine dimensions of the BSRI are the same dimensions as assertive/responsive on the Social Style analysis. Further, a strong correlation would support the research completed using the Assertiveness-Responsiveness Scale (Richmond & McCroskey, 1990). By supporting their research, correlations would allow communication researchers to continue to note the effects of gender on communicative behavior. In the corporate training arena, strong correlations would suggest that a gender bias may be intrinsic to the Social Style of an individual. Consequently Social Styles should not be used in decisions regarding employment or promotion in corporate environments. It also would suggest that other scales might be preferable to the Social Style if they do not have strong gender correlations. Trainers and employers should look to scales that have little to no gender
bias but still give good information about the personality and behavior patterns of individuals. Scales without gender biases are preferable because they keep individuals from being identified based on their gender.

If no correlation is found it would suggest that there is not a relationship between gender and social style. This would support the use of social style in the corporate arenas as an unbiased instrument for determining communicative behavior patterns of individuals. In the area of communication research the ramifications would be much greater. If gender and social style are not related the research based on the work of Richmond and McCroskey in Assertiveness and Responsiveness would have a fatal flaw. No correlation would cause researchers to further question the importance of looking at gender as effecting behavior. A lack of correlation may cause some to support the focus on social style over a focus on gender differences. In light of the effects such findings could have this study seeks to examine the existence of a relationship between gender and social style.
CHAPTER 2

REVIEW OF LITERATURE

Does any correlation exist between a person’s self-perceived gender and that same person’s self-perceived communicator style? To gain some understanding of the two variables in contention, I have chosen to look at the research surrounding each construct. I have chosen those studies that have continued to use and evaluate each construct. This section begins broadly with a look at the theoretical base behind perceptions of self and the effects of social construction of perceptions. It then looks at sex-role including the historical basis, psychometric properties and applications of the BSRI. Social Style is examined in a similar way starting with its historical basis and moving forward to examine how it has been used. Finally, specific hypotheses are presented concerning the relationship between sex-role identities and Social Styles.

Theoretical Base

The theoretical bases for this study can be found in the theory of symbolic interactionism as developed by George Herbert Mead (1934). According to the symbolic interactionists, experience is shaped by meanings that are socially constructed through interaction with persons and objects in our environment. This theory relies on three main concepts; society, self and mind. The concept of society is important in that symbols and their meanings are constructed through interaction of the individual with the group or society. The second important concept is self. Self-concept is important to the theory of
symbolic interactionism. “Another term for self-concept is … a kind of composite perspective from which you see yourself” (Littlejohn, 1999, p. 158). The third concept is mind. Mind is a process of interacting with oneself. These three concepts come together to explain how we learn and make sense of the world around us (Littlejohn, 1999).

Interaction with society molds our self-concept through social learning whereby we not only learn what things are and mean but also who we are and with which traits we identify. We also learn how to interact with those around us. Self-concept is important in that it is how we see ourselves. Gender role identity is part of our self-concept or way of describing who we are and with which socially constructed traits we choose to identify.

The self-conception, the individual’s plans of action toward the self, consists of one’s identities, interests and aversions, goals, ideologies, and self-evaluations. Such self-conceptions are anchoring attitudes, for they act as one’s most common frame of reference for judging other objects. All subsequent plans of action stem primarily from the self-concept. (Littlejohn, 1999, p. 160)

‘Mind’ is an important aspect in that it is the conscious act of interpreting messages received from others through the lens of self-concept and then responding to the messages received. With these three concepts symbolic interactionism is a useful theory in understanding that our self-concept can effect how we perceive our behavior and try to control the message that may be sent by those behaviors. It further explains how our self-concept and identities are created through interaction with the world around us. This explanation is useful in understanding not only how one develops a gender identity but also how it may effect the way we perceive our actions and the actions of those around
Symbolic interactionism is important to this study because it works to explain the relationship between self-concept and behaviors. This study proposes that gender role traits are a part of the self-concept and therefore effect an individual’s behaviors and how they are perceived.

**Sex-Role**

As discussed previously, sex-roles are social constructions of valued expectations used to describe individuals and to categorize them. Now we will take a closer look at sex-role. First, I will examine the construction of the most popular sex-role measurement, the BSRI. The next two areas of interest are the psychometric properties and recent studies that have utilized the measurement.

**Bem Sex-Role Inventory.** In the 1970s, against the backdrop of the contemporary women’s movement, research began to look at gender (sex-role identity) and its effects rather than sex differences among men and women (Rakow, 1986). At this time Constantinople wrote a seminal article regarding stereotypical male and female traits. Constantinople (1973) argued that stereotypical feminine psychological traits and stereotypical masculine psychological traits were distinct dimensions, meaning that an individual can have varying levels of both types of traits. Instead of the idea that individuals possessed either male or female traits based on biological factors, an individual could possess traits from both dimensions. For example, an individual might possess many stereotypical masculine traits, such as assertiveness and competitiveness, while at the same time showing signs of compassion. The following scenario is offered to
further describe the concept.

Teams of three have set out on a survival training competition. The team that retrieves its flag and returns to the base first wins the competition. The red team sets out and finds their flag fairly quickly. With fast acting teamwork they retrieve the flag and start back towards base. On the way one of the members catches a foot under a root growing out of the ground and falls. After assessing the incident, the team determines that the fallen individual needs medical attention and cannot walk alone. The leader really wants to win the competition and has displayed clear dominance and unrelenting aggression up to this point. The leader can leave the person behind and try to win or carry the person back and be slowed down. The leader chooses to deliver first aid and directs the others to help build a stretcher out of branches. The leader regularly reminds the person that she/he will be okay and that home is not very far. The team carries the injured person back to the base with the leader shouldering most of the load. The team lost valuable time and did not win. The next day the leader goes to visit the injured teammate at her/his home and encourages the person to take it easy for a couple of days. Identifying the leader as a man or a woman would be difficult. Even if we were to go on stereotypical traits it would pose difficulty because arguments could be made regarding both masculine and feminine traits. This is where the idea of two separate dimensions comes into play.

Previous research had argued for a single bipolar dimension. Separating the single dimension into two dimensions allows you to plot the masculine traits separately from the feminine traits (Campbell & Arthur, 1997). Within this structure a person can have two ratings. Let us return to the example. Our leader showed assertiveness and
competitiveness. These are two traits that generally are defined as being masculine, so the leader scores high on masculine traits. However, we note that the leader showed great compassion for the fallen teammate and strong sense of tenderness, which are stereotypically feminine traits. We then look at the second dimension and the leader scores high on feminine also. Now that we know the leader is both high masculine and high feminine, what is her/his gender? A single bipolar dimension would not allow for this distinction, we would be forced to place the leader as either higher masculine or higher feminine. The two separate dimensions provide other options (Bem, 1974; Constantinople, 1973).

The work of Bem (1974) picked up on the idea of two dimensions. In her creation of the Bem Sex-Role Inventory, she used these two dimensions to create a four-quadrant model of sex-role. The four quadrants were masculine, feminine, androgynous and undifferentiated. The leader from the earlier scenario would not fall in the masculine or feminine quadrants, but rather in the androgynous quadrant. The word androgyny itself is a mixture of the Greek *andros* meaning male and *gyne* meaning female (Wheeless & Wheeless, 1981). This new dimension accounts for individuals who identify strongly with both stereotypical masculine and feminine traits.

