

2016

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Publication Information

Copeland, Mary Kay (2016). "The Impact of Authentic, Ethical, Transformational Leadership on Leader Effectiveness." *Journal of Leadership, Accountability and Ethics* 13.3, 79-97.

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Abstract

Authentic, ethical and transformational leadership in 21st century business leaders is needed. This research posits that ethical, authentic and transformational leaders are more effective, that there are incremental improvements in a leader's effectiveness for each of these leadership qualities, and that transformational leadership moderates the impact of the leader's authentic and ethical leadership on the leader's outcomes. Analysis shows that authentic, ethical and transformational leadership behaviors make incremental independent contributions to explain leader effectiveness. The study did not find support for transformational leadership as a moderator of the relationships between authentic and ethical leadership behaviors and a leader's effectiveness.

Disciplines

Accounting | Finance and Financial Management

Comments

This article was published in the *Journal of Leadership, Accountability and Ethics* in 2016.

The Impact of Authentic, Ethical, Transformational Leadership on Leader Effectiveness

**Mary Kay Copeland
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Authentic, ethical and transformational leadership in 21st century business leaders is needed. This research posits that ethical, authentic and transformational leaders are more effective, that there are incremental improvements in a leader's effectiveness for each of these leadership qualities, and that transformational leadership moderates the impact of the leader's authentic and ethical leadership on the leader's outcomes. Analysis shows that authentic, ethical and transformational leadership behaviors make incremental independent contributions to explain leader effectiveness. The study did not find support for transformational leadership as a moderator of the relationships between authentic and ethical leadership behaviors and a leader's effectiveness.

INTRODUCTION

The early twenty-first century was plagued with extensive and disheartening leadership failures among US business leaders. As a result, scholars and practitioners called for a renewed focus on restoring hope, confidence, integrity and honor to its leaders. In response to this crisis, researchers urged that leaders possessing more than charismatic, seemingly transformational qualities, be sought. The desire was to expand effective leadership theory beyond charismatic qualities, to include components of authentic and ethical leadership. Leadership theorists began to argue that leaders should be selected based on their values based leadership behaviors and their ability to look out for the best interests of others, and for the best interests society as a whole.

In 2005, a national symposium and subsequent dedicated issue of *Leadership Quarterly* emphasized the need for U.S. institutions, both public and private, to consider revamping their leadership criteria and accept that for a leader to be effective and achieve positive long-term corporate and societal outcomes, authentic, ethical leadership was paramount. This new standard would reward leaders whose moral character and ethical behavior influenced their vision and direction.

Over the past decade, numerous researchers have outlined that values based leaders are more effective. Specifically, authentic (Avolio and Gardner, 2005; Avolio, Gardner, Walumbwa, Luthans, & May 2004; Gardner, Avolio, Luthans, May, & Walumbwa, 2005; George, 2003; George, Sims, McLean, & Mayer, 2007; Luthans & Avolio, 2003; May, Chan, Hodges & Avolio, 2003), ethical (Brown and Treviño, 2006; Ilies, Morgeson, & Nahrgang, 2005; Kalshoven, Hartog, & Hoogh, 2011; Mahsud, Yukl, & Prussia, 2010) and transformational (Bass, 1985; Bass & Avolio, 1994) leaders were found to be more effective. The purpose of this study is to advance the discussion of ethical, authentic, and transformational leadership and evaluate the effect that these combined behaviors in a leader have on leader outcomes. The

framework for the study is that transformational leadership influences follower behavior; however, to be truly transformational, a leader must also be moral, ethical and authentic (Bass and Steidlmeier, 1999).

Prior research has outlined that authentic, ethical and transformational leadership behaviors have each individually contributed to explaining improved levels of leader effectiveness (Bass, 1985; Bass & Avolio, 1994; Brown et al., 2005; Copeland, 2015). Additional research is required to further understand the relationship of authentic, ethical and transformational leadership. Prior research has not assessed if a leader possesses two or all three coalesced leadership behaviors if this will make a significant contribution, beyond only one behavior, to explaining leader effectiveness. This theory is posited by this study. Additional research is required to determine if the combined attributes of these three behaviors augment or improve a leader's ability to produce more effective outcomes. This study also examines whether transformational leadership moderates the relationship between authentic and ethical leadership and leader effectiveness, a second theory not examined previously.

LITERATURE REVIEW – AUTHENTIC, ETHICAL AND TRANSFORMATIONAL LEADERSHIP

Studies have concluded that authentic, ethical and transformational leadership behaviors incrementally contribute to explaining and predicting the effectiveness of a leader (Bass, 1985; Bass & Avolio, 1994; Brown et al., 2005; Copeland, 2015). While Bass and Steidlmeier (1999), Avolio and Gardner (2005) and Brown, Treviño, and Harrison (2005) have argued that authentic and ethical behavior in leaders is necessary to avoid the ethical and moral leadership failures that occurred in the past two decades, the actual research is minimal. The model researched in this study extends Bass and Steidlmeier's (1999) theory positing that transformational leadership necessitates a moral, ethical, and authentic foundation.

