LEADER VIRTUES AS PREDICTORS OF TRANSFORMATIONAL LEADERSHIP

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ABSTRACT
In an era of widely publicized scandals involving political and financial leaders, the study of the leadership ethics has risen in prominence. A relatively new instrument that measures leader ethics is Riggio et al’s Leadership Virtues Questionnaire. The instrument measures the virtues a leader possesses, and the self-knowledge and self-discipline that guide the leader’s moral actions.

The instrument is based on the four cardinal virtues found in Aristotle’s virtue-based ethics. Prudence, is often associated with knowledge, practical wisdom, and the ability to decide, based on experience, the right thing to do. Fortitude includes the characteristics of perseverance, patience, endurance and courage directed toward adversity on behalf of a noble cause. Temperance is the ability to control one’s emotions. Justice is a sustained or constant willingness to give others what they deserve.

This study analyzed the relationships between leaders’ virtues and how followers, peers, and supervisors perceived those leaders’ leadership styles. One hundred thirty-seven participants in executive leadership training and graduate programs in leadership provided a survey monkey link packet to two peers, two followers and a supervisor using the Multifactor Leadership Questionnaire and the Leadership Virtues Questionnaire. All scores were completed before the onset of the leadership training. The results of a multiple regression analysis found that the higher the leader scored on Prudence and Fortitude, the more the followers, peers, and supervisors rated the leaders as active, transformational leaders. The older the leaders were, the more the followers, peers, and supervisors rated the leaders as passive-avoidant leaders.
INTRODUCTION
In a 2010 Gallup survey, 80 percent of respondents rated nurses and military officers “high or very high” on honesty and ethics. Only 15 percent of respondents, however, rated business executives high or very high. While there are many possible explanations for these striking differences, one obvious one is the idea that military officers and nurses follow a code of conduct that includes service to others, often above their personal needs. Business executives, on the contrary, are often seen as willing to engage in a range of questionable acts in order to increase company profits, and, at its worst, their personal annual bonuses. Respondents in the Gallup survey likely envision this group of leaders as lacking in a code of conduct and strong personal virtues that emphasize courage in pursuit of noble causes and justice for others.

There have been multiple studies on ethics and the affect it has on a company’s culture. Studies have found that an employee’s perception of a positive or negative workplace is attributed to the ethical standards the business leaders’ employ. Leaders’ behaviors are a direct indicator of how ethical or unethical a follower perceives them. Because of the major impact ethics has on the followers’ perception of their leader, it is important to look at behaviors that attribute to a positive workplace beginning with the leader.

Leadership style has shown to impact multiple areas of follower performance. Transformational leadership has been found to be a significant predictor of ethical justice behaviors. An emerging area of interest in the study of leadership includes the personal virtues that leaders hold. The general idea of a virtue is a guiding principle that is practiced at all times. (Riggio, 2010)

THE BENEFITS OF TRANSFORMATIONAL LEADERSHIP
Transformational leadership has consistently shown to result in high follower satisfaction, high follower assessment of the leader’s effectiveness, and high follower willingness to give extra effort at work. In the largest meta-analysis of studies that have used the Multifactor Leadership Questionnaire, Wang, Oh, Courtright, and Colbert (2011) meta-analyzed 117 independent samples over 113 primary studies.

Transformational leadership was positively related to individual level performance (N = 16,809, estimated corrected mean correlation (r_c) = .25), task performance (N = 7,016, r_c = .21), contextual performance (N = 7,970, r_c = .30), creative performance (N = 3,728, r_c = .21), and general performance contextual performance (N = 4,017, r_c = .18).

Contingent reward was also positively related to individual, task and contextual measures of performance, with estimated corrected mean correlations ranging from .22 to .28. Conversely, both management by exception active and passive were negatively related to individual, task and contextual measures of performance, with estimated corrected mean correlations ranging from -.03 to -.29.

