

2015

The Effect of Nonverbal Immediacy and Biological Sex on Subordinate Job Satisfaction and Supervisor Credibility and Liking

Megan Witos

La Salle University, witosm1@student.lasalle.edu

Follow this and additional works at: <http://digitalcommons.lasalle.edu/graduateannual>

 Part of the [Gender, Race, Sexuality, and Ethnicity in Communication Commons](#), [Interpersonal and Small Group Communication Commons](#), and the [Organizational Communication Commons](#)

Recommended Citation

Witos, Megan (2015) "The Effect of Nonverbal Immediacy and Biological Sex on Subordinate Job Satisfaction and Supervisor Credibility and Liking," *Graduate Annual*: Vol. 3 , Article 13.

Available at: <http://digitalcommons.lasalle.edu/graduateannual/vol3/iss1/13>

This Paper is brought to you for free and open access by La Salle University Digital Commons. For more information, please contact careyc@lasalle.edu. Articles published in the Graduate Annual reflect the views of their authors, and not necessarily the views of La Salle University.

The Effect of Nonverbal Immediacy and Biological Sex on Subordinate Job Satisfaction and Supervisor Credibility and Liking

Megan Witos
M.A. in Professional and Business Communication
La Salle University
Philadelphia, Pa.

Executive Summary

This paper explores the relationships between nonverbal immediacy, biological sex, job satisfaction, credibility and liking. An online survey was used to answer the following questions:

RQ1: Do subordinates recognize a significant distinction between male and female supervisors' use of nonverbal immediacy?

H1: Supervisors who display nonverbal immediacy will be perceived as more competent communicators by their subordinates.

RQ2: Is there a relationship between the subordinate's perception of his or her supervisor's credibility and the subordinate's reported job satisfaction?

RQ3: Is there a relationship between the subordinate's perception of his or her supervisor's liking and the subordinate's reported job satisfaction?

RQ4: Is there a significant difference in a subordinate's reciprocation of nonverbal immediacy based on the biological sexes of the superior-subordinate relationship?

RQ5: Is there a relationship between subordinates' reciprocation of nonverbal immediacy and subordinates' reported job satisfaction?

Participants included 154 working adults, 46 male and 108 female, ranging in age from 21 to 76. Respondents were asked to complete a 143-item online survey between May 9, 2014 and July 1, 2014 that used the following scales: Nonverbal Immediacy Scale-Observer Report, Job Satisfaction Survey, Communication Competence Scale, Rubin's Liking Scale and McCroskey's Measurement of Ethos.

T-tests showed that there was no significant difference in the perceptions of nonverbal immediacy among members of different biological sexes. Results also showed that immediacy and communication competence had a significant positive correlation, an inverse relationship was found between supervisor's credibility and subordinate's job satisfaction and a positive correlation was found between supervisor's liking and subordinate's job satisfaction. The scale used to test reciprocation was not reliable, and therefore could not be tested.

I. Introduction

A universal interest of organizations worldwide is the retention of employees. Employees have a tendency to remain with an organization for as long as they experience satisfaction with their job. Therefore, organizations and researchers alike have contributed a great deal of time into researching what increases employee satisfaction.

One aspect of job satisfaction that is often overlooked deals with communication between employees and their supervisor, specifically nonverbal communication. Supervisors and subordinates worldwide engage in nonverbally immediate or nonimmediate behaviors when communicating with each other. By examining these behaviors, the impact they have on communication among supervisors and subordinates, reciprocation of the behaviors, and overall job satisfaction, organizations may be able to train supervisors to become more competent communicators. An increase in communication competence among supervisors may lead to an increase in job satisfaction and employee retention.

II. Review of Literature

Nonverbal Immediacy

The theory of immediacy refers to the ability of nonverbal communication to increase the perceptions of physiological or psychological closeness between individuals (Mehrabian 1971; Madlock 2006a). In this study, nonverbal immediacy will be defined as communicative, nonverbal behavior such as eye contact, body movement and facial expressions that results in a perceived increase of closeness in an interpersonal relationship. There are many nonverbal behaviors that can result in feelings of immediacy, though the most common behaviors identified as being nonverbally immediate in research include smiling, making eye contact in a non-threatening manner, leaning toward or sitting near an individual, and touching an individual (Madlock, 2006b; Richmond and McCroskey 2000b). When a person engages in one of these behaviors, they are silently communicating to the individuals around them that they are socially accessible, available or being attentive to their conversational partner (Mehrabian, 1971). The quantity or strength of these behaviors is also an indication of the closeness of an interpersonal relationship among individuals as well as the psychological distance between them (Mehrabian, 1971). If the quantity and intensity of the nonverbal immediacy behaviors increases, it will typically result in an increase of interpersonal closeness and a decrease of psychological

distance (Mehrabian, 1971).

Nonverbal immediacy has been connected to behaviors that indicate positive feelings, such as “warmth, closeness, openness and involvement with other persons” (Infante, Rancer and Womach, 2003; Madlock, 2006b, p. 9). Individuals typically respond to nonverbal immediacy with an increased like for that person, making their relationship stronger. As Mehrabian (1971) stated in his research, “People are drawn towards persons and things they like, evaluate highly, and prefer; and they avoid or move away from the things they dislike, evaluate negatively, or do not prefer” (p. 1).

