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## THE IMPACT OF EDUCATION, GENDER, AGE AND LEADERSHIP EXPERIENCE ON PREFERENCES IN LEADERSHIP

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*Meta-analytic studies have found that men and women are different in areas such as how they approach morality, forgiveness and leadership. Similarly, meta-analyses have found that increased education is related to increased self-esteem, job attitudes and social capital. In this study, 577 working adults from the state of Texas completed the Project Globe Leadership Questionnaire. The participants indicated to what degree 24 leadership behaviors contributed to or inhibited outstanding leadership. This study found that both gender and education were related to the intensity with which participants believed particular leadership characteristics contributed to and inhibited outstanding leadership. Women held stronger opinions than men about the benefits of five aspects of leadership generally considered to contribute to outstanding leadership: integrity, team-oriented, participative, humane-oriented and diplomatic. Women also held stronger opinions about the liabilities of four aspects generally considered to inhibit outstanding leadership: conflict inducer, self-protective, autocratic and malevolent. Formal education was related to stronger ratings of the importance of integrity, charisma, performance and team orientation. Formal education was also related to stronger ratings of the degree to which self-protective, face-saving, autocratic, self-centered and malevolent behaviors inhibit outstanding leadership.*

### INTRODUCTION

When conducting research in the field of leadership many options exist. Some researchers, for example, perform focus group interviews or case studies. The information garnered in these types of studies is very rich. However, typically these types of studies are conducted with small samples, which limit the ability to generalize their results. Additionally, even with methods of triangulation, these types of studies tend to lack something equivalent to an alpha level for establishing significance. They are primarily very rich, but descriptive information.

Many quantitative leadership studies tend to use the survey method. Generally, these types of studies fall into one of three designs. In *Leader-Only* types of studies, researchers ask leaders to complete self-assessments of how they lead. Demographic comparisons are often made, such as self-assessed leadership styles of women versus men. Leaders might also take a second instrument such as a personality assessment to assess the relationship between the constructs measured. For example, a researcher might explore relationships between leaders' personality scores and self-assessed leadership scores.

Leader-Only types of studies suffer from the problem of leader self-perception. Any working adult has encountered at least one leader who was a megalomaniac. The followers of that particular leader believed she/he was a very poor leader. Yet, the leader's inflated sense of self would result in that leader completing a self-assessment that would indicate she/he was an extraordinary leader. To some degree, the law of large numbers eventually accounts for

some of this self-assessment bias, but it will still be present in leader-only types of studies.

In an *Other-Than-Leader* type of study, some combination of stakeholders assesses how the leader leads. Often these raters are the leader's followers, but they can also be peers, the leader's own boss or some other stakeholder group. This type of assessment provides a more realistic assessment of how the leader actually leads than does a leader-only study. One challenge to an other-than-leader study, however, is co-variation. While not absolute, in a large percentage of these types of studies follower independent variables such as age, experience and education often co-vary with the leader.

For example, a 60 year old leader who holds a masters degree and has been leading for 20 years "typically" is at an elevated level of an organization, compared to a leader who is 22, holds a bachelors degree and who is in her/his first year as a leader. More times than not, the followers who work directly for the 20 year veteran are also likely to have many years of leadership experience, advanced education and so forth. Conversely, the followers of the younger, new leader, more than likely hold educational credentials of college or less and have more than likely had limited leadership experiences themselves. These co-variations between leader and follower demographics can be, to some degree, controlled for statistically, but a large number of other-than-leader types of studies do not report the results of the many spurious follower variables that might influence ratings of the leader.

A third type of study is often called *Implicit Leadership*. In this type of study, no "actual" leader is rated. Rather, the concept of desired or outstanding leadership is measured. In

these types of studies, participants complete a survey concerning their prototypes of what constitutes outstanding leadership. There may be a second instrument, such as personality, as well, in order to look at associations between the second construct and participants' implicit views or what constitutes outstanding leadership, or the leadership scores obtained may be analyzed for participant demographics.

To date, the largest study of implicit leadership was the Globe Research Project (House, 2004). This study surveyed over 17,000 participants worldwide about what contributed to the participants' concepts of outstanding leadership. The 17,000 participants were from 62 countries/societies.

The primary focus of the Globe study was to analyze how cultural preferences predicted leadership preferences. While the study added significantly to the body of literature related to implicit leadership, the study did not report how participants' gender and education moderated their views of leadership. The present study builds upon the findings of the Globe study by analyzing how participant variables of education, gender, age and leadership experience impact implicit leadership views.

### PURPOSE OF THE STUDY

Although Project Globe was a landmark study, a variety of other variables besides culture undoubtedly contribute to the implicit prototypes of outstanding leadership that individuals hold. This study used the *Project Globe Research Survey* to assess 24 measures of leadership. Four demographic variables were then analyzed: participants' gender, years of formal education, age and years of management/leadership experience.

### PREVIOUS STUDIES

#### The Broad Impact of Education

Adults develop and grow through a wide range of activities. Most of these influences are informal and difficult to codify empirically. Adults are influenced through things such as life experiences, faith activities, self-help books and the media they watch. Because these influences are so unique to each individual, broad measures such as age, work experience or various socio-economic indicators are often used in research in order to capture the effects of some of these influences.