The BSRI scale itself was developed in an unusual way. Bem created a list of socially desirable traits for men and a similar list for women. Then in several studies she asked participants, mostly university students, to mark whether the traits were more often used to describe men, women, or were neutral (described neither male nor female) (Bem, 1974). Through this technique Bem eventually arrived at an inventory of adjectives that
could be used to determine how strongly an individual identified with stereotypical traits of masculinity and femininity. Using the work of Constantinople (1973) she also was able to identify one’s level of androgyny, which is the category she was most interested in. Bem (1974) believed that the majority of people would see themselves as neither masculine nor feminine; rather, she believed they would identify with both masculine and feminine traits. To determine where an individual would fall among the quadrants, Bem looked at which traits were chosen most often by an individual. One individual may identify strongly with masculine traits and not as strongly with feminine traits. This person would fall in the masculine quadrant, which is not to say that she/he does not possess some feminine traits; rather, it indicates that she/he identifies more strongly with the masculine traits that she/he possesses. Another person may be just the opposite and identifies strongly with feminine traits and identifies only slightly with some masculine traits. This person falls within the feminine quadrant. Like the masculine sex-role person, this individual possesses cross-sexed traits but does not identify as strongly with them as with the feminine traits. Finally an individual, like the leader from earlier, may identify strongly with both masculine and feminine sex-role traits. This individual would fall in the androgyny quadrant (Bem, 1974; Campbell & Arthur, 1997; Wheeless & Wheeless, 1981). The last quadrant, undifferentiated, consists of people who do not identify strongly with either masculine or feminine sex-role traits (Bem, 1974). This lack of identification with masculine or feminine traits might occur for any number of reasons. One reason may be that such individuals are not aware of the stereotypical traits for men and women. Another reason may be that in development of self-concept, these individuals did not
attribute certain traits of their own with their gender or the gender of others (Durkin, 1996).

We have looked at the theoretical background and the development of the sex-role and the BSRI to measure sex-roles. The next two areas of analysis move into more current research. The section that follows discusses concerns regarding the psychometric properties of the BSRI.

**Psychometric properties.** An instrument's validity is the degree to which it measures what it was intended to measure. An instrument's reliability refers to the instrument's ability to consistently measure the same thing again and again. A scale that has good reliability can be counted on to produce the same results when completed over and over again. A scale with high validity is said to measure what it was created to measure. The length of time the BSRI has been available has led to questions of whether its reliability and validity continue to support its use.

The first area of interest is validity. Researchers have conducted recent studies to examine the internal validity of the BSRI scale (Campbell & Arthur, 1997; Cramer & Westergren, 1999; Schmitt & Millard, 1988). These studies have focused on the items that make up the inventory. In other words, they look at the list of traits developed by Bem to see whether they continue to represent socially accepted beliefs in American society. Both studies used factor analysis to test validity.

Schmitt and Millard (1988) completed their factor analysis with the help of 384 undergraduate volunteers. After the students completed the BSRI, the forms were scored and the inventories were grouped by sex-role (masculine, feminine, androgynous,
undifferentiated). They then ran two factor analyses. One on the sample of traditionally
sex typed participants and then another on the sample of androgynous and
undifferentiated sex types participants. Factors one and two of the traditional participants,
which accounted for 75% of the common variance, showed feminine and masculine items
loading on opposite polls. In the other sample the first two factors, which accounted for
76% of the common variance, had moderately to highly positive loadings on the neutral
factors. The results of this study “provided evidence for the internal validity of the
inventory” (p. 587). Although the researchers had suggestions for future studies, they
concluded that, “sex role researchers are…justified in using the inventory to study the
cognitive and behavioral differences” (p. 588) of individuals. More recent research
confirms these findings.

Todd Campbell and James Arthur (1997) also examined the validity of the BSRI.
Their study tested the validity of the BSRI through confirmatory factor analysis.
Participants consisting of 791 graduate and undergraduate students provided data for
analysis. The researchers performed a confirmatory factor analysis on the data and ran
correlations that allowed them to determine whether the factors would fit various models.
Findings supported the classic idea that the two constructs were essentially orthogonal.
These findings supported Bem’s and Constantinople’s contention that there is a
masculine dimension and a feminine dimension of sex-role traits. Campbell and Arthur
also found more factorial support for the short form than for the long form. The
researchers suggested that future studies use the short form because it has greater internal
validity.
Some critics have questioned the validity of the BSRI based on the idea that the stereotypes that were accepted widely in the 1970s, when the scale was created, no longer exist. Such discrepancies, they contend, could cause the BSRI to lack validity in contemporary society. A study by Phebe Cramer and Heather Westergren (1999) found that attitudes regarding traditional male and female stereotyped traits have not changed appreciably. Their study consisted of 60 participants who completed the BSRI as well as the Thematic Apperception Test (TAT). The TAT is a set of story cards developed to test coded narratives to determine if they fit traditional male/female patterns of narrative. To determine whether social conditions modified gender identity the participants were given a bogus result sheet for the BSRI. After discussing these results with the researcher, each student was asked to finish the narrative section by writing three additional stories. The researchers were interested in determining whether this intervention effected the total outcome of the participants’ gender identity. Cramer et al (1999) found that “college students…continue to describe themselves in sex-stereotyped ways” (p. 28). Further findings of the study revealed that sex-role attitudes reflected in the BSRI behavioral styles can be used to predict actions of a person in social settings. The most important aspect of the study is that its findings support the idea that students continue to identify with traditional designations of sex-role traits. Furthermore, students continue to use these attitudes in describing themselves, and the findings suggest that these beliefs and traits can be used to predict behavior.

The second psychometric trait of importance is reliability. The fact that the BSRI continues to be the most used scale when determining sex-role of an individual attests to
researchers’ confidence in it.

One question that has persisted since the conception of the BSRI is whether individuals change sex-roles over time. Barbara Yanico (1985) reported the results of a longitudinal study of reliability that addressed this question. In the original study, 154 women completed the BSRI. Four years later the 115 (75%) of the original group were contacted again and asked to complete the BSRI a second time. Yanico received 77 useable responses. Pearson product-moment correlations compared the groupings of the 77 respondents from the first study to the same 77 respondents on the second study. Although some fluctuation was apparent, the study showed stability for the scale with very few shifts overall. Specifically, Yanico found that between their freshman and senior years of college, women showed little change in sex-role identification. The idea that the college years are some of the most formative years, a time when people tend to redefine themselves, was not supported by this study. Yanico’s findings suggest that sex-role identity is determined before the college years and does not change appreciably during this time period.

Recent studies have confirmed both the validity and the reliability of the BSRI as an appropriate measure for determining the sex-role of an individual. The next section will extend the review by examining recent studies that have used the BSRI.

