# AN EXAMINATION OF THE SIMILARITIES AND DIFFERENCES BETWEEN TRANSFORMATIONAL AND AUTHENTIC LEADERSHIP AND THEIR

### RELATIONSHIP TO FOLLOWERS' OUTCOMES

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Vicki L. Goodwin, Major Professor and Chair of the Department of Management Lew Taylor, Committee Member Robert Pavur, Committee Member O. Finley Graves, Dean of the College of Business Mark Wardell, Dean of the Toulouse Graduate School McKee, Victoria. <u>An Examination of the Similarities and Differences between</u> <u>Transformational and Authentic Leadership and their Relationship to Followers' Outcomes</u>. Doctor of Philosophy (Management), August 2013, 149 pp., 18 tables, 7 illustrations, references, 139 titles.

To date there is no comprehensive understanding of what leadership is, nor is there an agreement among different theorists on what a good or effective leader should be. The purpose of this dissertation is to examine the theoretical and empirical similarities and differences of two styles of leadership – transformational and authentic leadership. Follower outcomes, as well as, the effects of trust and psychological capital within these paradigms are of particular interest. Although theoretical differences are proposed for the leadership style, the extent of overlap suggests the need to more closely examine each theory. Pilot studies were created to validate original scenarios created for the study as well as to examine the validity and reliability of new measurement instruments. The dissertation is designed to determine whether the relationships between authentic leadership and a variety of follower outcomes including performance, affective commitment, satisfaction, trust, and organizational citizenship behavior are similar to those between transformational leadership and these outcomes. In addition, variables more unique to authentic leadership research including psychological capital and follower well-being were examined within both paradigms to determine whether their relationships are similar to each type of leadership style. An experimental study using Qualtrics was used to collect the data with the expectation that there would be significant differences in the two styles of leadership such that each explains unique variance in follower behavior. The results of this dissertation support the lack of perceptual difference between the two theories of leadership. The results of this experiment do not come completely unexpected because of the ethical overlap between the

two styles of leadership. Although subjects in the experiment could differentiate authentic leadership from transformational leadership based on the manipulations, authentic leadership effects were not significantly different when compared to transformational leadership effects. As a result, analyses in my research do not support previous theoretical development of authentic leadership as a separate theory from transformational leadership. Consequently, lack of support for my hypotheses actually provides valuable information to the study of leadership and calls into question the continued pursuit of research on authentic leadership. Although this dissertation was constructed to investigate the differences between authentic leadership and transformational leadership relative to follower outcomes, results found for gender differences may highlight an additional component to these leadership paradigms not previously considered. Copyright 2013

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#### CHAPTER I

#### INTRODUCTION

The differences between authentic and transformational leadership theories and their effects on followers' outcomes are examined in this study. The purpose of this dissertation is to review followers' outcomes of both transformational and authentic leadership, and examine each with specific focus on the theoretical and empirical similarities and differences. What is of particular interest in this dissertation is whether authentic and transformational leadership lead to the same kind of followers' outcomes because of the overlap between the two constructs. Ultimately the goal is to clarify the extent of the overlap as a means of addressing concerns that there is no difference between authentic and transformational leadership as currently operationalized.

Over the past 60 years there have been as many as 65 classification systems to define and develop leadership (Fleishman, Mumford, Zaccaro, Levin, Korotkin, & Hein, 1991). Today, the field of leadership focuses not only on the leader, but also on the followers, peers, supervisors, environment, and culture. Leadership is no longer simply one dimensional, but a dyadic, shared, relational, strategic, global, and complex social dynamic (Avolio, Walumbwa, & Weber, 2009). Research on this topic is extensive because of the influence a leader has on an employee's overall performance and satisfaction in the workplace.

To date there is no comprehensive understanding of what leadership is, nor is there an agreement among different theorists on what a good or effective leader should be. In recent decades, leadership researchers turned their attention to inspirational styles of leadership such as visionary, charismatic, and transformational (Michie & Gooty, 2005). Researchers focused attention away from predominately transactional models that were based on how leaders and

followers exchange with each other to newer models of leadership that focus on symbolic behavior, visionary inspirational messages, emotional feelings, ideological and moral values, individualized attention, and intellectual stimulation (Avolio, Walumbwa, & Weber, 2009).

In a content analysis conducted in 2001 of articles published in *Leadership Quarterly*, Lowe and Gardner reported that one-third of the research conducted focused on transformational leadership, making it a staple in leadership research. It is one of the most popular approaches over the last 20 years because it fits the need for employers who want to inspire and empower their employees to succeed in times of uncertainty. Transformational leadership occurs when a leader inspires followers to share a vision, and provides the resources necessary for developing their personal potential (Bass, 1996). This theory proposes that leaders increase followers' aspirations and stimulate their higher-order values (e.g., altruism) such that followers identify with the leader and his or her vision, feel better about their work, and then perform beyond simple transactions and base expectations (Avolio et al., 2009). One of the central components to the study of transformational leadership is trust. Trust in leadership is identified as a crucial element to the effectiveness of transformational leaders (Bass, 1990). Trust is defined as a psychological state comprising the intent to accept vulnerability based upon positive expectations of the intentions or behavior of another (Dirks & Ferrin, 2002; Rousseau, Sitkin, Burt & Camerer, 1989).

Authentic leadership is a more recent theory of leadership in the early stages of development. Although there is no clear agreement on its definition, authentic leadership describes a process of leadership that draws from both positive psychological capacities and a highly developed organizational context. If leaders are authentic, they will have greater self-

awareness and self-regulated positive behaviors on the part of the leaders and the followers, which in turn will create positive self development (Luthans and Avolio, 2003).

The development of authentic leadership theory emerged at a time when organizations were looking for someone to guide and inspire individuals. Newspapers were filled with examples of corruption and unethical behavior at the very top ranks of U.S. corporations. Authentic leaders were expected to add immense benefits to the organization through their positive effects on employee attitudes and behaviors (Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Gardner, Avolio, Luthans, May, & Walumbwa, 2005). The importance of authentic leadership stretches across multiple domains, due to the ever-changing economic, geo-political, and technological developments that require leaders to adapt, to be transparent, be aware of their values, and lead organizations with an ethical perspective (Clapp-Smith, Vogelgesang, & Avey, 2009). As a result, the topic of authentic leadership is generating increased interest in the leadership literature and also provides realistic value for practitioners (George, 2003; Avolio, Luthans, & Walumbwa, 2004; Gardner & Schermerhorn, 2004; Luthans & Avolio, 2003; May, Chan, Hodges, & Avolio, 2003; Avolio, Gardner, Walumbwa, Luthans, & May, 2004). Managers benefit from an emphasis on transparency, balanced processing, self awareness, and high ethical standards as a means to enhance employee engagement and citizenship behaviors, both of which provide a competitive advantage in global markets.

The authentic leadership process is proposed to affect followers' attitudes and behaviors through psychological capital and trust (Clapp-Smith et al., 2009). Psychological capital represents positive psychological states that contribute to higher levels of effectiveness and successful organizations (Luthans, Youssef, & Avolio, 2007; Luthans & Youssef, 2007). Trust also is important within the authentic leadership paradigm (Gardner, Avolio, Luthans, May, &

Walumbwa, 2005). Authentic relations with followers lead to trust. When followers believe top management exhibits the dimensions of authentic leadership, they will have greater amounts of trust in those leaders, which will lead to positive future outcomes (Clapp-Smith et al., 2009). As a result, the authentic leadership process is important because it addresses both theoretically and practically, a potential foundation and point of departure for authentic leadership development. Authentic leaders are not only concerned with their own authenticity but can convey their authenticity to their followers, which allows their followers to more accurately assess the competence and morality of their leaders' actions (Day, 2000; Day & O'Connor, 2003; Luthans & Avolio, 2003; Avolio, Gardner, Walumbwa, & May, 2004).

Furthermore, because authentic leadership facilitates the process of followers' true selfidentification it should contribute directly to follower well-being (Humphreys, Williams, Layton, & Novicevic, 2011). When examining the direct connection between authentic leadership and followers' well-being, one must return to the early work of authenticity and how it provides impressive empirical evidence of the positive consequences that increase in terms of physical and psychological well-being to individuals who achieve relatively high levels of authenticity (Deci & Ryan, 2000; Kernis & Goldman, 2005). Also, authentic leadership is based on a paradigm of positive health; therefore well-being is one of the distinguishing outcomes that separate authentic leadership from transformational leadership. It is likely that when a leader possesses self knowledge and a personal point of view, which reflects clarity about his or her values and convictions, he or she will influence the physical, mental, social, and psychological well-being of his or her followers.

Regardless of attempts to identify authentic leadership as its own unique construct, it has similarities to transformational leadership. Trust represents a key overlap between theories. It is

well documented as a mediator in transformational leadership (Avolio, 1999; Dirks & Ferrin, 2002; Jung & Avolio, 2000; Podsakoff, MacKenzie, & Bommer, 1996; Goodwin, Whittington, Murray, & Nichols, 2011) and proposed theoretically as a mediator in the authentic leadership paradigm with some empirical support (Avolio et al., 2004; Edmondson, 1999; Prati, Douglas, Ferris, Ammeter, & Buckley, 2003; Rego et al., 2007). Furthermore, each style of leadership is associated with similar outcomes (e.g., trust in leadership (Clapp-Smith et al., 2009; Wong & Cummings, 2009; Wong et al., 2010), follower job satisfaction (Giallonardo et al., 2010; Jensen & Luthans, 2006 & Walumbwa et al., 2008), organizational commitment (Jensen & Luthans, 2006; & Walumbwa et al., 2008), follower job performance (Walumbwa et al., 2008; Wong & Cummings, 2009).

#### Statement of the Problem

The differences between authentic and transformational leadership theories are examined in this study. The purpose is to review major components of theories with specific focus on the theoretical and empirical similarities and differences. Follower outcomes, as well as, the mediating effects of trust and psychological capital within these paradigms are of particular interest. Although there appears to be theoretical differences in definition or description, the extent of overlap suggests the need to more closely examine each construct within the same nomological network to determine whether there is any real difference before moving forward with authentic leadership research (Humphreys et al., 2011).

If authentic leadership offers little additional insight into the leadership paradigm beyond that obtained from transformational leadership, then as a separate theory it adds little value to the leadership literature. Perhaps its effect through psychological capital provides a contribution by helping us understand how leadership can positively influence an employees' outlook on the job as well as his or her ultimate well-being. Yet based on the other similarities between authentic and transformational leadership, it is possible that transformational leaders may accomplish the same results; if not through psychological capital, then through trust. In the following section, these issues are further clarified followed by a summary of my expectations for the outcome of the current research.

#### Theoretical Foundation

#### Transformational Leadership

Transformational leadership was first conceptualized by Burns (1978) in his seminal work that described the concepts of transformational and transactional leadership. Later, Bass (1985) elaborated on the construct of transformational leadership as a style used by leaders who are concerned with improving the performance of their followers and developing them to their fullest potential (Avolio, 1999, Bass & Avolio, 1997). Individuals who exhibit transformational leadership often have a strong set of internal values and ideals, and they are effective in motivating followers to work for the greater good (Kuhnert, 1994). Since its foundation, researchers demonstrated the effectiveness of transformational leadership for increasing organizational satisfaction, commitment, and effectiveness, and increased the understanding of the dynamics of transformational leadership.

Transformational leadership is described in four factors: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1985, 1996; Bass & Avolio, 1994a, 1994b). *Idealized influence* and *inspirational motivation* are displayed when a leader envisions a desirable future, articulates to the followers how to reach future goals, and sets an example of how that goal can be attained using confidence, a high standard of performance, and determination. *Intellectual stimulation* is displayed when a leader helps followers increase

the creative and innovative side of their jobs. *Individualized consideration* occurs when leaders assist in the developmental needs of the followers by supporting and coaching them, along with giving the followers opportunities for growth (Bass, 1999).

Transformational leadership is often measured using the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1995), which includes subscales for both transactional and transformational styles of leadership. Research conducted using the MLQ clearly demonstrates that perceptions of transformational leadership are positively related to multiple organizational outcomes, generalizing across organizational levels, cultures, and sample populations (Bass, 1997).

Numerous studies, including a series of meta-analytic studies, provide evidence supporting a positive relationship between transformational leadership effectiveness, follower performance and follower organizational citizenship behavior (Judge & Piccolo, 2004). Followers of transformational leaders are more committed, satisfied, have stronger identification with their organizations, and perceive their leaders to be fairer than non-transformational leaders (e.g. Liao & Chuang, 2007, Walumbwa, Avolio, & Zhu, 2008). Furthermore, trust is a crucial element in the study of transformational leadership. A meta-analysis conducted by Dirks and Ferrin (2002) indicated that trust in a leader is associated with a variety of positive organizational outcomes, such as commitment, organizational citizenship behaviors, satisfaction, and intentions to remain in the organization. It provides an explanation for how or why transformational leadership relates to follower outcomes in its role as a mediator of the transformational behaviorfollower outcome relationships (Podsakoff, MaKenzie, Moorman, & Fetter, 1990; Goodwin, Whittington, Murray, & Nicholas, 2012).

#### Authentic Leadership

Authentic leadership has many different definitions, but one commonality among them is that leaders are portrayed as possessing self-knowledge and a personal point of view, which reflects clarity about their values and convictions (Avolio, Luthans, & Walumbwa, 2004). Authentic leaders identify strongly with their leadership role and act on the basis of their strong values and convictions (Shamir & Eilam, 2005). As a result, they lead in a manner that the follower recognizes as authentic.

As a new construct, there is very little empirical evidence that examines authentic leadership and its relationship to followers' performance outcomes. In 2004, the Gallup Leadership Institute at the University of Nebraska – Lincoln hosted an inaugural summit on authentic leadership development (ALD). This summit was created to promote a dialogue among scholars and practitioners because of the challenging and turbulent times and to develop a strategy of leadership.

Only recently did Walumbwa, Avolio, Gardner, Wersing, and Peterson (2008) create a theory-based measure of authentic leadership comprised of leader self-awareness, presenting one's authentic self, objectivity, and self regulation. Since then, research using the Authentic Leadership Questionnaire (ALQ) supports relationships between authentic leadership and important work-related attitudes and behaviors similar to those found for transformational leadership (e.g., followers' organizational citizenship behavior, commitment, satisfaction, and performance).

In addition, authentic leadership may be linked to follower well-being or positive health. Although, there is very little empirical evidence to support this idea, it seems likely that when leaders possess self knowledge and a personal point of view that reflects clarity about their

values and convictions, they will influence the physical, mental, social, and psychological wellbeing of their followers. The concept of well-being is represented by four components: (1) leading a life with a purpose, (2) quality connections to others, (3) positive self-regard, and (4) perception of negative events as paths to meaning and purpose (Ryff & Singer, 1998). Each of these four elements moves beyond the physiological level, which is normally examined in the literature, to incorporate a psychological component. From this research, Macik-Frey et al. (2009) examine authentic leadership as a pathway to positive mental health or well-being and provide evidence that authentic leadership is an efficient and effective way to move toward optimal human functioning.

Although past research has been hierarchical and leader centric, future research should adapt more integrative approaches in which followers and context are also examined to advance leadership theory (Avolio et al., 2004). The change in the direction of leadership is important for organizations so that they can evolve with the ever changing globalized market. Authentic leaders are aware of how their actions will affect their followers and try to make decisions that are best for them. But for leaders to be considered truly authentic by followers, followers must perceive them to be authentic; for that reason authentic leadership must be regarded as a function of a follower's perception. Shamir (2007) suggests that leadership effectiveness is just as much a product of good followers as it is of good leaders. Therefore, a model of authentic leadership should include not only the leader's behaviors but also their characteristics as well as those of the followers, revealing a more integrative approach to studying leadership and organizational behavior (Gardner, Luthans, Avolio, & May, 2005; Luthans, Norman, & Hughes, 2006).

Psychological capital is one follower characteristic that is examined in the authentic leadership paradigm. It has gained some momentum in the field of organizational behavior. In

their book, *Psychological Capital*, Luthans, Youssef and Avolio (2007) underscore the importance of examining psychological capital and define its key constructs, which have not received much attention in the organizational behavior literature to date.

Psychological capital is considered to be an outgrowth of positive organizational behavior and is defined as an individual's positive psychological state of development characterized by having confidence to take and put in the necessary effort to succeed at challenging tasks, making positive attributions about success, persevering toward goals, and when necessary, redirecting paths to goals in order to succeed, and when overwhelmed by problems and adversity the individual is able to recover successfully (Luthans, Youssef, & Avolio, 2007). Each of these four characteristics of individuals with positive psychological capital are represented by the four constructs of self-efficacy, hope, optimism, and resiliency, respectively, as conceptualized by Luthans, Youssef, and Avolio (2007). When these four constructs are considered together as a core construct rather than separate constructs, additional variance is explained in outcomes associated with them (Law, Wong, & Mobley, 1998; Luthans, Avolio, Avey, & Norman, 2007).

Psychological capital is not considered to be a personality characteristic as it has a *state-like* quality rather than the relatively fixed, *trait-like* quality typically associated with personality characteristics. In effect, hope, self-efficacy, optimism and resiliency can be developed and change over time. This assumption is significant given that authentic leadership is more likely to influence psychological capital if it does not consist of largely stable and enduring traits (Luthans & Avolio, 2009).

Avolio, Gardner, Walumbwa, Luthans and May (2004) were the first to propose psychological capital as a mediating variable between authentic leadership and followers'

outcome variables. Authentic leadership affects followers' outcomes through psychological capital because leaders have a strong impact on the decisions and identity of their followers. The authors drew on positive organizational behavior, trust, hope, emotion, and identification to describe the process by which authentic leaders exert their influence on followers' attitudes and behaviors. Avolio (2003) suggests that one of the core challenges by an authentic leader is to identify followers' strengths and help direct and build them appropriately, which in turn affects their psychological capital.

Trust is another variable that is proposed to mediate the relationship between authentic leadership and followers' outcomes. When authentic leaders are deeply aware of how their followers think and operate, they can gain their followers' trust. Furthermore, when authentic leaders take an ethical and well developed approach to decision making, followers may be more willing to place trust in the leader's future actions because they can use past experiences to predict future responses and behaviors by the leader (Gardner, Avolio, Luthans, May, & Walumbwa (2005).

Although research results support psychological capital as a mediator of the authentic leadership-performance relationship, research results support trust in management as a mediator of the relationship between psychological capital and performance. Consequently, the role of trust as a mediator in the authentic leadership paradigm is less clear (Smith et al., 2009). At the very least, these results demonstrate the potential relevance of psychological capital to authentic leadership and the utility of exploring the effects of both constructs on trust and performance (Gardner, Cogliser, Davis, & Dickens, 2011).