One variable that is regularly used is formal education. One advantage of using formal education as a predictor variable is that accredited education within a country tends to be somewhat similar from person to person. Certainly, the experiences vary by university and major, but generally, a bachelor's degree represents a common duration and level of rigor across individuals. The same holds true for a masters, doctorate and so forth.

Education as a predictor variable has been studied to the point that many meta-analyses exist. For example, a

sampling of recent meta-analytic studies shows that education predicts job attitudes, entrepreneurial success, self-esteem, social capital, and receiving mentorship. Ng and Feldman (2010), in a meta-analysis of 800 articles, found that education level was a positive predictor of job attitudes. Huang, van den Brink and Groot (2009) synthesized 154 evaluations on social trust and 286 evaluations on social participation and found that education was positively correlated to individual social capital. Twenge and Campbell (2002), in a meta-analysis of 446 samples representing 312,940 participants, found a positive relationship between education level and self-esteem. Hezlet (2003), in a study of 65 independent samples representing 17,087 participants, found that education level was positively associated with receiving mentorship. In a meta-analysis of 70 independent samples, representing 24,733 participants, Reeves, Culbreth and Greene (1997), found a relationship between entrepreneurial human capital investments, coded as education and/or experience and entrepreneurial success.

#### Education and Leadership

A limited number of studies have reported relationships between education and leadership. Generally, these studies indicate that as education increases, effective leadership behaviors also increase. Kearney and Gerbert (2008), for example, found that team leaders in a multi-national pharmaceutical company who had obtained a Masters degree were rated higher on emphasizing team performance, than those with a bachelors or less. Xirasagar, Samuels and Curtin (2006) found that physician leaders who also held an MBA were rated higher on transformational leadership than those without an MBA. Turner, Barling and Epitropaki (2002) found an inverse relationship between education and transactional leadership. Stout-Stewart (2005) found a positive relationship between education and all five Exemplary Leadership Practices measured on the *Leadership Practices Inventory*. Reeves, Culbreth and Greene (1997) found that substance abuse counselor supervisors who held graduate credentials reported using more interpersonally-sensitive and less task-oriented behaviors than supervisors who held a bachelors degree.

#### The Broad Impact of Gender

Gender has also been studied in a variety of academic areas. Meta-analytic studies have found that women score higher than men in areas such as behavioral self-esteem and moral-ethical self-esteem, care-orientation towards morality, forgiveness, collaborative computer-mediated communication, extraversion, anxiety, trust and nurturance. Men score higher than women in areas such as assertiveness, overall self-esteem, the self-esteem domains of physical appearance, athletic, personal, and self-satisfaction.

Gentile, Grabe, Dolan-Pascoe, Twenge, Wells, and Maitino (2009), meta-analyzed 115 articles and dissertations

representing 32,486 participants to explore gender differences in reported self-esteem. Males scored higher than females on the self-esteem domains of physical appearance, athletic, personal, and self-satisfaction. Females scored higher than males on the self-esteem domains of behavioral conduct and moral-ethical self-esteem. Major, Barr, Zubek, and Babey (1999) conducted a meta-analysis of 226 samples representing 82,569 participants to explore gender differences in reported self-esteem. The study found that males reported higher global self-esteem than female participants did.

Miller, Worthington and McDaniel's (2008) meta-analysis of 53 empirical articles representing 15,731 participants found women were more forgiving than men across a variety of sample types, measures of forgiveness and in both US and non-US samples

Jaffee and Hyde (2000) performed a meta-analysis of 113 studies representing 5,783 male and 6,654 female participants. Women scored higher than men did on Care Orientation - characterized by a focus on maintaining relationships, responding to the needs of others, and a responsibility not to cause hurt. Men, on the other hand, scored higher than women did on Justice Orientation - characterized by principles of fairness and equity such as those assessed in conventional measures of moral reasoning.

Li's (2005) meta-analysis of 50 studies involving 63,889 users found that female users had a significantly higher frequency of collaborative instances using computer-mediated communication than males and females were more collaborative and personally oriented than males.

Feingold (1994) analyzed 68 studies representing 17,729 participants to compare differences in personality between men and women. Males were found to be more assertive and had slightly higher self-esteem than females. Females scored higher than males on extraversion, anxiety, trust and nurturance. The differences were consistent across ages, years of data collection, educational levels, and nations.

## Gender and Leadership

In the seminal meta-analysis of gender and leadership, Eagly, Johannesen-Schmidt and van Engen (2003) meta-analyzed 45 studies which compared men and woman on measures of transformational, transactional, and laissez-faire (passive-avoidant) leadership styles. The studies were conducted with people occupying leadership roles who were rated by their subordinates, peers, and superiors using the *Multifactor Leadership Questionnaire*. The results of the meta-analysis revealed that female leaders were more transformational and scored higher on the subscales of charisma, idealized influence, inspirational motivation, intellectual stimulation, and individual consideration than their male counterparts. Female leaders also scored higher than males on the first subscale of transactional leadership, contingent reward. Male leaders scored higher on the

subscales of management by exception active and management by exception passive. The study also found that women surpassed men in areas of leadership styles that were positively related to effectiveness while men's leadership styles had a negative relationship to follower effectiveness.