Applications of sex-role. Not only should an instrument be valid and have strong reliability, it also should be utilized in current research. “A computerized reference search carried out in January, 1984, yielded 432 research studies employing the BSRI” (Buros, 1997, p. 1). More recently, I conducted a similar reference using Ebscohost and searching
multiple databases. The search was limited to the years 1996 to 2001 and produced 48 studies employing or testing the BSRI. These findings suggest that the BSRI remains an accepted and widely used method for determining sex-role identity. The studies found in the recent search covered many different areas of research. Studies dealt with the associations between the BSRI and depression (Barbee, 1996; Gray, 1998; Wautier, 2000), other cultures (Fung, 2000; Katsurada, 1999; Masson-Maret, 1999; Sugihara, 1999), health behaviors (Bornstein, 1996; Ketcham, 1999; Murnen, 1997; Shifren & Bauserman, 1996; Sunick, 1999), healthcare professionals (Campbell, 1999; Kaplan, 1996; Laurella, 1997; McCutcheon, 1996), homosexuality (Barba, 1998; Chung, 1996; Dilan, 2000; Dunkle & Francis, 1996; Lobel, 1999; Stellrecht, 2000; Turner, 1997; Weisbuch, 1999), women (Benolken, 2000; Burke, 1998; Sweeny, 1999), children (Colley, 1996; Endo, 1998; Golden, 1998; Keeler, 1998; Marcotte, 1999; Zweig, 2000), religion (Mercer, 1999), and sports participation (Koivula, 1999). Although these topics are interesting, they do not deal with Social Style, self-perception, or interpersonal behavior. Since the present study is focusing on self perception of interpersonal behavior as effected by gender this section of the review will focus on the research utilizing the BSRI in communicative interpersonal behavior.

Several recent studies employing the BSRI are relevant to this study. Between 1996 and 1999, three studies using the BSRI (House et al., 1998; Moss & Kent, 1996; Shifren & Bauserman, 1996) contain findings that suggest information relevant to the effects of sex-role identity on communication and behavior.

The first study, conducted by Sherry E. Moss and Russell L. Kent (1996),
examined whether sex-role had any effect on leadership emergence in small groups. Participants in the study consisted of 239 M. B. A. students. The students were enrolled in classes that required members to work together throughout the term. Each group was given gender-neutral tasks to accomplish. The gender-neutral tasks consisted of analyzing business problems and proposing solutions. Leaders were not assigned within groups. Rather, they were allowed to emerge over the course of the semester. At the beginning of the semester, participants were asked to complete the BSRI. At the end of the semester, participants completed questionnaires regarding leadership emergence within the group. Results found that “masculine typed participants were significantly more likely than feminine participants to be perceived as emergent leaders” (Moss & Kent, 1996, p. 90). The results also demonstrated that the rest of the sex-role categories, in order from more likely to least likely to emerge as a leader, to be androgynous, feminine, and undifferentiated. This study suggests that individuals’ sex-roles can effect whether they are perceived as leaders. The researchers suggest that masculine sex-roles often are associated with instrumental and task oriented traits, which make them more attractive as leaders.

Another study published the same year examined the relationship between health behaviors and sex-role. Kim Shifren and Robert L. Bauserman (1996) asked 353 participants to complete several questionnaires regarding health behaviors and personality traits including the BSRI. The results of the multiple tests run on the data collected found that androgynous and feminine individuals reported “using safety precautions more than other individuals and drinking less that other individuals” (p. 858).
At the other end of the spectrum “undifferentiated individuals appear to be most likely to pursue health risky behaviors” (p. 858). This study is significant to the present study because it demonstrates a relationship between sex-role and specific self-reported behavior. The findings of this study suggest that individuals may exhibit behavior congruent with their sex-role identification.

Ann House, Judith M. Dallinger, and Danni-Lynn Kilgallen (1998) used the BSRI to examine whether sex-role can be expressed through communicator style. Participants consisted of 124 college students. Participants completed the BSRI to determine sex-role and the RHETSEN scale to determine communicator style. Researchers used the RHETSEN scale to plot participants along a continuum that includes three predominate categories of communicators: noble selves, rhetorical sensitives, and rhetorical reflectors. Noble selves represent one end of the continuum and are described as communicators who consistently believe that a person should say what they think regardless of the situation and/or audience. At the other end of the continuum are rhetorical reflectors, who are unlikely to speak their minds and more apt to acquiesce to the situation and audience rather than express their own beliefs. The middle group is identified as rhetorically sensitive communicators. Members of this group recognize multiple ways to construct and send messages, and also believe some messages do not need to be communicated to some audiences. Using Pearson correlations, this study found a relationship between rhetorical sensitives and individuals who identify as undifferentiated as well as between noble selves and individuals who identify as masculine. These results were based on frequency of communicator styles by gender orientation. Many of the results House et al
(1998) had hoped for were found but not at significant levels. One problem they noted was comparing scales that utilize different dimensional models. As noted earlier, the BSRI utilizes two intersecting dimensions --masculine and feminine-- whereas the RHETSEN utilizes a one-dimension continuum. House et al. suggest that further research use a communicative scale with two dimensions when comparing it with the BSRI. They also suggest that further research look at behavior. The proposal to compare the Social Style Analysis and BSRI, both of which have two dimensions, is supported by the suggestions for further study made by House et al. The Social Style is also a means of classification based on communicative behaviors.

This section has traced the BSRI from its conception through its widespread and continued use as a measurement for sex-role. Recent advances in gender research also have been discussed. Moss and Kent (1996) demonstrated the relationship between masculine sex-roles and task-oriented traits. Shifren and Bauserman (1996) found a relationship between sex-role and specific self-reported behavior. The results of House et al (1998) suggest that gender orientation had some effect on communicative behavior. The reviewed research suggests that sex-role and self-reported communication behavior may be related. The next section discusses an instrument that has been developed to help determine behavior patterns in interpersonal communication contexts.

Social Style

This section of the review of literature focuses on the concept of Social Style as developed by Merrill and Reid (1981). The section begins with the history of the development of Social Style through Merrill and Reid. The next section focuses on the
progression of Social Style since its conception.

The origins of Social Style theories are found among the American Behaviorists of the 1950s and 1960s. During this time the field of psychology underwent a shift towards behaviorism and away from psychoanalysis. This shift on the part of psychologists was an attempt to demonstrate that their research was grounded in rigorous scientific principles and worthy of serious consideration within the broader scientific community (Merrill & Reid, 1981). Behavior and interaction were easily observed, manipulated and, most importantly, quantified. The concept of Social Style developed from theories that were evolving during this time period (Merrill & Reid, 1981). In the 1950s the United States Office of Naval Research, working in conjunction with researchers from Ohio State University, articulated a theory of style as a result of their attempts to discover the components of effective leadership (Merrill & Reid, 1981). Researchers developed a list of descriptive behaviors, then asked various people to identify those behaviors they felt demonstrated good leadership. In the end, 150 behaviors were identified as characteristic behaviors of good leadership. Factor analysis was done to organize the terms into categories. “Next, several questionnaires were developed to determine which factor characterized the best leader, but no reliable results were obtained” (Merrill & Reid, 1981, p. 41).

Fred Fiedler determined that the research was flawed because it examined leadership in a vacuum. He decided to take context into consideration. His research concluded that effective styles of leadership vary depending upon different situations (Merrill & Reid, 1981). From this background research Merrill and Reid began to study
the concept of style in the 1960s. They borrowed a questionnaire that was developed in
the early 1960s by James Taylor, a staff psychologist at a large corporation. Taylor
developed his questionnaire by asking corporate employees to mark the adjectives that
they felt described their own behavior. Through testing he narrowed his original list from
2331 adjectives to 150 adjectives. Through factor analysis of the responses to the
narrowed adjective checklist, Taylor found a tendency for clustering of adjectives. He
then developed five scales that took into account this clustering effect. The original five
scales of human behavior were “1) self-confident; 2) considerate; 3) conforming; 4)
thoughtful; and 5) rigid” (Merrill & Reid, 1981, p. 43).