Even when nonverbal immediacy is responsible for increased closeness in a relationship, participants in the conversation may not be aware of the cause. As several studies have pointed out, an individual oftentimes does not recognize the behavior as nonverbal immediacy, nor do they recognize the effect it has on their relationship (Richmond & McCroskey, 2000a; Madlock, 2006a). Individuals may even respond to these nonverbal behaviors without consciously thinking about it. When returning acts of nonverbal immediacy, an individual will do so collectively, as opposed to responding to each behavior individually (Richmond & McCroskey, 2000b).

Nonverbal Immediacy in Education

Extensive research has been done on the effects of nonverbal immediacy in an education setting (Teven, 2010). Research by Andersen, J., Andersen, P. and Jensen (1979) asserted that “good” teachers laugh, smile, gesture, stand and walk more often. They will also reduce the barriers between his or herself and the students by staying out from behind their desks (Andersen et al., 1979). As a result, students have demonstrated an increased willingness to learn, be motivated and satisfied (Myers & Ferry, 2001; Teven, 2007). Teachers with high nonverbal immediacy are perceived as more likeable and warm, more accessible and approachable and more positive (Mehrabian, 1971; Chamberlin, 2000).

In contrast, an instructor who lacks nonverbal immediacy is viewed as demonstrating a type of “misbehavior.” (Teven, 2010). Students may also perceive a nonimmediate instructor’s behavior as inappropriate or cold (Teven, 2010). This research implies those supervisors who do not demonstrate nonverbal immediacy in a non-education professional setting can also be perceived as inappropriate and their behavior as a barrier to communication (Teven, 2010).

Nonverbal Immediacy in the Professional Workplace

Effective communication is essential to the interpersonal relationship between supervisors and subordinates in the workplace. Nonverbal communication behaviors, such as facial expressions, eye contact and body language, are a fundamental aspect of this relationship (Burgoon, Buller, & Woodall, 1996). For example, subordinate perceptions of communication openness are correlated to the nonverbal warmth demonstrated by a supervisor through eye contact, facial expression and body movement (Tjosvold, 1984).

Additionally, job and communication satisfaction of subordinates is positively influenced by the supervisor’s use of immediacy (Madlock, 2008). Research by Koermer, Goldstein and Fortson (1993) has shown that employees feel more valued, respected and relationally attractive when their supervisors utilize immediacy. Nonverbal messages have also been shown to impact subordinate perceptions of trust, deception, attraction, social influence, emotional expression, impression formation and communication openness (Chamberlin, 2000; Burgoon et al., 1996; Myers & Ferry, 2001).

Biological Sex

There has been an extensive amount of research on biological sex and its impact on nonverbal behavior and leadership. However, there is limited research available with regard to nonverbal immediacy behaviors and biological sex in subordinate-supervisor relationships (Madlock, 2006a). Previous research to determine the effects of biological sex has resulted in little progress since some research suggests biological sex differences while other research suggests there are no biological sex differences (Aires, 2006; Madlock, 2006a). Aires (2006) has proposed that the varied results of this research is due to the presence of several factors in the research, such as the nature of the task, social roles and stereotypes.

Researchers who argue against the existence of biological sex differences, such as Andersen (2006) have stated that, “biological differences between sexes revealed no evidence to exclude either sex from being an excellent manager” (p. 127). Teven’s (2007) research supports the idea that both female and male managers can be perceived as competent, credible and trustworthy when they engage in highly immediate behavior and use positive power strategies. In his experiments, neither the female nor male manager was perceived as being superior to the other, but both were perceived as superior to non-immediate colleagues by subordinates (Teven, 2007). His research would support the concept that there are no biological sex differences.

Other researchers argue that analyzing biological sex differences among supervisors defeats the primary goal of seeking the best candidate for each individual managerial position. Powell and Graves (2006), two proponents of this idea argue, “The proper goal for leadership-training programs is neither to teach men how to behave more like women, nor to teach women to behave like men. Instead, the goal should be to enhance the likelihood that all people, women and men, will bring the right stuff to leader roles” (p. 93).

Other research has supported the concept that biological sex differences are apparent in communication. Hall and Friedman’s (1999) research posited that women in managerial positions were characterized by their subordinates as having “greater warmth” and “expressiveness” than their male colleagues. These females were more likely than males to use nonverbal behavior when communicating, and tended to use behaviors linked with openness, confidence and supportiveness more often (Hall and Friedman, 1999). Eagly and Johnson’s (1990) research indicated that women also tended to be higher in “interpersonal style” when communicating.

The success of female managers in interpersonal communication

may be partially due to research that suggests that women are more adept at accurately recognizing the expressions and body language of others (Morand, 2001). Women have more success recognizing the six universal facial expressions, “happiness, fear, sadness, surprise, anger, and disgust,” than men (Morand, 2001, p. 24). American women, in particular, are thought of as being more “emotive, intuitive, and feeling oriented” (Morand, 2001, p. 24).