## Age and Leadership

It is common to find leadership studies in which leader age is reported. Often, these are studies in which the leaders' self-assessed their styles, rather than studies in which followers actually rate their leaders. Several, large sample studies, however, in which the leadership ratings are those of the followers do exist. The overall findings of this body of literature seem almost stereotypical. Older leaders tend to be rated higher on dimensions of leadership such as being calm, conservative, considerate, cooperative and deferent to authority. Younger leaders tend to be rated higher on being energetic, exciting and friendly, but tend to emphasize short-term results, have a production focus, and are somewhat self-focused.

In one of the largest studies performed, Sessa, Kabacof, Deal and Brown (2007) analyzed 79,866 direct report ratings of leaders using the *Leadership Effectiveness Analysis* instrument. Participants came from more than 6,000 North American companies in 23 industries across 48 states. Older leaders were rated as more calm and as using a more considered approach that draws on the skills and abilities of others. Younger leaders were rated as more energetic. They were also seen as focused on attaining short-term results and were more self-centered.

Kabacoff and Stoffey (2001) administered the *Leadership Effectiveness Analysis* to 640 managers in the 25 - 35 year range and 640 managers in the 45 - 55 year range. Each manager underwent 360-degree evaluations from followers, peers and supervisors. Participants were from 282 North American companies. Older managers were rated higher on leadership that emphasized being conservative, practicing restraint, cooperation and deference to authority. Younger leaders were rated higher on strategic thinking, excitement, having a tactical, management focus and emphasizing production.

In a study of 285 team members and 21 team supervisors in the pharmaceutical industry Kearney and Gebert (2008) found that the relationship between transformational leadership and team performance was positive when the leader was older than the other team members, but non-significant when the leader's age was closer to the mean age of the team members

Barbuto, Fritz, Matkin and Marx (2007) used the *Multifactor Leadership Questionnaire* with 234 followers of 56 leaders from a variety of organizations. The 46+ age group was rated the highest for transformational leadership including the subscales of idealized influence, intellectual stimulation, individualized consideration, and effectiveness.

The lowest ratings were given to the 36–45 age groups for intellectual stimulation and individualized consideration.

Gilbert, Collins and Brenner (1990) asked 1,634 employees to rate their immediate supervisors on 12 dimensions of leadership. Significance for leader age was only found on four of the 12 dimensions. Older leaders tended to delegate more effectively than younger leaders, while younger leaders were rated higher in the leadership dimensions of being a calming influence, being friendly and enjoyable.

### Experience and Leadership

The literature on experience is mixed. Several studies have found no relationship between leadership experience and ratings of leadership. Laurent and Bradney (2007), for example, in a study of 238 athletic training leaders, found no relationship between years of leadership experience and any of the five measures of the *Leadership Practices Inventory*. Corona (2010) found no relationship between years of professional experience, and emotional intelligence among a population of 103 individuals from a national Hispanic American business organization. In a study of 870 elementary school principals, Eren and Kurt (2011) found no relationship between the experience of the principals and their technological leadership behaviors. Juras and Hinson (2008) analyzed differences in financial performance of top performing and worst performing bank holding companies as a result of a series of board of directors' characteristics. No differences were found in the companies' Return on Assets or Return on Equity as a result of the average tenure of the board of directors of the companies.

Other studies have found limited relationships between experience and leadership. In a meta-analysis of 64 independent samples representing 10,884 leader-member dyads, Sin (2009) found that the length of the leader-follower relationship was positively related to LMX loyalty, but unrelated to LMX affect, contribution and professionalism. In a study of 3,900 teachers from 81 schools, Williams (2009) found that the tenure of the principal was unrelated to student achievement, negatively related to the number of disciplinary incidents on campus and positively related to campus culture. Ejaz, Rehman and Zaheer (2009), in a study of 93 respondents from the Pakistani banking system, found that experience was positively related to the leadership dimensions of developing others, developing self, supporting team, pursuit of excellence and accountability but was not related to the leader's ability to identify follower pain, business acumen, commitment or interpersonal skills.

### PARTICIPANTS

The participants in this study consisted of 577 working adults from the state of Texas. The sample ranged in age from 20 to 82 with a mean age of 41.70 years. There were 56

participants who self-identified their ethnicity as Asian, 53 as African-American, 253 as White and 215 as Hispanic. There were 178 males and 395 females who reported their gender. Education was collected as years of formal education. Years of formal education ranged from 10 years (approximately sophomore in High School) to 22 (PhD, MD and other doctoral credentials). The mean number of years of formal education was 16.8 years (slightly more than four years of college).

Years of work experience ranged from only 1 year to 51 with a mean of 19.77 years. Years of management experience ranged from 0 years to 39 with a mean of 6.71 years.

### INSTRUMENT

The instrument used was the *Project Globe Leadership Questionnaire*. This instrument has been used by over 20,000 participants worldwide. To develop the instrument, two empirical pilot studies were conducted in 28 countries to assess the psychometric properties. In the first pilot study, the survey was distributed in 28 countries to people who had full-time working experience as a white-collar employee or manager. Exploratory factor analysis, aggregation analysis, reliability analysis, and intra-class correlations were then conducted on the results of the surveys. A second pilot study was conducted in 15 countries that did not participate in the first pilot study in order to replicate the scales in a different sample. The results confirmed the findings from the first pilot study and verified through aggregation tests their target level of analysis.