#### Similarities and Differences

When examining research concerning transformational leadership and authentic leadership, most researchers have examined one or the other, but not both. There are only a limited number of studies that examine them together.

#### Similarities

It is very clear from a review of the literature that transformational leadership and authentic leadership are very similar. From the beginning of its theoretical development, Burns (1978) proposed that transformational leadership includes a moral dimension. Transformational leaders were expected to raise the level of human conduct and ethical aspiration of both the leader and the follower. Authentic leadership, also with a moral component, was derived in part from transformational leadership (Bass and Steidlmeier, 1999). Leaders are authentically transformational when they increase awareness of what is right, when they help to evaluate followers' needs for achievement and self actualization, and when they move followers to go beyond their self-interests, for the good of the organization (Bass & Steidlmeier, 1999). Gardner (2004) agrees that a prerequisite to both transformational and authentic leadership is high moral character. Because of the ethical overlap, some researchers propose there is no difference between transformational leadership and authentic leadership (Bass & Steidlmeier, 1999). The authors' position is that authentic transformational leaders portray idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration and expect and empower followers to take actions that are noble, fair, and legitimate. Therefore, authentic leadership is simply an extension of transformational leadership. Also, Avolio and Gardner (2004) explain that transformational leaders are described as optimistic, hopeful, and developmentally-oriented and of high moral character (Bass, 1998), all of which are components

of authentic leadership. On the other hand, May, Chan, Hodges, and Avolio (2003) state that authentic leadership is an over-arching concept that includes transformational leadership and all positive forms of leadership, which is similar to the propositions made by Lloyd-Walker and Walker (2011). The authors propose that authentic leadership incorporates transformational and ethical leadership into the same construct or at the very least, adds ethical leadership qualities to the established transformational style. Either way, all of the above authors agree that transformational and authentic leadership are similar, if not the same.

#### Differences

More current researchers delineate authentic leadership from transformational leadership. Authentic leadership emerged over the last few decades as a central component to positive leadership since its conceptualization in the late 1970s (Clapp-Smith, Vogelgesang, & Avey, 2009). It was not until recently that researchers began to argue that authentic leadership is its own construct and is not an extension of other leadership constructs, such as transformational leadership. Authentic leadership can integrate transformational, charismatic, servant, spiritual or other forms of positive leadership; though, in contrast to transformational leadership in particular, an authentic leader may or may not have all the qualities that a transformational leader should possess (George, 2003). For example, authentic leaders may or may not be actively or proactively focused on developing followers into leaders, even though they have a positive impact on them via role modeling (Avolio & Gardner, 2005). Authentic leaders build enduring relationships, work hard, and lead with purpose, meanings, and values, but are not necessarily described as charismatic by others, which has been defined as a core component of transformational leadership (Avolio & Gardner, 2005). Another way authentic leadership differs is that authentic leadership underlies the positive aspects of charismatic, transformational,

spiritual, and ethical leadership and does not include a negative style such as pseudotransformational leadership. As a result, authentic leadership should be examined separately. Authentic leaders are aware of how their actions will affect their followers and attempt to make decisions that are best for them (Yukl, 2010). According to Avolio and Gardner (2005), distinguishing characteristics of authentic leadership are leaders' self awareness and self regulation, emotional contagion, and commitment to enabling follower success through supporting their development (Avolio & Gardner, 2005). Therefore, authentic leadership is focused on leaders' personal characteristics, whereas transformational leadership focuses on the behaviors of the leader.

Table 1 includes a summary of the research based on the similarities and differences established in the literature on transformational and authentic leadership. After reviewing these articles, it is apparent that there is a disagreement among researchers, as to whether a difference truly exists between transformational and authentic leadership.

#### Table 1

Article Title	Туре	Similar or Different
Bass, 1998	С	S
Bass & Steildemeir, 1999	С	D
Avolio, 1999	С	S
Fredirickson, 2001	С	D
Luthans & Avolio, 2003	С	D
May, Chan, Hodges, & Avolio, 2003	С	S
George, 2003	С	D
		(table continues)

Similarities and Differences between Transformational and Authentic Leadership

Table 1 (continued).

Article Title	Туре	Similar or Different
Gardner, 2004	С	S
Avolio & Garner, 2004	С	S
Avolio & Garner, 2005	С	D
Ilies, Morgenson, & Nahrgang, 2005	С	S
Walumbwa, Avolio, Gardner, Wersing, & Peterson, 2008	E	D
Neider, Schriesheim, & Sinclair, 2009	Е	D
Yukl , 2010	Е	D
Walker & Walker, 2011	С	S

\*Type: Conceptual -C; Empirical-E

In addition to there being a question about the similarities and differences between the theoretical components of transformational and authentic leadership, both forms of positive leadership result in similar follower outcomes. It is clear that a preponderance of evidence reports a direct relationship between transformational and authentic leadership to followers' performance, satisfaction, organizational citizenship behaviors, trust, and commitment. Two followers' outcome variables that differentiate authentic from transformational leadership are psychological capital and well-being. Psychological capital, by its definition is associated with authentic leadership because both psychological capital and authentic leadership came from the outgrowth of positive psychology. Well-being is typically examined as a dependent variable in the authentic leadership paradigm and not the transformational leadership paradigm because well-being is part of an individual's personal expressiveness, self realization, experiences, and self efficacy (Illies, Morgeson, & Nahrgang, 2005).

Based upon this review, the guiding research questions for this dissertation are:

1 Is there a difference between transformational leadership and authentic leadership?

#### 2 If so, how do they differ?

#### Summary

The purpose of this research is to examine transformational and authentic leadership to determine whether they differ substantially or whether they are the same theory under different names. Transformational leadership has been validated many times in previous research, whereas authentic leadership has less evidence supporting it as a separate theory. Specifically, I examined both authentic and transformational leadership effects on followers' outcome variables. Even though some of the debate between transformational and authentic leadership is simply semantics, the literature does indicate that while the theoretical connection between transformational and authentic leadership is substantial, it is also incomplete. This fact alone requires this dissertation to better illustrate the similarities shared by these positive forms of leadership as well as the differences.

Proposition 1: Inspirational motivation, idealized influence, intellectual stimulation, individualized consideration as components of transformational leadership affect a follower's trust which, in turn affects a follower's satisfaction, performance, organizational citizenship behavior, and commitment.

Proposition 2: Self awareness, relational transparency, balanced processing, and internalized moral perspective as components of authentic leadership affect a follower's trust which, in turn affects a follower's satisfaction, performance, organizational citizenship behavior, and commitment.

Figure 1 includes a model of transformational leadership that has been supported in numerous research studies. In order to first determine if there is a difference, the components of authentic leadership replace the transformational leader style in the second model. If authentic leadership differs from transformational leadership then its relationship with trust and the outcome variables will be dissimilar to those for transformational leadership.

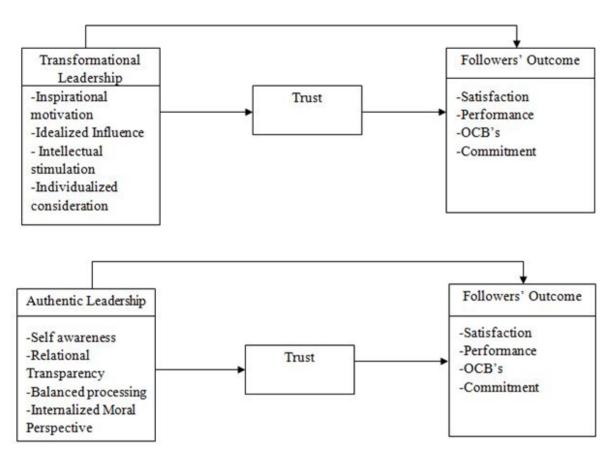


Figure 1. Theoretical model of transformational and authentic leadership.

Proposition 3: Self awareness, relational transparency, balanced processing, and internalized moral perspective as components of authentic leadership affect a follower's trust and a follower's psychological capital which, in turn affects a follower's satisfaction, performance, organizational citizenship behavior, commitment, as well as wellbeing.

Because a difference is expected, an alternative theoretical model for authentic leadership

based on previous theorizing and research is presented in Figure 2. In this model, psychological

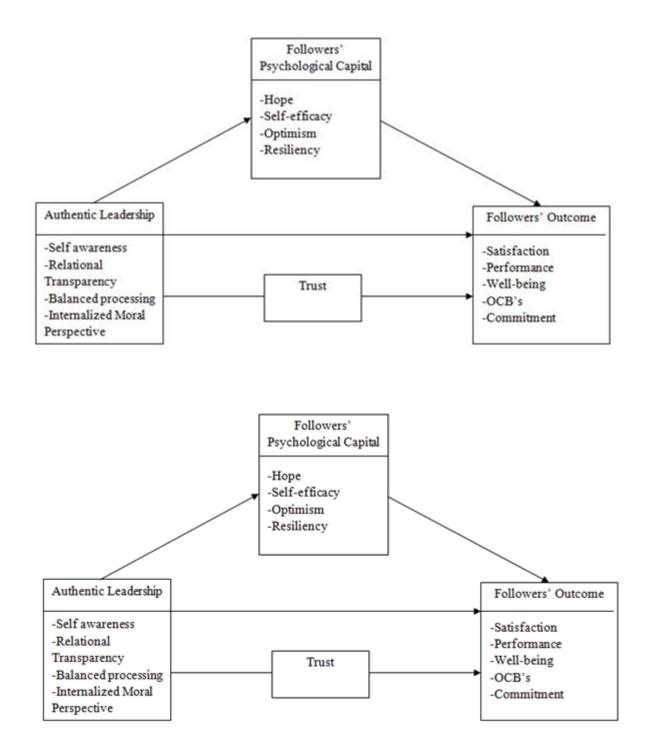
capital and trust are included as partial mediators of the authentic leadership-outcomes

relationship. In addition, both psychological capital and well-being are distinguishing

characteristics of authentic leadership. It is expected that this model will provide a better fit to

the data when authentic leadership is the independent variable compared to the model in Figure

1.



*Figure 2*. Alternative theoretical model for authentic leadership with psychological capital as a partially mediating variable of authentic leader-follower outcomes relationship.

#### Significance of the Research

In conclusion, this dissertation provides an initial investigation of many variables that are of interest in the leadership literature. First, this examination answers the call for an investigation of the difference between transformational and authentic leadership. Second, this dissertation will provide a more in-depth analysis of the relationship between authentic leadership and follower outcome variables. Third, this paper will provide a more in-depth analysis of the mediating variables of psychological capital and trust providing a test of the theoretical framework first proposed by Luthans et al. (2007).

If authentic leadership does differ from transformational leadership, this research will help provide information as to how authentic leadership explains outcomes beyond what is explained by transformational leadership. Results from this study will have practical implications for the development of authentic leaders because empirical evidence will illuminate what outcome variables are most affected by authentic leadership.

#### Glossary of Terms

The following is a list of terms and their conceptual definitions.

• Transformational leadership: was first conceptualized by Burns (1978) and then refined by Bass (1985). Bass extended Burns earlier work by giving more attention to followers' rather than leaders' needs, and illuminated the emotional elements and origins of charisma. Transformational leadership is concerned with improving followers' performance and developing them to their fullest potential. Transformational leadership is comprised of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

• Authentic leadership: defined as "a process that draws from both positive psychological capacities and a highly developed organizational context, which results in greater

self-awareness and self-regulated positive behaviors on the part of the leaders and associates fostering positive self -development" (Luthans and Avolio, 2003; p. 243).

• Psychological capital: Psychological capital is seen primarily as an outgrowth of positive organizational behavior and is defined as "an individual's positive psychological state of development characterized by: (1) having confidence to take and put in the necessary effort to succeed at challenging tasks; (2) making positive attributions about succeeding now and in the future; (3) persevering toward goals, and when necessary, redirecting paths to goals in order to succeed; (4) when beset by problems and adversity, sustaining and bouncing back and even beyond to attain success" (Luthans, Youssef, & Avolio, 2007, p. 3).

• Trust: Trust is defined as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Dirks & Ferrin, 2002, p. 612; Rousseau, Sitkin, Burt & Camere, 1989, p. 395). Trust is normally treated as a perception by the follower of the leader of an organization (Collins & Smith, 2006).

#### CHAPTER II

#### **REVIEW OF THE LITERATURE**

#### Introduction

The differences between authentic and transformational leadership and their effects on followers' outcomes are examined in this dissertation. The purpose of this literature review was to focus on the theoretical and empirical similarities and differences between the two constructs. The first question that is of interest is whether authentic and transformational leadership lead to the same kind of followers' outcomes because of the theoretical and empirical overlap between the two constructs. The second question addressed is if a difference between transformational and authentic leadership is identified, what it is about authentic leadership that distinguishes it from transformational leadership? First, an overview of transformational and authentic leadership is presented. Within this section is a discussion of transformational leadership, including definitions, an outline of the basic tenets, why transformational leadership is important, mediators and moderators of transformational leadership relationships, and how it relates to follower outcomes. This overview is followed by a discussion of authentic leadership, including definitions, the main components of authentic leadership, what is gained by studying authentic leadership and how it relates to follower outcomes. Next, a discussion of the similarities and differences between transformational leadership and authentic leadership is presented, followed by the development of my position that these constructs are theoretically and empirically different even though there is overlap. Consequently, each leadership theory adds to our understanding of leadership research. Hypotheses are presented at the end of the chapter along with the research model.

#### Transformational Leadership

In this section, I introduce the construct of transformational leadership through the discussion of its various components, as presented in the original work of Burns (1978) and Bass (1985). Transformational leadership is discussed in its relationship to followers' outcomes and possible mediators and moderators of this relationship. The conclusion of this section ties the various components of this construct together to provide a coherent picture of transformational leadership.

#### Transformational Leadership

Transformational leadership is particularly important in the leadership field. A search from 1990 to 2003 of the PsyINFO database revealed that there have been more studies on transformational leadership than on all other popular theories of leadership combined. Furthermore, in a content analysis of published articles, transformational leadership constituted one third of the research in *Leadership Quarterly* (Lowe & Gardner, 2001). Transformational leadership has been studied in the lab and in the field, using correlational and experimental data, with subjective perceptions of effective leadership and economic criteria and in a wide variety of settings – including military, education, and business (Judge & Piccolo, 2004).

#### Origins of Transformational Leadership

Transformational leaders were first described by Burns (1978) as those leaders who offer a purpose above short-term goals and focus on higher-order intrinsic needs. Transformational leadership involves motivating followers to implement their shared vision. These leaders are also role models to their followers, who develop trust in them because of their personal commitment to achieving the vision (Jung & Avolio, 2000; Bass & Avolio, 1995). Individuals who exhibit transformational leadership often have a strong set of internal values and ideals and they are

effective in motivating followers to work for the greater good (Kuhnert, 1994). Later, Bass (1985) elaborated on the construct of transformational leadership as a style used by leaders who are concerned with improving the performance of their followers, developing them to their fullest potential and raising the bar by appealing to higher moral ideals and values of the followers (Avolio, 1999, Bass & Avolio, 1999). Furthermore, Bass did not agree with Burns (1978) that transformational and transactional leadership represent opposite ends of a single continuum. Bass argued that the greatest leaders are both transformational and transactional leadership. Although the theory has undergone several revisions, in the most recent version there are four dimensions of transformational leadership, three dimensions of transactional leadership, and a non-leadership dimension. Since its foundation, researchers have demonstrated the effectiveness of transformational leadership for increasing organizational satisfaction, commitment, and effectiveness, and have increased understanding of the dynamics of transformational leadership (Judge & Piccolo, 2004).

#### Components of Transformational Leadership

There are four dimensions of transformational leadership; these are idealized influence/charisma, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1985). Idealized influence is the degree to which leaders behave in admirable ways that cause followers to identify with their leader. Leaders are advocates for their followers and appeal to them on an emotional level. Inspirational motivation is the degree to which the leader is able to articulate a vision that is both engaging and inspiring to followers. Leaders who use inspirational motivation challenge followers with high standards, communicate optimism about future goal attainment, and provide meaning to the task. Intellectual stimulation

is the degree to which a leader challenges assumptions, takes risks, and incorporates followers' ideas. Leaders who intellectually stimulate their followers support a more creative environment. Individualized consideration represents the degree to which the leader attends to the followers' needs, mentors them, and takes into consideration their concerns and needs.

#### Transformational Leadership and Outcomes

Numerous studies, including a series of meta-analytic studies, provide results supporting a positive relationship between transformational leadership effectiveness, follower performance and follower organizational citizenship behavior (Judge & Piccolo, 2004). Researchers have examined the concept of transformational leadership intensively in recent years (Kearney & Gebert, 2009; Eisenbeiss et al., 2008) and found it is effective both in terms of increasing followers' performance expectations (Bass, 1985) and transforming their personal values and self-concept into a higher level of needs and aspirations (Jung & Avolio, 2001). Transformational leadership is now closely associated with a range of outcomes pertaining to the individual: satisfaction and performance (Vecchio et al., 2008), organizational commitment (Avolio et al., 2004; Whittington et al., 2004), work withdrawal (Wang & Walumbwa, 2007), task performance and organizational citizenship behavior (Piccolo & Colquitt, 2006; Wang *et al.*, 2005), followers' creativity (Gumusluoglu & Ilsev, 2009; Shin & Zhou, 2003), and absenteeism (Richardson & Vandenberg, 2005).

Research described in a number of articles has examined the relationship between transformational leadership and trust (Bass, 1985; Bass & Avolio, 1994; Dirks & Ferrin, 2002; Jung & Avolio, 2000; Podsakoff, MacKenzie, & Bommer, 1996; Goodwin, Whittington, Murray, & Nichols, 2011). There have been many studies that provide clear implications for the effect of trust in both popular management press and in scholarly research. Trust helps sustain individual

and organizational effectiveness, along with the leader-follower relationship. When examining trust and transformational leadership, followers develop trust in their leaders because of their leaders' personal commitment to achieving the vision. Also, transformational leaders empower and encourage followers to think for themselves, which instills trust in the leader (Bass & Avolio, 1995). Several studies have examined trust as an outcome of transformational leadership. Podsakoff el al. (1996) investigated trust by asking followers how fairly they felt they were treated by their managers. They found that when leaders provide an appropriate model, individualized support and foster acceptance of group goals, employee trust was higher.

In addition, a meta-analysis conducted by Dirks and Ferrin (2002) provides evidence for a correlation between trust and transformational leadership, as well as job satisfaction, organizational commitment, organizational citizenship behavior, and performance. Because both transformational leadership and trust have similar relationships to a variety of outcomes, yet they also have a strong relationship with each other, researchers have examined trust as a mediation variable (Goodwin, Whittington, Murray, & Nichols, 2011).