Further research has argued that not only are there differences in the way the sexes communicate, but they are significant and noticeable (Baird and Bradley, 1979). Female managers have a strong tendency to share information, emphasize interpersonal relationships, be open to ideas, be encouraging, monitor employees and be concerned with the morale of her subordinates (Baird and Bradley, 1979; Teven, 2007). However, male supervisors were more likely than female supervisors to demonstrate dominance, challenge their colleagues and subordinates and lead conversations (Baird and Bradley, 1979; Teven, 2007).

Communication Competence

Larson, Backlund, Redmond and Barbour (1978) have defined communication competence as, “the ability of an individual to demonstrate knowledge of the appropriate communication behavior in a given situation” (p. 16). Communication competence is a multi-faceted concept that requires individuals to be adept in areas of knowledge, language, motivation, skill, behavior and effectiveness (Spitzberg, 1983; Madlock, 2006b, 2008). If an individual is considered competent in communication, he or she has the capability to combine the use of gestures, linguistics and speech to accomplish communication goals (Madlock, 2006b). However, another aspect of communication competence argues that as an individual attempts to accomplish these goals, they must also maintain a sense of appropriateness, through the use of “conversational and interpersonal norms” (Spitzberg, 1983; Madlock, 2008).

The concept of communication competence is applicable to nonverbal immediacy research, especially with regard to supervisor-subordinate relationships, because immediacy is an essential piece of becoming competent in communication. Previous research concerning the relationship between teachers and their supervisors showed that supervisors were considered more competent communicators when they decreased the quantity of nonimmediate behaviors (Chamberlin, 2000). Behaviors including a relaxed posture, using physical barriers, minimal eye contact and limited gestures and head nods were found to discourage the trust of the subordinates, in this case, teachers (Chamberlin, 2000).

Satisfaction

Current research has shown that there is a positive correlation between communication competence and satisfaction (Madlock, 2006b). The concept of satisfaction is two-fold; both employee and communication satisfaction are often considered. Employee satisfaction or job satisfaction has been defined in a variety of ways (Winska, 2010). Taylor (1970) defined employee satisfaction as an individual receiving the “highest possible earnings with the least amount of fatigue” (p. 68). However, an alternate definition provided by Locke (1976) described job satisfaction as “a pleasurable or positive emotional state from the appraisal of one’s job or

experiences” (p. 1297).

These two components are of interest to researchers because communication and job satisfaction are linked to the turnover rates of an organization (Winska, 2010). When employees are dissatisfied with their jobs, there is an increase in the number of days they are absent, as well as increased levels of stress and a decrease in commitment to their employer (Winska, 2010). Similarly, employees who consider themselves “satisfied” with the communication of their supervisors and their job will perform at a higher level than a discontented employee (Gruneberg, 1979). As a result, a higher level of performance has been shown to lead to more effective and productive employees and a positive corporate culture (Gruneberg, 1979; Madlock, 2006a, 2006b).

Miles, Patrick, and King (1996) demonstrated that the communication between supervisors and subordinates is an important variable in the analysis of job and communication satisfaction. Supervisors are considered to have a significant influence on the satisfaction of their subordinates (Pincus, 1986; Madlock, 2006b). When a subordinate is satisfied with communication with their supervisor, it has a positive influence on their overall job satisfaction (Madlock, 2006b). Whether or not a subordinate will perceive their interactions with a supervisor as being satisfying is in part determined by nonverbal immediacy (Teven, 2010).

The use of nonverbal behavior to demonstrate dominance and superiority is correlated with a decrease in communication satisfaction (Teven, 2010). Likewise, the use of nonverbal behavior to demonstrate openness, sincerity and an eagerness to listen has been correlated with an increase in communication satisfaction (Teven, 2010). Similar to the evaluation of nonverbal immediacy as a whole, some research has supported biological sex differences in communication satisfaction with supervisors. Subordinates of female supervisors were more likely than subordinates of male supervisors to be satisfied with their jobs (Madlock, 2006a). Madlock’s (2006a) research also demonstrated that the aforementioned female supervisors engaged in higher levels of nonverbal immediacy and were perceived as more competent communicators than their male colleagues.

Credibility

Nonverbal immediacy also has an impact on the credibility of a supervisor, though there has been limited research on the topic (Teven, 2010). Credibility has been called the “foundation for successful influence” (Teven, 2010, p. 72). Simply put, a subordinate is more likely to work harder for a supervisor that they like and perceive as credible (Teven, 2010). When a subordinate dislikes a supervisor or does not trust them, the relationship between the two has the potential to become evasive and unproductive (Teven, 2010). Research by Teven (2010) suggests that supervisors who wish to remain effective should practice positive and immediate behavior in the workplace.