The instrument consists of 112 questions. For each question, the participant is asked to rate to what degree that behavior or characteristic inhibits or contributes to outstanding leadership. The rating scale ranges from one to seven. The instrument measures 21 first-order dimensions of leadership that can comprise six second-order dimensions. The second-order dimensions of humane-oriented leadership, autonomous leadership and self-protective leadership, however, are very similar to the first-order dimensions that comprise them. Consequently, they were not used in this study. This resulted in the use of 21 first-order dimensions and three second-order dimensions. The 21 first-order dimensions are: *Administratively Competent, Autocratic, Autonomous, Charismatic I: Visionary, Charismatic II: Inspirational, Charismatic III: Self-Sacrifice: Risk Taker, Self-Sacrificial, Convincing, Conflict Inducer, Decisive, Diplomatic, Face Saver, Humane Orientation, Integrity, Malevolent, Modesty, Participative, Performance Oriented, Procedural, Self-Centered, Status Conscious, Team I: Collaborative Team Orientation and Team II: Team Integrator*. The three second-order dimensions are, *Team Oriented, Charismatic/Value-Based and Self-protective leadership*. This resulted in 24 dimensions of leadership. Definitions of each measure are provided in the Appendix.

## METHOD

The data used in this study was collected through Survey Monkey. Participants were assured anonymity, the ability to choose not to participate without any penalty, and the ability to withdraw from participation at any point. No compensation was offered for participation.

Participants in this study were recruited from two primary sources. The first source consisted of employees at various Texas offices from two Fortune 500 companies. The organizations approved using company email to invite employees to participate. Three-hundred and eighty-five of the participants came from these sources. Additionally, links to the on-line survey were sent through a variety of social networking sites. There were 192 participants recruited in this manner.

Multiple Analysis of Co-Variance (MANCOVA) is a statistical technique for comparing differences in multiple dependent variables simultaneously. In this study, a MANCOVA was run for the categorical independent variable of gender and three co-variants of years of formal education, age and years of management/leadership experience. The 24 measures of leadership were the dependent variables.

## RESULTS

Table 1 shows the means for the 24 measures of leadership. Using the language of the *Project Globe Questionnaire*, 10 aspects were, on average, considered to somewhat contribute to outstanding leadership. Six characteristics were deemed to slightly contribute to outstanding leadership. Four characteristics were considered to have no impact, and four were considered to inhibit outstanding leadership.

### MULTIPLE ANALYSIS OF CO-VARIANCE RESULTS

In order to analyze the relationships between the four independent variables and the 24 measures of leadership, a 4-Way Multiple Analysis of Co-Variance was run. Using the Wilks' Lambda test, significance was found for all four variables: gender, education, age and leadership experience.

#### Results for Gender

Because gender was significant in the MANCOVA, 24 separate univariate tests were run with gender as the independent variable and each of the leadership characteristics as dependent variables. Gender differences existed for nine of the 24 dimensions of leadership at  $p < .05$ . The overall image that emerged was that women held

stronger opinions about the benefits of five aspects of leadership generally considered to contribute to outstanding leadership: integrity, team-oriented, participative, humane-oriented and diplomatic. Women also held stronger opinions about the liabilities of four aspects generally considered to inhibit outstanding leadership: conflict inducer, self-protective, autocratic and malevolent.

#### Results for Years of Formal Education

Thirteen of the 24 measures of leadership were related to years of formal education. For each of these measures, the relationship reported is a partial correlation after controlling for the impacts of gender, age and leadership experience. The general pattern that emerged was that formal education tended to accentuate the importance of those aspects of leadership considered to either contribute to or inhibit outstanding leadership. Formal education was unrelated to the ratings of leadership that respondents generally believed had no or only a slight impact on outstanding leadership such as being diplomatic, humane-oriented, procedural and modest. This lack of significance for those aspects of leadership that tend to have only moderate influence negates an initial interpretation that those with more education simply have stronger opinions when completing the instrument used. If that were the case, significant correlations should have been found on almost all of the 24 dimensions of leadership. Instead, formal education was related to stronger ratings of the importance of integrity, charisma, performance and team orientation. Formal education was also related to stronger ratings of the degree to which self-protective, face-saving, autocratic, self-centered and malevolent behaviors inhibit outstanding leadership.

#### Results for Age

Age was only related to three of the 24 dimensions of leadership. After controlling for the effects of gender, education and leadership experience, the finding was that the older the participant, the more she/he believed integrity contributed to outstanding leadership and the more being autocratic and status conscience inhibited outstanding leadership.

#### Differences as a Result of Leadership Experience

Only one of the measures of leadership was significant: Charismatic II: Inspirational. After controlling for the effects of gender, education and age, the more experience the participants had as a leader, the more they believed being inspirational contributed to outstanding leadership ( $r_p = .092$ ).

