Exploring the Differences that Communication Medium has on Perception of Leadership Style: Does Communication Medium Affect the Leadership Rating of the Leader?

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Abstract
The primary focus of this quasi-experiment was to analyze differences in leadership ratings for leaders that communicate through different mediums (traditional, email, and social media). Participants were a heterogeneous mix of 352 individuals from the researcher’s social network from various backgrounds, education levels, and familiarity with technology. The primary instrument used was a modified version GLOBE Leader Attributes and Behavior Questionnaire (House, Hanges, Ruiz-Quintanilla, Dorfman, Javidan, & Dickson, 2004) – officially titled GLOBE Project (Global Leadership and Organizational Effectiveness Project) Form Alpha, 2006 – and GLOBE based on Hofstede’s work on cultural dimensions of leadership (1980). This study will serve to contribute to the body of knowledge in leader communication and the effects of medium on the perception of leadership traits.

Key words: Leadership, communication medium, gender, social media, performance, modesty

INTRODUCTION
This research sought to determine if the medium by which a leader communicates, makes a difference in follower’s rating of the leader’s leadership style using the GLOBE subscale of Modest. This study sought to determine if there is a difference that the medium by which that leader communicates, makes on a difference on Modest leadership rating and will examine three modes of communication (face-to-face, Intranet, and new media such as Facebook, Twitter, and other social media).

GLOBE
GLOBE is an acronym for Global Leadership and Organizational Behavior Effectiveness Research Program. The GLOBE project occurred in three parts: Phase I focused on the development of the research instrument. Phase II focused on the assessment of the nine core attributes of societal and organizational cultures. Phase III focused on the impact and effectiveness of specific leadership styles of CEOs on subordinates’ attitudes and performance – this phase identified the impact of over 3-5 years of leadership behavior of CEOs on organizational effectiveness. Phase III also included testing of the moderating effects of culture on relationships between organizational practices and organizational effectiveness (House & Javidan, 2004).

PURPOSE OF THE STUDY
While various studies exist that demonstrate leadership and follower satisfaction, few studies have looked at the medium by which leaders communicate and the effect it has on the follower’s rating of the leader, specifically the differences between those ratings when the leader communicates face to face, via email or through new media such as Facebook, Twitter or Instagram. A meta-analysis of over 113 independent studies, by Gang, In-Sue, Courtright, Colbert and Oh (2011), found that Transformational leadership is positively related to individual-level follower performance across criterion type such as group, team, or team-level organizational performance. Almost assuredly, these studies were looking at traditional behaviors, and not email or electronic communication or social media.

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Additionally, in 2014, Do and Minbashian conducted a meta-analysis examining relationship between ambition, dominance, boldness, assertiveness, referred to as agency (Depue, 2005) and leadership outcomes. The meta-analysis showed that agency was positively linked to transformational leadership. In that same meta-analysis, agency was positively linked to leadership effectiveness. Again, almost assuredly, these studies were examining traditional modes of communication and not leaders who communicated with their followers through email or social media methods.

**PREVIOUS STUDIES**

Several studies have addressed the relationship between leadership communication and organizational commitment or general effects of communication and job satisfaction of employees, but fewer studies have examined the relationship between medium and leadership rating. I will explore a scenario-based question that asks participants to look at the communication style and medium by which the leader communicates and rank the leader on various scales of the GLOBE Leadership subscales styles of Charisma, Performance, Modest, and Humane leadership.

In 2014 Avolio et al. looked at the effects that AIT (advanced information technologies) such as Internet, email, video conferencing, virtual teams, and groupware have on leadership dynamics. The researchers identified gaps in AIT including changing locus from individual to a shared-collective. Ethical considerations that should be addressed include a definition of dangerous technologies and the lack of leadership literature focusing on how different styles of orientations of leadership interact with the appropriation of AIT.

This research attempts to identify how followers rate their leaders as a result of the leader’s use of various communication mediums. It is hypothesized that a leader who is more concerned with people will communicate in one manner, while one concerned more with production or task will communicate in another manner. However, does that leadership style true across different media?