Liking

Another variable of nonverbal immediacy that has received limited attention in research is liking (Madlock, 2006b). Liking has been defined as the mixture of “respect and affection” (Rubin,

1970; Hinkle, 2001, p. 130). It is created and conveyed amongst supervisors and subordinates through nonverbal behavior (Teven, 2010). The appearance of both nonverbal immediacy and liking in a professional environment were “strongly correlated” and essential for successful communication (Hinkle, 2001). When supervisors and subordinates like each other, there are fewer opportunities for interpersonal conflict to arise, and more opportunities for positive interpersonal influence (McCroskey, Richmond, & Stewart, 1986).

Reciprocity

The subordinates of supervisors who engage in nonverbal immediacy behaviors reported feeling more “valued, respected and relationally attractive” than subordinates of supervisors who did not engage in nonverbal immediacy behaviors (Koermer et al., 1993). This is the result of the principle of immediate communication, which states that the more communicators employ immediate behaviors, the more others will “like, evaluate highly and prefer such communicators” (Madlock, 2006b, p. 10-11; Richmond & McCroskey, 2000b). Additionally, the less communicators use immediate behaviors, the more others will “dislike, evaluate negatively and reject such communicators” (Madlock, 2006b, p. 10-11).

Subordinates will not only like immediate behavior more if they are exposed to it more often, they will begin to reciprocate the behavior. The norm of reciprocity and research by Manz and Sims (1981) suggests that subordinates have a tendency to reciprocate or imitate supervisor behavior. By applying the social learning theory, which states that individuals learn through observing the behavior of others, one can imply that it would be beneficial for supervisors to model nonverbal immediacy behaviors in the workplace (Teven, 2010).

III. Research Questions and Hypotheses

The overarching goal of this research is to expand on the existing research on the effect on nonverbal immediacy on the superior-subordinate relationship in a professional workplace environment. This topic has received a limited quantity of research outside of an educational setting. By conducting additional research, the current discussion on nonverbal immediacy will be expanded.

In comparison to other facets of immediacy, there has been a larger amount of research done on the impact of biological sex on displays of nonverbal immediacy behaviors. However, an agreement has yet to be reached among researchers regarding the presence of biological sex differences in immediacy behaviors. The following research question will seek to contribute to the current debate:

RQ1: Do subordinates recognize a significant distinction between male and female supervisors' use of nonverbal immediacy?

Second, an additional hypothesis will address the suggestions of previous research that nonverbally immediate supervisors will be perceived as more competent communicators than nonimmediate supervisors, regardless of biological sex. The following hypotheses will seek to confirm the findings of previous research:

H1: Supervisors who display nonverbal immediacy will be perceived as more competent communicators by their subordinates.

The following two research questions will examine the impact of two variables, credibility and liking, on the subordinate's reported job satisfaction. Factors that influence job satisfaction are of great concern to organizations, which generally aim to retain employees and keep them satisfied. Previous research has examined the relationships between communication competence and job satisfaction, but relatively few studies have focused on the effect of credibility and liking on job satisfaction. The research generated by these two questions is beneficial because it will provide insight into factors that influence employee satisfaction, a factor known to influence retention rates.

RQ2: Is there a relationship between the subordinate's perception of his or her supervisor's credibility and the subordinate's reported job satisfaction?

RQ3: Is there a relationship between the subordinate's perception of his or her supervisor's liking and the subordinate's reported job satisfaction?

While some research has shown that subordinates are likely to reciprocate nonverbal immediacy behavior when it is demonstrated by supervisors, the biological sexes of the supervisor and subordinate have not been taken into account. This gap in the research can be resolved by examining whether there is more or less reciprocation when the supervisor-subordinate relationship is a male-female, female-male, male-male or female-female relationship. The following research question will address this problem:

RQ4: Is there a significant difference in a subordinate's reciprocation of nonverbal immediacy based on the biological sexes of the superior-subordinate relationship?

Finally, Teven (2010) suggested that the reciprocation of nonverbal immediacy could result in an employee preference for that type of communication. An increase in job satisfaction may follow if a supervisor continues to communicate with the subordinate in a nonverbally immediate manner. The following research question seeks to determine if there is a relationship between the reciprocation of displays of nonverbal immediacy and the subordinate's job satisfaction:

RQ5: Is there a relationship between subordinates' reciprocation of nonverbal immediacy and subordinates' reported job satisfaction?

IV. Method

Participants

Participants included 154 employees (46 male and 108 female) from varying organizations. Of these participants, 81 reported having a male supervisor, while 68 reported having a female supervisor. The age of the participants ranged from 21 to 76 years ($M=42.78$, $SD= 14.43$). Participation was voluntary. No other

demographic data were collected.

Procedures

Participants were asked to complete a 143-item questionnaire online between the dates of May 9, 2014 and July 1, 2014. The full survey can be found in the appendix. The survey included demographic information that asked the participants age, biological sex and the biological sex of their supervisor. The biological sex of the participant and their supervisor was then used to code them into either a matched gender pair, where both the supervisor and subordinate is a member of the same biological sex, or an unmatched gender pair, where the supervisor and the subordinate are members of different biological sexes.

This survey tested the relationships among the six variables that were identified. These variables include nonverbal immediacy, reciprocity, job satisfaction, communication competence, liking and credibility. Existing scales were used to test each variable.