The results from Goodwin et al.'s (2011) study support past research that examines trust as a mediator in relationships between transformational leadership and various outcome variables (e.g. Podsakoff et al., 1990; Pillai, Schriesheim, & Williams, 1999; Jung & Avolio, 2000; Makenzie, Podsakoff, & Rich, 2001; Connell, Ferres, & Travaglione, 2003). In particular, trust was found to fully mediate the relationship between transformational leadership behavior and organizational citizenship behavior, performance, and affective commitment. Therefore, transformational leaders are trusted by their followers, who in turn display positive attitudes and performance. These results also support Avolio's (1999) contention that the impact of transformational leadership on followers is not direct.

#### Authentic Leadership

#### Origins of Authenticity and Authentic Leadership

Authenticity, as a construct dates back at least to the ancient Greeks, captured in their timeless admonition to "be true to oneself" and reflected in many philosophical discussions of what constitutes authenticity (Harter, 2002; Harter, Schmidt, & Hayes, 2002). Only in recent years has the concept of authenticity been clarified and refined through theoretical developments and empirical research by social psychologists (Deci & Ryan, 2000; Kernis, 2003; Ryan & Deci, 2001, 2003). In a developmental model proposed by Kernis (2003) after an extensive comprehensive review of the literature, he hypothesized that attainment of authenticity leads to optimal levels of self-esteem. When individuals have optimal self esteem, they are relatively free of defensive biases displayed by less mature individuals, and consequently, more comfortable forming transparent, open, and close relationships with others. In addition, individuals display authentic behavior when their behavior reflects a consistency with their values, beliefs, and actions. This multi-component conceptualization of authenticity provides a theoretical foundation for several authentic leadership theories. Another definition of authenticity in social psychology suggests there are two distinguishing and crucial components of authentic leadership theory. One component is representative of moral behavior and the other includes a developmental focus (Kernis, 2003).

George (2003) popularized authentic leadership as a general practice as did Luthans and Avolio (2003). Luthans and Avolio (2003) introduced the concept of authentic leadership development into the literature with the goal of integrating work on (Luthans, 2002) positive organizational behavior. The theoretical underpinnings of Luthans and Avolio's (2003) authentic leadership model include positive organizational behavior, transformational/full range

leadership, and ethical perspective taking. In this early conceptualization, the authors included all the components of psychological capital (Luthans, Avolio, Avey, & Norman, 2007). Their main purpose was to examine what constituted genuine leadership development, including what would work and what would not work, as well as bring to the foreground some of the recent work in positive psychology as a foundation for examining how one might accelerate the development. Luthans and Avolio reasoned that they could use some of Fredrickson's (2001) theoretical work in positive psychology to broaden and build a theory that could offer a more positive way for conceptualizing leadership development. According to Fredrickson, those individuals who have more positive psychological resources are expected to grow more effectively and to broaden themselves and expand their personal resources to perform. This approach is significant because prior leadership development work is based on a deficit reduction model strategy, where one discovers what is wrong with a leader and then works to correct deficits in terms of focusing on the leader's development (Avolio, Walumbwa, & Weber, 2009).

The study of authentic leadership has become more relevant over the last few years because individuals find themselves working in challenging and turbulent times, where authentic leadership may be needed to achieve desirable outcomes. From a macro level perspective, an upswing in highly publicized corporate scandals, management corruption, and broader societal challenges facing public and private organizations has contributed to the recent attention placed on authenticity and authentic leadership. The convergence of these challenges have, in combination, elicited calls for more positive forms of leadership in institutions and organizations to restore confidence in all levels of leadership (Avolio & Luthans, 2006; Brown, Trevino, & Harrison, 2005, George, 2003; Lorenzi, 2004). As positive psychology has gained momentum, so has the need for organizational behavior to adapt to this new view of individuals and

organizations. Although the idea of positive psychology is not novel, over the last few years it has begun to attract new researchers and empirical studies have been conducted in the areas of positive reinforcement, positive affect and emotions, and even humor (Luthans & Avolio, 2009). Furthermore, there appears to be a strong relationship between the new "positive" agenda and authentic leadership (Macik-Frey, Quick, & Cooper, 2009). Authentic leadership is based on the paradigm of positive health, the ability to perform at an exceptional level as a leader, and to facilitate this level of including and optimally emphasizing the positive side of leadership (Macik-Frey et al., 2009). Therefore, the process of authentic leadership truly draws from both positive psychological capacities and a highly developed organizational context that in turn provides the leader with greater self-awareness and regulation, which fosters positive development (Luthans & Avolio, 2003).

# Authentic Leadership Defined

Authentic leadership has many different definitions, but one commonality among them is that leaders are portrayed as possessing self-knowledge and a personal point of view, which reflects clarity about their values and convictions (Avolio, Luthans, & Walumbwa, 2004). An authentic leader is confident, hopeful, optimistic, resilient, transparent, and ethically futureoriented. This type of leader does not try to coerce or even rationally persuade followers, but rather the leader's authentic values, beliefs, and behaviors serve to model the development of his or her followers (Luthans & Avolio, 2003). Although authentic leadership has considerable intuitive (e.g., George, 2003) and theoretical support (Yammarino, Dionne, Schriesheim & Dansereau, 2008), to date, little empirical research has been conducted in order to better understand the mechanisms by which authentic leaders exert their influence on effective behaviors. There is a distinct need in authentic leadership research to theoretically articulate and

empirically test processes and process variables and measures related to this style of leadership (Walumbwa, Luthans, Avey, & Oke, 2011). Up until 2010, the majority of the scholarly publications were written to develop or extend the theory. Just in the last year, has there been an increase in empirical research and the emergence of a few critical reviews (Gardner, Cogliser, Davis, & Dickens, 2011). Included in these reviews is the identification of positive organizational behavior, positive organizational scholarship, and psychological capital as foundational constructs significant to authentic leadership.

# Four Components of Authentic Leadership

Current research on authentic leadership provides evidence that it is a higher ordermultidimensional construct comprised of self-awareness, relational transparency, internalized moral perspective, and balanced processing (Walumbwa et al., 2008). Self-awareness is defined as demonstrating an understanding of how a leader obtains and makes meaning of the world and how this process impacts the way he or she views himself or herself over time. It also refers to showing an understanding of one's strengths and weaknesses and the multifaceted nature of the self, which includes gaining insight into the self through exposure to others, and being cognizant of the impact that is made on followers. Relational transparency refers to presenting an individual's authentic self to others, promoting trust through disclosures that involve openly sharing information and expressions of one's true thoughts and feelings, while trying to minimize displays of inappropriate emotions (Walumbwa et al., 2008). Internalized moral perspective is showing that a leader can objectively analyze all relevant data before coming to a decision; leaders request views that challenge their deeply held positions (Walumbwa et al., 2008). Balanced processing refers to an internalized and integrated form of self-regulation. This type of self-regulation is guided by internal moral standards and values versus group,

organizational, and societal pressures, and it results in expressed decision making and behavior that is consistent with these internalized values (Walumbwa et al., 2008). Each of these definitions came about through the utilization of research in positive psychology, social psychology, moral and ethical philosophy, and related fields. Using a multi-sample strategy involving U.S. and non-U.S. participants, Walumbwa et al. (2008) provided initial evidence that a measure of authentic leadership that assessed these four components was reliable. These four scales loaded on a higher-order factor labeled authentic leadership that has discriminate validity from measures of transformational leadership (e.g. Avolio, 1999) and ethical leadership (e.g. Brown, Trevino, & Harrison, 2005), and that was a significant and positive predictor of organizational citizenship behavior, organizational commitment, and satisfaction with supervisor and performance.

# Authentic Leadership and Outcomes

Due to the emerging nature of authentic leadership research, only 25 empirical articles have been published. Gardner, Cogliser, Davis and Dickens (2011) distinguished between qualitative and quantitative studies to identify the research strategies employed across time periods, finding that nine studies used qualitative methods, while sixteen studies used quantitative methods. For the qualitative studies, the authors found that there was no particular form of data collection favored as focus groups, case studies, interviews, narrative analysis, and participant observation were all employed. In addition, the research was conducted in a wide range of settings. Although qualitative methodology is important, the authors encourage researchers to devote greater attention to assessing the credibility, transferability, and dependability of their findings. When examining quantitative research, most of the studies (13) were conducted at the individual level of analysis with only four focused at the organizational

level (Clapp-Smith et al., 2009; Hoy & Henderson, 1983; Roche, 2010). Furthermore, in 15 of the 16 studies, a field study methodology was used; in 15 out of 16 studies, survey methods were used; and in only one, interviews were used. In addition, a wide array of sample types provided the data. When authentic leadership is examined at the individual level, there is growing evidence that it is desirable and effective for advancing the human enterprise and achieving positive and enduring outcomes in organizations (George, Sims, McLean, & Mayer, 2007; George, 2003).

Avolio and Luthans. (2006) were the first to propose that authentic leadership has a positive impact on a follower's attitudes (e.g., commitment, job satisfaction, meaningfulness, and engagement) and behaviors (e.g., job performance, extra effort, and withdrawal behaviors). Although there is limited empirical research on authentic leadership, several of these studies support a direct link between authentic leadership and followers' outcomes (Gardner, Cogliser, Davis, & Dickens, 2011). The direct relationship between authentic leadership and follower outcome variables is important because it supports the idea that when subordinates perceive their leaders to be authentic they also tend to be satisfied with their jobs and perform better. Authentic leadership is inspirational and should change a follower's perception of his or her job; therefore, authentic leadership should be related to positive organizational outcomes.

Although there are few studies that examine authentic leadership as an independent variable, these studies far exceed research on the antecedents of authentic leadership. Gardner, Cogliser, Davis and Dickens (2011), conducted a review of the literature and indentified articles with theoretical proposals for authentic leadership and those that empirically examined it relative to other variables. Proposed models of authentic leadership identify a variety of outcomes including personal and social/organizational identification (Avolio, Gardner et al.,

2004; Hannah, Lester, & Vogelgesang, 2005; Ilies, Morgenson, & Nahrgang, 2005), trust in leadership (Avolio et al., 2004; Chan, Hannah, & Garber 2005; Douglas, Ferris, & Perrewe, 2005; Gardner, Avolio, Luthans et al., 2005; Gardner et al., 2009; Hannah et al., 2005; & Hunt, Gardner, & Fischer, 2008), follower job satisfaction (Avolio, Gardner et al., 2004), follower organizational commitment (Avolio, Gardner et al., 2004), follower work engagement (Avolio et al., 2004; Gardner, Avolio, Luthans et al., 2005) follower job performance (Chan et al., 2005; Gardner, Avolio, Luthans et al., 2005; Ilies et al., 2005), leader and follower well-being (Gardner, Avolio, Luthans et al., 2005; Gardner, Fischer, & Hunt, 2009; Hunt et al., 2008; Ilies et al., 2005), follower withdrawal behaviors (Avolio, Gardner et al., 2004), and positive leader modeling (Gardner, Avolio, Luthans et al., 2005; Hannah, Lester, & Vogelgesang, 2005) & Ilies

From the proposed models of authentic leadership, researchers empirically confirmed authentic leadership is positively related to identification with supervisor (Walumbwa, Wang, Wang, Schaubroeck, & Avolio, 2010).), personal identification (Wong, Laschinger, & Cummings, 2010), trust in leadership (Clapp-Smith et al., 2009; Wong and Cummings, 2009; Wong et al., 2010), follower job satisfaction (Giallonardo et al., 2010; Jensen and Luthans, 2006 & Walumbwa et al., 2008), organizational commitment (Jensen and Luthans, 2006; & Walumbwa et al., 2008), follower work engagement (Giallonardo et al., 2010 & Walumbwa et al., 2010), follower job performance (Walumbwa et al., 2008 & Wong and Cummings, 2009), and components of well-being, including leader psychological well being (Toor & Ofori, 2009) and follower work happiness (Jensen & Luthans, 2006). In addition, Wong and Cummings (2009) found support for a negative relationship between authentic leadership and followers' burnout, which is a negative indicator of well-being (Kernis, 2003).

The direct connection between authentic leadership and followers' well-being sets authentic leadership apart from transformational leadership because it has rarely been examined as an outcome in the transformational leadership literature. In the early work on authenticity, there is impressive empirical evidence of the positive increase in physical and psychological well-being of followers who have authentic leaders (Deci & Ryan, 2000; Kernis & Goldman, 2005). Because authentic leadership is based on a paradigm of positive health, follower wellbeing should be a key outcome. It is likely that when leaders possess self knowledge and a personal point of view that reflects clarity about their values and convictions, they will influence the physical, mental, social, and psychological well-being of their followers.

The concept of well-being was first introduced by Ryff and Singer (1998), who proposed four components that characterized well-being: (1) leading a life with a purpose, (2) quality connections to others, (3) positive self-regard and mastery, and (4) perception of negative events as paths to meaning and purpose. Each of these four elements moves beyond the physiological and biological level to incorporate a psychological component. Based on this research, Macik-Frey et al. (2009) examined authentic leadership as a pathway to positive mental health or wellbeing and provided evidence that authentic leadership is an efficient and effective way to move toward optimal human functioning.

## **Psychological Capital and Constructs**

In other research, mediators of the authentic leadership-follower outcomes relationships have been examined. Clapp et al. (2009) proposed that authentic leadership affects followers' attitudes and behaviors specifically through psychological capital and trust. The interest in psychological capital follows a shift in psychology and organizational behavior over the last decade, with positive psychology gaining momentum, followed by positive organizational

behavior and positive organizational scholarship. This shift is not surprising because the workplace is increasingly becoming a place where survival, let alone success, necessitates higher-than-average performance (Avolio & Luthans, 2006; Sutcliffe & Vogus, 2003; Luthans & Youssef, 2007). In their book, *Psychological Capital*, Luthans, Youssef and Avolio (2007) underscore the importance of examining psychological capital and define the key constructs that comprise it. None of these constructs have received much attention in the organizational behavior literature.

Psychological capital is defined as an individual's positive psychological state of development that is characterized by (1) confidence in success at challenging tasks (hope), (2) the ability to make positive attributions about succeeding now and in the future (self-efficacy), (3) having a goal orientation and the ability to redirect paths to goals as needed (optimism), and (4) the ability to sustain effort and succeed when faced with problems and adversities (resiliency) (Luthans, Youssef, & Avolio, 2007). One of the main differences between psychological capital and other personality characteristics is that psychological capital assumes a *state-like* value as opposed to a relatively fixed, *trait-like* personality traits because hope, self-efficacy, optimism and resiliency are not dispositional and fixed, but rather can be developed and change over time. This assumption is significant given that authentic leadership is less likely to influence psychological capital if the latter consists of largely stable and enduring traits.

Law, Wong, and Mobley (1998) suggest that when the four dimensions of psychological capital are considered as a core construct, as opposed to each individual construct measured on its own, the variance explained in outcomes is increased (Luthans, Avolio, Avey, & Norman, 2007). Self-efficacy is an individuals' belief in his or her abilities to mobilize the motivation,

cognitive resources, and courses of action necessary to successfully perform a specific task within a given context (Stajkovic & Luthans, 1998). Those individuals are likely to choose challenging tasks and endeavors, apply their efforts and motivational resources to accomplish their goals, and persevere in the face of obstacles and difficulties (Bandura, 1977; Luthans, 2002; Luthans & Youssef, 2004).

Hope describes a quality in an individual who is resolute in pursuing goals. Hopeful employees tend to be risk-takers and look for alternative pathways when the old ones are blocked (Snyder, 1994, 2002). Most hopeful individuals enjoy goal pursuit, are more intrinsically motivated, and look for creative ways when implementing their strategies (Amabile, 1988, 1997; Oldham & Cummings, 1997; Shalley & Gilson, 2004; Snyder, 2002).

Optimistic individuals take credit for favorable events in their lives, strengthening their self-esteem and morale (Goldsmith & Matherly, 2000; Lyubomirsky, Tkach, & DiMatteo, 2006). Optimists distance themselves from unfavorable life events, thus diminishing the likelihood of experiencing depression, guilt, self blame, and despair. Thus, optimists are less likely to give up and more likely to have a more positive outlook on stressful situations, to experience positive emotions, to persevere when facing difficulties, and to look for creative ways to solve problems and take advantage of opportunities (Fredrickson, 2001; Youssef & Luthans, 2007).

Resilient individuals are able to overcome, steer through, bounce back and reach out to pursue new knowledge and experiences, and deeper relationships with others (Luthans, Youssef, & Avolio, 2007). Resilient employees have zestful and energetic approaches to life, are curious and open to new experiences (Tugade, Fredrickson, & Barrett, 2004), and improvise in situations predominantly characterized by change and uncertainty (Youssef & Luthans, 2007). As such, resilient employees are likely to develop new ways of doing things when facing difficulties,

failures, and opportunities. A resilient individual is able to recover quickly from negative emotional experiences and is more prone to experience positive emotions in the midst of stressful events.

Psychological capital has been linked to many outcomes such as performance, organizational citizenship behavior, and satisfaction. Larson and Luthans (2006) conducted one of the first studies that investigated the relationship between psychological capital and performance outcomes. The authors recognized that organizations are becoming more fluid and less bounded by space today due to information technology and globalization. Because of this new environment, organizations must recognize the value of human capital, social capital, and psychological capital. Psychological capital goes beyond human and social capitals to gain a competitive advantage through investment/development of "who you are" and "what you can become."

In an empirical test to examine the added value of psychological capital to employee satisfaction and commitment, Larson and Luthans (2006) found a significant relationship between psychological capital and both employee satisfaction and commitment. Luthans, Avolio, Walumbwa, and Li (2005) examined the psychological capital of Chinese workers and performance. The authors found that those workers' positive states of hope, optimism, and resiliency, when combined as a core construct, significantly correlated with supervisory ratings of job performance. Although the authors did not address self efficacy, they did examine positive organizational behaviors. In other research, Luthans et al. (2007) examined the relationship between psychological capital and performance and satisfaction. Using three diverse samples, the authors found that an employee's psychological capital is positively related to his or her

performance, satisfaction, and commitment. Furthermore, Luthans, Norman, Avolio, and Avey (2008) found a similar relationship between psychological capital and employee performance.

Although authentic leadership is important, it is not sufficient for leaders to achieve their desired goals. Avolio, Gardner, Walumbwa, Luthans and May's (2004) research presents a process that links authentic leadership to followers' attitudes and behaviors. The authors provide a model that contributes to a better understanding of the processes through which authentic leadership operates, but also how intervening variables such as psychological capital, can be enhanced.