**TABLE 1**  
**Characteristics That Contribute to or Inhibit Outstanding Leadership**

Characteristic	Mean	SD
Contributes Somewhat		
Integrity	6.22	1.16
Performance Oriented	6.01	1.17
Charismatic I: Visionary	6.01	1.09
Administratively Competent	5.85	1.15
Team-Oriented	5.82	0.79
Charismatic/Value-Based	5.82	0.98
Team II: Team Integrator	5.78	0.94
Decisive	5.73	1.12
Charismatic II: Inspirational	5.72	0.96
Participative	5.61	1.13
Contributes Slightly		
Modesty	5.41	1.13
Humane-Oriented	5.40	1.27
Diplomatic	5.40	0.97
Charismatic III: Self-Sacrifice	5.02	1.15
Team I: Collaborative Team Orientation	4.73	0.85
Autonomous	4.66	1.14
Has No Impact		
Procedural	4.43	0.99
Status Conscience	4.13	1.6
Self Protective	3.68	0.74
Conflict Inducer	3.58	1.1
Slightly Inhibits		
Face Saver	2.95	1.14
Somewhat Inhibits		
Autocratic	2.25	1.13
Self Centered	2.18	1.05
Malevolent	1.69	0.89

TABLE 2

## Results of a 4-Way Multiple Analysis of Covariance

Variable	Wilks' Lambda	F	Sig.
Gender	.92	1.75	.02
Education	.88	2.80	.00
Age	.91	2.11	.00
Leadership Experience	.93	1.52	.05

TABLE 3

## Significant Results for Gender

Dependent Variable	Type III Sum of Squares	Df	F	Sig.	Mean for Males	Mean for Females
Females Believed These Characteristics Contributed to Outstanding Leadership More Than Did Males						
Integrity	4.87	1	3.98	0.04	6.13	6.27
Team-Oriented	2.74	1	4.89	0.02	5.74	5.86
Participative	6.04	1	4.62	0.03	5.41	5.68
Humane-Oriented	7.13	1	4.80	0.02	5.29	5.45
Diplomatic	3.99	1	4.59	0.03	5.29	5.45
Females Believed These Characteristics Inhibited Outstanding Leadership More Than Did Males						
Conflict Inducer	9.99	1	8.20	0.00	3.78	3.48
Self Protective	2.10	1	3.81	0.05	3.75	3.64
Autocratic	9.71	1	7.50	0.00	2.44	2.16
Malevolent	7.64	1	9.71	0.00	1.83	1.63

Note. Only significant differences are shown.



**TABLE 4**  
**Significant Results for Years of Formal Education**

Dependent Variable	Type III Sum of Squares	df	F	Sig.	Mean	Partial Correlation
The More Years of Formal Education, The More Participants Believed These Characteristics Contributed to Outstanding Leadership						
Integrity	6.75	1	5.52	0.02	6.22	0.10
Performance Oriented	17.27	1	14.05	0.000	6.01	0.17
Charismatic I: Visionary	13.28	1	13.04	0.00	6.01	0.16
Charismatic/Value- Based	11.17	1	13.6	0.00	5.82	0.16
Team-Oriented	3.35	1	5.97	0.02	5.82	0.12
Team II: Team Integrator	3.36	1	4.44	0.04	5.78	0.09
Charismatic II: Inspirational	4.80	1	6.03	0.01	5.72	0.11
Charismatic III: Self-Sacrifice	6.63	1	5.68	0.02	5.02	0.11
The More Years of Formal Education, The More Participants Believed These Characteristics Inhibited Outstanding Leadership						
Self Protective	2.39	1	4.32	0.04	3.68	-0.09
Face Saver	8.30	1	6.36	0.01	2.95	-0.11
Autocratic	5.25	1	4.06	0.04	2.25	-0.09
Self Centered	13.66	1	13.05	0.00	2.18	-0.15
Malevolent	6.88	1	8.74	0.00	1.69	-0.12

*Note.* Only significant differences are shown. Partial correlations shown are after controlling for gender, age and leadership experience.

**TABLE 5**  
**Significant Results for Age**

Dependent Variable	Type III Sum of Squares	df	F	Sig.	Mean	Partial Correlation
The Older the Participant The More Participants Believed These Characteristics Contributed to Outstanding Leadership						
Integrity	5.04	1	4.13	0.04	6.22	0.09
The Older the Participant The More Participants Believed These Characteristics Inhibited Outstanding Leadership						
Status Conscience	14.59	1	6.02	0.01	4.13	-0.11
Autocratic	7.21	1	5.57	0.02	2.25	-0.10

*Note.* Only significant differences are shown. Partial correlations shown are after controlling for gender, education and leadership experience.

## DISCUSSION

Though all four independent variables of work experience, age, formal education and gender were found to have significant effects on leadership preferences, two variables, gender and years of formal education stood out. Table 6 highlights consistencies between gender findings in this study and previous meta-analytic studies for gender. Meta-analyses have found that women are more transformational, forgiving, caring, nurturing, and trusting than men. These overall meta-analytic findings align well with the results of this study that found that women held stronger opinions than men about the benefits of integrity, team-oriented, participative, humane-oriented and diplomatic leadership. Women also held stronger opinions than men about the liabilities of four aspects generally considered to inhibit outstanding leadership conflict inducer, self protective, autocratic and malevolent leadership.