Instruments

Nonverbal immediacy was measured by the 36-item Nonverbal Immediacy Scale-Observer Report (Richmond, McCroskey & Johnson, 2003). A 5-point Likert-type scale (1 = never to 5 = very often) was used in the study. Cronbach's alpha for the current study was .90 ($M = 3.38$, $SD = .53$). Since the scale was reliable, responses to all items were combined to form one score for the nonverbal immediacy variable.

Reciprocity was measured by a 13-item variation of the Nonverbal Immediacy Scale-Observer Report (Richmond, et al., 2003). A 5-point Likert-type scale (1 = never to 5 = very often) was used in the study. The scale did not achieve good reliability and therefore was not included in further analysis.

Job satisfaction was measured by using the 8-item supervision and communication facets of the Job Satisfaction Survey (Spector, 1985). A 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree) was used in the study. Cronbach's alpha for the current study was .75 ($M = 3.46$, $SD = .74$). Because the scale was reliable, responses to all items were combined to form one score for the job satisfaction variable.

Communication competence was measured by the 35-item Communication Competence Scale (Wiemann (1977). A 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree) was used in the study. Cronbach's alpha for the current study was .98 ($M = 3.65$, $SD = .83$). Because the scale was reliable, responses to all items were combined to form one score for the communication competence variable.

Liking was measured by the 13-item Rubin's Liking Scale (Rubin, 1970). A 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree) was used in this study. Cronbach's alpha for the current study was .96 ($M = 3.48$, $SD = .93$). Because the scale was reliable, responses to all items were combined to form one score for the liking variable.

Credibility was measured by the 43-item scale for the measurement of ethos (McCroskey, 1966). A 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree) was used in the study. Cronbach's alpha for the current study was .97 ($M = 2.09$, $SD = .76$). Because the scale was reliable, responses to all items were combined to form one score for the credibility variable.

V. Results

RQ1 focused on the differences in nonverbal immediacy caused by the biological sex of the supervisor-subordinate relationship. In the current study, among participants who completed the entire survey, 56 participants reported being a member of the same biological sex as their supervisor (matched gender pair), while 41 participants reported being a member of a different biological sex than their supervisor (unmatched gender pair). A t-test was used to determine that there was no significant difference in the perceptions of nonverbal immediacy among the matched gender pairs and unmatched gender pairs.

H1 posited that supervisors who displayed nonverbal immediacy would be perceived as more competent communicators by their subordinates. A t-test was used to test this hypothesis. The p value was 0.00 and the Pearson correlation was .616. The present study showed that nonverbal immediacy and communication competence had a significant positive relationship. The data supports the suggestion that as nonverbal immediacy increases, perceived communication competence also increase.

RQ2 focused on the relationship between a subordinate's perception of his or her supervisor's credibility and the subordinate's job satisfaction. In the current study, the Pearson correlation was $-.703$ and the p value was 0.00. An inverse relationship was found between a subordinate's job satisfaction and his or her perception of their supervisor's credibility, therefore as the perceived credibility of the supervisor increases, the job satisfaction of the subordinate decreases.

A t-test was used to test RQ3, which concerned the relationship between the subordinate's perception of his or her supervisor's liking and the subordinate's reported job satisfaction. The results showed a positive correlation between the variables of liking and job satisfaction. The p value of the data was 0.00 and the Pearson correlation was .811.

RQ4 concerned the difference in reciprocation of nonverbal immediacy based on the biological sexes of the superior-subordinate relationship. The scale used to test reciprocation of nonverbal immediacy was not found to be reliable, and therefore could not be tested.

RQ5 focused on the relationship between subordinates' reciprocation of nonverbal immediacy and the reported job satisfaction of the subordinates. The scale used to test reciprocation of nonverbal immediacy was not found to be reliable, therefore it could not be tested.

VI. Discussion

The purpose of the current study was to better understand the relationships between nonverbal immediacy and biological sex, credibility, liking, job satisfaction and communication competence. These relationships have implications for professional organizations that seek to understand how they can encourage supervisors to interact with subordinates more effectively. While current research is relatively limited, this study provides four significant findings that can be used to better understand the supervisor-subordinate relationship in the workplace.

The first significant finding in this study was that subordinates recognize no significant difference in the nonverbal immediacy of their supervisors based on the biological sexes of the supervisor-subordinate relationship. Therefore, male and female supervisors have equal chances of communicating effectively with their subordinates. This finding supports current research by Teven (2007) that male and female supervisors are both capable of being quality leaders and the biological sexes of employees have no connection to who will be successful and who will be unsuccessful. This outcome bears important implications for organizations that may still consider biological sex an important factor in the instance of selecting an individual for a supervisory position. Organizations should not select or disqualify an individual from being a supervisor based on their biological sex.