In a recent paper, Gumusluoglu and Ilsev (2009) merge the authentic leadership, psychological capital, and creativity literatures, and present results supporting a direct relationship between authentic leadership and employees' creativity as well as an indirect relationship through psychological capital. Avolio, Gardner, Walumbwa, Luthans and May (2004) were the first to propose psychological capital as a mediating variable between authentic leadership and followers' outcome variables. Authentic leadership affects followers' outcomes through psychological capital because leaders have a strong impact on the decisions and identity of their followers. The authors drew on positive organizational behavior, trust, hope, emotion, and identification to describe the process for which authentic leaders exert their influence on followers' attitudes and behaviors. Avolio (2003) suggests that one of the core challenges by an authentic leader is to identify followers' strengths and help direct and build them appropriately, which in turn affects their psychological capital.

#### Trust

The theoretical link between authentic leadership and trust requires consideration because it is this connection that provides validity to the argument that authentic leadership is

essential in turbulent environments and situations leaders find themselves in today. Trust is an important component when referring to authentic leadership because it involves follower confidence in their leaders, the belief that their leaders have the ability to fulfill a commitment, and shared values and benevolence with their leaders (Lloyd-Walker & Walker, 2011; Mayer, Davis, & Schoorman, 1995). Considerable research evidence has demonstrated that trust in leadership is related to positive organizational outcomes (Dirks & Ferrin, 2002). Therefore, trust in leadership should mediate the relationship between authentic leadership and positive organizational behaviors (Avolio, Gardner, Walumbwa, Luthans, & May, 2004). This link between authentic leadership and trust supports the proposition that authentic leadership is beneficial to the development of employees' trust (Avolio et al., 2004; Deluga, 1994; Dirks & Ferrin, 2002; Gardner et al., 2005; Ilies et al., 2005; Walumbwa et al., 2008). Furthermore, authentic leaders build a climate of trust and support through acknowledging and genuinely considering followers' perspectives and opinions (Avolio et al, 2004). Trust is important because individuals experience greater emotional safety and feel free to propose unconventional ideas and introduce conflicting opinions without fear (Avolio et al., 2004; Edmondson, 1999; Prati et al., 2003; Rego et al., 2007).

Highly authentic leaders value realistic and truthful relationships with followers (Gardner et al., 2005; Ilies et al., 2005). They solicit views about important work-related matters and openly share information fairly and transparently. Empirical research provides evidence that a leader's level of transparency and psychological capital affects the followers' perceived trust in the leader (Norman, Avolio, & Luthans, 2011). Furthermore, Clapp-Smith, Vogelgesang, and Avey, (2009) investigated the relationships between authentic leadership, trust in management, psychological capital, and performance at the group level using a sample of retail clothing stores.

The results from this investigation revealed that trust in management mediated the relationship between psychological capital and performance, and partially mediated the relationship between authentic leadership and performance.

Promising findings such as these demonstrate the relevance of both trust and psychological capital to authentic leadership research and the utility of exploring the effects of both constructs on performance and other work outcomes. Therefore, investigation of these relationships should continue in order to clarify their significance to the leadership literature. In addition, research that includes the examination of both authentic and transformational leadership would help to clarify their independent effects on important follower outcomes. There are too few studies that include an examination of these constructs together allowing researchers to observe some of the similarities and differences between the constructs.

# Similarities and Differences

#### Similarities

The advent of work on authentic leadership development came as a result of the literature on transformational leadership, in which authors, such as Bass and Steidlmeier (1999) suggest that some transformational leaders are authentic whereas others are really pseudo transformational, thus not authentic. Leaders are authentically transformational when they increase awareness of what is right, good and beautiful, when they help to evaluate followers' needs for achievement and self actualization. Leaders also are authentically transformational when they shift followers to go beyond their self-interests and recognize what is good for the organization (Bass & Steidlmeier, 1999). Therefore, Bass and Steidlmeier (1999) assert that there is a construct of authentic transformational leadership in which leaders display the four major dimensions of transformational leadership (e.g., idealized influence, inspiration

motivation, intellectual stimulation, and individualized consideration), but also are moral agents who empower followers to take actions that are noble, right, and legitimate.

More recently, Avolio and others extended the final I (individualized consideration) in their transformational leadership model to incorporate the concept of authentic leadership (Avolio et al., 2004; Avolio & Gardner; 2005; Avolio & Luthans, 2006; George et al., 2007). Under this revised conceptualization of individualized consideration, transformationally authentic leaders show purpose, demonstrate a passion for their purpose, and lead with their hearts as well as their heads. At the core of authentic leadership is the consistency between espoused practice and practice in action. Because of the ethical overlap, some researchers propose there is no difference between transformational leadership and authentic leadership (Bass & Steidlmeier, 1999). Avolio and Gardner (2004) explain that transformational leaders are described as optimistic, hopeful, developmentally-oriented, and of high moral character (Bass, 1998), all of which are components of authentic leadership. Gardner (2004) agrees that a prerequisite to both transformational and authentic leadership is high moral character. Regardless, authentic leaders are not necessarily transformational. For example, authentic leaders may or may not be actively or proactively focused on developing followers into leaders, even though they have a positive impact on them via role modeling (Avolio & Gardner, 2005).

Although there is less empirical research in authentic leadership, many outcome variables overlap with transformational leadership. Some of the empirically confirmed positive relationships that overlap are trust in leadership (Clapp-Smith et al., 2009; Wong and Cummings, 2009; Wong et al., 2010), follower job satisfaction (Giallonardo et al., 2010; Jensen and Luthans, 2006 & Walumbwa et al., 2008), organizational commitment (Jensen and Luthans,

2006; & Walumbwa et al., 2008), follower job performance (Walumbwa et al., 2008 & Wong and Cummings, 2009) and organizational citizenship behavior (Avolio, Gardner et al., 2004). *Differences* 

More current research delineates authentic leadership from transformational leadership. Authentic leadership has emerged over the last few decades as a central component to positive leadership since its conceptualization in the late 1970s (Clapp-Smith, Vogelgesang, & Avey, 2009). It was not until recently that researchers began to argue that authentic leadership is its own construct and is not an extension of other leadership constructs such as transformational leadership. Authentic leadership can integrate transformational, charismatic, servant, spiritual or other forms of positive leadership. Though, in contrast to transformational leadership in particular, an authentic leader may or may not be charismatic (George, 2003). Authentic leaders build enduring relationships, work hard, and lead with purpose, meanings, and values, but are not necessarily described as charismatic by others, which has been defined as a core component of transformational leadership (Avolio & Gardner, 2005). Authentic leadership differs from transformational leadership in that authentic leadership focuses on the leader's self concept where as transformational leadership focuses primarily on a leader's behavior (Shamir & Eilam, 2005). Furthermore, authentic leadership has a positive connotation, theoretically describing positive qualities of leadership and referring to authentically positive behavior, whereas transformational leadership has been extended to include a negative side to leadership- a pseudo transformational component. Authentic leaders are aware of how their actions will affect their followers and attempt to make decisions that are best for them (Yukl, 2010). Avolio and Gardner (2005) compared authentic leader developmental theory with transformational leadership and found that psychological capital, authentic leader behavior, relational

transparency and followers' authentic behavior have been discussed in the transformational leadership literature but never have been a focal component. The authors further distinguish the characteristics of authentic leadership that are not addressed at all in the transformational leadership literature including leader's self awareness and self regulation, emotional contagion, and commitment to enabling follower success through supporting their development (Avolio & Gardner, 2005).

Very little empirical research has been conducted on the similarities and differences between transformational and authentic leadership. One reason for this minimal research eas the lack of a valid measurement device to assess authentic leadership which would be the first tep to clarify the conceptual ambiguity concerning the difference between authentic leadership and related constructs, particularly with respect to current conceptualizations of transformational leadership (Cooper et al., 2005 & Yukl, 2010).

Walumbwa, Avolio, Gardner, Wersing, and Peterson (2008) developed and tested a theory-based measure of authentic leadership using five separate samples obtained from China, Kenya, and the United States. Structural equation modeling demonstrated the predictive validity for the Authentic Leadership Questionnaire (ALQ) measure for important work-related attitudes and behaviors, beyond what ethical and transformational leadership offered. The result of this study provided evidence that the four dimensions of authentic leadership correlate positively with ethical leadership and the dimensions of transformational leadership, but not so highly as to indicate construct redundancy. The authors also found that the higher order authentic leadership measure accounted for variance in a diverse set of frequently researched work outcomes beyond that explained by ethical and transformational leadership dimensions, specifically in OCB, organizational commitment, and satisfaction with supervisor. Therefore, the authors argue that

authentic leadership provides value to the study of organizations; they also suggest that the incremental validity displayed by using the authentic leadership measure does not necessarily indicate that it will be a better predictor of performance across all organizational domains, and the extent to which these findings are generalizable should await further confirmation.

In another study conducted by Neider and Schriesheim (2011), an examination of the differences between transformational and authentic leadership was conducted. The authors primarily sought to develop a new measure of authentic leadership based on the theoretical framework and available dimension definitions provided by Walumbwa, Avolio, Gardner, Wernsing and Peterson (2008) in their comprehensive review of the literature and scale development article. The authors examined the ALQ instrument using a more rigorous quantitative content validity assessment process; and, therefore, proposed a scale that has more validity than the commonly used ALQ. Also, the authors propose that there are some concerns as to the conclusions drawn by Walumbwa et al. (2008) regarding their confirmatory factor analyses (which indicated a higher-order factor model). Therefore, the authors question the validity of using the four factors as a higher order factor known as Authentic Leadership.

## Hypotheses

It is clear that the measurement of authentic leadership has not been clarified or quantified to the point of agreement among scholars in the field. Regardless, the ALQ provides us with a starting point for the understanding better hoe authentic leadership differs from transformational leadership.

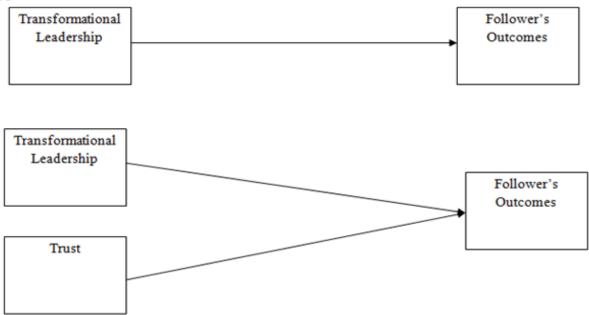
An abundance of articles report a direct relationship for both transformational and authentic leadership with followers' performance, satisfaction, organizational citizenship behaviors, trust, and commitment. Two followers' outcome variables that differentiate authentic

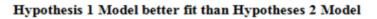
from transformational leadership are psychological capital and well-being. Well-being is typically examined as a dependent variable in the authentic leadership paradigm and not the transformational leadership paradigm because well-being is part of an individual's personal expressiveness, self realization, experiences, and self efficacy, instead of a behavior (Ilies, Morgenson, & Nahrgang, 2005). Authentic leaders provide a supportive and positive environment where well-being is nurtured. The authentic leader influences followers through their trust in the leader, their positive emotions, and the leader's commitment to foster selfdetermination and growth in their followers. Although these relationships have not been empirically tested, Macik-Frey, Quick, and Cooper (2009) believe they should be examined in order to expand authentic leadership theory to incorporate follower well-being. Previous conceptual work has emphasized the role of authentic leadership in creating psychological capital in leaders and followers, but there has been no real attempt to integrate these related constructs except in Walumbwa, Luthans, Avey, and Oke's (2011) study of the mediating role of collective psychological capital and trust.

The purpose of this research is to examine transformational and authentic leadership to determine whether they differ substantially or whether the constructs represent the same theory under different names. Transformational leadership has been validated many times in previous research, whereas authentic leadership has less evidence supporting it as a separate theory. Even though some of the debate between transformational and authentic leadership appears to be a matter of semantics, the literature does indicate that while the theoretical connection between transformational and authentic leadership is substantial, it is also incomplete. This fact alone requires this attempt to better illustrate the similarities shared by these positive forms of leadership as well as the differences.

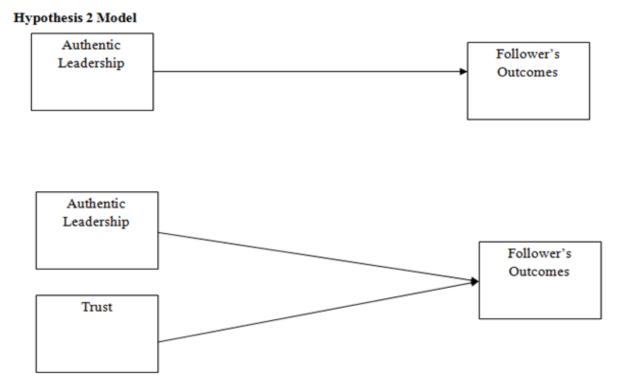
Figure 3 includes a research model of transformational leadership that has been supported in numerous research studies. In order to establish a difference between the two constructs, the components of authentic leadership replace the transformational leader style in the second model. If authentic leadership differs from transformational leadership then its relationship with trust and the outcome variables will be dissimilar to those for transformational leadership. Due to limited empirical research on authentic leadership, performance, satisfaction, organizational citizenship behaviors, and commitment will be examined because each of these follower outcomes have been examined in more than one empirical study and because of the overlap these outcomes have with the transformational leadership literature. In addition, because the method employed in the experiment involves the use of scenarios, trust is examined as a second independent variable rather than a mediator variable. Describing a scenario where followers' have knowledge about their leader's style and trustworthiness as independent variables is a more straight forward approach when manipulating relationships in a scenario than describing a mediated relationship. Therefore, we may assume trust would be a mediator if the transformational leadership outcomes are significant because of previous research. But we will not have confirmation of that relationship. The mediated relationship involving authentic leadership may not be as easily assumed.

## Hypotheses 1 Model





Hypothesis 3



*Figure 3*. Alternative theoretical model for authentic leadership with psychological capital as a partially mediating variable of authentic leader-follower outcomes relationship.

Hypothesis 1: When employees have information that their leaders are transformational and trustworthy, employee performance, satisfaction, organizational citizenship behavior, and commitment will be higher than when employees only have information that their leaders are transformational.

Hypothesis 2: When employees have information that their leaders are authentic and trustworthy, employee performance, satisfaction, organizational citizenship behavior, and commitment will be higher than when employees only have information that their leaders are authentic.

Hypothesis 3: A model with transformational leadership as a predictor of follower outcomes is a better fit to the data than when authentic leadership is the predictor.

Once a difference between transformational leadership and authentic leadership is

established, the research model in Figure 4 describes the next step. This model incorporates two

variables more typically examined in the authentic leadership literature. The first variable is

psychological capital and the second is follower well-being. As was the case with trust,

psychological capital is not specifically examined as a mediator but rather as an additional

independent variable (Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Yammarino et al.,

2008 Avolio et al., 2004; Bandura, 1997; Rego, Machado, Leal, & Cunha, 2009). Follower well-

being is included as another dependent variable to examine its relationship with the leader styles

and with trust and psychological capital. It is expected that this model will provide a better fit to

the data when authentic leadership is included in the model as an independent variable then when

transformational leadership is included as an independent variable.

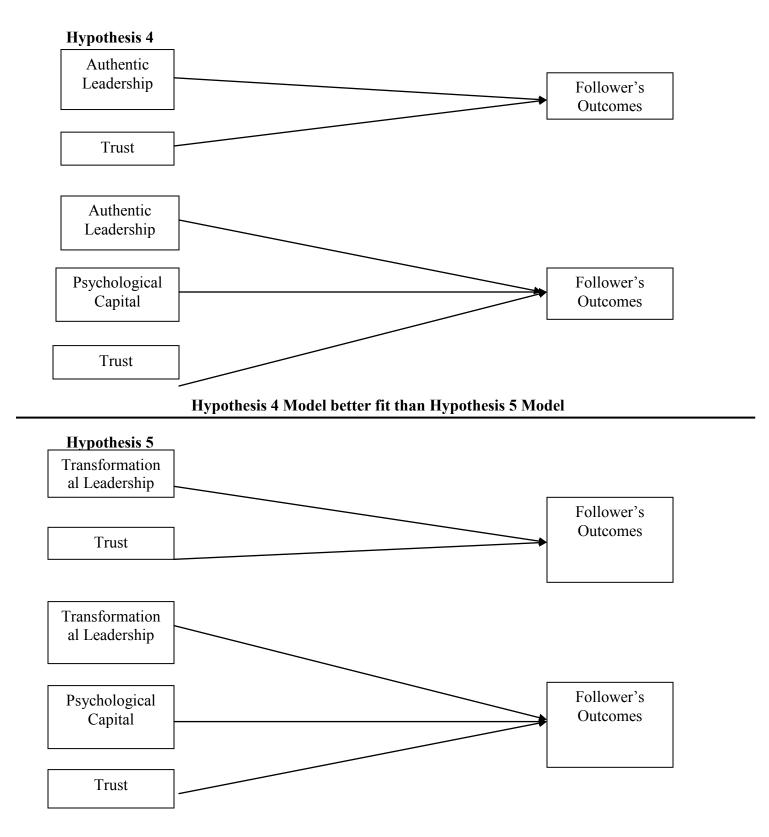


Figure 4. Hypothesis 4 is a better fit than Hypothesis 5.

Hypothesis 4: When employees have information that their leaders are both authentic and trustworthy and the employee has positive psychological capital, employee performance, satisfaction, organizational citizenship behavior, commitment, and well-being will be higher than when employees only have information that their leaders are authentic and trustworthy.

Hypothesis 5: When employees have information that their leaders are both transformational and trustworthy and the employee has positive psychological capital, employee performance, satisfaction, organizational citizenship behavior, commitment, and well-being will be higher than when employees only have information that their leaders are transformational and trustworthy.

Hypothesis 6: A model with authentic leadership as a predictor of follower outcomes fits the data better when psychological capital and well-being are included, and is a better fit to the data than when transformational leadership is the predictor.

## Chapter Summary

In conclusion, this study provides an initial investigation of many variables that are of interest in the leadership literature. First, this examination answers the call for an investigation of the differences between transformational and authentic leadership. Second, it will provide a more in-depth analysis of the relationship between authentic leadership and follower outcome variables and whether psychological capital and trust fit within the authentic leadership paradigm.

If authentic leadership does differ from transformational leadership, this research will help provide information as to how authentic leadership explains outcomes beyond what is explained by transformational leadership. Results from this study will have practical implications for the development of authentic leaders because empirical evidence will illuminate what outcome variables are most affected by authentic leadership.

#### CHAPTER III

## **RESEARCH METHODOLOGY**

The primary purpose of this dissertation is to examine whether there is a difference between transformational and authentic leadership. If there is a difference, then the purpose is to identify where the difference is and how both transformational and authentic leadership impact followers' outcomes. In the previous section, a hypothesized model and related hypotheses were developed. This chapter presents the methodology used and tests the hypotheses. The methodology for the main study incorporates the necessary changes made after analyzing the results of the pilot study, but otherwise follows the same design, method, and procedure. First, the sample is described, followed by an explanation of the manipulations and measurements used. Next, the research design of the pilot study is explained, followed by the modifications I made, based on the results of the pilot studies.