In 2009, De Vries, Bakker-Pieper and Oostenveld used the Dutch translation of the Supervisory Behavior Description Questionnaire (SBDQ) to measure the task and oriented human-oriented leadership styles and the Dutch version of Multifactor Leadership Questionnaire (MLQ) to measure charismatic leadership style. These researchers studied the relationship between a leader’s communications styles and charismatic leadership, humane-oriented leadership (a leader who exhibits consideration), task-oriented leaders (a leader who initiates structure) and leader outcomes. Looking at 289 employees in a governmental organization they found that charismatic and humane oriented leadership are mainly communicative leadership styles and that task-oriented leadership styles are less communicative. Those communicative styles (charismatic and humane) were further related to knowledge-sharing, perceived leader performance, satisfaction with the leader and subordinate team commitment.

**LEADER COMMUNICATION**

Fusion leaders are those leaders break out of the common mold and communicate to employees in ways that help them and the organization “break out of the constraints of traditional hierarchies” (p. 13). Daft and Lengel (1998) further contend that face-to-face communication is the richest medium for communication because it provides the opportunity for experience, relationship building, eye contact and body language (p. 148) and that managers that “hide behind memos and electronic mail were less effective” (p. 148).

According to Northouse (2001) “Communication is the vehicle through which leaders and subordinates create, nurture, and sustain useful exchanges. Effective leadership occurs when the communication of leaders and subordinates is characterized by mutual trust, respect, and commitment” (p. 155).

**CONCEPTUAL DEFINITIONS**

GLOBE definition of leadership refers to the ability of a leader to influence, motivate, and enable others to contribute toward the effectiveness and success of an organization of which they are members (House, 2004, p. 15). Further, individuals who exhibit inspirational, visionary, empathic, and confident leadership behaviors are perceived to be effective leaders (Boerner, Eisenbeiss, & Griesser, 2007).
LEADERSHIP CONSTRUCT DEFINITIONS
The four first-order dimensions of GLOBE leadership that were used in this research are:
Charismatic II: Inspirational leader attributes include Enthusiastic, Positive, Morale Booster, and Motive Arouser. Such a leader exhibits leadership attributes that reflect that leader’s ability to “inspire, motivate and expect high performance outcomes from others on the basis of firmly held core values” (p. 675). Humane Orientation attributes include Generous and Compassionate. This leadership dimension reflects a leader who exhibits supportive and considerate leadership (p. 675). Modesty attributes include Self-Effacing, and Patient (House, et. al, 2004). This dimension reflects a leader who is unassuming and does not take undue credit. Performance Orientated consists of Improvement-Oriented, Excellence-Oriented and Performance-Oriented attributes (House, et. al, 2004). The dimension reflects a leader who strives continuously for improved performance.

EXAMINATION OF LEADERSHIP ATTRIBUTES
The following section examines the four subsets of leadership attributes associate with this study and will discuss those leadership values researched in GLOBE.

CHARISMATIC II: INSPIRATIONAL
Charismatic or Values Based Leadership is one of the six global leadership behaviors broadly defined as a leader who has the ability to inspire, motivate, and expect high performance and outcomes, all related to core beliefs and values (House, et. al, 2004, p. 14). This dimension includes six leadership sub scales labeled Charismatic I: Visionary, Charismatic II: Inspirational, Charismatic III: Self-sacrifice, Integrity, Decisive, Performance Oriented.

HUMANE ORIENTATION
Humane Orientation is one of the six global leadership behaviors, and describes a leader who is supportive and considerate and who exhibits generosity and compassion. This leadership behavior has two sub scales including Modesty and Humane Orientation describing a leader who is modest, self-effacing (does not draw attention to one’s self or who does not take undue credit), is patient, generous and compassionate.

PERFORMANCE ORIENTED
Performance Oriented dimension describes how a community of individuals promotes and encourages innovations and high standards and performance improvements (GLOBE, 2004, p. 239). House et. al. (2004) further describes these societies that have specific attributes—these societies typically value learning, education, setting high performance targets and taking initiative. and they prefer direct and explicit communication. At the leadership level, performance orientation relates to the extent the leaders set ambitious goals, communicate high expectations to their staff, build self-confidence. This leader helps his followers achieve and do more by setting high standards and helping his subordinates achieve. (House et. al, 2004, p. 277).
The Performance Oriented leader is seen as a key indicator in employee performance, both by leaders who initiate structure or who are considerate of employees (relationship, consideration, employee orientation/support).