The theories of authentic and ethical leadership have received increased attention in the past decade, largely in response to the tumultuous ethical leadership failures observed in the early 21st century, an era tainted by corporate meltdowns, worldwide terrorism, political upheaval, and international health issues such as the perceived SARS and HIV epidemics (Avolio & Gardner, 2005; Brown & Treviño, 2006). Scholars, practitioners and America as a nation began to call for a renewed focus on restoring hope, confidence, integrity and honor to its leaders (Avolio and Gardner; Brown & Treviño; George, 2003; Luthans & Avolio, 2003; May, Chan, Hodges & Avolio, 2003). Decades of charismatic and transformational leadership promotion had left scholars, practitioners, shareholders and the nation as a whole experiencing an urgent need for reform, as many charismatic, persuasive leaders had emerged that lacked integrity, honor and morality (Avolio & Gardner, 2005; Brown and Treviño, 2006; Cooper, Scandura, & Schriesheim, 2005; George, 2003; Ilies, Morgeson, & Nahrgang, 2005).

These events resulted in many responses and proposed new leadership constructs that attempted to address the leadership deficiencies observed. Table 1 identifies emerging leadership theories that Copeland (2014) noted were in response to the decline in morality and ethics identified in many leaders. These theories incorporated an element of morality and proposed a revised standard for evaluating whether leaders were truly effective.

TABLE 1
EMERGING CONSTRUCTS IN RESPONSE TO ETHICAL AND MORAL DEFICIENCIES IN LEADERS (IN CHRONOLOGICAL ORDER BASED ON FIRST OCCURRENCE)

Values Based Leadership Theories	Author
Servant leadership	Greenleaf, 1977; Patterson, 2003; Parolini, Patterson, & Winston, 2009
Stewardship	Block, 1993
Connective leadership	Lipman-Blumen, 1996
Self-sacrificial leadership	Choi & Mai-Dalton, 1999
Authentic Transformational	Bass & Steidlmeier, 1999
Complex leadership	Regine & Lewin, 2000; Marion & Uhl-Bien, 2001; Knowles, 2001, 2002
Contextual leadership	Osborn, Hunt, & Jauch, 2002
Shared leadership	Pearce & Conger, 2003
Spiritual Leadership	Fry, 2003
Authentic leadership	Avolio, Gardner, Walumbwa, Luthans & May, 2004; Avolio, Luthans, & Walumbwa, 2004; Luthans, & May, 2004; Avolio & Gardner, 2005; Gardner, Avolio, Luthans, May, & Walumbwa, 2005
Ethical leadership	Brown, Trevino & Harrison, 2005; Brown & Treviño, 2006; De Hoogh & Den Hartog, 2008; Kalshoven, Hartog, & Hoogh, 2011; Copeland, 2015

Data Source: (Copeland, 2014)

Of these theories, authentic, ethical, and spiritual leadership shared core constructs of morality, ethics, integrity and putting the interest of others above the leader's self interest (Brown & Treviño, 2006).

Prior to accessing and understanding the emerging ethical, authentic, transformational leadership paradigm, we will review earlier prevailing leadership theories to gain an understanding of this study's extension of these theories.

AUTHENTIC LEADERSHIP

Avolio and Gardner (2005), proposed the need for the development of authentic leadership as they observed glaring deficiencies in the development of leaders. George (2003) emphasized that authentic leaders were those who had a deep sense of purpose, possessed ethical and solid values, understood their purpose, lead with their hearts, established connected relationships and demonstrated self restraint and discipline.

Gardner *et al.* (2005) posited that authenticity is a prerequisite for an authentic leader. Gardner *et al.* outlined authenticity as accepting and acknowledging ones thoughts, emotions, needs, wants, preferences,

or beliefs and acting consistently with those beliefs and one's inner person. An authentic person seeks to know oneself and confidently conveys their beliefs in speech and action (Gardner *et al.*). Avolio, Luthans, & Walumbwa (2004) extend the description of authentic leaders to those that are self-aware of their own "values/moral perspective, knowledge, and strengths" and that authentic leaders are "confident, hopeful, optimistic, resilient, and high on moral character" (p. 4). Luthans & Avolio (2003) argue that while authentic leadership is a "root construct" that "could incorporate charismatic, transformational, integrity and/or ethical leadership," and that these constructs may overlap in individuals, they can also be distinct from each other (p. 4).

Brown and Treviño (2006) summarize that "self-awareness, openness, transparency, and consistency are at the core of authentic leadership," and that "being motivated by positive end values and concern for others (rather than by self-interest) is essential to authentic leadership" (p. 599).

ETHICAL LEADERSHIP

The ethical leadership construct gained increased momentum in the second half of the 2001-2010 decade as scholars observed that a greater intersection of leadership and ethics was essential if our nation was to recover from the apparent lack of moral deficiency identified in many 21st century leaders (Brown and Treviño, 2006; Brown, Treviño & Harrison, 2005; Treviño, Brown & Hartman, 2003;). Brown & Treviño argue that ethical leaders, like authentic and transformational leaders are "altruistically motivated, demonstrating a genuine caring and concern for people" and "are thought to be individuals of integrity who make ethical decisions and who become models for others (p. 600). According to Brown and Treviño, an ethical leader's proactive concern for the ethical behavior of their followers is their differentiating characteristic from authentic and transformational leaders. Ethical leaders communicate and place great emphasis on the establishment of ethical standards as well as accountability for adhering to those principles (Brown & Treviño).