LEADERSHIP AND ETHICS
META-ANALYTIC STUDIES - LEADER BEHAVIOR
Davis and Rothstein (2006) meta-analyzed 12 studies in which followers rated the integrity of their leader/manager and, in turn, completed job satisfaction instruments. Each of the individual studies reported positive relationships between perceived leader integrity and follower outcomes. The mean corrected correlation (r_c = .48) indicated that increased manager/leader behavioral integrity was correlated with followers who reported higher job satisfaction, higher satisfaction with the organization’s leadership, and higher commitment to the organization.
META-ANALYTIC STUDIES - ORGANIZATIONAL CLIMATE

Martin (2006) meta-analyzed 42 studies that measured leader ethics and follower job satisfaction, follower psychological well-being and dysfunctional behavior. Among the findings were that the more followers believed the organizational climate emphasized self-interest and company profit the less job satisfaction and more dysfunction the followers reported. Conversely, the more followers believed the climate fostered ethical decisions that were based on an overarching concern for the well-being of others, the higher the followers rated their job satisfaction and psychological well-being. O'Fallon and Butterfield’s (2005) review of 127 articles related to ethical decision making found that, generally, establishing an ethical climate positively influenced perceptions of ethical decision-making.

TRANSFORMATIONAL LEADERSHIP AND ETHICS

Several studies have specifically addressed the relationship between transformational leadership and ethics. Larsson, Eid, and Kjellevold-Olsen (2010) found a strong relationship between ratings of the leaders’ ethical justice behaviors and scores from the Multifactor Leadership Questionnaire. High scores on the transformational leadership facet were significant predictors of ethical justice behaviors.

Toor and Ofori (2009) found strong relationships between ratings given to leaders using the Multifactor Leadership Questionnaire and ethical ratings using the Ethical Leadership Scale. Ratings of the leaders’ ethicality were positively correlated with transformational leadership and negatively correlated with passive-avoidant leadership.

Engelbrecht, Van Aswegen, and Theron (2005) found a positive relationship between leaders rating using the Multifactor Leadership Questionnaire and ratings of the ethical climate as measured by Victor & Cullen’s Ethical Climate Questionnaire.

Hood (2003) found a positive relationship between ratings given to leaders using the Multifactor Leadership Questionnaire and the leaders’ morality-based, social, personal and competency-based values. Passive leadership style was negatively correlated to competency based values.

GENDER AND ETHICS

Ethical differences between men and women have been studied to the point that meta-analyses exist that summarize the body of literature. Pan and Sparks (2012) meta-analyzed 65 studies with 75 effects reported for gender. Thirty-six of these 75 effects were significant in the individual studies. The meta-analysis represented a sample size of 6,662 participants. Women demonstrated a higher level or more strictness in ethical judgments than did men ($Q = 385, p < .05$).

In a 1997 meta-analysis of the literature on gender differences in ethical perceptions of business practices, Franke, Crown and Spake analyzed 66 previous studies representing 20,000 respondents. Women reported higher ethical standards than men when evaluating ethical practices. This difference, however, was more pronounced in studies that used students than those that used working adults. The gender differences were also found to be much smaller if the ethical issue in question was collusion or conflict of interest. Women, however, were much more critical than men when the ethical issue was rule breaking and use of insider information.

AGE AND ETHICS
Pan and Sparks (2012) meta-analyzed 42 studies related to age and ethical judgments representing a sample size of 3,784 participants. Only 15 of these 42 studies reported significant effects as a result of age. The meta-analysis performed found no relationship between participant age and the strictness of ethical judgments of the participants ($Q = 148, p > .05$).

**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**

While there are many studies that report leadership style and age, the vast majority of those studies are leader self-assessment studies in which leaders report how they believe they lead, 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 et al (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. 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 (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 et al (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.

ETHNICITY AND LEADERSHIP
Ospina and Foldy (2009) conducted a systemic review of 15 quantitative studies on how ethnicity affected the perceptions or enactments of leadership. The results from this analysis found that Hispanic leaders were often rated slightly less positively than non-Hispanics, while White leaders were often rated higher than Black leaders. Asian leaders were rated higher than both Black and Hispanic leaders when participants compared profiles of a successful manager to stereotypical profiles of managers of different races.