MODESTY
Modesty is a first-order GLOBE Project leadership dimensions is associated with the Humane Leadership scale reflecting a leader who is patient, self-effacing (makes one actions inconspicuous, is not boastful) and does not take undue credit (House et al, 2004). Modesty manifests in a leader who is patient (Green, 2012).
METHODOLOGY
In order to answer the question in research Area I, two sets of three different vignettes were created and a five-way analysis of co-variance (ANCOVA) was conducted. In order to address the questions in research area I and a post-hoc analysis was used to determine differences.
Each vignette identifies a situation in which a male or female leader at a mythical car dealership engages his or her followers throughout a typical work day via various means. The first vignette identifies a leader who communicates with employees through the company’s bulletin board (face-to-face). The second vignette identifies a leader who communicates with employees throughout the day using email. The third vignette identifies a leader who communicates with employees through “new media” defined as social media activities such as Facebook, Twitter and Instagram. Various behaviors in each vignette represent the GLOBE Project dimensions of Charismatic II; Inspirational leadership, Humane Orientation leadership, Modesty leadership and Performance Oriented leadership. The first set has a male leader and the second set has a female leader. The leader names, Anthony and Michelle, were chosen to reflect neutrality and commonality across various ethnic groups.

INSTRUMENT
GLOBE Culture and Leadership Scales researchers developed 382 items they believed reflected the skills, traits and abilities of effective leadership. These scales include a number of leader attributes and behavior items, where respondents rated the items on a seven-point Likert-type scale (House et al., 2004) from greatly inhibits to contribute greatly. GLOBE was administered to 17,370 middle managers in 62 societies. The number of middle-managers ranged from 17 to 1,790 per country and there was a mean of 251 people per country. Additionally, 62 societies across 951 organizations were represented. Food processing, a traditional labor industry; financial organizations, a traditional service industry, and telecommunications, a modern, emerging industry were represented (House, et. al, 2004; Green, 2014). The factor analyses on leadership data resulted in 16 first-order dimensions that loaded on four second-order dimensions (House, et. al, 2004; Green, 2014).
After collection of this data, factor analyses identified five additional first-order leadership scales that raised first-order scales from 16 to 21; second-order scales increased from four to six (House, et. al, 2004; Green, 2014).

INDEPENDENT VARIABLES
The primary independent variables of interest (IVs) are medium of communication, leader gender, participant’s education level, participant’s years of leadership, participants' comfort with using new media.
Medium is defined as the method of communication the vignette leader through and is assigned in the vignette as either traditional (face to face), email, or new media (social media that includes Facebook, Twitter, Instagram, and other social media)
Leader gender is assigned in the vignette as either male or female
Participant’s educational level is self-reported and identified from a survey question asking participants about their highest level of school they have completed. Responses may include: no schooling completed, some high school (no diploma), high school (diploma), associate degree, bachelor degree, master’s degree, and doctorate. This is a self-reported variable.
Participant’s years of leadership is self-reported and defined as the total number of years a participant has performed in a leadership capacity in their organization or during their career.
New media is defined as communication mediums and activities such as texting, using social media networks including Facebook, Twitter or posting or consuming content on Instagram. More broadly, this is defined as electronic technologies that support interpersonal connections (Zappavinga, 2012).
Comfort with technology is defined as not having unpleasant feelings regarding using or communicating with others through new media such as texting or social networks including (but not limited to) Facebook, Twitter or Instagram or other social media platforms.
RESEARCH AREA I - RATING OF LEADERSHIP STYLE NULL HYPOTHESES

1. There is no difference in how participants rate the Charismatic/Inspirational leadership style of the leader using the GLOBE scale as a result of the medium used (traditional, email, new media), the leader's gender (male or female), participant's education level, participant's years of leadership, and the participant's comfort-level using new media.