De Hoogh & Den Hartog (2008) outlined that ethical behavior is vital for organizations, and that lapses in ethics on the part of leaders can have costly organizational consequences. Organizations should take care in selecting managers who show integrity and act in an ethical manner, and who are not self-serving or exploitive of others (De Hoogh & Den Hartog). De Hoogh and Den Hartog concluded when leadership is perceived as ethical, upper level management is perceived as more effective and subordinates express greater optimism about the future potential of the organization. Copeland (2015) found that ethical leaders in the accounting profession were reported as more effective by their subordinates and superiors.

In summary, prior studies of authentic and ethical leadership suggest that leaders who are more authentic or ethical are more effective leaders and therefore can lead their organizations more successfully. Research had not assessed if leaders who are both ethical and authentic are more effective than those that possess only one of these two behaviors.

TRANSFORMATIONAL LEADERSHIP

Burns (1978) is credited with first proposing the theory of transformational leadership. Burns compared transactional leadership with transformational leadership and noted that transactional leaders exchanged follower fulfillment of tasks for rewards while transforming leaders sought to appeal to and influence the moral values of the followers and inspire them to reform and revamp their organizations. Bass (1985, 1990) posited that transformational leaders seek to motivate their followers to accomplish more than they originally intended, encourage their followers to look beyond their own interests and to consider the best interests of the organization as a whole, and assist and empower their own followers in becoming leaders. Bass and Avolio (1993) contended that transactional and transformational leadership have varying characteristics and results, but they are not mutually exclusive. Yukl (2006) states that both leaders seek to motivate others to achieve common goals, but the behavior of the leader and the effect on the follower are different with each style. Bass (1985) asserts that while transformational leaders are more

effective than transactional leaders at motivating and empowering others, the most successful leaders combine the strengths of each of these styles.

Avolio, Waldman and Yammarino (1991) established the concept of the four I's of transformational leadership. The four I's are idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Bass (1985, 1990) later asserted that authentic, transformational leadership necessitated a moral foundation congruent with the four I's theory. The four I theories were foundational in the expansion of transformational leadership theories to include components of ethical and authentic leadership theory. It was the beginning of the viewpoint that to truly impact and to be truly beneficial to individuals, organizations and society as whole, transformational leaders needed to possess some inner qualities beyond characteristics of effective charisma and transformational leadership. (Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Bass and Steidlmeier, 1999; Gardner & Avolio, 2005). Leadership theorists were beginning to posit that leaders' moral character and ethical values that influenced their vision and direction were critical for effective leadership that had positive long term corporate and societal outcomes.

AUTHENTIC, ETHICAL AND TRANSFORMATIONAL LEADERSHIP

The model being researched in this study utilizes seven leadership characteristics that were previously outlined by Brown and Treviño (2006) as traits that were found in authentic, ethical and transformational leaders.

Table 2 below summarizes the common and differentiating traits between the three constructs, according to Brown and Treviño.

TABLE 2
ETHICAL, AUTHENTIC AND TRANSFORMATIONAL LEADERSHIP CHARACTERISTICS

Leadership Trait	Ethical Leadership	Authentic Leadership	Transformational Leadership	Ethical Authentic Transformational Leadership
Altruism	X	X	X	X
Ethical decision-making	X	X	X	X
Integrity	X	X	X	X
Role modeling	X	X	X	X
Ethical leaders - Moral management	X			X
Authentic leaders – authenticity and self- aware		X		X
Transformational leaders emphasize vision, values, and intellectual stimulation			X	X

Source: Brown and Treviño (2006)

The model proposed in this study extends Brown and Trevino's model and proposes a theoretical categorization of leaders based on their combination of authentic, ethical and transformational leadership behaviors. This proposed model theorizes the impact of different combinations of authentic, ethical and transformational behaviors. The theory suggests that these combinations place leaders in different groups that summarize their potential for leadership effectiveness.

MODERATING EFFECTS OF TRANSFORMATIONAL LEADERSHIP

Kouzes and Posner (1995) noted that true transformational leadership characteristics increase trust and lead to exemplary leadership. Avolio, Waldman, and Yammarino, (1991) outlined that a transformational leader is one who demonstrates inspirational motivation, idealized influence, is intellectually stimulating and who shows individualized consideration for each of their followers.

This study will assess transformational leadership defined and measured as a single construct (Carless, Wearing, & Mann, 2000). Carless *et al.* defined a transformational leader as one that: (a) communicates a vision, (b) develops staff, (c) provides support, (d) empowers staff, (e) is innovative, (f) leads by example, and (g) is charismatic. The proposed moderating impact of transformational leadership is explained in relationship to Carless, Wearing, and Mann's definition of transformational leadership.

A leader's charisma (or ability to be a vision seeker), to have idealized influence, to be confident, and to set high standards for others to follow are behaviors of a transformational leader. When a leader is ethical and authentic, by definition, their values are morally uplifting, according to Burns (1978). A transformational leader augments an ethical/authentic leader's effectiveness by creating enthusiasm around the good, noble and excellent principles that ethical/authentic leaders possess. A leader that lacks vision, the ability to empower, or charisma would find it difficult to enthusiastically transfer their enthusiasm for ethical and authentic behaviors to those they lead. In other words, they may have great ideas, be very ethical and authentic, but would fail to create or transfer this vision or moral persuasion to others. A transformational leader who also is authentic and ethical is better able to translate their authentic, ethical behavior into action and vision to impart to their followers.