With Taylor’s permission, Merrill and Reid adapted his research and worked
towards creating what is now known as Social Style. Conforming to the behaviorist
thought of the day, Merrill and Reid altered the way that respondents answered the
questionnaire. Instead of marking adjectives describing one’s own behavior, others were
asked to report on the subject. This method would be more like clinical research in that it
would provide only observable patterns of behavior. Another change Merrill and Reid
made was to do a second factor analysis, where they found significant clustering around
only three scales rather than five. The scales that would from then on determine Social
Style were 1) assertiveness, 2) responsiveness, and 3) versatility (Merrill & Reid, 1981, p.
43). As defined by Merrill and Reid (1981) assertiveness is the tendency one has to “ask”
or “tell” in an effort to influence the decisions of others; responsiveness is a dimension
that indicates whether a person “emotes” or “controls” feelings (p. 44). Assertiveness and
responsiveness were then put together to become the two scales that form the Social Style
Profile, a questionnaire designed to determine Social Style.

It is important to note the third scale, versatility. This third dimension of human behavior is not effected by the other two. It often is tested separately. Merrill and Reid even provide a separate questionnaire for determining an individual’s versatility. Versatility is determined by the amount of endorsement, approval of behavior, that we receive from others with whom we interact (Merrill & Reid, 1981, p. 43). Since it is a separate dimension that does not effect how an individual is plotted within the orthogonal Social Style matrix, this study will not look at the effects of an individual’s level of versatility. Further research may want to investigate the sex-role effects on an individual’s level of versatility.

Psychometric properties. As discussed earlier, psychometric properties include an instrument’s reliability and validity. Because Social Style questionnaires have been used primarily in a corporate environment rather than an academic one, information regarding the psychometric properties of Social Style measures is limited and contradictory. Most corporations that sell these instruments make claims about the reliability and validity of the instruments that often are not confirmed by independent research. Although there has been little research regarding the psychometric properties of these scales, they continue to be used widely by corporations. With this deficit in mind I suggest that data gathered during the present study (Taylor et al., 1993) should be used to conduct tests for reliability and validity on the Social Style instrument. Only continued testing of these instruments will allow for certainty of their ability to do what they are designed to do. The next section will look at the applications of Social Style.
Applications of Social Style

At the time that Merrill and Reid developed Social Style they primarily focused on insurance sales agents as participants when developing their Social Style questionnaires. Since the development of the concept of Social Style, researchers have focused on determining other areas to which the concept of Social Style also would apply. This section will look at the applications for Social Style. Most research has looked at how Social Style can aid in organizational communication through training, consulting, and staff development. Other social science research has taken a more academic look at Social Style. This section will be divided into the areas of corporate application and social science research.

Corporate application. The majority of available research points to the use of Social Style in business and administrative contexts (Baum & James, 1984; Bolton & Bolton, 1984; Darling, 1990; Darling & Cluff, 1987; Darling & McNutt, 1996; Taylor et al., 1993). The articles of Darling and others suggest Social Style to be a useful concept for business administration and team development. This section will outline the suggestions made by these researchers for the usefulness of Social Style in a corporate setting.

Building on the research of Merrill and Reid, Robert Bolton (1984) has attempted to make Social Style easier to understand and to use in a variety of contexts. Bolton has suggested the usefulness of Social Style to aid in selling, managing, parenting, marriage, team development and career promotion not through published studies but through his writings and workshops. In the first part of his book Social Style/Management Style
(1984) he explains in simple terms not only what Social Style is but also how to predict the Social Style of others as well as predict your own Social Style. In the second part he explains style flex or the idea of bending your natural style towards some other person’s style to make them understand you better. This concept gets very intricate and was actually part of Merrill and Reid’s original work. The difference is that Bolton condenses the original research for the purpose of making the ideas and concepts easier to understand and in a condensed format.

After Bolton’s work, others tried to apply Social Style to various contexts. One of the most prolific writers on the use of Social Style is John R. Darling, whose work dates from 1987 to 1996. Darling has been a professor of international business and marketing at a number of different universities in the United States and abroad. The articles he has written on Social Style generally are published in business journals. In reviewing most of his work, it seems that his intent is to make Social Style easier to use and to show its application to different contexts. He achieves his first goal by providing a questionnaire he adapted from the work of Bolton. This questionnaire generally is attached to many of his articles and allows the reader to determine his/her own Social Style without having to hire outside consultants, purchase a scale, and/or involve others. The accessibility of his questionnaire allows the reader to do what Darling suggests and begin using Social Style to effect interaction in multiple contexts. Darling notes that Social Style can be useful when implemented in the following areas: vertical organizational communication (Darling & Cluff, 1987), team building and team selection (Darling, 1990), enhancement of direct mail response (Taylor et al., 1993), and administrative team building in
community colleges (Darling & McNutt, 1996) to better align the speaker’s message with the intended audience. In all of his publications dealing with Social Style, Darling lays out the basics as developed by Merrill and Reid and enhanced by Bolton. He then applies the concept of Social Style as a way to fix or aid the system already employed by the given context. The direct mail response context will serve as an example.

In this article Taylor et al. (1993) outline how knowing a person’s Social Style would aid companies in communicating their products to the prospective customer in a way that is most comfortable to the customer. He points out that all customers are not alike and what may appeal to one does not appeal to another. Social Style is presented as a way to better target the customer. When demographic information is collected, the researcher also could ask questions to identify an individual’s Social Style. This information then could be used to generate a letter that is specific to the style of the intended customer. He notes that the customer probably will react better to a letter that caters to his/her individual style.

This section has reviewed writings that confirm the idea that Social Style was developed for and often used in the corporate arena. Consultants and researchers have supported the Social Style as a way to improve office communication. The prolific writings of business professionals suggest that the claims made by the companies that produce the questionnaires are true. Many companies are using the Social Style model in distinguishing how to communicate in a business environment. None of the writings of Darling, Bolton, Merrill & Reid, or Taylor address the idea that the Social Style of an individual could be influenced by perceptions of the person completing the questionnaire.
The next section will examine the social science research that has begun to test Social Style in an attempt to determine if it is worthy of the praise that it has received from the business community.

**Social Science research.** Some researchers (Baum & James, 1984; Prince, 1986) have examined whether Social Style training increased trust among a group of coworkers. The study produced no significant findings (Baum & James, 1984). The lack of trust gained was attributed to many factors, with the most significant being the length of time between training and re-testing for trust. Edward Baum and Anita James (1984) suggest that another factor to consider is the number of communicative interactions that have transpired in the interim period that would have an affect on trust.

William Snavely and Glen Clatterbuck (1980) also conducted a study that examined trust and Social Style. This particular study looked at the impact of Social Style on person perceptions. His hypotheses that differences in Social Style would result in different perceptions of versatility, trust, power and credibility were all supported by his research. In his study 400 students completed packets containing the Social Style profile as well as various person perception scales to determine trust, power, and credibility. Each packet asked the participant to score the questionnaires based on someone they knew fitting the relationship (co-worker, acquaintance, or friend) provided on the front of the booklet. Chronbach’s alpha was used to analyze the reliability of the factors in the study. All factors achieved an acceptable level of reliability (.62-.92). Snavely and Clatterbuck found the following results: expressives and amiables were perceived higher in interpersonal trust, expressives followed by drivers were perceived to be the more
powerful group, expressives were perceived as more competent than any of the other styles, and expressives and amiables were seen as being higher in character, more supportive, and more sociable. The findings of Snavely and Clatterbuck (1980) call into question the argument made by Merrill and Reid that no style is preferable to another. In this particular study it seems that the expressive Social Style was perceived to have more positive and attractive traits than the other styles. Although Snavely and Clatterbuck (1980) end by stating that “the best style is most likely the one with which the individual feels most comfortable” (p. 17), their results suggest there might be a style that is, perceived by others, more positive and/or attractive as a coworker, friend or acquaintance.