The second major finding is that there is a significant positive correlation between nonverbal immediacy and communication competence. The findings of this study suggest that subordinates will perceive supervisors as more competent communicators when supervisors increase the quantity of nonverbally immediate behaviors in their communications. This result was anticipated to occur because communication competence includes the combining of gestures, linguistics and speech to accomplish a goal (Madlock, 2006b). The current research supports the findings of Chamberlin (2000), which showed that supervisors in an academic environment were considered more competent communicators when they decreased nonimmediate behaviors. This is also significant because it shows that at least parts of the research done on nonverbal immediacy in an academic setting may also be applicable to a professional business setting. These specific findings suggest that organizations should encourage supervisors to engage in more nonverbally immediate behaviors in order to be perceived as more competent by their subordinates. This can increase the effectiveness of communications and persuasive efforts of supervisors.

The third finding of the current research suggests there is an inverse relationship between credibility and job satisfaction, where credibility increases as job satisfaction decreases. There has been limited research on the relationship of credibility and job satisfaction, especially in the context of nonverbal immediacy. Despite limited research, the findings of this study were unexpected. Current research supports the notion that employees will perform at a higher level for supervisors they like and perceive as credible (Teven, 2010). Research also supports the idea that employees will perform at a high level when they are satisfied with their job and a lower level when they are dissatisfied with their job (Gruneburg, 1971). Since employees perform at a high level for supervisors that are credible and well-liked, and employees typically only perform

at a high level when they are satisfied with their jobs, one could expect that a credible and well-liked supervisor would lead to job satisfaction.

One possible explanation for the inverse relationship between credibility and job satisfaction could be the involvement of nonverbal behavior or certain acts of nonverbal immediacy. Current research suggests that nonverbal behaviors that demonstrate dominance and superiority are correlated with a decrease in satisfaction (Teven, 2010). Therefore, it is possible that a supervisor who aims to demonstrate credibility through nonverbal behavior is unknowingly perceived as demonstrating dominance or superiority by their subordinates, resulting in decreased job satisfaction. Future research will be required to examine the inverse relationship further.

The fourth finding in the current study is a positive correlation between liking and job satisfaction, whereas liking increases, job satisfaction also increases. The current study supports research that shows nonverbal immediacy and liking are strongly correlated with successful communication, and successful communication positively influences overall job satisfaction (Hinkle, 2001; Madlock, 2006b). The findings of this study suggest organizations should not overlook the relationships between supervisors and subordinates, but take steps to ensure the relationships are positive and liking is present. This will increase the opportunities to reap the benefits of liking and job satisfaction, which include decreased opportunities for interpersonal conflict, reduced quantity of absent days an employee takes, reduced stress and increased commitment to an organization (McCroskey, et al., 1986; Winska, 2010).

VII. Recommendations for Application

Based on the findings of this research, several recommendations can be made to improve interpersonal relationships in the workplace. These recommendations are applicable to upper-level management who coordinate training programs for managers and are involved in hiring and promotion decisions as well as individual managers of all levels.

First, biological sex is not an important factor in determining the potential success of a manager. This study, as well as those before it, have demonstrated that women and men have an equal likelihood of becoming a successful supervisor (Teven 2007; Powell & Graves, 2006). Management should stress to their managers that biological sex is not a factor used in selecting an individual for a supervisory position. All employees that are in consideration for a supervisory role should be told this during interview stages. In addition to this, it would also be beneficial to assure them that their sex has no bearing on their potential for success. Each female and male supervisor has the potential to be great at managing their employees. Supervisors should be reminded of this potential to keep them from feeling discouraged based on their sex.

The implications of this information are applicable to a very broad audience: anyone who may become a manager in their lifetime. Therefore, it is recommended that students, especially those in business and management courses, also receive this information. This may be through professors or mentors in management trainee programs.

Second, based on the finding that nonverbal immediacy and communication competence have a positive relationship, organizations should introduce a way to teach managers to actively include nonverbally immediate behaviors in their interactions with subordinates. Every organization strives to have supervisors who are competent communicators. Multiple studies, including this one, have shown that an increase in nonverbal immediacy is positively correlated to an increased perception of communication competence.

It is recommended that management have a small workshop or webinar to demonstrate the concept of nonverbal immediacy to supervisors in their organization. Supervisors must be able to see the behaviors that are deemed nonverbally immediate and may be asked to demonstrate those behaviors in interactions in pairs so that they can get a feel for them. This may also help the behavior stick when they engage in real-life interactions with subordinates. Management may also opt to occasionally remind supervisors of these benefits through periodic emails or follow-up sessions with those supervisors. This will have a positive impact on the interpersonal relationships between supervisors and subordinates.

Third, it is recommended that managers are reminded to not demonstrate dominance to their subordinates as it may result in a decreased amount of job satisfaction. Since job satisfaction decreases as credibility increases, supervisors must make sure they walk the fine line of being perceived as honest, open and credible instead of dominant and superior. Subordinates should feel that their opinions are of value and they can approach their manager with questions and suggestions, which would not be possible with an especially dominant manager. This can also be incorporated into a workshop about nonverbal immediacy to ensure that nonverbal behavior is appropriate and will not have adverse effects on the interpersonal relationships among superiors and subordinates.

Again, business and management students would also benefit from this information. Since these individuals are still learning and training in potential management roles, they should be given the best information on how to effectively communicate with their colleagues. By teaching them effective communication at the onset of their careers, managers will become more competent, well-liked supervisors who do not demonstrate bad habits.