Bass and Steidlmeier (1999) noted that the Inspirational Motivation of a transformational leader "provides followers with challenges and meaning for engaging in shared goals and undertakings" (p.188). In the Carless, Wearing, and Mann's (2000) model, staff motivation increases as leaders support and empower staff. Transformational leaders are better able to motivate and empower staff. Brown, Trevino and Harrison (2005) demonstrated that ethical leaders are more effective, and Avolio, Gardner, Walumbwa, Luthans, & May (2004) showed that authentic leaders are more effective. When these leaders are also transformational -- more effective at developing, supporting and empowering their staff -- their authentic and ethical qualities are augmented. If a leader is simply authentic and ethical, but lacks positive empowering transformative qualities, their authentic/ethical leadership will have less of an impact.

The goal of furthering ethical and authentic ideology is an intellectual pursuit that often requires leaders to challenge followers to a higher level of thinking and acting. In the Carless, Wearing, and Mann's (2000) model, intellectual stimulation is seen as leaders develop their subordinates. An authentic/ethical and transformational leader uses staff development and intellectual stimulation to challenge, communicate and transfer beliefs and values to others. Leaders who are ethical and authentic, but who do not engage staff on a transformative or intellectually stimulating level may have greater difficulty conveying the intellectually challenging concepts to their followers. Similarly, leaders who lack the capacity to develop others will have less ability to motivate staff. Or worse, a pseudo-transformational leader may be confident and intellectually stimulating for amoral or unethical pursuits. As Bass and Steidlmeier (1999) note, these pseudo-transformational leaders may "influence ignorant, scared, angry, frustrated people for personal gain in the name of doing good for the entire nation or race" (p.189; Lockman, 1995).

The ability to be innovative and to lead by example are other aspects of transformational leadership that result in greater effectiveness in an authentic/ethical leader. As authentic/ethical leaders are innovative, or as they model the way for their followers, the follower is more likely to respond to and

listen to the leader's ethical, moral beliefs. Through coaching, mentoring and encouraging growth opportunities (Bass, 1985), transformational leaders develop and transfer the positive aspects of their authentic/ethical leadership to inspired, motivated followers.

Bass (1985, 1990) outlined that certain qualities make leaders transformational and this leads to greater leader effectiveness. Research has established that core ethical and authentic qualities in a person also result in improved leadership outcomes. When this transformational leadership is also present in one that is ethical and authentic, the goals of the organization become ethical and moral rather than self serving, and become focused on the well-being of the followers and organization as a whole. Authentic, ethical, transformational leadership provides an enthusiasm and support for that which is good and moral, and fosters trust and enthusiasm. This research proposes that this combination of behaviors, leads to greater leader effectiveness.

Research Questions and Hypotheses

The specific research questions in this study are: 1) Does the presence of all three: ethical, authentic and transformational leadership behaviors, predict higher levels of leader effectiveness and 2) Does transformational leadership behavior magnify the effectiveness of authentic and/or ethical leadership?

To answer these questions, the following four research hypotheses were tested:

H1: There will be a positive relationship between the levels of ethical, authentic and transformational leadership behaviors and leader effectiveness.

H2: Authentic, ethical and transformational behaviors will each make an incremental contribution to the explanation of leadership effectiveness.

H3: Transformational leadership will moderate the impact of the relationship between authentic leaders and leader effectiveness.,

H4: Transformational leadership will moderate the impact of the relationship between ethical leader effectiveness.

THE THEORETICAL MODEL

The research hypotheses were based on the following proposed model, which outlines how combined authentic, ethical and transformational leadership qualities impact leader effectiveness. The independent variables include define ethical and authentic leadership qualities. The dependent variable was leadership effectiveness. Transformational leadership in a leader was posited to be a moderating variable. It was proposed that the presence or absence of transformational leadership traits, when coupled with authentic or ethical leadership, explained why ethical or authentic leadership qualities incrementally increased or decreased leader effectiveness. The investigation controlled for several variables that on their own may contribute to improved leader effectiveness. Control variables for the study included: the years an individual had worked for the leader and the organization and the participants' age. The study also collected additional demographic data on the participants, the leaders and organizations being studied so that demographic diversity could be established. Participant's gender and title as well as the leader's title and the type of organization were collected for this purpose.

Methods

To test the proposed hypotheses, data were collected to measure the ethical, authentic and transformational qualities in a leader. It was also necessary to collect data to determine if transformational leadership moderates the impact that authentic and ethical traits have on a leader's effectiveness.

Research Method and Design

Sample

Data were collected from a population of individuals who are employed at a variety of organizations and had daily contact with leaders in their organizations. The sample size was 175 individuals. Nineteen percent ($n = 34$) of the sample was made up of Masters in Strategic Leadership (MSL) students from a small, liberal arts college in the Northeast. The remaining eighty-one percent ($n = 141$) of the sample were collected from a large email list of employed adults from a variety of organizations.