# Participants and Procedures

Hypotheses were tested by surveying university students in a large college of business in the southwestern United States. Demographic information collected included the participant's age, gender, classification in the university, the amount of full-time or part-time work experience the participant had, experience as a committee chairperson or president of a club or organization, and experience as a manager in a business setting (see Appendix A). To reduce potential concern related to evaluating others, participants were assured that their responses would be kept confidential and used for research only. Participants received extra credit from their instructor for participating in the survey or had the ability to request an alternative assignment. Qualtrics was used as a delivery tool to obtain the respondents' answers. Qualtrics is a software program that allows for secure administration of surveys to participants, enabling them to easily answer survey

questions. An online release form that described the purpose of the study and asked for the participants' consent through their agreement to continue with the study was provided as the first document viewed by participants. This document also assures the confidentiality of their responses (see Appendix A). The survey was set up as a link and the students were able to access the link at any time during the agreed upon period of time.

Participants first accessed an introduction that describes the content of the survey task (see Appendix A). Once the introduction/instruction sheet was completed and submitted, respondents then were able to access the next item. Due to access restrictions made possible by Qualtrics, participants were not able to revisit previously completed sections, nor were they able to go on to future sections until previous sections were completed. Participants viewed or responded to 16 pages of information or questions; in order—an introduction, instruction sheet, demographics, instructions for reading the scenario, a scenario, 5 dependent variable scales, 4 manipulation checks, a page to receive credit for their participation, and a debriefing/thanks note (see Appendix A). Subjects were randomly assigned to read one of eight different scenarios that were used to test Hypotheses 1, 2, 4, and 5 (see Appendix B). Participants only had access to one scenario, which the computer randomly assigned to them, and they were not able to view other respondents' answers. Once the survey was completed, the students did not have access to the survey again.

Before I could gather sample populations, I determined the appropriate number of participants needed for this research design. One of the best methods to approximate the number of participants needed for a particular experiment is to conduct a power analysis. The power of a statistical test represents the probability of rejecting the null hypothesis (Cohen & Cohen, 1983).

Determining the size of the sample is important for survey research because it ensures lower sampling error and higher reliability of data, and results can be better replicated when obtaining data from another sample of equal size using the same sampling technique and the same population (Alreck & Settle, 1985). A power analysis allows a researcher to anticipate how many participants are necessary to detect any effects that result from the independent variables, given the size of the effect, the type of statistical test used, and the level of significance of the study (Rudestam & Newton, 2007).

Researchers always attempt to perform a power test of their hypotheses; however, one must be cautious about the level of power used. Too much power might be a disadvantage to the study, as it might pick up the existence of very insignificant relationships. Although there are no formal standards for power, most researchers assess the power of their tests using .80 or .50 as a standard for adequacy (Cohen, 1988). I used .80 as a desirable value for statistical power in this study. This convention implies a four-to-one trade-off between Type I and Type II errors. If  $\alpha$  = .05 is the probability of a Type I error and  $\beta$  (the probability of a Type II error) is four times the chance of a Type I error, then  $\beta$  =.20. The power of the test is  $1 - \beta = .80$ , which meets the standard for adequacy (Cohen, 1988).

A traditional rule to determine the sample size uses the formula,  $n = (\lambda/f^2) + (k + 1)$ , where n = sample size,  $\lambda$  = table value for  $\alpha$  =.05, f<sup>2</sup>= ES index, k= number of independent variables (Cohen, 1988). According to this formula, the minimum sample size should be 99 with power of .80 [99= (13.5/.15) + (8+1)]. It is suggested that statistics calculated from large samples are more accurate, all things being equal, than those calculated from small samples sizes (Kerlinger & Lee, 2000). I collected more than the minimum data to allow for missing data or problems in particular participants' answers.

# **Pilot Studies**

For this dissertation, I have written the majority of this chapter in terms of the pilot studies. A pilot study is beneficial because it involves the use of a questionnaire with a small sample size to test logistics and gather information prior to a larger study, in order to improve the latter's quality and efficiency. A pilot study can expose problems in the design of a proposed research method or procedure and these can then be addressed before time and resources are expended on large scale studies (Backstrom & Hursch, 1963). A pilot study was crucial for this experiment because I composed original scenarios to test 4 of the 6 hypotheses. The manipulations in these scenarios were based, in part, on the known measures that assessed the leadership variables I wanted to manipulate, as well as on the theory that described the leadership constructs. In addition, it was necessary to determine if the participants were able to discriminate between the two types of leadership and if there were validity and reliability for the measure created for the purpose of the study. Before the pilot study was conducted, the scenarios and measures were sent to experts in the field of leadership to ensure the components of transformational and authentic leadership were represented properly. In addition, these experts were able to examine the appropriateness of the survey, content validity, and clarity of the wording. Changes were made based on the experts' comments and were incorporated into the scenarios.

#### Manipulation and Measures

## **Manipulations**

Hypothesis 1 states when employees have information that their leaders are transformational and trustworthy, employee performance, satisfaction, organizational citizenship behavior, and commitment will be higher than when employees only have information that their

leaders are transformational. To test Hypothesis 1, I created one condition that required subjects to read a scenario that described a transformational leader who was trusted by his followers and a second condition that required subjects to read a scenario that described a transformational leader without discussion of whether he was trusted by his followers.

I incorporated the theoretical description of the four components of transformational leadership (i.e., idealized influence/charisma, inspirational motivation, intellectual stimulation, and individualized consideration; Bass, 1985) into the scenario. An example sentence used in the scenario is "He (John) is very good at recalling people's names and shows a genuine interest in getting to know each individual"(see Appendix B). The manipulation check for transformational leadership was obtained by asking subjects in both scenarios to respond to the (6) questions in the Appendix C.

Trust was manipulated in this pilot study using a combination of theoretical definitions of trust and questions from a multitude of surveys regarding the elements of trust (Bass, 1985; Bass & Avolio, 1994; Dirks & Ferrin, 2002; Jung & Avolio, 2000; Podsakoff, MacKenzie, & Bommer, 1996; Goodwin, Whittington, Murray, & Nichols, 2011). Participants should perceive outcomes for individuals with transformational leaders, who also had trust, as higher than for those who only know their leader as transformational. An example sentence used to manipulate trust in the scenario is "The employees developed trust in John because of his personal commitment to achieving the vision of the organization" (see Appendix B). The manipulation check for trust was obtained by asking subjects in both scenarios to respond to the (6) questions in the Appendix C.

Hypothesis 2 states when employees have information that their leaders are authentic and trustworthy, employee performance, satisfaction, organizational citizenship behavior, and

commitment will be higher than when employees only have information that their leaders are authentic. To test Hypothesis 2, I created one condition that required subjects to read a scenario that described an authentic leader who was trusted by his followers and a second condition that required subjects to read a scenario that described an authentic leader without discussion of whether he was trusted by his followers.

I incorporated the four components of authentic leadership (i.e., self-awareness, relational transparency, internalized moral perspective, and balanced processing) into the scenario (Walumbwa et al., 2008). An example sentence used to manipulate authentic leadership in the scenario is "John shows an understanding of his strengths and weaknesses, which include gaining insight into himself through exposure to others, and being aware of the impact that he makes on his employees" (see Appendix B). The manipulation check for authentic leadership was obtained by asking subjects in both scenarios to respond to the (13) questions (see Appendix C). Trust was manipulated in the same way in these scenarios as it was in the scenarios to test Hypothesis 1 (see Appendix C).

Hypothesis 4 states when employees have information that their leaders are both authentic and trustworthy and the employees have positive psychological capital, employee performance, satisfaction, organizational citizenship behavior, commitment, and well-being will be higher than when employees only have information that their leaders are authentic and trustworthy. Similarly, Hypothesis 5 states When employees have information that their leaders are both transformational and trustworthy and the employees have positive psychological capital, employee performance, satisfaction, organizational citizenship behavior, commitment, and wellbeing will be higher than when employees only have information that their leaders are transformational and trustworthy. To test Hypotheses 4 and 5, I used the same scenarios for

transformational leadership, authentic leadership, and trust that I used to test Hypotheses 1 and 2. I then added conditions that included a description of follower psychological capital. Consequently, there were the scenarios including descriptions of transformational leadership—with or without trust and with or without psychological capital and authentic leadership—with or without trust and with or without psychological capital. In the condition including psychological capital, subjects were required to read a scenario that described a situation where the followers were described as having positive attributes of psychological capital (self efficacy, hope, optimism, and resiliency; Luthans, Avolio, Avey, & Norman, 2007).

An example sentence used to manipulate psychological capital in the scenario is "John's employees are able to hang in there and stick with the job, even when things get rough, which allows them to gain new knowledge and experiences and deeper relationships with others" (see Appendix B). All subjects responded to the same manipulation checks as those used to test hypotheses 1 and 2 (see Appendix C), plus a manipulation check for psychological capital. The manipulation check for psychological capital was obtained by asking subjects in both scenarios to respond to the (7) questions in the Appendix C.

For Hypotheses 3 and 6, I was be able to examine the difference between transformational and authentic leadership with the use of data collected to determine if the effects obtained were applicable only to one type of leadership or whether both types of leadership resulted in similar outcomes, and to determine where the strongest relationships occurred. Hypothesis 3 states A model with transformational leadership as a predictor of follower outcomes is a better fit to the data than when authentic leadership is the predictor. Hypothesis 6 states, A model with authentic leadership as a predictor of follower outcomes fits

the data better when psychological capital and well-being are included, and is a better fit to the data than when transformational leadership is the predictor.

# Dependent Variables

In the pilot study, five different dependent variables were measured—affective commitment, organizational citizenship behavior, satisfaction, well-being, and performance. Each measure utilized a slider scale with endpoints of 1 and 100. A slider scale was used to provide the most accurate answers from participants. Unlike the traditional Likert scale where survey participants specify their level of agreement with a statement (i.e., *agree strongly, agree, neither agree nor disagree, disagree, disagree strongly*), the slider allows participants to score from 1 to 100. Some experts believe the Likert scale is a rather imprecise instrument. A participant's true opinion can lie in the spaces between the allowable answers and even beyond the traditional end points. Therefore, sliders have the psychometric advantage of communicating to respondents that they are responding on an interval continuum.

Affective organizational commitment was measured using participants' responses to the seven-item affective commitment dimension in the organizational commitment scale developed by Allen and Meyer (1990). Each item was measured using a slider scale with the end points of 1 and 100 ( $\alpha$ =.84). The scale of affective commitment is scored by summing the points across all seven items (see Appendix B).

Organizational citizenship behavior was measured using a 21-item social report scale adapted from Podsakoff et al. (1990), which measures five facets of OCB (Organ, 1988). Each of these items was measured using a slider scale ( $\alpha$  =.95). The scale of organizational citizenship behavior is scored by summing the points across all 21 items (see Appendix B).

Well-being was measured by a series of questions based off of the work by Ryff and Singer (1998). The authors proposed that four components characterized well-being: (1) leading a life with a purpose, (2) quality connections to others, (3) positive self-regard and mastery, and (4) perception of negative events as paths to meaning and purpose. Each of these four elements moves beyond the physiological and biological level to incorporate a psychological component. Therefore, questions were generated from these 4 components ( $\alpha$  =.96). The scale consists of 10 items. The scale of well-being is scored by summing the points across all 10 items (see Appendix B).

Performance was measured by a series of questions generated over time using definitions of performance and team effectiveness scales (Avolio and Luthans et al., 2004; Vecchio et al., 2008). There are so many performance scales to date, that questions were taken from subject matter experts and from some of the questions provided by the other scales ( $\alpha$  =.97). The scale consists of four items. The scale of performance is scored by summing the points across all 4 items (see Appendix B).

Satisfaction was measured by the adaptation of Hackman and Oldham's (1975) General Job Satisfaction Scale. The authors describe the scale as an overall measure of the degree to which employees are satisfied and happy with their jobs ( $\alpha = .95$ ). The scale consists of five items. The scale of performance is scored by summing the points across all five items (See Appendix B).

# Pilot Study 1

# Sample

The sample used in the first pilot study consisted of 99 undergraduate students enrolled in face to face classes, reflecting an 83% response rate. The sample was comprised primarily of

94% juniors and seniors in college; 43% were females and 57% were males. Thirty-three percent had at least one year of full time work experience, whereas 29% had at least one year experience as a committee chairperson or president of a club or organization.

# Method

Data was collected online over two weeks, by way of Qualtrics. Participants were sent a link from their professors that directed them to the Qualtrics survey. The survey was open so that the participants could access the link at any time during the two weeks. They first accessed an introduction/instruction sheet (see Appendix A). Once the introduction/instruction sheet was completed and submitted, respondents were then able to access the next survey. Due to access restrictions made possible by Qualtrics, participants were not able to revisit previously completed sections, nor were they able to go on to future sections until previous sections were completed. Participants viewed and/or responded to the 16 pages of information or questions. They were randomly assigned to read one of eight different scenarios that were used to test Hypotheses 1, 2, 4, and 5. Participants only could access one scenario, which the computer randomly assigned to them, and could not view other respondents' answers. Once the survey was completed, the students could not access the survey again.

#### Manipulation Checks for Pilot Study 1

Manipulation checks for each scenario were conducted to determine if participants were able to differentiate transformational leaders from authentic leaders (see Appendix C). Using analysis of variance, results indicated that participants' were unable to differentiate between transformational and authentic leadership with and without trust and with and without psychological capital based on the constructed scenarios. Each of the dependent variable measures yielded reliable data, but a dry-run to test hypotheses was not conducted because of the

lack of valid manipulations. Changes based on the results of the manipulation checks for the first pilot study will be discussed, which in turn led to a second pilot study.

## Pilot Study 2

Pilot Study 2 was designed to simplify and perfect the manipulations in the original pilot study. After reviewing the results from the first pilot study, I established that the wording for each leadership style from the scenarios in the first pilot were perhaps too similar for the participants to differentiate between the different types of leadership. Therefore, in the second pilot study the scenarios were designed to be more specific and exploit the more obvious theoretical difference between transformational and authentic leadership- authentic leadership differs from transformational leadership in that authentic leadership focuses on the leader's self concept, where as transformational leadership focuses primarily on a leader's behavior (Shamir & Eilam, 2005). In addition, the wording was altered in the questions for the manipulation checks in the second pilot. Rather than ask the participants, "To what degree do you believe ...? (followed by statements relating to the manipulations). "I asked them, "How confident are you THAT YOU READ ABOUT a leader whose employees ...?" (followed by statements related to the manipulations). The change in the wording was intended to help the participants focus more specifically on what they read, rather than use their own heuristics or beliefs about leaders. In addition, the questions for the manipulation checks were revised to reflect the revisions made to the scenarios. Revised scenarios are presented in Appendix D and revised manipulation checks are presented in Appendix E.

#### Sample

The sample used in the second pilot study consisted of 60 undergraduate students enrolled in face to face classes, reflecting a 71% response rate. It was comprised primarily of

juniors and seniors (88%), with 58% females and 42% males. Thirty-three percent had at least one year of full-time work experience. Twenty-nine percent had at least one year experience as a committee chairperson or president of a club or organization. Course credit was given for participation. The participants were very similar between the first and second pilot studies. *Manipulation Checks for Pilot Study 2* 

Four questions were asked to verify whether participants agreed that they were confident that the leader described in the scenario exhibited transformational leadership. Responses were obtained on a 100 point slider scale ranging from 1 (not at all) to 100 (a great deal). High scores support the perception that the leader was transformational. Low scores suggest participants did not perceive that the leader was transformational. Thus, the transformational condition should reflect high scores, and the non-transformational (authentic) leadership condition should reflect low scores. These results support the manipulation (F=6.96,  $\underline{p} \leq .0001$ ).

Six questions were asked to verify whether participants agreed that they had confidently read about a leader in the scenario who exhibited authentic leadership. High scores support the perception that the leader was authentic. Low scores suggest participants did not perceive that the leader was authentic. Thus, the authentic leadership condition should reflect high scores, and the non-authentic (transformational) leadership condition should reflect low scores. These results support the manipulation (F=43.96,  $\underline{p} \leq .0001$ ).

Four questions were asked to verify whether participants agreed they were confident the leader described in the scenario exhibited trust. High scores support the perception that the subject read that the leader was trusted by his subordinates; low scores suggest subjects did not read that the leader was trusted by his subordinates. Thus, the trust condition should reflect high

scores, and the non-trust condition should reflect low scores. These results support the manipulation (F=10.97,  $\underline{p} \leq .0001$ ).

Four questions were asked to verify whether participants agreed that they were confident that the followers described in the scenario exhibited psychological capital. High scores support the perception that the subjects read that followers had high psychological capital. Low scores suggest subjects did not read that the followers had psychological capital. Thus, the psychological capital condition should reflect high scores and the non-psychological capital condition should reflect low scores. These results support the manipulation (F=13.71,  $\underline{p} \leq .0001$ ).

Results indicate all individuals perceived their manipulations as intended. I did not collect data on the dependent variables in the second pilot study. The primary concern was achieving reliable and valid manipulations of the independent variables.

# Summary and Revisions to the Main Study

By conducting two pilot studies I was able to examine the characteristics of the data and the instruments. Both studies helped to confirm the validity and reliability of the scenarios and measures of the instruments. The pilot study was crucial to the clarity and wording of the scenarios and manipulations check questions. For the actual dissertation experiment, I used the scenarios and manipulation checks from Pilot Study 2.

## CHAPTER IV

#### RESULTS

This chapter provides results of statistical analyses used to test hypotheses presented in chapter two. The chapter begins with a presentation of the descriptive statistics. Following this, a report of the manipulation checks and an analysis of each of the hypotheses, using a 2X2X2 MANOVA in SPSS are presented.

Survey Response Rate and Sample Characteristics

An online survey method was used to collect data from university students in a large college of business in the southwestern United States. Demographic information collected included the participant's age, gender, classification in the university, fulltime and part-time work experience, experience as a committee chairperson or president of a club or organization, and experience as a manager in a business setting. The survey consisted of 74 questions. Participants first accessed an introduction that described the content of the survey task (see Appendix A). Once the introduction/instruction sheet was completed and submitted, respondents were then able to access the next item. Due to access restrictions made possible by Qualtrics, participants were not able to revisit previously completed sections, nor were they able to go on to future sections until previous sections were completed. Participants viewed or responded to 16 pages of information or questions; in order—an introduction, instruction sheet, demographics, instructions for reading the scenario, a scenario, 5 dependent variable scales, 4 manipulation checks, a page to receive credit for their participation, and a debriefing/thanks note (see Appendix A). Subjects were randomly assigned to read one of eight different scenarios that were used to test all hypotheses (see Appendix D).