INSTRUMENTS
The Multifactor Leadership Questionnaire (MLQ) was developed to determine the degree to which leaders exhibited transformational and transactional leadership. The MLQ has undergone many revisions during the past 20 years. The Form 5X contains five transformational leadership subscales, two transactional subscales, and two passive subscales of leadership that together form what is known as the full range leadership theory.

Bass and Avolio (2002) conducted a cross-validation study of the MLQ Form 5X. The study was used to test the convergent and discriminant validities of each subscale through confirmatory factor analysis. The studies consisted of examining nine samples with $N = 2,154$, and a second study using five samples with a total of $N = 1,706$. The two studies combined provided a sample of $N = 3,860$. Reliabilities for the total items and leadership factor subscales ranged from .74 to .94. The validity coefficient for the MLQ was .91 (Bass & Avolio, 2002). Bass and Avolio conducted a second confirmatory factor analysis using LISRELVII to compare the Goodness of Fit (GFI) and the Root Mean Squared Residual (RMSR) estimates with the MLQ. The GFI values higher than .90 indicated a better fit between the model and the available data (Bentler & Kano, 1990). The RMSR value was considered a good fit if it was less than .05 (Joreskog & Sorbom, 1982). The results if the study indicated that the full range leadership model represented by the MLQ 5X had a goodness of fit (GFI) of .91 and the root mean squared residual (RMSR) was .04. Each was above and below their perspective cut-off criterion respectively.

The Leadership Virtues Questionnaire measures four leader virtues: prudence, fortitude, temperance and justice. Prudence is the wisdom that manages or dictates a proper balance between two extremes in a world of shifting contexts and priorities. It is often associated with knowledge, practical wisdom, and insight. Fortitude includes the characteristics of perseverance, patience, endurance and courage directed toward adversity on behalf of a noble cause. Temperance is the ability to control one’s emotions by accepting her/his deficiencies. Justice is a sustained or constant willingness to give others what they deserve. The LVQ was developed through four successive pilot tests representing over 1000 managers. Both exploratory and confirmatory factor analyses were used to develop the 19 questions used in the questionnaire. The instrument is strongly positively correlated with relevant measures of authentic leadership ($r = .90, p = .01$), ethical leadership ($r = .93, p = .01$), and transformational leadership ($r = .85, p = .01$).

METHOD
One hundred thirty-seven participants in executive leadership training and graduate programs in leadership agreed to participate in the study. The participants provided a survey monkey link
packet to two peers, two followers and a supervisor. The generic term for this assessment is often referred to as a “360 degree” assessment, as the leader is being rated from three different organizational viewpoints. The peers, supervisor and followers rated the each participant on the Multifactor Leadership Questionnaire and the Leadership Virtues Questionnaire. All scores were completed before the onset of the leadership training.

DESCRIPTIVE STATISTICS
A total of 137 participants agreed to participate in this study. There were 87 females and 50 males. The group of 87 female participants consisted of 20 Black women, 42 Hispanic women and 25 White women. The group of the 50 male participants consisted of 14 Black men, 34 Hispanic men and 2 White men. The sample ranged in age from 25 to 83 with a mean age of 41 years.

PRELIMINARY FACTOR ANALYSIS
Table 1
Results of an Exploratory Factor Analysis

<table>
<thead>
<tr>
<th>Scales Used</th>
<th>Active TF Leadership</th>
<th>Leader Virtue</th>
<th>Passive Avoidant Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idealized Influence – Attributed</td>
<td>.735</td>
<td>.244</td>
<td>-.136</td>
</tr>
<tr>
<td>Idealized Influence – Behavioral</td>
<td>.788</td>
<td>.007</td>
<td>-.045</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>.851</td>
<td>.245</td>
<td>-.143</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>.784</td>
<td>.215</td>
<td>-.230</td>
</tr>
<tr>
<td>Individual Consideration</td>
<td>.746</td>
<td>.323</td>
<td>.027</td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>.515</td>
<td>.473</td>
<td>.273</td>
</tr>
<tr>
<td>Prudence</td>
<td>.285</td>
<td>.815</td>
<td>-.199</td>
</tr>
<tr>
<td>Fortitude</td>
<td>.236</td>
<td>.726</td>
<td>-.180</td>
</tr>
<tr>
<td>Temperance</td>
<td>.038</td>
<td>.799</td>
<td>-.065</td>
</tr>
<tr>
<td>Justice</td>
<td>.211</td>
<td>.885</td>
<td>-.067</td>
</tr>
<tr>
<td>Management by Exception - Active</td>
<td>.355</td>
<td>-.089</td>
<td>.652</td>
</tr>
<tr>
<td>Management by Exception - Passive</td>
<td>-.395</td>
<td>-.059</td>
<td>.823</td>
</tr>
<tr>
<td>Liaise-Faire</td>
<td>-.328</td>
<td>-.240</td>
<td>.711</td>
</tr>
</tbody>
</table>