Constance Staley and Jerry Cohen (1988) conducted a study that examined the differences between males’ and females’ self-perceptions on Social Style and communicator style. Data was collected from 85 college students. Each subject completed both the Communicator Style Measure and the Social Style Profile. The first result noted was that the use of an other-report instrument (Social Style Profile) as a self-report instrument had no effect on the usefulness of the instrument to measure the construct. Validity was supported through, “a principal components analysis with a varimax rotation” (Staley & Cohen, 1988, p. 195). Cronbach’s alpha coefficient of the three scales for the self-report of Social Style was acceptable, ranging from .717 to .823. Along with other results they found that male participants rated themselves as more assertive than female participants. Contrary to their predictions, no significant difference between males and females was found on the responsiveness and versatility scales (Staley
& Cohen, 1988). The researchers suggest that further research look at self-perception, Social Style, and a different type of speaker profile other than biological sex.

This section has addressed Social Style examining both its strengths and weaknesses. Although social science research regarding Social Style is limited, the research that has been done leads to the conclusion that more research needs to be done. Research has addressed the relationships between Social Style and trust (Baum & James, 1984) as well as Social Style and person perception (Snavely, 1980). The research of Staley and Cohen (1988) not only examined the relationship between Social Style and sex differences but they also suggest further research examine the relationship between Social Style and gender differences. This study seeks to fill the gap illustrated by Staley and Cohen (1988) and House et al. (1998). The final section will examine some recent research in the field of communication that has claimed to examine the dimensions of assertiveness and responsiveness.

**Sex-Role and Assertiveness and Responsiveness**

Researchers (Richmond & McCroskey, 1990) in the field of communication began to examine the relationship between sex-role and the dimensions of assertiveness and responsiveness that are used commonly in Social Style research. In 1990, Virginia Richmond and James McCroskey developed the Assertiveness-Responsiveness Measure by taking the masculinity and femininity dimensions of the Bem scale and renaming them assertiveness and responsiveness respectively. In the article that discusses the development of the Assertiveness-Responsiveness Measure, Richmond and McCroskey provide no basis for making this alteration nor do they explain the equivalency they
presume between masculinity and assertiveness or femininity and responsiveness. Some subsequent research refers to the scale developed by Richmond and McCroskey as the Socio-Communicative Style (Sidelinger & McCroskey, 1997; Thomas, McCroskey, & Richmond, 1994; Wooten & McCroskey, 1996). The adjectives used in the scale developed by Richmond and McCroskey are identical to those used on the Bem scale (Richmond & McCroskey, 1990; Wheeless & Wheeless, 1981). All claims of reliability and validity also mimic the findings with regard to the Bem scale. This section reviews studies done using the measurement developed by Richmond and McCroskey (1990).

The first three studies focus on the area of education. Most of the participants of these studies were students and teachers. The first of these studies examined the relationship between immediacy and socio-communicative style (Thomas et al., 1994). Data was collected from 230 undergraduate students. Participants were asked to complete the Perceived Nonverbal Immediacy Scale and the Assertive-Responsiveness Measure. Participants were asked to answer the questionnaires with regard to the teacher from the last class they had attended. Correlational analysis of the data found that “assertiveness was at least as highly associated with immediacy as was responsiveness” (Thomas et al., 1994, p. 111). To be perceived as more immediate in their classes it is necessary for teachers to be both assertive and responsive. In terms of the BSRI (Wheeless & Dierks-Stewart, 1981), this study found that to be perceived as more immediate in their classes it is necessary for teachers to score both high masculine and high feminine. In other words, androgynous individuals are perceived as more immediate.

A study done by Robert Sidelinger and James McCroskey (1997) found a positive
correlation between teacher clarity and socio-communicative style. Data was collected from 204 undergraduate students who were asked to report on the teacher whose class they had most recently attended. Each subject completed Teacher Clarity Measure, Affective Learning Measure, Evaluation of Teacher, Nonverbal Immediacy, and Socio-Communicative Style measure. “Results yielded significant relationships between teacher clarity and the socio-communicative style of the teacher” (Sidelinger & McCroskey, 1997, p. 7). Teachers who were both assertive and responsive were perceived as clearer and more understandable. In terms of the BSRI (Wheeless & Dierks-Stewart, 1981) teachers who are androgynous were perceived as clearer and more understandable.

Research conducted by Andrea Wooten and James McCroskey (1996) looked at the relationship between socio-communicative style and trust. The 139 undergraduate participants were asked to complete the Individualized Trust Scale (ITS) and the measure of Socio-communicative style on a teacher whose class they had attended most recently and the then a second measure of Socio-communicative style on themselves. Results found that “exhibiting a high-level responsiveness is most likely to produce higher trust from the students” (Wooten & McCroskey, 1996, p. 98). Results regarding assertiveness were mixed and depended on the socio-communicative style of the student. Dissimilarity was associated with lower levels of trust; less assertive students were less likely to trust high assertive teachers than were the high assertive students. In terms of the BSRI (Wheeless & Dierks-Stewart, 1981) less masculine students were less likely to trust high masculine teachers than were the high masculine students. This finding suggests that a level of similar masculinity between individuals can affect trust.
The next three studies were not limited to the educational arena. Brian R. Patterson and C. Shawn Beckett (1995) looked at Socio-Communicative style and repair strategy selection. The 177 participants were asked to complete a self-report of the measure for Socio-Communicative style and a survey including a list of affinity seeking strategies. Participants were asked to indicate the affinity seeking strategy they used in the most recent conflict they had with a friend, relative, or significant other. Results indicated that “those who are assertive tend to take control of repair situations and tend to avoid behaving in a sensitive manner” (Patterson & Beckett, 1995, p. 238). They also found that high responsive individuals seemed to encourage self-disclosure and employ a variety of strategies. In terms of the BSRI (Wheeless & Dierks-Stewart, 1981) findings suggest that more masculine individuals tend to take control and more feminine individuals seemed to encourage self-disclosure and employ a variety of strategies.

The communication motives of assertive and responsive communicators were examined by Carolyn Anderson and Matthew Martin (1995). They asked 208 participants to complete both the Interpersonal Communication Motives Scale and assertive-responsiveness measure. In their research, Anderson and Martin refer to four styles formed by the assertive-responsiveness measure. The four styles they identify are aggressive (high assertive and low responsive; masculine), submissive (low assertive and high responsive; feminine), competent (high assertive and high responsive; androgynous), and noncompetent (low assertive and low responsive; undifferentiated). None of the other studies I reviewed using Richmond and McCroskey’s (1990) scale used these particular names for the four styles. The study found that competent communicators
communicate from affection and pleasure needs. Noncompetent communicators report to communicate more from control and escape needs. Results show that aggressive communicators report more control motives and submissive communicators report more affection motives. Researchers suggest additional research should address self-concept variables and communicator styles as well as communication motives (Anderson & Martin, 1995). In terms of the BSRI (Wheeless & Dierks-Stewart, 1981) these findings would suggest that androgynous individuals communicate from affection and pleasure needs, undifferentiated individuals communicate from control and escape needs, masculine individuals communicate from control motives, and feminine individuals report affection motives for communication.