The design of this study presented minimal risk to the participants, as it involved no exposure to physical or psychological harm. There was no formal debriefing of the participants after the study other than a description of the purpose for the study that they received upon completion of the survey, but participants were able to contact the administrator if they had any questions regarding the survey. Confidentiality of data was maintained at all times and identification of subjects was removed from the data after the list of participants was provided to their instructors so that they could receive extra credit. The sample consisted of 220 students, which represented a 75% response rate. As response rate is an important indicator of survey quality, the higher response rates assure more accurate survey results (Aday, 1996).

The 220 useable responses represent a wide variety of students. The sample was comprised primarily of 97% freshman and sophomores in college; 47% were females and 53% were males. Only 14.5% had at least one year of full-time work experience, but 57% had at least one to five years of part-time work experience. Twenty-two percent had at least one year experience as a committee chairperson or president of a club or organization. This demographic data was collected to better understand respondents' demographic background and compare the general demographic characteristics of the business students used in this study. Tables 2 and 3 present the characteristics of the samples regarding gender and classification. Table 4 contains information on respondents' full-time work experience (40 hours a week or more). Table 5 contains information on respondents' part-time work experience (less than 40 hours per week).

Table 2

#### Gender

Gender	Frequency	Percent	<b>Cumulative Percent</b>
Male	116	52.7	52.7
Female	104	47.3	100
Total	220	100	

## Classification

	Frequency	Percent	Cumulative Percent
Freshman	186	84.5	84.5
Sophomore	27	12.3	96.8
Junior	4	1.8	98.6
Senior	3	1.4	100
Total	220	100	

### Table 4

## Full Time (40 Hours a Week or More)

	Frequency	Percent	<b>Cumulative Percent</b>
Less than a year	188	85.5	85.5
1-5 years	26	11.8	97.3
6-10 years	4	1.8	99.1
11-15 years	1	.5	99.5
16-20 year	1	.5	100
Total	220	100	

### Table 5

### Part Time (Less than 40 Hours a Week)

	Frequency	Percent	Cumulative Percent
Less than a year	95	43.2	43.2
1-5 years	119	54.1	97.3
6-10 years	6	2.7	100
Total	220	100	

### Measurement Assessment

In this section, the steps used to create and evaluate the measurements and variables of

the study are discussed. Any issues related to internal consistency, validity, and reliability of the

constructs and measures employed also are addressed.

### Reliability and Validity Tests

Reliability tests were conducted to assess the internal consistency of the measures employed in the study. Reliability refers to the state when a scale yields consistent measures over time (Henson, Kogan, & Vacha-Haase, 2001). Reliability tests offer an important step in instrument validation to ensure measurement accuracy; that is, to minimize the measurement error. Cronbach's alpha ( $\alpha$ ) is usually calculated to measure reliability, with a commonly used threshold value for acceptable reliability to be around .70 (Nunnally & Bernstein, 1994).

In the study, five different dependent variables were measured—affective commitment, organizational citizenship behavior, satisfaction, well-being, and performance. Each measure utilized a slider scale with endpoints of 1 and 100.

Affective organizational commitment was measured using participants' responses to the seven-item affective commitment dimension in the organizational commitment scale ( $\alpha = .68$ ). Organizational citizenship behavior was measured using a 21-item social report scale adapted from Podsakoff et al. (1990) ( $\alpha = .92$ ). Well-being was measured by a series of questions based off of the work by Ryff and Singer (1998) ( $\alpha = .96$ ). Performance was measured by a series of questions generated over time using definitions of performance and team effectiveness scales (Avolio and Luthans et al., 2004; Vecchio et al., 2008). There are so many performance scales to date, that questions were taken from subject matter experts and from some of the questions provided by the other scales ( $\alpha = .94$ ) *Satisfaction* was measured by the adaptation of Hackman and Oldham's (1975) General Job Satisfaction Scale ( $\alpha = .87$ ) for the sample (see Appendix B).

#### Manipulation Checks

Manipulation checks were performed for all hypotheses. The manipulation checks ensured that the participant's interpretation of the manipulations was consistent with the intended description in the scenarios.

Participants were asked a series of questions to ensure that transformational leadership was properly manipulated (see Appendix E). Responses were obtained on a 100 point slider scale ranging from 1 (not at all) to 100 (a great deal). High scores support the perception that the leader was transformational. Low scores suggest participants did not perceive that the leader was transformational. Thus, the transformational condition should reflect high scores, and the non-transformational (authentic) leadership condition should reflect low scores. These results support the manipulation (F=19.23,  $p \le .0001$ ).

Participants were asked a series of questions to ensure that authentic leadership was properly manipulated (see Appendix E). High scores support the perception that the leader was authentic. Low scores suggest participants did not perceive that the leader was authentic. Thus, the authentic leadership condition should reflect high scores, and the non-authentic (transformational) leadership condition should reflect low scores. These results support the manipulation (F=9.32,  $p \le .0001$ ).

Participants were asked a series of questions to ensure that trust was exhibited and properly manipulated (see Appendix E). High scores support the perception that participants understood the leader was trusted by his subordinates; low scores suggest participants did not read that the leader was trusted by his subordinates. Thus, the trust condition should reflect high scores, and the non-trust condition should reflect low scores. As expected, the high trust

condition mean is higher than the non-trust condition and the difference is significant (F=4.30,  $p \le .0001$ ). Results support the manipulation.

Participants were asked a series of questions to ensure that psychological capital was exhibited and properly manipulated (see Appendix E). High scores support the perception that the subjects read that followers had high psychological capital. Low scores suggest subjects did not read that the followers had psychological capital. Thus, the psychological capital condition should reflect high scores and the non-psychological capital condition should reflect low scores. These results support the manipulation (F=9.37,  $p \le .0001$ ).

Results indicate all individuals perceived their manipulations as intended. Thus, scenarios created to test the hypotheses were valid.

### Analysis of Research Hypotheses

In this section, the statistical analyses used to test the research model and hypotheses are

discussed, and the results obtained from the test are presented. Table 6 includes a summary of the

hypotheses proposed in the previous chapter.

Table 6

Summary of Hypotheses

Hypotheses
H1: When employees have information that their leaders are transformational and trustworthy, employee performance, satisfaction, organizational citizenship behavior, and commitment will be higher than when employees only have information that their leaders are transformational.
H2: When employees have information that their leaders are authentic and trustworthy, employee performance, satisfaction, organizational citizenship behavior, and commitment will be higher than when employees only have information that their leaders are authentic.
H3: A model with transformational leadership as a predictor of follower outcomes is a better fit to the data than when authentic leadership is the predictor.

*(table continues)* 

Table 6 (continued).

Model	Hypotheses
	H4: When employees have information that their leaders are both authentic and trustworthy and the employees have positive psychological capital, employee performance, satisfaction, organizational citizenship behavior, commitment, and well-being will be higher than when employees only have information that their leaders are authentic and trustworthy.
	H5: When employees have information that their leaders are both transformational and trustworthy and the employees have positive psychological capital, employee performance, satisfaction, organizational citizenship behavior, commitment, and well-being will be higher than when employees only have information that their leaders are transformational and trustworthy.
	H6: A model with authentic leadership as a predictor of follower outcomes fits the data better when psychological capital and well-being are included, and is a better fit to the data than when transformational leadership is the predictor.

# Hypothesis 1

Hypothesis 1 proposed a stronger relationship between a transformational leader who is trustworthy and an employee's performance, satisfaction, organizational citizenship behavior, and commitment than when a leader is only transformational. The scenario used to test Hypothesis 1 had two conditions, one in which the leader was described as transformational and one in which the leader was described as both transformational and trustworthy. The method used to test this hypothesis was to measure all the dependent variables and then compare the results between the two conditions stated above using MANOVA. The results showed no support for Hypothesis 1 (see Table 7).

*Results for Hypothesis 1 – Dependent Variables (OCB, Performance, Satisfaction, Affective Commitment, and Well-being): Test of Between-Subject Effects: Hypothesis 1* 

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>e</sup>
	TotalAFC	78.381 <sup>a</sup>	2	39.190	.135	.874	.001	.269	.071
Corrected	TotalOCB	81.656 <sup>b</sup>	2	40.828	.165	.848	.002	.329	.075
Model	TotalPERF	366.734 <sup>°</sup>	2	183.367	.479	.620	.004	.958	.128
	TotalSAT	84.973 <sup>d</sup>	2	42.486	.107	.899	.001	.214	.066
	TotalAFC	528243.597	1	528243.597	1813.732	.000	.895	1813.732	1.000
Intercent	TotalOCB	586161.396	1	586161.396	2363.591	.000	.918	2363.591	1.000
Intercept	TotalPERF	777937.605	1	777937.605	2032.493	.000	.906	2032.493	1.000
	TotalSAT	687944.164	1	687944.164	1731.511	.000	.891	1731.511	1.000
	TotalAFC	78.381	2	39.190	.135	.874	.001	.269	.071
H1	TotalOCB	81.656	2	40.828	.165	.848	.002	.329	.075
пі	TotalPERF	366.734	2	183.367	.479	.620	.004	.958	.128
	TotalSAT	84.973	2	42.486	.107	.899	.001	.214	.066
	TotalAFC	61744.323	212	291.247					
Error	TotalOCB	52575.179	212	247.996					
LIIUI	TotalPERF	81143.103	212	382.750					
	TotalSAT	84229.410	212	397.309					
	TotalAFC	1058587.837	215	-	-	-	-	_	
Total	TotalOCB	1126487.317	215						
Total	TotalPERF	1513059.438	215						
	TotalSAT	1349335.160	215						
	TotalAFC	61822.704	214						
Corrected	TotalOCB	52656.835	214						
Total	TotalPERF	81509.837	214						
	TotalSAT	84314.382	214						

a. R Squared = .001 (Adjusted R Squared = -.008)

b. R Squared = .002 (Adjusted R Squared = -.008)

c. R Squared = .004 (Adjusted R Squared = -.005)

d. R Squared = .001 (Adjusted R Squared = -.008)

e. Computed using alpha = .05

### Hypothesis 2

Hypothesis 2 proposed a stronger relationship between an authentic leader who is trustworthy and an employee's performance, satisfaction, organizational citizenship behavior, and commitment than when an individual is only authentic. The scenario used to test Hypothesis 2 had two conditions, one in which the leader was described as authentic and one in which the leader was described as both authentic and trustworthy. The method used to test Hypothesis 2 was to measure all the dependent variables and then compare the results between the two conditions stated above using MANOVA. The results showed no support for Hypothesis 2 (see Table 8).

### Hypothesis 3

Hypothesis 3 predicted that a model with transformational leadership as a predictor of follower outcomes is a better fit to the data than when authentic leadership is the predictor. For this hypothesis, the interaction between leadership and trust conditions was examined with the expectation that results would reflect higher levels of the dependent variable with transformational leadership than with authentic leadership. Although Hypothesis 3 is not supported there was a trend when examining the means of the dependent variables under each condition of leadership. Except for affective commitment, the means were higher for transformational leadership than authentic leadership (see Tables 9 & 10).

*Results for Hypothesis 2 – Dependent Variables (OCB, Performance, Satisfaction, Affective Commitment, and Well-being): Test of Between-Subject Effects: Hypothesis 2* 

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>e</sup>
	TotalAFC	117.000 <sup>a</sup>	2	58.500	.201	.818	.002	.402	.081
Corrected	TotalOCB	1119.008 <sup>b</sup>	2	559.504	2.302	.103	.021	4.603	.464
Model	TotalPERF	376.874 <sup>c</sup>	2	188.437	.492	.612	.005	.985	.130
	TotalSAT	688.036 <sup>d</sup>	2	344.018	.872	.420	.008	1.744	.199
	TotalAFC	493868.996	1	493868.996	1696.767	.000	.889	1696.767	1.000
Intercent	TotalOCB	507348.425	1	507348.425	2086.969	.000	.908	2086.969	1.000
Intercept	TotalPERF	698494.903	1	698494.903	1825.163	.000	.896	1825.163	1.000
	TotalSAT	608535.137	1	608535.137	1542.689	.000	.879	1542.689	1.000
	TotalAFC	117.000	2	58.500	.201	.818	.002	.402	.081
110	TotalOCB	1119.008	2	559.504	2.302	.103	.021	4.603	.464
H2	TotalPERF	376.874	2	188.437	.492	.612	.005	.985	.130
	TotalSAT	688.036	2	344.018	.872	.420	.008	1.744	.199
	TotalAFC	61705.703	212	291.065					
Error	TotalOCB	51537.827	212	243.103					
Error	TotalPERF	81132.964	212	382.703					
	TotalSAT	83626.346	212	394.464					
	TotalAFC	1058587.837	215	-	-	-	-	-	
Total	TotalOCB	1126487.317	215						
Total	TotalPERF	1513059.438	215						
	TotalSAT	1349335.160	215						
	TotalAFC	61822.704	214						
Corrected	TotalOCB	52656.835	214						
Total	TotalPERF	81509.837	214						
	TotalSAT	84314.382	214						

a. R Squared = .002 (Adjusted R Squared = -.008)

b. R Squared = .021 (Adjusted R Squared = .012)

c. R Squared = .005 (Adjusted R Squared = -.005)

d. R Squared = .008 (Adjusted R Squared = -.001)

e. Computed using alpha = .05

	Conditions with			95% Confidence Interval		
Dependent Variable	Transformational or Authentic Leadership	Mean	Std. Error	Lower Bound	Upper Bound	
TotalAFC	AL	63.672	1.745	60.223	67.121	
TOTALATC	TF	62.268	1.804	58.703	65.832	
TotalOCB	AL	63.703	1.629	60.484	66.923	
Топаюсь	TF	67.226	1.684	63.899	70.553	
TotalPEF	AL	74.403	2.295	69.867	78.938	
IOUAIFEF	TF	77.268	2.372	72.581	81.955	
TotalSAT	AL	69.623	2.176	65.323	73.922	
I UtalSA I	TF	71.192	2.249	66.749	75.636	

Results for Hypothesis 3 – Dependent Variables (OCB, Performance, Satisfaction, Affective Commitment, and Well-being)

Test of Between-Subject Effects: Hypothesis 3

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>f</sup>
	TotalAFC	225.503 <sup>a</sup>	3	75.168	.317	.813	.006	.950	.110
Composed Model	TotalOCB	615.099 <sup>b</sup>	3	205.033	.991	.399	.020	2.973	.266
Corrected Model	TotalPEF	773.858°	3	257.953	.628	.598	.013	1.885	.179
	TotalSAT	407.101 <sup>e</sup>	3	135.700	.368	.776	.007	1.103	.121
	TotalAFC	597840.032	1	597840.032	2517.870	.000	.945	2517.870	1.000
Intercent	TotalOCB	646147.818	1	646147.818	3123.334	.000	.955	3123.334	1.000
Intercept	TotalPEF	867084.179	1	867084.179	2111.957	.000	.935	2111.957	1.000
	TotalSAT	747406.243	1	747406.243	2025.313	.000	.932	2025.313	1.000
	TotalAFC	74.301	1	74.301	.313	.577	.002	.313	.086
TEALMonin	TotalOCB	467.735	1	467.735	2.261	.135	.015	2.261	.321
TFALManip	TotalPEF	309.395	1	309.395	.754	.387	.005	.754	.139
	TotalSAT	92.882	1	92.882	.252	.617	.002	.252	.079
	TotalAFC	19.657	1	19.657	.083	.774	.001	.083	.059
TRUSTNOTRUST	TotalOCB	3.303	1	3.303	.016	.900	.000	.016	.052
	TotalPEF	40.747	1	40.747	.099	.753	.001	.099	.061
	TotalSAT	.941	1	.941	.003	.960	.000	.003	.050
									(11 ··· )

(table continues)

## Table 9 (continued).

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>f</sup>
	TotalAFC	135.046	1	135.046	.569	.452	.004	.569	.116
TFALManip *	TotalOCB	146.736	1	146.736	.709	.401	.005	.709	.133
TRUSTNOTRUST	TotalPEF	431.756	1	431.756	1.052	.307	.007	1.052	.175
	TotalSAT	314.160	1	314.160	.851	.358	.006	.851	.150
	TotalAFC	34903.504	147	237.439		-			-
Eman	TotalOCB	30411.003	147	206.878					
Error	TotalPEF	60352.259	147	410.560					
	TotalSAT	54247.762	147	369.032					
	TotalAFC	634628.020	151						
Tatal	TotalOCB	677366.921	151						
Total	TotalPEF	929127.125	151						
	TotalSAT	803260.320	151						
	TotalAFC	35129.007	150						
a 15.1	TotalOCB	31026.102	150						
Corrected Total	TotalPEF	61126.117	150						
	TotalSAT	54654.863	150						

a. R Squared = .006 (Adjusted R Squared = -.014)

b. R Squared = .020 (Adjusted R Squared = .000) c. R Squared = .013 (Adjusted R Squared = -.007)

d. R Squared = .017 (Adjusted R Squared = .007) d. R Squared = .017 (Adjusted R Squared = .003) e. R Squared = .007 (Adjusted R Squared = .013) f. Computed using alpha = .05

### Hypothesis 4

Hypothesis 4 proposed that when employees have information that their leaders are both authentic and trustworthy and the employees have positive psychological capital, employee's performance, satisfaction, organizational citizenship behavior, and commitment will be higher than when employees only have information that their leaders are authentic and trustworthy. The scenario used to test Hypothesis 4 had two conditions, one in which the leader was described as authentic and trustworthy, and their followers had positive psychological capital and one in which the leader was only described as authentic and trustworthy with no reference to follower psychological capital. The method used to test Hypothesis 3 was to measure all the dependent variables and then compare the results between the two conditions using MANOVA. The results showed no support for Hypothesis 3 (see Table10).

### Hypothesis 5

Hypothesis 5 proposed that when employees have information that their leader are both and trustworthy and the employees have positive psychological capital, employee performance, satisfaction, organizational citizenship behavior, and commitment will be higher than when employees only have information that their leaders are only transformational and trustworthy. The scenario used to test Hypothesis 5 had two conditions, one in which the leader was described as transformational and trustworthy and the followers as having positive psychological capital and one in which the leader was described as transformational and trustworthy with no references to follower psychological capital. The method used to test Hypothesis 4 was to measure all the dependent variables and then compare the results between the two conditions using MANOVA. The results showed no support for Hypothesis 4 (see Table 11).