Because 13 scales were used in this study, an exploratory factor analysis was first conducted using the Principal Component Analysis to determine which scales loaded together on a single component. Three components were found that had an Eigenvalue greater than one. The first component, which was labeled Transformational Leadership had an Eigenvalue of 3.89 and explained 29.9% of the variance in scores. Table 1 shows that the first six scales of the Multifactor Leadership Questionnaire loaded on this component with an Eigenvalue vector score greater than 0.5 or less than negative 0.5. The second component was labeled Leader Virtues. The scales from the Leadership Virtues Questionnaire loaded on this component with an Eigenvalue of 3.18. The final component was labeled Passive-Avoidant Leadership and consisted of Management by Exception Passive and Liaise-Faire leadership. This component had an Eigenvalue of 1.9.
Because the four different scales of the Leadership Virtues Questionnaire loaded on a difference component than either Transformational or Passive-Avoidant leadership, it is reasonable to ask whether leader virtues can predict transformational leadership.

RESULTS
A multiple regression was run using the predictor variables of leader gender, ethnicity, age, prudence, fortitude, temperance and justice. The criterion variable was the Multifactor Leadership Questionnaire rating of the leader’s active Transformational leadership style. This score was created by calculating the mean of the five different ratings each leader received. Table 2 provides the results of the most parsimonious model found for predicting transformational leadership.

Table 2
Regression for Predictors of Transformational Leadership

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R Square</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Beta-Weight</th>
<th>Partial Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Prudence</td>
<td>.49</td>
<td>.24</td>
<td>.24</td>
<td>39.15</td>
<td>.33</td>
<td>.29</td>
<td>.00</td>
</tr>
<tr>
<td>2 Fortitude</td>
<td>.51</td>
<td>.26</td>
<td>.02</td>
<td>4.02</td>
<td>.24</td>
<td>.21</td>
<td>.05</td>
</tr>
<tr>
<td>3 Age</td>
<td>.54</td>
<td>.29</td>
<td>.02</td>
<td>4.07</td>
<td>-.16</td>
<td>-.18</td>
<td>.05</td>
</tr>
</tbody>
</table>

TRANSFORMATIONAL LEADERSHIP
The leader’s Prudence score explained twenty four percent of the variance in how the participants’ followers rated them on active transformational leadership ($R^2 = .24$, $\beta = .33$, $r_p = .29$, $p = .00$). The Beta weight was .33, and the partial correlation, controlling for the effects of the other independent variables, was .29. These indicate that the more prudent the leader is, the higher the followers rated them as transformational leaders.

The leader’s Fortitude score explained an additional two percent of the variance in how the participants’ followers rated them on active transformational leadership ($\Delta R^2 = .02$, $\beta = .24$, $r_p = .21$, $p = .05$). This indicated that the more fortitude the leader exhibits, the higher the followers rated them as transformational leaders.

The leader’s age explained an additional two percent of the variance ($\Delta R^2 = .02$, $\beta = -.16$, $r_p = -.18$, $p = .05$). Here the older the leaders were, the lower the followers rated them as transformational leaders.