Finally, those managers who have displayed dominant or superior nonverbal behaviors and have experienced decreased job satisfaction among their subordinates as a result, may be able to benefit from the fourth finding. Since job satisfaction increases as liking increases, these managers may seek methods of increasing liking to salvage their employees' happiness. This information may also be used proactively to keep subordinates from initially becoming dissatisfied. If managers are able to be continuously perceived as well-liked by their subordinates, those subordinates will likely be more satisfied with their own jobs.

VIII. Limitations and Future Research

There are several limitations in the current study, the most significant of which is the imbalance of male and female respondents to the survey. While each biological sex was represented more equally in the gender of the supervisor, there were a larger number

of female respondents than male respondents. Many previous research studies on the topic of nonverbal immediacy have also experienced this limitation. In the future, a study with a more equal number of male and female participants will be necessary.

Another limitation of this study was the relatively small sample size. A larger sample size could be achieved by having a higher number of participants complete the entirety of the survey. Respondents were likely dissuaded by the length of the survey used in this study caused by the use of six scales to test the six different variables. Future research may wish to focus on a fewer number of variables in order to achieve a higher completion rate among participants.

A third limitation to the current study is the lack of a proven, reliable scale to test the reciprocation of nonverbal immediacy among participants. Since the variable of reciprocity has not been widely researched in communication studies dealing with nonverbal immediacy, a separate scale has not yet been developed. Previous studies have used a variation of the Nonverbal Immediacy Scale-Observer Report, but the current data found that scale to be unreliable. Future research will need to develop a scale to measure reciprocity in order to discover the relationship it has, if any, with nonverbal immediacy.

The current study also provides evidence that the relationship between nonverbal immediacy, credibility and job satisfaction warrants further research. In order to better understand the inverse relationship between credibility and job satisfaction, future studies are necessary to complete a more in-depth examination of these variables. These studies may examine the nonverbal methods that supervisors use to convey credibility to their subordinates and the role liking plays in the relationship.

Overall, this study expanded on the current research by confirming the findings of previous studies, such as those related to biological sex and the relationship between nonverbal immediacy and communication competence. In addition to this, the findings of this study contributed new results by demonstrating an inverse relationship between credibility and job satisfaction. The present study and future experiments will help researchers and organizational leaders better understand the subordinate-supervisor relationship in the professional workplace.

References

- Aguinis, H., & Henle, C. A. (2001). Effects of nonverbal behavior on perceptions of a female employee's power bases. *The Journal of Social Psychology*, 141, 537-549.
- Andersen, J. F., Andersen, P. A., & Jensen, A. D. (1979). The measurement of nonverbal immediacy. *Journal of Applied Communications Research*, 7, 153-180.
- Andersen, P. A. (2006). The evolution of biological sex differences in communication. In K. Dindia & D. J. Canary (Eds.), *Sex differences and similarities in communication*. (2nd ed., pp. 117-135). Mahwah, NJ: Lawrence Erlbaum. Retrieved from <http://books.google.com/books?id=iNmiVjn9qOgC&lpq>