Results for Hypothesis 4 – Dependent Variables (OCB, Performance, Satisfaction, Affective Commitment, and Well-being)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>f</sup>
	TotalAFC	54.179 <sup>a</sup>	1	54.179	.226	.638	.006	.226	.075
Compositod	TotalOCB	16.005 <sup>b</sup>	1	16.005	.075	.786	.002	.075	.058
Corrected Model	TotalPEF	$2.400^{\circ}$	1	2.400	.004	.948	.000	.004	.050
Model	TotalWB	245.002 <sup>d</sup>	1	245.002	.585	.449	.016	.585	.115
	TotalSAT	103.779 <sup>e</sup>	1	103.779	.224	.639	.006	.224	.075
	TotalAFC	147780.261	1	147780.261	615.209	.000	.946	615.209	1.000
	TotalOCB	144807.305	1	144807.305	674.949	.000	.951	674.949	1.000
Intercept	TotalPEF	196854.596	1	196854.596	357.556	.000	.911	357.556	1.000
-	TotalWB	167184.125	1	167184.125	399.352	.000	.919	399.352	1.000
	TotalSAT	169013.309	1	169013.309	364.223	.000	.912	364.223	1.000
	TotalAFC	54.179	1	54.179	.226	.638	.006	.226	.075
H4	TotalOCB	16.005	1	16.005	.075	.786	.002	.075	.058
	TotalPEF	2.400	1	2.400	.004	.948	.000	.004	.050
	TotalWB	245.002	1	245.002	.585	.449	.016	.585	.115
	TotalSAT	103.779	1	103.779	.224	.639	.006	.224	.075
	TotalAFC	8407.397	35	240.211					
	TotalOCB	7509.093	35	214.546					
Error	TotalPEF	19269.455	35	550.556					
	TotalWB	14652.339	35	418.638					
	TotalSAT	16241.313	35	464.038					
	TotalAFC	157682.041	37						-
	TotalOCB	153539.299	37						
Total	TotalPEF	217541.375	37						
	TotalWB	182144.740	37						
	TotalSAT	187161.200	37						
	TotalAFC	8461.575	36						
<b>a</b>	TotalOCB	7525.098	36						
Corrected	TotalPEF	19271.855	36						
Total	TotalWB	14897.341	36						
	TotalSAT	16345.092	36						

Test of Between-Subject Effects: Hypothesis 4

a. R Squared = .006 (Adjusted R Squared = -.022) b. R Squared = .002 (Adjusted R Squared = -.026)

c. R Squared = .000 (Adjusted R Squared = -.028) d. R Squared = .016 (Adjusted R Squared = -.012) e. R Squared = .006 (Adjusted R Squared = -.022) f. Computed using alpha = .05

Table 11

Results for Hypothesis 5 – Dependent Variables (OCB, Performance, Satisfaction, Affective Commitment, and Well-being)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>f</sup>
	TotalAFC	137.708 <sup>a</sup>	1	137.708	.744	.394	.021	.744	.134
Corrected	TotalOCB	116.364 <sup>b</sup>	1	116.364	.570	.455	.016	.570	.114
Model	TotalPEF	49.001 <sup>c</sup>	1	49.001	.133	.718	.004	.133	.064
Model	TotalWB	573.904 <sup>d</sup>	1	573.904	1.874	.180	.051	1.874	.265
	TotalSAT	352.436 <sup>e</sup>	1	352.436	1.123	.297	.031	1.123	.178
	TotalAFC	145443.769	1	145443.769	785.515	.000	.957	785.515	1.000
	TotalOCB	168307.615	1	168307.615	823.761	.000	.959	823.761	1.000
Intercept	TotalPEF	226730.001	1	226730.001	613.410	.000	.946	613.410	1.000
	TotalWB	202183.744	1	202183.744	660.154	.000	.950	660.154	1.000
	TotalSAT	189299.818	1	189299.818	602.942	.000	.945	602.942	1.000
	TotalAFC	137.708	1	137.708	.744	.394	.021	.744	.134
	TotalOCB	116.364	1	116.364	.570	.455	.016	.570	.114
H5	TotalPEF	49.001	1	49.001	.133	.718	.004	.133	.064
	TotalWB	573.904	1	573.904	1.874	.180	.051	1.874	.265
	TotalSAT	352.436	1	352.436	1.123	.297	.031	1.123	.178
	TotalAFC	6480.502	35	185.157					
	TotalOCB	7151.063	35	204.316					
Error	TotalPEF	12936.776	35	369.622					
	TotalWB	10719.367	35	306.268					
	TotalSAT	10988.600	35	313.960					
	TotalAFC	156002.020	37	-	-	-			
	TotalOCB	179926.254	37						
Total	TotalPEF	244851.750	37						
	TotalWB	220214.030	37						
	TotalSAT	206417.240	37						

Test of Between-Subject Effects: Hypothesis 5

(table continues)

Table 11 (continued).

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>f</sup>
	TotalAFC	6618.210	36						
	TotalOCB	7267.427	36						
Corrected	TotalPEF	12985.777	36						
Total	TotalWB	11293.271	36						
	TotalSAT	11341.036	36						

a. R Squared = .021 (Adjusted R Squared = -.007)

b. R Squared = .016 (Adjusted R Squared = -.012) c. R Squared = .004 (Adjusted R Squared = -.025)

d. R Squared = .051 (Adjusted R Squared = .024) e. R Squared = .031 (Adjusted R Squared = .003)

f. Computed using alpha = .05

### Hypothesis 6

Hypothesis 6 predicted that a model with authentic leadership as a predictor of follower outcomes is a better fit when psychological capital and well-being are included, and is a better fit to the data than when transformational leadership is the predictor. For this hypothesis the interaction between the leader, trust, and psychological capital conditions was examined with the expectation that results would reflect higher levels of the dependent variable with authentic leadership than with transformational leadership. Hypothesis 6 was not supported (see Table 12).

#### Chapter Summary

This chapter provided a detailed review of the experimental results. First, descriptive statistics were presented. An extensive review of the MANOVA results used to test the hypotheses followed. Although the hypotheses were not supported, the reasons for these potential explanations for the null results are discussed in Chapter 5.

Data was collected using scenarios, with subjects responding to dependent variable measure items based on those scenarios. The interpretation of results is contingent upon the validity of the scenarios and the participants' perceptions of the underlying manipulations. Manipulation checks provided support for the scenarios' validity. Consequently, conclusions drawn from these data are valid. A discussion of implications derived from the results is presented in Chapter 5.

# Results for Hypothesis 6 – Dependent Variables (OCB, Performance, Satisfaction, Affective Commitment, and Well-being)

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>f</sup>
	TotalAFC	235.106 <sup>a</sup>	3	78.369	.330	.804	.007	.990	.113
	TotalOCB	813.496 <sup>b</sup>	3	271.165	1.319	.270	.026	3.958	.346
Corrected Model	TotalPEF	510.535 <sup>c</sup>	3	170.178	.413	.744	.008	1.238	.131
	TotalWB	1644.832 <sup>d</sup>	3	548.277	1.662	.178	.033	4.986	.429
	TotalSAT	347.618 <sup>e</sup>	3	115.873	.314	.815	.006	.941	.110
	TotalAFC	595804.483	1	595804.483	2509.988	.000	.945	2509.988	1.000
	TotalOCB	643804.881	1	643804.881	3132.445	.000	.955	3132.445	1.000
Intercept	TotalPEF	865372.780	1	865372.780	2098.632	.000	.935	2098.632	1.000
-	TotalWB	764467.561	1	764467.561	2317.307	.000	.940	2317.307	1.000
	TotalSAT	745516.593	1	745516.593	2017.980	.000	.932	2017.980	1.000
	TotalAFC	68.068	1	68.068	.287	.593	.002	.287	.083
	TotalOCB	479.857	1	479.857	2.335	.129	.016	2.335	.330
TFALManip	TotalPEF	302.442	1	302.442	.733	.393	.005	.733	.136
	TotalWB	288.968	1	288.968	.876	.351	.006	.876	.153
	TotalSAT	90.949	1	90.949	.246	.621	.002	.246	.078
	TotalAFC	160.217	1	160.217	.675	.413	.005	.675	.129
	TotalOCB	326.835	1	326.835	1.590	.209	.011	1.590	.240
PSYCAPNOPSCAP	TotalPEF	93.304	1	93.304	.226	.635	.002	.226	.076
	TotalWB	1381.440	1	1381.440	4.188	.043	.028	4.188	.529
	TotalSAT	187.487	1	187.487	.507	.477	.003	.507	.109
	TotalAFC	1.722	1	1.722	.007	.932	.000	.007	.051
TEAL Monin *	TotalOCB	25.521	1	25.521	.124	.725	.001	.124	.064
TFALManip *	TotalPEF	113.702	1	113.702	.276	.600	.002	.276	.082
PSYCAPNOPSCAP	TotalWB	8.577	1	8.577	.026	.872	.000	.026	.053
	TotalSAT	76.619	1	76.619	.207	.649	.001	.207	.074
	TotalAFC	34893.901	147	237.373					
	TotalOCB	30212.606	147	205.528					
Error	TotalPEF	60615.582	147	412.351					
	TotalWB	48494.548	147	329.895					
	TotalSAT	54307.245	147	369.437					

Test of Between-Subject Effects: Hypothesis 6

(table continues)

### Table 12 (continued).

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>f</sup>
	TotalAFC	634628.020	151						
	TotalOCB	677366.921	151						
Total	TotalPEF	929127.125	151						
	TotalWB	819931.340	151						
	TotalSAT	803260.320	151						
	TotalAFC	35129.007	150						
	TotalOCB	31026.102	150						
Corrected Total	TotalPEF	61126.117	150						
	TotalWB	50139.380	150						
	TotalSAT	54654.863	150						

a. R Squared = .007 (Adjusted R Squared = -.014) b. R Squared = .026 (Adjusted R Squared = .006) c. R Squared = .008 (Adjusted R Squared = -.012) d. R Squared = .033 (Adjusted R Squared = .013) e. R Squared = .006 (Adjusted R Squared = -.014)

f. Computed using alpha =

#### CHAPTER V

#### DISCUSSION OF RESULTS

#### Overview

The preceding chapter reported the results of the data analysis and hypotheses tests for this experiment. The discussion in this chapter extends the data analysis to assemble both descriptive and normative implications for advancing leadership theories and practices. Toward that goal, findings for each hypothesized relationship included within the research model are interpreted. The chapter is divided into three parts. First, the implications of the findings are addressed. Second, the limitations of the experiment are presented. As a conclusion, future research is suggested.

#### Implications of the Findings

The main purpose of this experiment was to examine transformational and authentic leadership and to determine whether these leadership styles differ substantively or whether they are the same theory under different names. Some doubt exists that the two leadership theories are different and a cause and effect investigation was warranted to find the answer. Specifically, I examined authentic and transformational leadership effects on followers outcome variables. In addition, my research provided a more in-depth analysis of the relationship between authentic leadership and follower outcome variables and helped answer the question as to whether or not psychological capital and trust fit within the authentic leadership paradigm.

#### Hypothesis 1

Hypothesis 1 was not supported. Participants did not believe that when employees have information their leaders are transformational and trustworthy, performance, satisfaction, organizational citizenship behavior, and commitment are higher than when employees only have

information their leaders are transformational. Trust is a critical element in the study of transformational leadership. A meta-analysis conducted by Dirks and Ferrin (2002) indicated that trust in a leader is associated with a variety of positive organizational outcomes, such as commitment, organizational citizenship behaviors, satisfaction, and intentions to remain in the organization. It provides an explanation for how or why transformational leadership relates to follower outcomes in its role as a mediator of the transformational behavior-follower outcome relationships (Podsakoff, MaKenzie, Moorman, & Fetter, 1990; Goodwin, Whittington, Murray, & Nicholas, 2012). As a mediator, trust is related to transformational leadership and is found to have significant correlations with it in earlier research. It is very likely that although the subjects were aware when trust had and had not been manipulated, they did not consider or believe it explains significantly more variance in the outcomes than transformational leadership alone (Cunningham & MacGregor, 2000; Lagace, 1987; Brower, Schoorman, and Tan 2000).

Another reason Hypothesis 1 may not have been supported was due to the sample, which consisted primarily of college freshman. Although participants were asked about their previous leadership experience, perhaps results were not different between transformational leadership and transformational leadership with trust as they related to the dependent variables because the participants did not have enough relatable experience. Although participants could distinguish if a scenario included trust or not, they may not have been able to relate to what a transformational leader or a transformational leader with trust, really looks like in a work environment given their limited work experience and, thus, a potential inability to understand the significance of leader style and trust in a work environment.

#### Hypothesis 2

Hypothesis 2 was not supported. Participants did not believe that when employees have information that their leaders are authentic and trustworthy, employee performance, satisfaction, organizational citizenship behavior, and commitment are higher than when employees only have information their leaders are authentic. Authentic leadership may have the same differentiation and mediation problems relative to trust as transformational leadership, given that it may not be any different from it in the first place.

Authentic leadership is a newer construct; therefore there is limited empirical research on authentic leadership (Gardner, Cogliser, Davis, & Dickens, 2011). In 2004, the Gallup Leadership Institute at the University of Nebraska – Lincoln hosted an inaugural summit on Authentic Leadership Development (ALD). This summit helped define authentic leadership and allowed for an open discussion on leadership strategy. Only recently did Walumbwa, Avolio, Gardner, Wersing, and Peterson (2008) create a theory-based measure of authentic leadership comprised of leader self-awareness, presenting one's authentic self, objectivity, and self regulation. Since then, research using the Authentic Leadership Questionnaire (ALQ) supports relationships between authentic leadership and important work-related attitudes and behaviors similar to those found for transformational leadership (e.g., followers' organizational citizenship behavior, commitment, satisfaction, and performance). Based on this previous research, Hypothesis 2 was constructed to essentially place authentic leadership in the transformational leadership paradigm to determine if it provided similar information on relationships between leader and follower outcomes as did transformational leadership.

The relationship between authentic leadership and trust required consideration because it adds validity to the idea that authentic leadership is beneficial; authentic leaders promote

employees' trust (Avolio et al., 2004; Deluga, 1994; Dirks & Ferrin, 2002; Gardner et al., 2005; Ilies et al., 2005; Walumbwa et al., 2008). Because results for this hypothesis were not significant, there is no basis to conclude that information about followers' trust in their leader provides enough different information than knowledge of their leaders' authenticity to affect their perceptions of follower outcomes. The lack of subject experience again may have influenced these results similarly to those obtained for Hypothesis 1.

### Hypothesis 3

Hypothesis 3 was not supported. In Hypothesis 3, it was expected that a model with transformational leadership as a predictor of follower outcomes is a better fit to the data than when authentic leadership is the predictor. For this hypothesis, the interactions between leadership and trust conditions were examined relative to the dependent variables. Although results for Hypothesis 3 were not significant, the direction of the means for all the dependent variables revealed a pattern indicating participants did tend to believe transformational leadership would lead to higher levels of the dependent variables except for affective commitment than authentic leadership (see Tables 8 & 9). When comparing the transformational leadership and trust interaction to the authentic leadership and trust interaction, no differences were found. Although subjects in the experiment could differentiate authentic leadership from transformational leadership based on manipulations, authentic leadership effects. The conclusion thus far is that there are no differences between transformational and authentic leadership when examined within a traditional transformational leadership paradigm.

#### *Hypothesis* 4

Two followers' outcome variables that theoretically differentiate authentic from transformational leadership are follower psychological capital and follower well-being. When examining the direct relationship between authentic leadership and followers' well-being, one must return to the early work of authenticity and how it provides impressive empirical evidence of the positive consequences that increase in terms of physical and psychological well-being to individuals who achieve relatively high levels of authenticity (Deci & Ryan, 2000; Kernis & Goldman, 2005). Researchers also believe that psychological capital should be examined in order to expand authentic leadership theory to incorporate follower well-being. Psychological capital is related to many follower outcomes such as performance, organizational citizenship behavior, and satisfaction. Because businesses are always evolving, organizations must recognize the value of human capital, social capital, and psychological capital. Psychological capital goes beyond human and social capitals to gain a competitive advantage through investment/development of "who you are" and "what you can become" (Larson & Luthans, 2006). For leaders to be considered truly authentic by followers, followers must perceive them to be authentic; for that reason authentic leadership must be regarded as a function of followers' perception. Shamir (2007) suggests that leadership effectiveness is just as much a product of good followers as it is of good leaders. Therefore, a model of authentic leadership should include not only the leader's behaviors but also their characteristics as well as those of the followers, revealing a more integrative approach to studying leadership and organizational behavior (Gardner, Luthans, Avolio, & May, 2005; Luthans, Norman, & Hughes, 2006).

Previous conceptual work emphasizes the role of authentic leadership in creating psychological capital in leaders, but there has been only a small attempt to integrate these related

constructs. In a recent paper, Gumusluoglu and Ilsev (2009) merge the authentic leadership, psychological capital, and creativity literatures, and present results supporting a direct relationship between authentic leadership and employees' creativity as well as an indirect relationship through psychological capital. Avolio, Gardner, Walumbwa, Luthans and May (2004) were the first to propose psychological capital as a mediating variable between authentic leadership and followers outcome variables. Authentic leadership affects follower outcomes through psychological capital because leaders have a strong impact on the decisions and identity of their followers. Walumbwa, Luthans, Avey, and Oke's (2011) study of the mediating role of collective psychological capital and trust provide further evidence for both psychological capital and trust in the authentic leadership literature, suggesting that authentic leadership may enhance group members' psychological capital and trust levels, which in turn affects their citizenship behaviors and performance.

Trust is important for authentic leadership. When authentic leaders interact with followers with openness and truthfulness, their follower should develop unconditional trust in them (Ilies et al., 2005). Additionally, by setting a personal high moral standard with integrity and involving followers in the decision-making process, authentic leaders should be able to build a deep sense of trust in group members. This trust sustains a more transparent process of dealing with difficult problems in part because of the shared values. Prior research suggests that when followers identify with their immediate supervisors' values, they become more trusting to the leader (Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Empirically it has been found that the leader's level of transparency and psychological capital affects the followers' perceived trust in the leader (Norman, Avolio, & Luthans, 2011).

Hypothesis 4 was not supported. Participants did not believe that when employees have information that their leaders are authentic and trustworthy and followers' have positive psychological capital, that employee performance, satisfaction, organizational citizenship behavior, commitment, and well-being, are higher than when employees only have information that their leaders are authentic and trustworthy. Consequently, knowledge of follower psychological capital did not add anything to the understanding of a relationship between authentic leadership and follower outcomes.