Table 7 highlights consistencies between education findings in this study and previous meta-analytic studies. Because a meta-analytic study specifically analyzing education and leadership does not exist, a second section of Table 7 includes findings from the individual education and leadership studies available.

Meta-analyses have found that increased levels of education are related to increased self-esteem, positive job attitudes, entrepreneurial success, social capital and receiving mentorship. These meta-analytic findings align well with the results of this study, which found that education was positively related to the desire for leadership integrity, charisma, team and performance orientation. This study also found that education was related to the belief that increased face saving, self-protective, self-centered, autocratic and malevolent behaviors inhibited successful leadership.

**TABLE 6**  
**Gender Meta-Analytic Consistencies with This Study**

Meta-Analytic Areas in Which Women Score Higher	Areas Related to this Study in Which Women Scored Higher	Areas Related to this Study in Which Women Scored Lower
Transformational Leadership	Integrity, Humane-Oriented , Participative, Team-Oriented	Self-Protective, Autocratic. Conflict Inducer, Malevolent
Moral Self-Esteem	Integrity	Malevolent
Forgiveness	Humane-Oriented	Malevolent
Caring	Humane-Oriented	Conflict Inducer, Malevolent
Trust	Integrity	Conflict Inducer
Nurturance	Diplomatic, Participative, Team-Oriented	Malevolent, Self Protective,

**TABLE 7**  
**Education Meta-Analytic Consistencies with This Study**

Meta-Analytic Areas Related to Higher Education Levels	Areas in this Study Positively Related to Education Levels	Areas in this Study Negatively Related to Education Levels
Self-Esteem	Integrity, Charisma	Face Saver, Self-Protective, Self-Centered, Malevolent
Job Attitudes Entrepreneurial Success	Performance Orientation Charisma,	Self Centered
Social Capital	Performance Orientation Charisma, Team Orientation	Autocratic, Face Saver
Receiving Mentorship		Self Centered
Leadership Studies Related to Higher Education Levels	Areas in this Study Positively Related to Education Levels	Areas in this Study Negatively Related to Education Levels
Transformational	Integrity, Charisma, Team Orientation	Malevolent, Autocratic
Inter-Personal		Self-Protective, Self-Centered, Malevolent
Team-Oriented	Team Orientation	Self-Protective, Self-Centered, Malevolent

**CONCLUSION**

The results of this study provide insight into leadership in organizations in the future. Four trends can provide a backdrop for this insight: a) an increase in the percentage of women leaders/managers b) an increase in the percentage of women working full time in the workforce, c) an increase in the percentage of adults earning bachelor’s degrees and d) an increase in the percentage of women earning post-secondary degrees.

**Percentage of Women Leaders/Managers**

The Bureau of Labor Statistics provides a sense of the continued movement of women into leadership and management positions. The category used by the bureau is *Managerial and Professional Specialty Occupations*. This category includes occupations such as chief executive, general administration, public administration, personnel management and health care management. (Bureau of Labor Statistics, 2010) Based on Bureau of Labor Statistics data, women now comprise 51% of this category. While the category is not named “leadership,” it is reasonable to envision the occupations comprising this category as involving a great deal of formal, workplace leadership. Women are the majority in management and professional specialty occupations.

**Percentage of Women in the Workforce**

The Bureau of Labor Statistics (2011) also reports that, in 2011, 62% of working-age women in the United States were in the labor force. This rate, called the *Labor Force Participation Rate* has hovered around the 60% rate for nearly 20 years. A slightly different view of women in the workforce shows that women currently comprise 47% of the total U.S. labor force. This percentage is has increased steadily from 1985 when women comprised 42% of the total labor force.

These data added to the previous data indicate that women are on a trajectory to become the majority of participants in the workforce and the majority of workers in careers labeled as management and professional occupations.

**Percentage of Women Earning Degrees**

Data from the National Center for Educational Statistics (2011) indicates over the past 25 years the percentage of adults in society who have earned a bachelor’s degree has increased from 22% to 32%. Of those earning a bachelor’s degree, a higher percentage of women are now earning both undergraduate and master’s degrees than men. Women currently earn about 55% of all bachelors and 62% of all masters degrees.

Figure 1 combines the trends of women in management and professional occupations, women in the labor force and women earning degrees. An increasing trajectory can be seen in all of the categories.