=PP1&pg=PP1#v=onepage&q&f=false

- Aries, E. (2006). Sex differences in interaction: a reexamination. In K. Dindia & D. J. Canary (Eds.), *Sex differences and similarities in communication*. (2nd ed., pp. 21-36). Mahwah, NJ: Lawrence Erlbaum.
- Baird, J. E., & Bradley, P. H. (1979). Styles of management and communication: A comparative study of men and women. *Communication Monographs*, 46, 101-111.
- Burgoon, J. K., Buller, D. B., & Woodall, W. G. (1996). *Nonverbal communication: The unspoken dialogue*. New York: McGraw-Hill.
- Chamberlin, C. R. (2000). Nonverbal behaviors and initial impressions of trustworthiness in teacher-supervisor relationships. *Communication Education*, 49, 352-364.
- Eagly, A. H., & Johnson, B. T. (1990). Biological sex and leadership style: A meta-analysis. *Psychological Bulletin*, 108, 233-256.
- Goodboy, A. K., & McCroskey, J. C. (2008). Toward a theoretical model of the role of organizational orientations and Machiavellianism on nonverbal immediacy behavior and job satisfaction. *Human Communication*, 11, 293-308.
- Gruneberg, M. M. (1979). *Understanding job satisfaction*. New York: John Wiley & Sons.
- Hall, J. A., & Friedman, G. B. (1999). Status, biological sex, and nonverbal behavior: A study of structured interactions between employees of a company. *Personality and Social Psychology Bulletin*, 25, 1082-1091.
- Hinkle, L. L. (2001). Perceptions of supervisor nonverbal immediacy, vocalics, and subordinate liking. *Communication Research Reports*, 18, 128-136.
- Infante, D. A., Rancer, A. S. & Womack, D. F. (2003). *Building communication theory*, (4th ed.). Prospect Heights, IL: Waveland Press.
- Kay, B., & Christophel, D. M. (1995). The relationships among manager communication openness, nonverbal immediacy, and subordinate motivation. *Communication Research Reports*, 12, 200-205.
- Koermer, C., Goldstein, M., & Fortson, D. (1993). How supervisors communicatively convey immediacy to subordinates: An exploratory qualitative investigation. *Communication Quarterly*, 41, 269-281.
- Larson, C. E., Backlund, P. M., Redmond, M. K., & Barbour, A. (1978, November). *Assessing communicative competence*. Paper presented at the Speech Communication Association Convention, Minneapolis, MN.
- Locke, E. A. (1976). The nature and causes of job satisfaction. in M. D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology*. (1297-1349). Rand McNally: Chicago.
- Madlock, P. E. (2006a). Do differences in displays of nonverbal immediacy and communicator competence between male and female supervisors effect subordinate's job satisfaction. *Ohio Communication Journal*, 44, 61-77.
- Madlock, P. E. (2006b). *Supervisors' communicative behaviors as predictors of their subordinates' communication satisfaction, job satisfaction, and willingness to collaborate* (Master's thesis). Retrieved from https://etd.ohiolink.edu/ap/10?0::NO:10:P10_ACCESSION_NUM:akron1141827468
- Madlock, P. E. (2008). Employee satisfaction: An examination of supervisors' communication competence. *Human Communication*, 11, 87-100.
- Manz, C. C., & Sims, H. P. (1981). Vicarious learning: The influence of modeling on organizational behavior. *Academy of Management Review*, 6, 105-113.
- McCroskey, J. C. (1966). Scales for the measurement of ethos. *Speech Monographs*, 33(1), 65-72.
- Mehrabian, A. (1971). *Silent messages*. Oxford: Wadsworth Publishing Company.
- Merten, J. (1997). Facial-affective behavior, mutual gaze, and emotional experience in dyadic interactions. *Journal of Nonverbal Behavior*, 21, 179-201.
- Miles, E. W., Patrick, S. L., & King, W. C. (1996). Job level as a systematic variable in predicting the relationship between supervisory communication and job satisfaction. *Journal of Occupational and Organizational Psychology*, 69, 277-292.
- Morand, D. A. (2001). The emotional intelligence of managers: Assessing the construct validity of nonverbal measure of "people skills." *Journal of Business and Psychology*, 16, 21-33.
- Myers, S., & Ferry, M. F. (2001) Interpersonal communication motives and nonverbal immediacy behaviors. *Communication Research Reports*, 18, 182-191.
- Pincus, J. D. (1986). Communication satisfaction, job satisfaction and job performance. *Human Communication Research*, 12, 395-419.
- Powell, G. N., & Graves, L. M. (2006). Gender and leadership Perceptions and realities. In K. Dindia & D. J. Canary (Eds.), *Sex differences and similarities in communication*. (2nd ed., pp. 117-135). Mahwah, NJ: Lawrence Erlbaum. Retrieved from <http://books.google.com/books?id=iNmiVjn9qOgC&lpg=PP1&pg=PP1#v=onepage&q&f=false>
- Richmond, V. P. & McCroskey, J. C. (2000b). *Nonverbal behavior in interpersonal relations*, (4th ed.). Needham Heights, MA:

Allyn & Bacon.

- Richmond, V. P., & McCroskey, J. C. (2000a). The impact of supervisor and subordinate immediacy on relational and organizational outcomes. *Communication Monographs*, 67, 85-95.
- Richmond, V. P., McCroskey, J. C., & Johnson, A. E. (2003). Development of the Nonverbal Immediacy Scale (NIS): Measures of self- and other-perceived nonverbal immediacy. *Communication Quarterly*, 51, 502-515.
- Rubin, Z. (1970). Measurement of romantic love. *Journal of Personality and Social Psychology*, 16, 265-273.
- Schulman, D., & Bickmore, T. (2012). Changes in verbal and nonverbal conversational behavior in long-term interaction. *Proceedings of the 14th ACM international conference on Multimodal interaction*, 11-18.
- Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. *American Journal of Community Psychology*, 13, 693-713.
- Spitzberg, B. H. (1983). Communication competence as knowledge, skill, and impression. *Communication Education*, 32, 323-329.
- Taylor, F. W. (1970). What is scientific management. In H. F. Merrill (Ed.), *Classics in Management* (67-71). New York: American Management Association.
- Teven, J. J. (2007) . Effects of supervisor social influence, nonverbal immediacy, and biological sex on subordinates' perceptions of job satisfaction, liking, and supervisor credibility. *Communication Quarterly*, 55, 155-177.
- Teven, J. J. (2010) . The effects of supervisor nonverbal immediacy and power use on employees' ratings of credibility and affect for the supervisor. *Human Communication*, 13, 69-85.
- Tjosvold, D. (1984). Effects of leader warmth and directiveness on subordinate performance on a subsequent task. *Journal of Applied Psychology*, 69, 422-427.
- Wiemann; J. M. (1977). Explication and test of a model of communicative competence. *Human Communication Research*, 3, 195-213.
- Winska, J. (2010). Influence of superior-subordinate communication on employee satisfaction. *Journal of Positive Management*, 1, 110-124.