In 1996, Martin and Anderson teamed up again to study assertive and responsive communication traits and associations with age and sex differences (Martin & Anderson, 1996). Data was collected from 678 participants through a packet containing six separate scales. Instruments used in the study included: Assertiveness-responsiveness Measure, Argumentativeness Scale, Verbal Aggressiveness Scale, Communication Apprehension, Cognitive Flexibility Scale, and Affective Orientation Scales. Age difference was the only significant result reported that related to assertiveness and responsiveness. Older participants (55 or older) both male and female reported to be more responsive than any other group (Martin & Anderson, 1996). In terms of the BSRI (Wheeless & Dierks-Stewart, 1981) these findings suggest that older individuals report to be more feminine than any other group.

Research done in the field of communication studies involving assertiveness and
responsiveness finds its basis in the research of Richmond and McCroskey (1990). In their 1990 article Richmond and McCroskey make a large assumption regarding a relationship between masculinity/femininity and assertiveness/responsiveness.

Several streams of research have examined essentially similar concerns, although they have referred to the components by different terms. The work of Bem (1974) and others (e.g., Wheeless & Dierks-Stewart, 1981) references these as “masculinity” and “femininity.” Within the corporate training arena (TRACOM; Merrill & Reid, 1981; Wilson Learning; Lashbrook, 1974), they are commonly referred to as “assertiveness” and “responsiveness.” (Richmond & McCroskey, 1990, p. 449)

Richmond and McCroskey provide no justification for their assumption that masculinity/femininity and assertiveness/responsiveness are actually the same dimensions denoted by different terminologies. In fact the BSRI and the multiple Social Style questionnaires do not have face similarities. More basic is the argument that the BSRI was constructed and continues to characterize an individual’s gender based on the level that she/he identifies with masculine and/or feminine adjectives. The Social Style questionnaires purport to measure actual perceived behavior rather than identification with traits or adjectives. It also is worth noting that the earlier sections of this review of literature noted recent studies that have confirmed that the BSRI continues to measure masculinity and femininity (Cambell & Arthur, 1997; Cramer & Westergren, 1999; Schmitt & Millard, 1988). Without a basis for the assumption made by Richmond and McCroskey, any research using the Assertiveness-Responsiveness Measure should be
considered gender research, even though gender is not listed as a variable in any of the studies.

The current study proposes an examination of how instruments that purport to measure gender correlate with Social Style instruments that claim to have no gender affects. By examining correlations between sex-role and Social Style, the arguments made by Richmond and McCroskey can be either confirmed or negated. Other research has come close to closing the gap (House et al., 1998; Staley & Cohen, 1988) but research to date has not isolated a relationship between sex-role and Social Style.

**Hypotheses**

The proposed study seeks to bring together the information of past studies especially those done by House et al (1998) and Staley (1988). The study also seeks to fill a gap in existing research by attempting to determine whether correlations exist between gender role and Social Style.

The matrix design of the two scales suggests that similar groupings could appear in each scale. The current study will examine further to see if there is more predictive information that can be gained. As noted earlier, feminine sex-role traits include such items as sensitive to the needs of others, compassionate, friendly, and helpful. These items suggest that feminine gender role individuals may identify with highly responsive traits. On the masculine dimension these feminine gender role individuals tend to score low on items such as assertive, dominant, aggressive, and forceful. Such scoring suggests that they also may perceive themselves as lower in assertiveness. “The amiable Social Style combines higher-than-average responsiveness with a comparatively low level of
assertiveness” (Darling & Cluff, 1987, p. 351). This information suggests the following hypothesis:

H1: A relationship exists between Social Style and gender role such that feminine individuals will more frequently identify themselves as amiable than any other Social Style.

Individuals who strongly identify with a masculine gender role associate themselves highly with traits such as aggressive, independent, forceful, and strong. These individuals identify less with items from the feminine dimension such as friendly, warm, compassionate, and gentle. “The driver is a blend of relatively low level responsiveness with a high degree of assertiveness” (Darling & Cluff, 1987, p. 352). This information suggests the following hypothesis:

H2: A relationship exists between Social Style and gender role such that masculine individuals will more frequently identify themselves as driver than any other Social Style.

Androgynous gender role individuals identify strongly with traits on both the masculine and feminine dimensions. They tend to strongly identify with traits such as helpful, compassionate, sincere, and friendly as well as identifying with traits such as assertive, competitive, and leadership. “The expressive Social Style integrates high levels of assertiveness and responsiveness” (Darling & Cluff, 1987, p. 352). This information suggests the following hypothesis:

H3: A relationship exists between Social Style and gender role such that androgynous individuals will more frequently identify themselves as
expressive than any other Social Style.

The final gender role is that of undifferentiated. This category is rarely studied. It consists of individuals who score low on both dimensions of masculine and feminine. These individuals tend to use more neutral terms to describe themselves such as intelligent or industrious. “The analytical Social Style combines a relatively low level of responsiveness and a low level of assertiveness” (Darling & Cluff, 1987, p. 351). This information suggests the following hypothesis:

H4: A relationship exists between Social Style and gender role such that undifferentiated individuals will more frequently identify themselves as analytical than any other Social Style.

These hypotheses predict a more direct relationship than has been reported in previous research. Unlike the House (1998) study, this study will track the tendency of the same person to be categorized, for example, as masculine as well as driver. Each category will be examined individually to see if significant correlations exist among the matching categories.

The reviewed literature has shown gender as defined by sex-role to correlate with health behaviors (Shifren & Bauserman, 1996), leadership style (Moss & Kent, 1996) and communicator style (House et al., 1998). The research regarding Social Style has examined relationships with regards to perceptions of trust, credibility, power and sex differences (Snavely, 1981; Staley & Cohen, 1988). However research has not yet examined any relationship between sex-role and Social Style. The closest attempt to close this gap came from Richmond and McCroskey (1990) and the research that used their
Socio-Communicative Scale. The dangers associated with their attempt to close the gap are the assumptions their research makes. They equate masculinity with assertiveness and femininity with responsiveness, yet they provide no reasons for renaming the dimensions of the BSRI. The Socio-Communicative Scale was never tested to ensure that it was measuring assertiveness instead of masculinity and responsiveness instead of femininity. In light of Staley and Cohen’s (1988) findings where they were unable to correlate the responsiveness scale more strongly with females than males, the Socio-Communicative Scale could be making assumptions that cannot be substantiated.

The section of the review that highlighted the corporate applications demonstrated that Social Style is continuously recommended for use in corporate settings (Baum & James, 1984; Bolton & Bolton, 1984; Darling, 1990; Darling & Cuff, 1987; Darling & Nutt, 1996; Taylor et al., 1993). If the hypotheses stated by the current study are supported then it would suggest that an individual’s gender identity is related to their self-perception of their communicative interpersonal behavior. This may explain discrepancies between the self and other forms of Social Style. Companies who choose the Social Style as a method of understanding the communication patterns of their personnel may be inadvertently using a gender biased scale, especially if they use the self-report method. Another way of looking at any correlation between the two instruments would be that gender identification is so strong within us, it effects how we view our own behavior and possibly the way we view the behavior of those around us.
CHAPTER 3

METHODOLOGY

Sample

Ninety-four participants were solicited from a basic course for communication studies at the University of North Texas. Since this course satisfies a requirement in the University core curriculum requirement it was expected that the ethnic make-up of participants would parallel that of the University as a whole. Extra credit in the course was offered as an incentive to those students who volunteered to participate in the study. To maintain a higher level of privacy for the participants demographic information was not gathered.