2. There is no difference in how participants rate the Humane Orientation leadership style of the leader using the GLOBE scale as a result of the medium used (traditional, email, new media), the leader's gender (male or female), participant's education level, participant's years of leadership, and the participant's comfort-level using new media.

3. There is no difference in how participants rate the Modesty leadership style of the leader using the GLOBE scale controlling as a result of the medium used (traditional, email, new media), the leader's gender (male or female), participant's education level, participant's years of leadership, and the participant's comfort-level using new media.

4. There is no difference in how participants rate the Performance Oriented style of the leader using the GLOBE scale as a result of the medium used (traditional, email, new media), the leader's gender (male or female), participant's education level, participant's years of leadership, and the participant's comfort-level using new media.

RESULTS

The purpose of this dissertation was to determine if the medium by which a leader communicates, makes a difference in participant’s rating of the leader’s leadership style using the four subscales of the GLOBE Survey – also known as Global Leadership and Organizational Behavior Effectiveness Research Program. Using subscales of Charismatic II: Inspirational, Humane Orientation, Modesty, and Performance Oriented to measure leadership qualities, this study determined if there are differences that the medium by which that leader communicates, makes on a leadership rating when using one of three modes of communication: face-to-face, email, and new media such as Facebook, Twitter, and other social media. ANCOVA were conducted for each medium to determine statistically significant differences. The following section will provide the results for the descriptive statistics and the findings from the study.

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<th>F</th>
<th>Sig.</th>
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<td>2.18</td>
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\(^{a}\) R Squared = .174 (Adjusted R Squared = .094)
RESULTS INSPIRATIONAL/HUMANE

In order to test Null Hypothesis I, a five-way Analysis of Covariance (ANCOVA) was conducted to determine if there is a statistically significant difference between Inspirational/Humane Leadership Rating while controlling for Medium Used, Leader Gender, Participant’s Education Level, Participant’s Years of Leadership, and Participant’s Comfort Level Using New Media. Table 1 show the results of Test of Between-Subject Effects and shows the results of the five-way ANCOVA for Inspirational/Humane leadership dimension.

No main effects were significant. Comfort with New Media as a covariate was significant, F(1, 349) = 13.080, p = .00, and the three-way interaction between Leader’s Gender, Medium, and Education was also significant, F(8, 342) = 14.056, p = .002.

In order to better understand the relation between Inspirational/Humane Leadership Rating and Comfort with New Media, a Pearson Correlation was run as shown in Table 2.

The scatterplot shown in Figure 1, of Inspirational/Humane leadership rating and Comfort With New Media, shows a weak positive correlation (r = .16, p = .01) exists between Comfort with New Media and Leader’s Inspirational/Humane rating indicating that the more comfortable a participant was with New Media, the higher they rated the vignette leader on Inspirational/Humane dimension.

Table 2

<table>
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<th>Pearson Correlation</th>
<th>Comfort With New Media</th>
<th>Inspirational/Humane</th>
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</thead>
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<tr>
<td>Sig. (2-tailed)</td>
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<td>.16**</td>
</tr>
<tr>
<td>N</td>
<td>352</td>
<td>352</td>
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**. Correlation is significant at the 0.01 level (2-tailed).

Figure 1. Scatterplot of inspirational/humane and comfort with new media
RESEARCH QUESTION II – MODEST
In order to test Null Hypothesis II, a five-way ANCOVA was conducted to determine if there is a statistically significant difference between Modest Leadership Rating while controlling for Medium Used, Leader Gender, Participant’s Education Level, Participant’s Years of Leadership, and Participant’s Comfort Level Using New Media.
Table 3 shows medium (a main effect) as a covariate was significant, $F(2, 348) = 7.306, p = .001$ and comfort with new media as a covariate was significant, $F(1, 350) = 6.110, p = .014$.