Inquiries were made of 263 individuals and 175 responded, resulting in a 67% participation rate. The participants were employed in a variety of industries with 49% from for-profit businesses, 10% from non-profit businesses, 8% from government agencies, 11% from non-secondary schools, 11% from colleges and universities, 10% from churches and 1% from other types of entities. The sample included 47% men and 53% women, who on average were 43.3 years ($SD = 10.3$) of age. The average time participants had worked at their organizations was 7.7 years ($SD = 7.8$) and the average amount of time they had worked for their supervisor or leader was 3.6 years ($SD = 3.5$). Tenure with an organization ranged from 0 to 37 years and average time working for their leader ranged from 0 to 20 years.

Measures

Authentic Leadership

To measure the independent variable of authentic leadership, the study used the Authentic Leadership Questionnaire (ALQ), developed by Walumbwa, Avolio, Gardner, Wernsing and Peterson (2008). The ALQ measures authentic leadership using a 16-item scale that measures five dimensions of authentic leadership. The internal consistency and reliability measures in the Walumbwa, Avolio, Gardner, Wernsing and Peterson study was self-awareness, relational transparency, internalized moral perspective, and balanced processing. The alpha for these dimensions in this sample was .97.

Ethical Leadership

To measure the independent variable of ethical leadership, the study used the Ethical Leadership Survey (ELS), developed by Brown, Treviño and Harrison (2005). The ELS measures ethical behavior in leaders. The survey attempts to isolate ethical behavior from other related leadership behaviors that also possess a moral component, such as authentic and spiritual leadership. The ELS focuses on measuring ethical leadership behaviors “related to consideration behavior, honesty, trust in the leader, interactional fairness, socialized charismatic leadership (as measured by the idealized influence dimension of transformational leadership), and abusive supervision” (p. 134). Brown *et al.* contend that the ELS can be used to measure and help assess ethical behaviors that lead to ethical leadership and the resulting leader’s effectiveness. The scale was a 10-item scale and the corresponding alpha from this sample was 0.96.

Transformational Leadership

To measure transformational leadership, the moderating variable, the study used Carless, Wearing and Mann’s short measure of transformational leadership. Carless, Wearing, and Mann (2000) provide an alternative to the traditional measurements that have been used to assess an individual’s transformational leadership behaviors. Carless, Wearing, and Mann developed a measurement, the Global Transformational Leadership scale (GTL) that is much shorter, yet reliable and valid. The GLT is able to capture whether or not a leader is transformational by having a follower evaluate the leader’s vision, and their ability to develop their staff, lead in a supportive fashion, empower others, think innovatively, lead by example. The GLT also considers whether the leader is charismatic or highly competent, which translates into being respected by their followers.

Carless, Wearing, and Mann’s measurement contains seven questions. Their instrument has been determined as reliable and valid in measuring whether or not a leader is transformational by having a follower evaluate the leader’s: 1) vision, 2) their ability to develop their staff, their ability to lead in a supportive fashion, 4) the effectiveness in empower others, 5) innovative thinking, 6) propensity to lead

by example, and 7) ability to be seen as being highly competent which translates into being respected by their followers.

Carless, Wearing, and Mann's (2000) outlined the following items supporting the validity and reliability of the GLT. Carless, Wearing, and Mann's (2000) study outlined that: a) there was "a good fit between the observed variance-covariance" (p.397), b) "using the Bagozzi and Heatherton formula, the reliability of the GTL was calculated to be .93" (p. 398) and overall the findings" outlined that the "seven-item GTL is highly reliable" (p. 398), c) there was evidence that supported convergent validity of the GTL, d) "the pattern of high correlations with the hypothesized constructs" provided "evidence that the GTL corresponds to other measures of transformational leadership" (p. 398), e) "the high correlations between the GTL and the LPI and MLQ provide evidence that the GTL has strong convergent validity" (p. 400), f) T-tests and other "findings provide substantial evidence of the discriminate validity of the GTL, g) the descriptive statistics showed that with a possible range in score from 7 to 35 and a mean of 25 and standard deviation was 6.76. This supports a conclusion that there is "adequate dispersion of scores on the GTL" (p. 400), and lastly, h) Cronbach's alpha was .93 which supports the conclusion that the GLT is a reliable measure of transformational leadership (p. 400). In summary, the researchers have solidified that the GTL is a reliable measure as a single measurement of transformational leadership by outlining when a leader is "visionary, innovative, supportive, participative and worthy of respect" (p. 400). The high correlation between the GTL and other measures of transformational leadership suggests that the GTL is an acceptable "alternative short measure of transformational leadership with a broad range of potential" (Carless, Wearing, and Mann, 2000, p. 402). As with other measures, high scores describe a leader that uses transformational leadership extensively and a low score is received a leader who is seldom transformational. The GLT was developed from the study and assessment of prior literature, research studies and other instruments that measured transformational leadership behaviors in leaders. The Cronbach's alpha for transformational leadership in this study was .95.

Leadership Effectiveness

The dependent variable, leader effectiveness, was measured using Ehrhart and Klein's (2001) six item measures of leadership effectiveness. Leader effectiveness is a difficult outcome to define and measure. Ehrhart and Klein's tool assesses six factors that outline leader effectiveness, specifically, 1) a subordinate's willingness to work at a high level of performance for the leader, and agreement that they would 2) enjoy working for, 3) get along with, 4) admire the , and 5) find their work styles compatible with the leader. Lastly 6) assesses whether that they have similar ideals as the leader. The alpha for the scale for leader effectiveness in this sample was .95.