Procedure

Each participant was asked to complete a research packet that contained a consent form, the Wheeless and Wheeless Revised Bem Sex-Role Inventory (1981) and the Social Style Analysis Questionnaire (Taylor et al., 1993). Packets were distributed, completed and returned at the end of the lecture class. Consent forms were kept by the participants as per the request of the University of North Texas Institutional Review Board. Each packet had a number for tracking and recording purposes. To control for ordering effects, half of the packets had the revised BSRI (Wheeless & Wheeless, 1981) first and the other half had the Social Styles Analysis (Taylor et al., 1993) first. Instruments BSRI. Gender was measured using the 20 item revised BSRI. The instrument is a 7-point Likert scale (1=never/almost never, 2=usually not true,
3 = sometimes not true, 4 = neither true nor not true, 5 = sometimes true, 6 = usually true, 7 = always/almost always true) (Wheeless & Wheeless, 1981). Part of the revision included rewording of anchor items of the seven point scale to create equal appearing intervals which would reflect a semantically neutral midpoint item (Wheeless & Wheeless, 1981). The version used contained a total of 20 items, ten designed to measure masculinity and ten designed to measure femininity.

**Social Style Analysis.** Each participant’s Social Style was determined using the Social Style Analysis Questionnaire developed by Darling (Taylor et al., 1993). The Social Style Analysis Questionnaire contained 20 items using a 4-point Likert scale, and was a self-report questionnaire. Ten of the items were designed to measure assertiveness and ten were designed to measure responsiveness.

**Scoring**

**BSRI.** In scoring the BSRI the midpoint was set at 0 with positive and negative numbers representing the ends of the continuum (House et al., 1998). Masculine and Feminine items on the scale were calculated separately. The formula, $2(M+F)+(F-M)$ where $M$ was the masculine score and $F$ was the feminine score, recommended by Wheeless and Wheeless (1981) was used to measure Androgyny. The highest score in Masculine, Feminine or Androgynous placed the participant in one of those categories. If there was no high score the person was classified as Undifferentiated. When this method was employed all 94 participants were determined to be androgynous. Therefore, I reevaluated the packets using Bem’s original median split method for determining the categories of the BSRI. The results from this change in scoring are examined in the next
Scoring of the Social Style Analysis Questionnaire consisted of calculating averages, rounded to the nearest whole number, of the assertiveness and responsiveness dimensions respectively. Once calculated the averages were combined as a ratio and matched to a key to determine which of the four Social Styles the combination matched (Taylor et al., 1993). Ratios of 1/1, ½, 2/1, and 2/2 fell in the analytical quadrant. Ratios of 3/1, 3/2, 4/1, and 4/2 fell in the driver quadrant. Ratios of 3/3, ¾, 4/3, and 4/4 fell in the expressive quadrant. Ratios of 1/3, ¼, 2/3, and 2/4 fell in the amiable quadrant.

**Analysis**

A two-way chi square test for association was used to determine any relationship between the eight categories of masculine, feminine, androgynous, undifferentiated, drive, amiable, expressive, and analytical. The independent variables included the categories from the BSRI (Masculine, Feminine, Androgynous, Undifferentiated). The dependent variables included the categories from the Social Style Analysis (Driver, Amiable, Expressive, Analytical).

Since very little reliable research existed regarding the psychometric properties of Social Style scales, a second analysis focused on the reliability of the Social Style Analysis Questionnaire (Taylor et al., 1993). Spearman-Brown’s test of reliability was used to determine reliability. This test was chosen to accommodate the categorical data produced from the scoring of the social style scale.
CHAPTER 4

RESULTS

Results of Reliability of Social Style

A Spearman-Brown test of reliability was performed on the Social Style data gathered from the completed questionnaires. The results were a coefficient of .61, which is an acceptable level of reliability.

Results of First Hypothesis

A two-way chi square was used to determine any associations between feminine and amiable. Of the 21 individuals who were identified as feminine 0 were found to be drivers, 14 were found to be amiable, 5 were found to be expressive, and 2 were found to be analytical. The expected count for feminine/amiable was 4.2. The first hypothesis was supported (see Table 1).

Table 1: Chi-Square Analysis

<table>
<thead>
<tr>
<th>Gender</th>
<th>Social Style</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Driver</td>
</tr>
<tr>
<td>Masculine</td>
<td>4 (1.6)</td>
</tr>
<tr>
<td>Feminine</td>
<td>0 (1.8)</td>
</tr>
<tr>
<td>Androgynous</td>
<td>2 (2.2)</td>
</tr>
<tr>
<td>Undifferentiated</td>
<td>2 (2.4)</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
</tr>
</tbody>
</table>

( ) expected count
Results for Second Hypothesis

A two-way chi square test for association was used to determine an association between masculine gender and driver Social Style. Of the 19 masculine individuals, four identified as drivers, zero identified as amiable, 14 identified as expressive, and one identified as analytical. The expected count for masculine/driver was 1.6. The second hypothesis was not supported (see Table 1).

Results for Third Hypothesis

A two-way chi square test of association was used to determine if a relationship existed between androgynous and expressive. Of the 26 androgynous individuals 2 identified as driver, 2 identified as amiable, 20 identified as expressive, and 2 identified as analytical. The expected count for androgynous/expressive was 15.8. The third hypothesis was supported (see Table 1).

Results for Fourth Hypothesis

A two-way chi square test of association was used to determine a relationship between undifferentiated and analytical individuals. Of the 28 undifferentiated individuals 2 identified as driver, 3 identified as amiable, 18 identified as expressive, and 5 identified as analytical. The expected count for undifferentiated/analytical was 3.0. The fourth hypothesis was not supported (see Table 1).

Overall results for BSRI and Social Style

A two-way chi square test of association was used to determine any relationship between the gender data and the Social Style data. With gender entered as the independent variable and Social Style entered as the dependent variable the test found the
two scales to be associated. The results were significant at the p<.01 level with a chi square value of 43.461.
CHAPTER 5

DISCUSSION

Introduction

The previous chapter reported the results from the testing of the hypothesis and an analysis of the data collected. This chapter will begin by interpreting those results. In this chapter I also will discuss the implications and limitations of the study as a whole. This chapter ends with suggestions for further research in the fields of communication and gender.

Interpretation of results

This section examines the results reported in the previous chapter. The interpretation is divided into reliability of Social Style measure, changes in scoring of the BSRI, and discussion of hypotheses. This section begins with the discussions of the scales.

Reliability of Social Style. Earlier research using Social Styles analysis often did not include information regarding the psychometric properties of the measures used. As noted earlier, when reliability or validity was provided they often were suspect. A Spearman-Brown test of reliability was performed on the Social Style data gathered and interpreted for this study. The resulting Spearman-Brown coefficient of .61 was found to be an acceptable level (Glass and Hopkins, 1996). This supports the assertion that the instrument developed by John Darling is a reliable instrument for use in determining Social Style (Taylor et al, 1993).
**Results of BSRI scoring.** The method of scoring as developed and explained by Wheeless and Wheeless (1981) resulted in all 94 participants identifying as androgynous. This result suggested at least two possible explanations. First, all participants identify as androgynous and the idea of differing gender roles is a moot point. A second explanation may be that the method for scoring the BSRI, as described by Wheeless and Wheeless (1981), over identifies for androgyny. Wheeless and Wheeless created the new scoring method in an attempt to make research conducted using the scale more generalizable. They felt that the original median split method decreased a researcher’s ability to generalize to larger groups. After further examining the equation for androgyny and the research outlined in chapter two of the present study, I felt that some anomaly had occurred. No other studies that I could find resulted in all participants falling in the same category. To continue with the current study, I decided to return to Bem’s original median split method of scoring the BSRI. Since Wheeless and Wheeless were only trying to increase the ability to generalize results, reverting back to Bem’s method should not have a negative effect. Bem’s original method of scoring utilizes a traditional median split of the given sample. The median for feminine and masculine were determined using the scores from the sample of 94 participants. If a participant scored above the feminine median and below the masculine median than s/he was determined to be feminine. A masculine score above the masculine median and a feminine score below the feminine median categorized the individual as masculine. If both scores were below the medians than the individual was determined to be undifferentiated. If both scores were above the respective medians than the individual was determined to be androgynous. Using the
original median split method, the 94 participants divided into the following groupings: 19 masculine, 21 feminine, 26 androgynous, and 28 undifferentiated.