**FIGURE 1**

**Percentages of Women (Versus Men)**

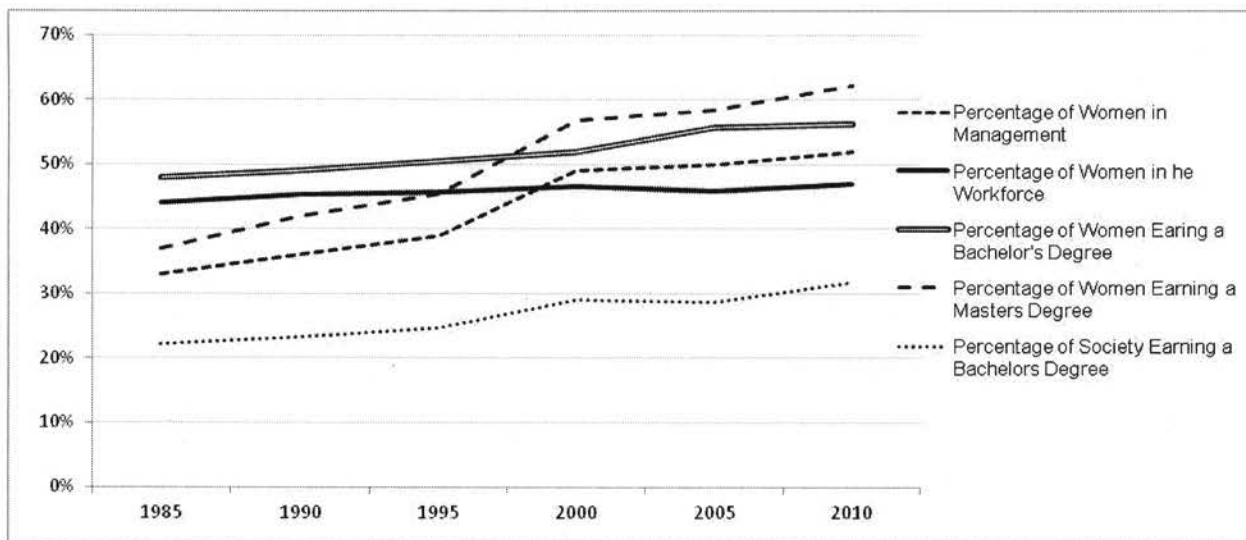


Figure 1 provides an image of a workforce in which increasing percentages of women are leading, high percentages of women are following as workforce participants, and increasing percentages of women are earning degrees.

This study found that both women and participants that are more educated held stronger opinions on the benefits of leaders who have integrity, and are humane, participative and team-oriented. Coupled with the trends in Figure 1 these findings provide a glimpse of a workplace that will expect leaders to use less hierarchical or command and control styles of leading and managing and, instead, adopt more participatory and humane models of leadership.

## REFERENCES

- Barbuto Jr., J. E., Fritz, S. M., Matkin, G. S., & Marx, D. B. (2007). Effects of gender, education, and age upon leaders' use of influence tactics and full range leadership behaviors. *Sex Roles, 56*(1/2), 71-83.
- Bureau of Labor Statistics. (2010) *Employed persons by intermediate occupation, sex, race, and Hispanic or Latino ethnicity, annual averages 2000-10*.  
[www.bls.gov/cps/tables.htm](http://www.bls.gov/cps/tables.htm)  
[www.bls.gov/cps/tables.htm](http://www.bls.gov/cps/tables.htm)
- Bureau of Labor Statistics (2011) *Women at Work, Spotlight on Statistics*.  
<http://www.bls.gov/cps/demographics.htm#women>
- Corona, M. (2010). The relationship between emotional intelligence and transformational leadership: A Hispanic American examination. *Business Journal of Hispanic Research, 4*(1), 22-34. Retrieved from EBSCOhost.
- Eagly, A. H., Johanneson-Schmidt, M. C., & van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin, 129*, 569-591.
- Ejaz, S., Rehman, K., & Zaheer, A. (2009). Evaluating effective leadership qualities of managers in day-to-day work of banking sector in Pakistan. *International Journal of Management & Marketing Research (IJMMR), 2*(1), 103-111. Retrieved from EBSCOhost.
- Eren, E., & Kurt, A. (2011). Technological leadership behavior of elementary school principals in the process of supply and use of educational technologies. *Education, 131*(3), 625.
- Feingold, A. (1994). Gender differences in personality: A meta-analysis. *Psychological Bulletin, 116*(3), 429-456.
- Gentile, B., Grabe, S., Dolan-Pascoe, B., Twenge, J. M., Wells, B. E., & Maitino, A. (2009). Gender differences in domain-specific self-esteem: A meta-analysis. *Review of General Psychology, 13*(1), 34-45.
- Gilbert, G., Collins, R. W., & Brenner, R. (1990). Age and leadership effectiveness: From the perceptions of the follower. *Human Resource Management, 29*(2), 187-196.
- Hezlett, S. (2003). Who receives mentoring? A meta-analysis of employee demographic, career history, and individual differences correlates. *Dissertation Abstracts International, 64*.
- House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., Dorfman, P.W., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: Sage Publications.
- Huang, J., van den Brink, H., & Groot, W. (2009). A meta-analysis of the effect of education on social capital. *Economics of Education Review, 28*(4), 454-464.
- Jaffee, S., & Hyde, J. (2000). Gender differences in moral orientation: A meta-analysis. *Psychological Bulletin, 126*(5), 703-726.
- Juras, P. E., & Hinson, Y. L. (2008). Leaders vs. Laggards: a study of the relationship between selected board composition characteristics and selected banking performance measures. *Advances in Accounting, Finance & Economics, 1*(1), 1-13.
- Kabacoff, R.I., and Stoffey, R.W. (2001). Age differences in organizational leadership. Paper presented at the 16th Annual Conference of the Society for Industrial and Organizational Psychology, San Diego, CA.
- Kearney, E., & Gebert, D. (2008). Managing diversity and enhancing team outcomes: the promise of transformational leadership. *Journal of Applied Psychology, 94*, 77-89.
- Laurent, T. G., & Bradney, D. A. (2007). Leadership behaviors of athletic training leaders compared with leaders in other fields. *Journal of Athletic Training, 42*(1), 120-125.
- Li, Q. (2005). Computer-mediated communication and gender difference: A meta-analysis. *Online Submission*.
- Major, B., Barr, L., Zubek, J., & Babey, S. H. (1999). Gender and self-esteem: A meta-analysis. In W. r. Swann, J. H. Langlois, L. Gilbert, W. r. Swann, J. H. Langlois, L. Gilbert (Eds.), *Sexism and stereotypes in modern society: The gender science of Janet Taylor Spence* (pp. 223-253). Washington, DC US: American Psychological Association.
- Miller, A. J., Worthington, E. R., & McDaniel, M. A. (2008). Gender and forgiveness: A meta-analytic review and research agenda. *Journal of Social and Clinical Psychology, 27*(8), 843-876.
- National Center for Educational Statistics (2010) *Percentage of 25- to 29-year-olds who attained selected levels of education, by race/ethnicity and sex: Selected years, March 1975-2010*  
[http://nces.ed.gov/programs/coe/current\\_tables.asp](http://nces.ed.gov/programs/coe/current_tables.asp)
- Ng, T. H., & Feldman, D. C. (2010). The relationships of age with job attitudes: A Meta-analysis. *Personnel Psychology, 63*(3).
- Reeves, D., Culbreth, J. R., & Greene, A. (1997). Effect of sex, age, and education level on the supervisory styles