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<td>.26</td>
<td>.62</td>
<td>.43</td>
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<td>.95</td>
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<tr>
<td>Medium * Education</td>
<td>2.70</td>
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<td>.81</td>
<td>.59</td>
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<td>8</td>
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<td>.68</td>
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<td>Error</td>
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$\textit{a.} \textit{R Squared} = .156 \textit{(Adjusted R Squared} = .074)$

NEW MEDIA AND MODEST LEADERSHIP RATING
In order to better understand the relation between Modesty dimension and Comfort with New Media, a Pearson Correlation was run. Table 14 shows the this correlation. A weak positive correlation exists between Comfort with New Media and Leader’s Modest rating ($r = .141, p = .008$) as shown in the scatterplot (Figure 2) indicating that the more comfortable a participant was with New Media (newer technologies including Facebook, Twitter, Instagram), the higher they rated the vignette leader on the Modesty dimension.
Table 4

Correlation Between Comfort With New Media and Modesty

<table>
<thead>
<tr>
<th>Comfort With New Media</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
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<tbody>
<tr>
<td>Comfort With New Media</td>
<td>1</td>
<td>.14**</td>
<td>352</td>
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</table>

**Correlation is significant at the 0.01 level (2-tailed).

Figure 2. Scatterplot of Modesty and Comfort With New Media

The results of the Scheffe post hoc test as shown in Figure 3 found that when the vignette leader used Traditional or Email communication, that leader was rated higher on Modest dimension, than if that same leader used New Media to communicate. Traditional and Email were not found to be different from each other, but were found to be different than New Media.
RESEARCH QUESTION III - PERFORMANCE ORIENTED

In order to test Null Hypothesis 3, a five-way ANCOVA was conducted to determine if there is a statistically significant difference between Performance-Oriented rating while controlling for Medium Used, Leader Gender, Participant’s Education Level, Participant’s Years of Leadership and Participant’s Comfort Level Using New Media.

Table 4 shows results of Test of Between-Subject Effects for Performance. Neither of the main effects of gender and medium were significant. Participant’s Years of Leadership as a covariate was significant $F(1, 349) = 7.069, p = .008$ and Comfort with New Media as a covariate was significant, $F(1, 349) = 11.959, p = .001$ on Performance rating of vignette leader. The two-way interaction of Leader Gender and Medium as a covariate was also significant, $F(2, 348) = 3.689, p = .026$. 

Figure 3. Scheffe post hoc test comparing means of mediums.
Table 5

<table>
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<th>Source</th>
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</table>

a. $R^2 = .146$ (Adjusted $R^2 = .063$)

Figure 4. Sample t-test of interaction of gender and medium on performance rating
An Independent Samples t-test was run using the Levene method. *Figure 4* shows the interaction of Gender and Medium on Performance rating. Female vignette leaders who communicated by Email were rated higher on Performance-Oriented dimension than those that used New Media or Traditional. Male vignette leaders that communicated by Traditional means, were rated higher on Performance Orientation than those that communicated by Email or New Media.

The scatterplot shown in *Figure 5* indicates that a weak negative correlation ($r = -.174, p < .01$) exists between Participant’s Years of Leadership Experience and Vignette Leader’s Performance rating signifying that the more leadership experience a participant had, the lower they rated the vignette leader on Performance-Oriented dimension.

*Figure 5. Scatterplot of Years of Leadership Experience and Performance*

The scatterplot shown in *Figure 6* indicates that a weak positive correlation ($r = .205, p < .001$) exists between Comfort With New Media and Vignette Leader’s Performance rating, signifying the more comfortable participants were with New Media, the higher they rated the vignette leader on the Performance-Oriented dimension.
DISCUSSION AND CONCLUSION

This study examined differences between medium and the effects on leader’s leadership style using four first-order dimensions from GLOBE Project to measure the dependent variable known as leadership rating for Charismatic II: Inspirational, Humane Orientation, Modesty, and Performance Oriented leadership dimensions. The independent variables included participant’s years of leadership, participant’s education level, and participant’s comfort with new media. This chapter presents the study findings for the differences medium of communication has on leadership rating. Implications, limitations of the findings and recommendations for future research will also be discussed.