Survey Procedures

The investigation utilized questionnaires to collect data and test the outlined hypotheses. To collect data, the study utilized both a manually completed sample of master's level students and an online survey of employees from various organizations. The participants were asked to evaluate a direct supervisor or leader of an organization that they are currently a part of. They were asked to respond to all questions describing the attributes of the same leader.

Two sets of procedures were utilized due to the fact that surveys were administered both online and manually. Procedures for each varied slightly and are outlined below. Participants completing manual and on-line survey's were identified separately to ensure that neither method produced a bias or unusual result.

Manually Completed Surveys

Graduate students in the MSL program at an upstate New York liberal arts college participated in the manual survey collection. To obtain permission to survey the participants, the researcher initially met with the director of the college's Master's in Strategic Leadership (MSL) program. The Director later emailed the faculty, introduced the researcher and the study, and approved participation by faculty who were willing to have their classes surveyed. Each faculty member was contacted in advance to get their

approval and to facilitate arrangements to visit their class. To survey the students whose classes were visited, the students were asked to complete a survey. Participation was optional and responses were confidential and anonymous.

To facilitate timely data collection, the researcher scheduled a time to visit each class to have survey's completed at that time. All individuals in attendance were asked to complete a survey (participants were encouraged but not required) to minimize the potential bias that may come from collecting only from those who voluntarily offered to participate, which could result in a disproportional collection of data from those who felt positive or negative about their supervisors (Kerlinger and Lee, 2000). These survey procedures were discussed with course instructors in advance. The manually completed survey included an outline of the research procedures and how confidentiality and anonymity would be maintained. Prior to administering the survey, these details were reviewed with the participants. . The MSL students then received a self-administered questionnaire to evaluate their direct supervisor or leader. On average, 84% of students attending class participated in the survey.

On-Line Surveys

The remaining eighty-one percent (n = 141) of the sample were collected from a large email list of employed adults from a variety of organizations. These were individuals that the researcher knew from consulting and community involvement and was made up of a diverse group of individuals. These individuals were asked directly if they would be willing to participate. Two hundred twenty five email requests were sent out and sixty-three percent responded. Participants completed the questionnaire on line and answers were confidential and anonymous. The on-line survey tool allowed for a tracking of cookies on one's computer to ensure that no one responded twice. As in the classroom scenario, participation was encouraged, but optional.

Results

Descriptive Statistics

The means and standard deviations are shown in Table 3 for the control, predictor and criterion variables of the study. Transformational and authentic leadership behaviors as well as leader effectiveness were measured using a 5-point Likert scale. Ethical leadership was measured using a 7-point Likert scale.

TABLE 3
DESCRIPTIVE STATISTICS (N = 175)

Variable	M	SD
1. Leader Effectiveness	4.33	1.13
2. Transformational Leadership	4.0	.96
3. Authentic Leadership	3.94	.94
4. Ethical Leadership	6.0	1.46
5. Gender ^a	1.47	.50
6. Age	43.02	10.31
7. Tenure	7.71	7.75
8. Years worked for supervisor	3.65	3.49

a. gender was coded 1 for female and 2 for male

Reliability

Prior to creating the scales for transformational, authentic and ethical leadership; and leadership effectiveness, it was necessary to test the reliability of each of those measures. The Cronbach's Alpha for each of the scales was .95 or greater.

Correlations

Table 4 summarizes correlations among the study variables.

**TABLE 4
CORRELATIONS (N=175)**

	Leader Effectiveness	Transformational Leadership	Authentic Leadership	Ethical Leadership	Gender	Age	Tenure	Yrs working for supervisor
Leader Effectiveness	-	0.875**	0.887**	0.907**	-0.078	0.150*	-0.076	0.200
Transformational Leadership		-	0.898**	0.878**	-0.116	0.137	-0.067	0.095
Authentic Leadership			-	0.924**	-0.103	0.121	-0.064	0.056
Ethical Leadership				-	-0.064	0.146	-0.043	0.087
Gender						-0.270	-0.034	-0.003
Age							0.216**	0.224**
Tenure								0.501
Yrs working for supervisor								

Note: ** denote that the correlation is significant **p< 0.01 and * p< 0.05

While correlation between authentic, ethical and transformational leadership was noted, Copeland (2015) calculated the tolerance value and its inverse, the variance inflation factor (VIF) to definitively measure the degree to which each independent variable is explained by the set of the other independent variables. Hair et al. (2006) recommended that the tolerance value and its inverse, the variance inflation factor (VIF) should also be computed to definitively measure the degree to which each independent variable is explained by the set of the other independent variables. Hair et al. outlined that the tolerance is the “amount of variability of the selected independent variable not explained by the other independent variables” (p. 227) and is calculated by taking 1-R². The VIF is then calculated by 1 ÷ the tolerance value. Hair et al. outlined that when a VIF exceeds 10, the colinearity among the variables is problematic. The VIF calculation for the study sample had a VIF of less than 10, which outlines that multicollinearity or high correlations amongst the study variables is not problematic in this study.

Regression Analysis

Hierarchical regression analysis was used to test the hypotheses and relationship of the independent and dependent variables. Results of the various regressions are reported in Tables 5 through 10 and are outlined as follows:

Hypothesis 1

The regressions, reported in Tables 5 through 7 were run to test hypothesis one, which stated that there would be a positive relationship between the levels of authentic, ethical and transformational leadership and leader effectiveness. The results of the regressions supported this hypothesis.