Results of hypotheses. The overall chi square analysis performed revealed that the variables of Social Style and gender are more dependent than they are independent. There is a relationship between the two, however it is not as strong and direct as Richmond and McCroskey (1990) suggest. Although a relationship was found, it was not strong enough to support the supposition made by Richmond and McCroskey that the categories are identical. If Richmond and McCroskey’s assessment that gender and Social Style were identical, the chi square analysis performed on the data in this study should have demonstrated that all 19 people who scored as masculine on the BSRI should have scored as drivers on the Social Style Analysis. This correlation was not found. The results demonstrate a relationship between each of the pairings outlined in the hypotheses, however the only hypotheses that were strongly supported were the first and third. The driver/masculine relationship exceeded the expected count of 1.6. The undifferentiated/analytical relationship exceeded the expected count of 3.0. A stronger relationship was found in the categories of masculine/expressive and undifferentiated/expressive. The feminine/amiable relationship and the androgynous/expressive relationship were the only associations that not only exceeded the expected counts but also had the largest expected groupings. Fourteen of the 21 individuals who identified as feminine also identified as amiable, and 20 of the 26 individuals who identified as androgynous also identified as expressive. Masculine individuals were found to identify more frequently as expressive than as driver. Fourteen
of the 19 masculine individuals identified as being expressive and only 4 of the 19
identified as being drivers. A similar association was found among people who scored as
undifferentiated on the BSRI. Eighteen of the 28 undifferentiated individuals identified as
expressive and only 5 of the 28 identified as analytical. The data showed that only
feminine individuals did not identify with the expressive Social Style more than any other
Social Style. All other genders (masculine, androgynous, undifferentiated) scored higher
in expressive than any other category. These results suggest that these individuals were
more likely to identify their communicative behavior as expressive than any of the other
Social Styles. The feminine group, on the other hand, was more likely to identify their
communicative behaviors as amiable than any other Social Style. Although this finding is
congruent with my predictions, it also is alarming. If the Social Style scale is used in a
job placement capacity with individuals who identify as both feminine and amiable, it
may be used to discriminate against those individuals under the guise of an inability to be
assertive and task oriented. The trend noted in this study shows a need to be concerned
about the appropriate use of the Social Style scale as well as a need for further research.

This section has outlined the results of the tests performed on the data collected in
this study. The next two sections will deal with the limitations and implications of this
study.

Limitations of the study

Several obvious limitations arise from the time and place of data collection. Data
were collected at the University of North Texas, Denton campus during summer school.
Results from a student population may not match results from individuals in a corporate
environment. The N of 94 was smaller than originally desired. In using the chi square test for association, a larger N would be preferred. The small N caused 10 of the 16 cells to have expected counts less than 5 and a minimum expected count of 1.62.

Along the same lines, it is important to note that both instruments were self-report measures. Self-report measures of collecting data often are criticized because they rely heavily on the participant being tested. This reliance is subject to low levels of objectivity and the opportunity for participants to answer with socially desirable responses rather than those that reflect their true feelings or behaviors. Since 57 of the 94 individuals identified as expressive and research by Snavely and Clatterbuck (1980) found expressive to be associated with more positive attributes, it is possible that social desirability played a part in the data gathered.

Another limitation to this study is the language used in the BSRI. The use of labels that are loaded with social meaning such as masculine and feminine can be seen as a limitation to any study that uses the scale. Using a scale that labels people in this way may perpetuate the stereotypical beliefs that are inherent in the development of the BSRI.

Finally, it is important to note that this study only tested for the existence of a relationship. This study does not demonstrate what kind of relationship exists between gender and Social Style. This study did not seek, and did not find, a cause and effect relationship. It has found only that the two variables are not independent of one another.

Implications and suggestions for further research.

In earlier chapters, I suggested that a relationship between gender and Social Style would indicate that the Social Style is not a preferred way of categorizing people because
of its link to gender. Consultants often have suggested that companies use Social Style to better understand its employees. The companies that sell Social Style scales claim that Social Style represents a sex-neutral way of looking at employees. Although the scales may be sex neutral the findings of this study suggest that Social Style may not be gender-neutral. The proof of a relationship between gender and Social Style is not as disturbing, however, as the actual groupings from the chi square analysis. These groupings suggest that feminine individuals were the only group that did not cluster around expressive. In light of Snavely and Clatterbuck’s findings (1980), which suggest that expressive individuals are seen as more trustworthy, more of a leader and more positive than individuals that identify with the other styles, feminine individuals may be viewed as lesser than because they do not identify as expressive. As suggested previously, if the Social Style of an individual is taken into account when decisions are made regarding hiring and promotions, feminine individuals may be neglected or not strongly considered. The findings of this study should alert corporate trainers and consultants to be cautious of the use and possible misuse of the social style scales.

The other side of the argument made in research is that gender and Social Style are so strongly related that they are the same thing (Richmond and McCroskey, 1990). The findings of this study suggest that although a relationship exists between gender and Social Style, it is not as strong as Richmond and McCroskey presume. This study suggests that it is still important to distinguish gender and Social Style as two separate concepts. Ultimately the results of this study suggest that neither side is completely correct. Those who say there is no relationship quite possibly confuse sex with gender.
Those who say it is a direct relationship may confuse personality identification with communicative behaviors. This study cannot support either side. Rather, it demonstrates that a relationship exists but the relationship is not strong enough to support the use of gender and Social Style interchangeably. Future research should examine the relationship between Social Style and gender more extensively.

Further research should include more participants and should investigate a variety of settings. Questions concerning the effects of a corporate environment or particular fields of study should be examined. Further research should examine the Wheeless and Dierks-Stewart (1981) method for determining androgyny. Does it over identify for androgyny? Further research also should continue to map the progression of gender and Social Style. If society is moving towards androgyny, as some would suggest, are we also moving towards expressive as the preferred Social Style? Along the same lines it may be interesting to compare the current findings with the research regarding sex and social style. Why would sex not be related to social style when gender is? Does social construction play the same role in our communicative behavior that is does in our gender perceptions?

Since this study used self-report instruments, other studies should conduct research using other report instruments in order to determine whether similar relationships can be detected. Do we make a link between an individual’s perceived gender and how we perceive the individual’s communicative behaviors? A study may look at a comparison between how individuals perceive their own gender and how others perceive the individual’s behaviors. It also may be important to compare gender, Social
Style, and managerial style, or other leadership styles. A final question deserves attention in future research. As social scientists create new ways of identifying and labeling people and behaviors, do these new categories inevitably impact the way we perceive ourselves and one another?
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