NULL HYPOTHESIS I: REJECTED

The findings reject the null hypothesis that there is no difference in how participants rate the Charismatic II: Inspirational/Humane leadership style of the leader, using the GLOBE Scale, as a result of the medium used, the leader’s gender, participant’s education level, participant’s years of leadership, and the participant’s comfort-level using new media.

LEADER GENDER AND LEADERSHIP RATING

As a main effect, Leader Gender by itself was not a significant differentiating variable for Inspirational/Humane, Modest, or Performance leadership rating in this study. This result is counter to a meta-analysis conducted by Eagly (2003) that found female leaders were more Transformational than men. Additionally, significance was found for females being leaders rating higher on subscales of Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, and Contingent Reward.

COMFORT WITH NEW MEDIA AND LEADERSHIP RATING

Comfort with New Media as a covariate was significant. A weak positive correlation exists between Comfort With New Media and a Leader’s Inspirational/Human rating. The more comfortable
participants were with New Media, the higher they rated the vignette leader on Inspirational/Humane Dimension. This result coincides with the results from a 2011 study by Hwang which found that Twitter use by CEOs influenced their perception of Transformational leadership.

INTERACTIONS
A three-way interaction of Leader Gender, Medium and Education was significant and had a weak positive correlation on the Charismatic II: Inspirational/Humane-Oriented rating of the leader. Throughout the study, Education as an independent variable was not a significant factor on the vignette leader’s leadership rating.

NULL HYPOTHESIS II: REJECTED
The findings reject the null hypothesis that there is no difference in how participants rate the Modest leadership style of the leader, using GLOBE scales, as a result of the medium used, the leader’s gender, participant’s education level, participant’s years of leadership, and the participant’s comfort-level using new media. This study found that Medium does affect the Modest rating of the leader.

MEDIUM AND LEADERSHIP RATING
The results of the Scheffe post hoc test found that when the vignette leader used Traditional or Email communication, that leader was rated higher on Modesty dimension than if that same leader used New Media to communicate. The survey questions measuring Modesty dimension consisted of a leader who is not easily distressed, is not boastful and presents him or herself in a humble manner. This leader would also be expected to show patience.

The stereotype of New Media users is that of people who use social media to brag about themselves, take and post selfies (pictures taken of themselves, by themselves), people posting pictures and posting other information that could be considered vain and boastful. Email is still largely viewed and used as a business-oriented communications tool. Email is an older form of electronic communication, and by its very nature, is more corporate and less social in nature. In the business setting, email is used to facilitate information sharing in ways that social media is not.

Likewise, Face-to-face (traditional) interactions between people takes time to develop—trusting, interactive relationships need to be cultivated, a process that takes time—before people would feel comfortable exhibiting boastful, vain, and less-humble activities in the presence of others.

COMFORT WITH NEW MEDIA AND LEADERSHIP RATING
A weak positive correlation was found to exist between Comfort with New Media and vignette leader’s Modest rating, indicating that the more comfortable participants were with New Media, the higher they rated the vignette leader on the Modest dimension.

When the vignette leaders communicated through New Media including Facebook, Twitter, and Instagram, they rated leaders higher on the Modest leadership dimension. The association between this Comfort with New Media and Modest rating is significant and indicates New Media, a social activity and the Modesty leadership dimension, also a social concept, are related. A modest leader, using the GLOBE Project definition, is someone who is considered patient, unassuming, and who makes their actions inconspicuous. People that are comfortable with new media use may see similar traits of modesty and patience in leaders who communicate socially.

NULL HYPOTHESIS III: REJECTED
The findings reject the null hypothesis that there is no difference in how participants rate the Performance Oriented leadership style of the leader, using the GLOBE Scale, as a result of the medium used, the
leader’s gender, participant’s education level, participant’s years of leadership, and the participant’s comfort-level using new media. While neither main effects of Leader Gender or Medium by themselves were significant, participant’s years of leadership, comfort with new technology and the two-way interaction between Leader Gender and Medium were significant on the Performance-Oriented rating of the vignette leader.