TABLE 5
SUMMARY OF HIERARCHICAL REGRESSION ANALYSIS FOR AUTHENTIC LEADERSHIP PREDICTING LEADER EFFECTIVENESS (N = 175)

Leadership Effectiveness	b	SE b	β
Step 1			
Tenure	-.021	.013	-.141
Age	.018	.009	.166*
Gender	-.178	.170	-.079
Years worked for supervisor	.017	.028	.053
Step 2			
Tenure	-.002	.006	-.013
Age	.006	.004	.054
Gender	.030	.080	.013
Years worked for supervisor	-.011	.013	-.035
Authentic Leadership	1.060	.043	.883**

Note: $R^2 = .043$ for Step 1; $\Delta R^2 = .748$ for Step 2 ($p < .01$). Note: ** $p < 0.01$ and * $p < 0.05$.

TABLE 6
SUMMARY OF HIERARCHICAL REGRESSION ANALYSIS FOR ETHICAL LEADERSHIP PREDICTING LEADER EFFECTIVENESS (N = 175)

Leadership Effectiveness	B	SE B	β
Step 1			
Tenure	-.021	.013	-.141
Age	.018	.009	.166*
Gender	-.178	.170	-.079
Years worked for supervisor	.017	.028	.053
Step 2			
Tenure	-.002	.005	-.016
Age	.004	.004	.033
Gender	-.047	.072	-.021
Years worked for supervisor	-.019	.012	-.058
Ethical Leadership	.700	.025	.906**

Note: $R^2 = .043$ for Step 1; $\Delta R^2 = .785$ for Step 2 ($p < .01$). Note: ** $p < 0.01$ and * $p < 0.05$.

TABLE 7
SUMMARY OF HIERARCHICAL REGRESSION ANALYSIS FOR TRANSFORMATIONAL LEADERSHIP PREDICTING LEADER EFFECTIVENESS (N = 175)

Leadership Effectiveness	B	SE B	β
Step 1			
Tenure	-.021	.013	-.141
Age	.018	.009	.166*
Gender	-.178	.170	-.079
Years worked for supervisor	.017	.028	.053
Step 2			
Tenure	.002	.006	-.015
Age	.005	.004	.045
Gender	.058	.083	.026
Years worked for supervisor	-.026	.014	-.081
Transformational Leadership	1.040	.045	.881**

Note: $R^2 = .043$ for Step 1; $\Delta R^2 = .730$ for Step 2 ($p < .01$). Note: ** $p < 0.01$ and * $p < 0.05$

Hypothesis 2

The regression outlined in Table 8 was used to test hypothesis two, which stated that authentic, ethical and transformational behaviors would each make an incremental contribution to the explanation of leadership effectiveness.

TABLE 8
SUMMARY OF HIERARCHICAL REGRESSION ANALYSIS FOR ETHICAL, AUTHENTIC
AND TRANSFORMATIONAL LEADERSHIP (COMPUTED SEPARATELY) PREDICTING
LEADER EFFECTIVENESS (N = 175)

Leadership Effectiveness	B	SE B	β
Step 1			
Tenure	-.021	.013	-.141
Age	.018	.009	.166*
Gender	-.178	.170	-.079
Years worked for supervisor	.017	.028	.053
Step 2			
Tenure	-.002	.005	-.016
Age	.004	.004	.033
Gender	-.047	.072	-.021
Years worked for supervisor	-.019	.012	-.058
Ethical Leadership	.700	.025	.906**
Step 3			
Tenure	-.001	.005	-.010
Age	.004	.004	.036
Gender	-.014	.070	-.006
Years worked for supervisor	-.017	.012	-.054
Ethical Leadership	.469	.062	.606**
Authentic Leadership	.389	.097	.324**
Step 4			
Tenure	.001	.005	.004
Age	.003	.003	.032
Gender	.010	.067	.005
Years worked for supervisor	-.023	.011	-.070*
Ethical Leadership	.394	.062	.510**
Authentic Leadership	.187	.104	.156
Transformational Leadership	.343	.083	.291**

Note: $R^2 = .043$ for Step 1; $\Delta R^2 = .785$ for Step 2 ($p < .01$); $\Delta R^2 = .015$ for Step 3 ($p < .01$); $\Delta R^2 = .015$ for Step 4 ($p < .01$). Note: ** $p < 0.01$ and * $p < 0.05$.

Hypotheses 3 and 4

The regression below in Table 9 was run to test the third hypothesis which stated that transformational leadership would moderate the impact of authentic leadership on leader effectiveness. The regression in Table 10 was run to test the fourth hypothesis which stated that transformational leadership would moderate the impact of ethical leadership on leader effectiveness. Regression results failed to support either hypothesis.