- of substance abuse counselor. *Journal of Alcohol & Drug Education*, 43(1), 76.
- Sessa, V. I., Kabacoff, R. I., Deal, J., & Brown, H. (2007). Research tools for the psychologist-manager: Generational differences in leader values and leadership behaviors. *Psychologist-Manager Journal*, 10(1), 47-74.
- Sin, H.P., Nahrgang, D.J., & Morgeson, F.P. (2009). Understanding why they don't see eye to eye: An examination of leader-member exchange (LMX) agreement. *Journal of Applied Psychology*, 94(4), 1048-1057.
- Stout-Stewart, S. (2005). Female community college presidents: Effective leadership patterns and behaviors. *Community College Journal of Research and Practice*, 29, 303-315.
- Turner, N., Barling, J., Epitropaki, O. (2002). Transformational leadership and moral reasoning. *Journal of Applied Psychology*, 87(2), 304-311.
- Twenge, J. M., & Campbell, W. (2002). Self-esteem and socioeconomic status: A meta-analytic review. *Personality & Social Psychology Review (Lawrence Erlbaum Associates)*, 6(1), 59-71.
- Williams, E. (2009). Evaluation of a school systems plan to utilize teachers' perceptions of principal leadership to improve student achievement. *Challenge (1077193X)*, 15(1), 15-32.
- Xirasagar, S., Samuels, M.E., & Curtin, T.F. (2006). Management training of physician executives, their leadership style, and care management performance: An empirical study. *The American Journal of Managed Care*, 12 (2), 101-108.

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## Appendix

### Aspects of Leadership Measured by the Project Globe Leadership Questionnaire

1. *Administratively Competent*: Orderly, Administratively Skilled, Organized, Good Administrator
2. *Autocratic*: Autocratic, Dictatorial, Bossy, Elitist
3. *Autonomous*: Individualistic, Independent, Autonomous, Unique
4. *Charismatic I: Visionary*: Foresight, Prepared, Anticipatory, Plans Ahead
5. *Charismatic II: Inspirational*: Enthusiastic, Positive, Morale Booster, Motive Arouser
6. *Charismatic III: Self-Sacrifice*: Risk Taker, Self-Sacrificial, Convincing
7. *Charismatic/Value-Based*: reflects the ability to inspire, to motivate, and to expect high performance outcomes from others based on firmly held core values
8. *Conflict Inducer*: Normative, Secretive, Intragroup Competitor
9. *Decisive*: Willful, Decisive, Logical, Intuitive
10. *Diplomatic*: Diplomatic, Worldly, Win-Win Problem Solver, Effective Bargainer

11. *Face Saver*: Indirect, Avoids Negatives, Evasive
12. *Humane Orientation*: Generous, Compassionate
13. *Integrity*: Honest, Sincere, Just, Trustworthy
14. *Malevolent*: Hostile, Dishonest, Vindictive, Irritable
15. *Modesty*: Modest, Self-Effacing, Patient
16. *Participative*: Does not Delegate, Does Not Micromanage, Egalitarian, Group Oriented
17. *Performance Oriented*: Improvement-Oriented, Excellence-Oriented, Performance-Oriented
18. *Procedural*: Ritualistic, Formal, Habitual, Procedural
19. *Self-Centered*: Self-Centered, Nonparticipative, Loner, Asocial
20. *Self-protective leadership* focuses on ensuring the safety and security of the individual and group through status enhancement and face saving.
21. *Status Conscious*: Status-Conscious, Class-Conscious
22. *Team I: Collaborative Team Orientation*: Group-Oriented, Collaborative, Loyal, Consultative
23. *Team II: Team Integrator*: Communicative, Team Builder, Informed, Integrator
24. *Team Oriented*: emphasizes effective team building and implementation of a common purpose or goal among team members (House et al., 2004, p. 131).