PASSIVE AVOIDANT LEADERSHIP
A multiple regression was also run using the same predictor variables with the criterion variable of the Multifactor Leadership Questionnaire rating of the leaders’ passive avoidant leadership style. Table 3 provides the results for those predictors of Passive Avoidant leadership.
Table 3
Regression for Predictors of Passive Avoidant Leadership

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R Square</th>
<th>R Square Change</th>
<th>F Change</th>
<th>Beta-Weight</th>
<th>Partial Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prudence</td>
<td>.42</td>
<td>.17</td>
<td>.17</td>
<td>25.78</td>
<td>-.26</td>
<td>-.23</td>
</tr>
<tr>
<td>2</td>
<td>Age</td>
<td>.47</td>
<td>.22</td>
<td>.05</td>
<td>7.88</td>
<td>.26</td>
<td>.28</td>
</tr>
<tr>
<td>3</td>
<td>Fortitude</td>
<td>.50</td>
<td>.25</td>
<td>.03</td>
<td>4.03</td>
<td>-.20</td>
<td>-.18</td>
</tr>
</tbody>
</table>

The leader’s Prudence score explained seventeen percent of the variance in how the participants’ followers rated them on passive avoidant leadership ($R^2 = .17$, $\beta = -.26$, $r_p = -.23$, $p = .00$). This indicates that the more prudent the leader is, the lower the followers rated them as passive avoidant leaders.

The leader’s age explained an additional five percent of the variance ($\Delta R^2 = .05$, $\beta = .26$, $r_p = .28$, $p = .01$). Here the older the leaders were, the higher the followers rated them as passive avoidant leaders.

The leader’s Fortitude score explained an additional three percent of the variance in how the participants’ followers rated them on passive avoidant leadership ($\Delta R^2 = .03$, $\beta = -.20$, $r_p = -.18$, $p = .05$). This indicated that the more fortitude the leader exhibits, the lower the followers rated them as passive avoidant leaders.

**DISCUSSION**

**Figure 1.** Model from this study.
Figure 1 reminds us that meta-analytic studies have found that both leader transformational and ethical behaviors are related to follower satisfaction and commitment. (a) Some studies have found that the more transformational leaders are the more ethical they are perceived to be. (b) This study found that the more leaders’ are considered to demonstrate the virtues of prudence and fortitude, the more the followers viewed them as transformational. (c)

The Exploratory Factor Analysis indicated that leader virtues are somewhat different than transformational leadership. The relationship between transformational leadership and ethics can be interpreted by comparing the scales of the Multifactor Leadership Questionnaire and those predictors of transformational leadership from the Leadership Virtues Questionnaire.

A leader who has practical wisdom is admired by their followers and is likely seen as a role model to emulate. A leader who provides insight inspires their followers to find meaning within themselves. A leader who demonstrates endurance is admired for their courage which motivates followers to challenge themselves. Those leaders that demonstrate leadership virtues are looked at as mentors, who the followers want to emulate.

Table 4

How Prudence and Fortitude Might Relate to Aspects of Transformational Leadership

<table>
<thead>
<tr>
<th></th>
<th>Prudence: Wisdom, knowledge, practical wisdom, and insight.</th>
<th>Fortitude: Perseverance, patience, endurance and courage on behalf of a noble cause.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Idealized Influence:</strong></td>
<td>Exemplary role models, admired and respected followers want to emulate</td>
<td>Admired for knowledge, practical wisdom.</td>
</tr>
<tr>
<td><strong>Inspirational Motivation:</strong></td>
<td>Motivate and inspire followers to commit to the vision of the organization. Provide meaning and challenge to their followers.</td>
<td>Insight inspires followers to find meaning and challenge themselves.</td>
</tr>
<tr>
<td><strong>Individual Consideration:</strong></td>
<td>Coaches, facilitators, teachers, and mentors to their followers.</td>
<td>Wisdom to be a mentor.</td>
</tr>
</tbody>
</table>

*Note.* In a separate regression, these three dimensions of transformational leadership were the strongest predictors of prudence and fortitude.

Because leadership is a complex, multi-faceted activity, myriad dimensions contribute to our understanding of it. This study adds to the body of knowledge by providing a sense of the importance of prudence and fortitude in transformational leadership.
REFERENCES