TABLE 9
SUMMARY OF REGRESSION ANALYSIS TO TEST IF TRANSFORMATIONAL LEADERSHIP IS A MODERATOR FOR AUTHENTIC LEADERSHIP. (N = 175)

Leadership Effectiveness	B	SE B	β
Step 1			
Tenure	-.021	.013	-.141
Age	.018	.009	.166*
Gender	-.178	.170	-.079
Years worked for supervisor	.017	.028	.053
Step 2			
Tenure	.001	.006	.007
Age	.005	.004	.043
Gender	.055	.074	.024
Years worked for supervisor	-.020	.012	-.062
Transformational Leadership	.494	.088	.418**
Authentic Leadership	.616	.088	.513**
Step 3			
Tenure	-.001	.006	-.005
Age	.005	.004	.043
Gender	.050	.074	.022
Years worked for supervisor	-.019	.012	-.059
Transformational Leadership	.672	.147	.569**
Authentic Leadership	.804	.152	.670**
Trans * Authentic	-.053	.035	-.304

Note: $R^2 = .043$ for Step 1, $\Delta R^2 = .781$ for Step 2 ($p < .01$), $\Delta R^2 = .002$ for Step 3; Note: * and ** denotes a significance ** $p < 0.01$ and * $p < 0.05$.

TABLE 10
SUMMARY OF REGRESSION ANALYSIS TO TEST IF TRANSFORMATIONAL LEADERSHIP IS A MODERATOR FOR ETHICAL LEADERSHIP. (N = 175)

Leadership Effectiveness	B	SE B	β
Step 1			
Tenure	-.021	.013	-.141
Age	.018	.009	.166*
Gender	-.178	.170	-.079
Years worked for supervisor	.017	.028	.053
Step 2			
Tenure	.001	.005	.004
Age	.003	.003	.030
Gender	.003	.067	.001
Years worked for supervisor	-.024	.011	-.074*
Transformational Leadership	.412	.074	.349**
Ethical Leadership	.467	.048	.603**
Step 3			
Tenure	-.001	.005	.005
Age	.003	.003	.031
Gender	.006	.067	.002
Years worked for supervisor	-.025	.011	-.076
Transformational Leadership	.316	.145	.268*
Ethical Leadership	.416	.081	.538**
Trans * Ethical	-.017	.023	-.144

Note: $R^2 = .043$ for Step 1, $\Delta R^2 = .812$ for Step 2 ($p < .01$), $\Delta R^2 = .001$ for Step 3; Note: * and ** denotes a significance ** $p < 0.01$ and * $p < 0.05$.

The initial hypothesis proposed that there would be a positive relationship between the levels of authentic, ethical and transformational leadership and leader effectiveness. The results of the regressions supported this hypothesis. The fit of the regressions predicting leadership effectiveness increased significantly when each variable was added independently. After eliminating the effects of the control variables, the regression analysis showed a significant increase in R^2 of .748, .785, and .730 when authentic, ethical and transformational leadership, respectively, were added individually to the regression model.

The results also supported the second hypothesis that posited that there would be an incremental effect of each of the leadership behaviors (authentic, ethical and transformational) on leader effectiveness. Each of the non-control independent variables, authentic, ethical and transformational behaviors made incremental contributions to explaining leader effectiveness. The change in R^2 supported this, as it was noted that in each new model, when the next independent variable was added, resulted in a significant change in the R^2 from the previous model. The regression showed that leaders that had traits of authentic, ethical and transformational leadership incrementally increased the level of leader effectiveness. Analysis of the Beta or std coefficients also showed the relative contribution of each of the independent variables tested. Ethical leadership was the strongest predictor of leader effectiveness, with transformational leadership being the second and authentic leadership contributing the least.

Results did not support hypothesis 3 or 4 as the results did not support transformational leadership as a moderator for either authentic or ethical leadership.

Limitations of Measurement Tools and Proposed Methodology

There were some limitations to the data collection instrument and methodology utilized in this study. Limitations were as follows:

Limited Data Collection

Objective questions and a quantitative data collection approach, potentially limit the information that is collected. Including a mixed method design with some open ended questions or limited interviewing may have provided additional insights that a study that includes only an objective survey may fail to uncover (Creswell, Kerlinger and Lee, 2000).

Differing Company Dynamics and Roles

The research design included studying leaders in multiple organizations in attempt to collect data on multiple levels of supervisors and increase the external validity that would come from surveying participants from a variety of companies and organizational levels. The downside of this is that interpretation of questions may differ from company to company.

Sample Size

The sample size was small (n= 175) and was not selected randomly, which can impact both the predictability and reliability of the research.

PROPOSED FUTURE RESEARCH

Future research could address the impact that combinations of levels of leadership behaviors have on leader effectiveness as in outlined in Table 4. Specifically, for example, what are the outcomes if a leader is high on authentic, low on ethical or high on ethical and low on authentic, etc? In addition, continued research that assesses strategies for and the impact of leader training and mentoring to increase a leader's authentic, ethical and transformational leadership behaviors. The initial focus of this research should be on ethical leadership, given that it is the most significant contributor to leader effectiveness.

CONCLUSION

The research provides evidence that leaders that are ethical, authentic and transformational are more effective and that each of these behaviors can incrementally improve the positive outcomes of a leader. Of the three leadership behaviors, ethical leadership was the greatest predictor of leader effectiveness with transformational being the next highest and authentic being the least. The research did not support the theory that the transformational leadership conduct of a leader moderated the impact of the leader's authentic or ethical leadership on the leader's effectiveness. Additional research is encouraged that assists academics and practitioners in determining how these combined leadership qualities may be further developed in leaders to add to their overall effectiveness.

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