MEDIUM AND PERFORMANCE ORIENTED LEADERSHIP RATING
After running a Samples t-test using the Leven method, researcher found that female vignette leaders communicating by Email were rated higher on Performance-Oriented dimension than female leaders communicating by New Media or Traditional means. The literature suggests that women are generally more communal than men (Eagly, 2008). Absent a specific noted role, and in the case of the researcher’s vignette, when women communicated via email—a lower channels on Communication Channel Richness scale (Lengel, 2008), and when participants observed non-verbal, non-visual cues, women are seen as more performance-oriented—though still not as agentic or dominant as men. (Eagly, 2008).

PARTICIPANT’S YEARS OF LEADERSHIP EXPERIENCE
A weak negative correlation was discovered between Participant’s Years of Leadership Experience and Vignette Leader’s Performance rating signifying that the more leadership experience a participant had, the lower they rated the vignette leader on the Performance-Oriented dimension. People with more years of leadership experience are more able to identify the concept of performance orientation; they have a higher expectation of performance.

MEDIUM AND LEADERSHIP RATING
The literature on Medium and Leadership was limited. In one study, communication medium and follower’s rating of the leader is positively related to transformational leadership style. Another study (Huang, 2010) found that social presence (or how medium affects how others’ presence are perceived) is positively associated with process satisfaction and outcome satisfaction and studies related to Web/tele-health associated Web use and tele-health with communication satisfaction from care providers. A study by Gilbert, Murphy and Avalos (2011) found that communication satisfaction between partners was higher in Second Life (a virtual environment) than when measured in real life. This research indicates that Medium is a factor in how leaders are viewed and that in certain situations, leaders communicating using social media or email would have higher leadership ratings.

PARTICIPANT YEARS OF LEADERSHIP
Participant’s Years of Leadership as a covariant on Performance Oriented rating of the leader was significant F(1,49) = 7.069, p = .008. The more years of leadership participant’s had, the lower they rated Performance Orientated dimension of vignette leader

PARTICIPANT’S EDUCATION LEVEL
Participant’s education level was not significant in the rating of the vignette leader across mediums.

PARTICIPANT COMFORT WITH NEW MEDIA
Comfort with New Media as a covariate for all three leadership dimensions was significant: Inspirational/Humane, F(1, 349) = 13.080, p = .00; Modest, F(1, 349) = 6.110, p = .014 and Performance-Orientation, F(1,349) = 11.959, p = .001.
A weak positive correlation (r = .16, p = .00) exists between Comfort with New Media and Leader’s Inspirational/Humane rating of the vignette leader. The more comfortable participants were with New Media, the higher they rated the vignette leader on Inspirational/Humane dimension. A weak positive correlation (r = .141, p = .014) exists for Comfort with New Media and the Modest rating of the vignette leader indicating the more comfortable the participant’s were with new media, the higher they rated the vignette leader on the Modest dimension. Similarly, there was a weak positive correlation (r = .205, p < .001) with Comfort with New Media as a covariate on Performance dimension, indicating that the more comfortable participants were with New Media, the higher they rated the vignette leader on Performance-Oriented dimension.

DISCUSSIONS AND IMPLICATIONS
In this study, the results indicate that male leaders are seen as more performance-oriented when they walk around and interact with staff members. As managers, male leaders may wish to be aware of the medium and the intended audience to have the best effect on performance. Male leaders may wish to be aware of how their physical presence and face to face communication may be perceived by others and effects it can have on improvement and excellence. These results may be useful in understanding differences in response to performance initiatives in staff that male leaders manage in-person versus those they manage remotely. Male leaders that manage face to face may see an increase in performance from staff versus those they manage remotely and through electronic means. In the future, astute decision makers may test or somehow evaluate managers’ management style to determine which leaders are better suited for in-person or remote management duties and responsibilities.

Similarly, female leaders in business settings may wish to think about the medium and audience to have the best effect on performance of their staff. Female leaders may wish to be aware of the medium and how they are perceived when communicating using different mediums in Communication Channel Richness, especially when using email versus face-to-face or new media. Female leaders may experience positive responses to performance initiatives when communicating by email with remote/off-site staff than with those they manage in-person. Female leaders may experience increased performance from remote staff, than those that they manage in-person.

REFERENCES

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