When examining psychological capital, researchers have observed many common characteristics between authentic leadership and psychological capital. Results from research by Caza, Bagozzi, Wooley, Levy, and Casa (2010) reveal a sizable positive correlation between the two constructs. Psychological capital is also linked to the same employee outcomes as those associated with authentic leadership. These results lead some researchers to propose that authentic leadership could include psychological capital as an explanatory factor, particularly with the aim of examining whether all authentic leadership effects stem from changes in follower psychological capital or if other developmental changes are also involved; therefore, the delineation between the roles of each construct is difficult (Wooley, Caza, & Levy, 2010).

As a result, just as subjects were unable to differentiate between authenticity alone and authenticity with trust, they also were potentially unable to distinguish between these constructs and follower psychological capital. Furthermore, they may have assumed positive follower psychological capital even when it was not specifically described as an aspect of the leader's style in the scenario.

### Hypothesis 5

Hypothesis 5 was not supported. Participants did not believe that when employees have information that their leaders are transformational and trustworthy and the followers have positive psychological capital, that employee performance, satisfaction, organizational citizenship behavior, commitment, and well-being are higher than when employees only have information their leaders are transformational and trustworthy. Psychological capital has not been linked to transformational leadership in previous research. Therefore, the purpose of this hypothesis was to investigate if follower psychological capital fit within the transformational leadership paradigm as it is proposed to fit within the authentic leadership paradigm. These results reveal no fit within either paradigm. Knowledge of follower psychological capital does not appear to add anything to knowledge of a leader's authenticity, transformational behavior, and trustworthiness. The problem with potentially overlapping constructs (i.e., shared variance) may once again be responsible for the null findings for Hypothesis 5.

#### *Hypothesis* 6

For this hypothesis, the interactions between leader style, trust, and psychological capital were examined with the expectation that results would reflect a better fit of the data when they included authentic leadership rather than transformational leadership. Hypothesis 6 was not supported (see Table 12). When comparing the transformational leadership, psychological capital, and trust interaction to the authentic leadership, psychological capital, and trust interaction to the authentic leadership, psychological capital, and trust interaction to the authentic leadership, psychological capital, and trust interaction to the authentic leadership is a better fit with the addition of psychological capital.

#### Post Hoc Analysis

Previous research reveals differences in leadership styles. Over the past sixty years there have been as many as sixty-five classification systems to define and develop leadership (Fleishman, Mumford, Zaccaro, Levin, Korotkin, & Hein, 1991). The field of leadership focuses not only on the leader, but also on the followers, peers, supervisors, environment, and culture. Leadership is dyadic, shared, relational, strategic, global, and a complex social dynamic (Avolio, Walumbwa, & Weber, 2009). Research on this topic is extensive because of the influence a leader has on an employee's overall performance and satisfaction in the workplace. But with so many different variables in place, other influences need always to be examined when conducting leadership research.

Given that none of the hypotheses were significant but the manipulations were valid, I was prompted to further investigate the results. Overall the subjects did not indicate they expected any differences in outcomes based on the hypothesized independent variables; however, I examined relationships between the demographic variables and follower outcomes relative to the leader's style and trust, particularly focusing on gender.

In their meta-analysis on gender and the evaluation of leaders, Eagly, Makhijani, and Klonsky (1992) explored gender differences in leadership and also examined problems researchers have when investigating leadership styles using vignettes. The authors explain that the effect of leaders' gender should become smaller as the amount of other information that subjects possess about the leaders increases. Such a prediction is consistent with more general evidence suggesting that stereotypic judgments are weakened in the presence of additional information about the leader (Deaux & Lewis, 1984; Eagly, Ashmore, Makhijani, & Longo,

1991; Locksley, Borgida, Brekke, & Hepburn, 1980; Locksley, Hepburn, & Ortiz, 1982). This meta-analysis also revealed that women favored male leaders over female leaders.

When conducting a post hoc analysis of the data, a significant main effect for gender and a significant interaction effect for leadership style, trust, and gender were found on organizational citizenship behaviors, performance, and affective commitment. The main effect for gender maybe due to the preference for male leaders found in Eagly et al. (1992). Results show that women expected higher levels of outcomes over men, perhaps because they leaders in the scenario were men.

Means for dependent variables in each condition for tests on organizational citizenship behavior are presented in Table 13. Table 14 ANOVA reports results for organizational citizenship behavior.

Figure 5 includes a graph of the 3-way interaction effect between leader style, trust, and gender on organizational citizenship behaviors. Without trust, males perceived that transformational leadership would produce higher organizational citizenship behavior than authentic leadership, but there was no leadership effect with trust. As perceived by males, transformational leadership is all that matters. They either do not differentiate trust from transformational leadership, or they do not require trust to assume higher levels of organizational citizenship behaviors.

With trust, females perceived transformational leaders produced higher organizational citizenship behaviors, but there was no leadership effect without trust. As perceived by females, trust is what makes the difference and a lack of it tends to harm effects for transformational leadership more than for authentic leadership.

Means for Organizational Citizenship Behavior: Descriptive Statistics; Depende	nt Variable:
TotalOCB	

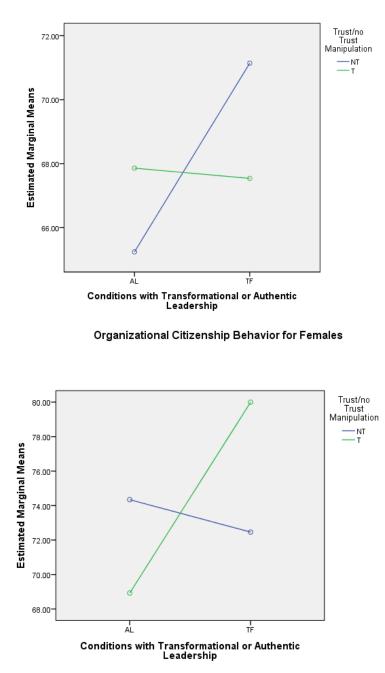
Conditions with Transformational or Authentic Leadership	Trust/no Trust Manipulation	What is your gender?	Mean	Std. Deviation	n
		Male	64.0035	16.10041	27
	NT	Female	70.1429	15.27508	17
		Total	66.3755	15.89664	44
		Male	63.5646	10.81834	21
AL	Т	Female	65.5736	17.81944	22
		Total	64.5925	14.68095	43
		Male	63.8115	13.90149	48
	Total	Female	67.5653	16.70302	39
		Total	65.4943	15.24515	87
		Male	65.9690	13.94619	20
	NT	Female	69.2653	14.34789	21
		Total	67.6574	14.07477	41
		Male	65.0604	13.24788	26
TF	Т	Female	77.5635	13.86643	18
		Total	70.1753	14.72154	44
		Male	65.4555	13.41013	46
TF	Total	Female	73.0952	14.55784	39
		Total	68.9608	14.38321	85
		Male	64.8399	15.09364	47
	NT	Female	69.6579	14.57295	38
		Total	66.9938	14.97024	85
		Male	64.3921	12.11752	47
Total	Т	Female	70.9690	17.06707	40
		Total	67.4160	14.88296	87
		Male	64.6160	13.61479	94
	Total	Female	70.3303	15.81193	78
		Total	67.2074	14.88395	172

Results for	Gender and	Organizational	Citizenship Behavior
<i>J</i>		0	1

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	3978.218 <sup>a</sup>	7	568.317	2.437	.020	.075	17.058	.862
Intercept	1082257.150	1	1082257.150	4640.658	.000	.957	4640.658	1.000
TFALManip	733.332	1	733.332	3.144	.078	.015	3.144	.423
TRUSTNOTRUST	4.270	1	4.270	.018	.892	.000	.018	.052
Q13	1926.427	1	1926.427	8.260	.004	.038	8.260	.816
TFALManip * TRUSTNOTRUST	152.109	1	152.109	.652	.420	.003	.652	.127
TFALManip * Q13	43.870	1	43.870	.188	.665	.001	.188	.072
TRUSTNOTRUST * Q13	32.229	1	32.229	.138	.710	.001	.138	.066
TFALManip * TRUSTNOTRUST * Q13	1234.762	1	1234.762	5.295	.022	.025	5.295	.629
Error	48741.310	209	233.212					
Total	1134949.707	217						
Corrected Total	52719.528	216						

a. R Squared = .075 (Adjusted R Squared = .044) b. Computed using alpha = .05

#### Organizational Citizenship Behavior for Males



*Figure 5*. Interaction effect between leader style, trust, and gender on organizational citizenship behaviors.

Table 15 presents the means for each condition for tests on performance and Table 16 reports ANOVA results for performance. Figure 6 includes a graph of the 3-way interaction effect between leader style, trust, and gender on performance. Results for both males and

females are the same as those obtained for organizational citizenship behavior. Trust makes the difference for females, but not for males.

# Table 15

Conditions with Transformational or Authentic Leadership	Trust/no Trust Manipulation	What is your gender?	Mean	Std. Deviation	n
	-	Male	75.1290	20.53329	31
	NT	Female	86.0109	15.64748	23
		Total	79.7639	19.22977	54
		Male	77.9500	19.55015	25
AL	Т	Female	80.6339	24.53196	28
		Total	79.3679	22.15210	53
		Male	76.3884	19.96889	56
	Total	Female	83.0588	20.97651	51
		Total	79.5678	20.63153	107
		Male	81.6724	18.36353	29
	NT	Female	82.2870	18.84651	27
		Total	81.9688	18.43040	56
		Male	78.8966	19.65183	29
TF	Т	Female	92.0833	13.41675	24
		Total	84.8679	18.20672	53
		Male	80.2845	18.90294	58
	Total	Female	86.8971	17.08480	51
		Total	83.3784	18.29502	109
		Male	78.2917	19.62882	60
	NT	Female	84.0000	17.37565	50
		Total	80.8864	18.77305	110
		Male	78.4583	19.42497	54
Total	Т	Female	85.9183	20.80881	52
		Total	82.1179	20.36711	106
		Male	78.3706	19.44618	114
	Total	Female	84.9779	19.13239	102
		Total	81.4907	19.53559	216

# Results for Gender and Performance

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	4964.629 <sup>a</sup>	7	709.233	1.914	.069	.061	13.396	.750
Intercept	1432816.602	1	1432816.602	3866.055	.000	.949	3866.055	1.000
TFALManip	773.976	1	773.976	2.088	.150	.010	2.088	.301
TRUSTNOTRUST	66.634	1	66.634	.180	.672	.001	.180	.071
Q13	2503.886	1	2503.886	6.756	.010	.031	6.756	.735
TFALManip * TRUSTNOTRUST	306.591	1	306.591	.827	.364	.004	.827	.148
TFALManip * Q13	.186	1	.186	.001	.982	.000	.001	.050
TRUSTNOTRUST * Q13	63.968	1	63.968	.173	.678	.001	.173	.070
TFALManip * TRUSTNOTRUST * Q13	1442.217	1	1442.217	3.891	.050	.018	3.891	.501
Error	77087.853	208	370.615					
Total	1516452.500	216						
Corrected Total	82052.481	215						

# Test of Between-Subject Effects: Gender and Performance

a. R Squared = .061 (Adjusted R Squared = .029) b. Computed using alpha = .05

#### Performance for Males

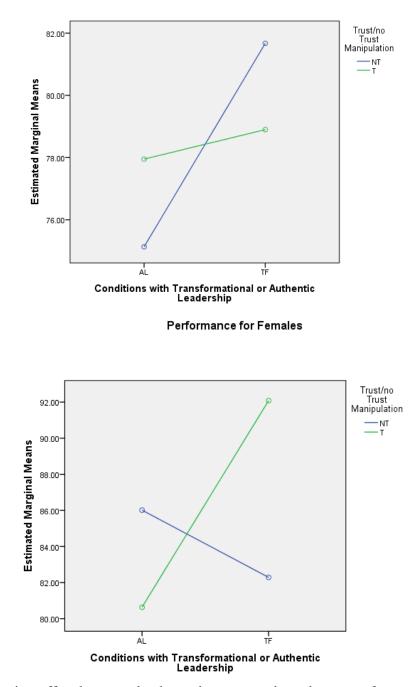


Figure 6. Interaction effect between leader style, trust, and gender on performance.m

Table 17 reports the means for each condition for test on affective commitment and Table18 reports ANOVA results for affective commitment.

Conditions with Transformational or Authentic Leadership	Trust/no Trust Manipulation	What is your gender?	Mean	Std. Deviation	n
		1	63.0402	17.22420	32
	NT	2	72.7391	16.84419	23
		Total	67.0961	17.58454	55
		1	65.2747	16.59584	26
AL	Т	2	70.5510	16.36090	28
		Total	68.0106	16.53367	54
		1	64.0419	16.83461	58
	Total	2	71.5378	16.44979	51
		Total	67.5491	16.99909	109
	-	1	67.4433	19.71548	29
	NT	2	68.3545	16.86731	27
		Total	67.8827	18.23701	56
	Т	1	62.3990	11.79998	29
TF		2	77.0179	16.31953	24
		Total	69.0189	15.70809	_53
ΓF		1	64.9212	16.30374	58
	Total	2	72.4314	17.01547	51
		Total	68.4351	16.98535	109
	-	1	65.1335	18.42798	61
	NT	2	70.3714	16.82923	50
		Total	67.4929	17.83949	111
		1	63.7584	14.20591	55
Total	Т	2	73.5357	16.50508	52
		– Total	68.5100	16.06182	107
		1	64.4815	16.50500	116
	Total	2	71.9846	16.65802	102
	i Utur	2 Total	67.9921	16.95884	218

Means for Affective Commitment: Descriptive Statistics; Dependent Variable: TotalAFC

## Results for Gender and Affective Commitment

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power <sup>b</sup>
Corrected Model	4552.928 <sup>a</sup>	7	650.418	2.361	.024	.073	16.526	.848
Intercept	1008222.449	1	1008222.449	3659.500	.000	.946	3659.500	1.000
TFALManip	43.934	1	43.934	.159	.690	.001	.159	.068
TRUSTNOTRUST	45.303	1	45.303	.164	.686	.001	.164	.069
Q13	3137.739	1	3137.739	11.389	.001	.051	11.389	.919
TFALManip * TRUSTNOTRUST	43.036	1	43.036	.156	.693	.001	.156	.068
TFALManip * Q13	1.038	1	1.038	.004	.951	.000	.004	.050
TRUSTNOTRUST * Q13	290.693	1	290.693	1.055	.306	.005	1.055	.176
TFALManip * TRUSTNOTRUST * Q13	1108.359	1	1108.359	4.023	.046	.019	4.023	.515
Error	57856.732	210	275.508					
Total	1070208.531	218						
Corrected Total	62409.660	217						

# Test of Between-Subject Effects: Gender and Affective Commitment

a. R Squared = .073 (Adjusted R Squared = .042) b. Computed using alpha = .05

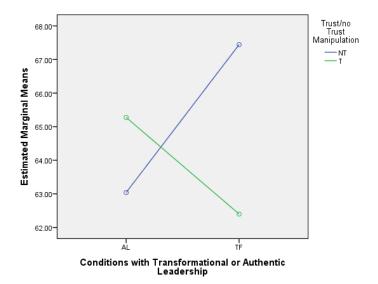
Figure 7 includes a graph of the 3-way interaction effect between leader style, trust, and gender on affective commitment. Without trust, males perceived that transformational leadership would produce higher levels of affective commitment than authentic leadership; however, with trust, males perceived authentic leadership to lead to more affective commitment than transformational leadership. Male subjects expected trust to make a difference for affective commitment relative to leadership style. Trust adds information that is apparently missing from knowledge about authentic leadership relative to affective commitment, but it still does not produce as high levels of affective commitment as transformational leadership does without trust.

For females, results were the same for affective commitment as they were for organizational citizenship behavior and performance. Trust is what makes the difference and without it, effects for transformational leadership suffer more than they do for authentic leadership.

An interpretation of the above graphs provides evidence of the interaction effects between leadership style, trust, and gender on follower organizational citizenship behavior, performance, and affective commitment. Although results for satisfaction and well-being were not significant, the trends followed the significant results for the other dependent variables. It is possible that the results differed between men and women because of the socialization that occurs for boys and girls, which was still producing these differing results given subjects' youth. These young women likely expected to see more positive outcomes at work than young men did given their socialization to be the cheerleaders, supporters, and caregivers in the house (Bland, 2003; Kumar & Maheshwari, 2011). Young men and women in their freshman year at college have not had the opportunity of experience and maturity that would likely dull the effects of

socialization over time, which would tend to cause both men and women to consider workrelated variables as they make these judgments rather than relying on their socialization. A tendency for males and females to rate outcomes similarly in an actual work environment is supported by Eagly (2005).





Affective Commitment for Females

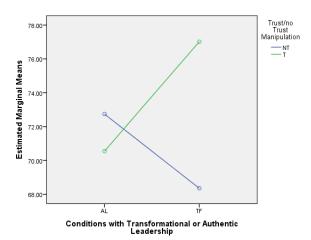


Figure 7. Interaction effect between leader style, trust, and gender on affective commitment.

#### Summary of Results

As stated in the hypotheses, I expected there to be a difference between transformational and authentic leadership based upon current research indicating they are two different styles of leadership. Authors propose that authentic leadership differs from transformational leadership in that authentic leadership focuses on the leader's self concept where as transformational leadership focuses primarily on a leader's behavior (Shamir & Eilam, 2005).

In addition, I expected a model with authentic leadership as a predictor of follower outcomes to fit the data better when psychological capital and well-being are included, and is a better fit to the data than when transformational leadership is the predictor. The literature reveals that authentic leaders are aware of how their actions will affect their followers and attempt to make decisions that are best for them (Yukl, 2010). Avolio and Gardner (2005) compared authentic leader developmental theory with transformational leadership and found that psychological capital, authentic leader behavior, relational transparency and followers' authentic behavior have been discussed in the transformational leadership literature but never have been a focal component. The authors further differentiate the characteristics of authentic leader's self awareness and self regulation, emotional contagion, and commitment to enabling follower success by supporting their development (Avolio & Gardner, 2005). From these studies and previous research, one would expect to find a difference between transformational and authentic leaders.

Further delineation of authentic leadership from transformational leadership was examined by Walumbwa, Avolio, Gardner, Wersing, and Peterson's (2008) theory-based measure of authentic leadership. The result of this study provided evidence the four dimensions

of authentic leadership correlate positively with ethical leadership and the dimensions of transformational leadership, but not so highly as to indicate construct redundancy. The authors also discovered the higher order authentic leadership measure accounted for variance in a diverse set of frequently researched work outcomes beyond that explained by ethical and transformational leadership dimensions, specifically in OCB, organizational commitment, and satisfaction with supervisor. Therefore, the authors argue that authentic leadership provides value to the study of organizations.

Little empirical research has been conducted on the similarities and differences between transformational and authentic leadership. In this dissertation, I attempted to distinguish authentic leadership from transformational leadership. Authentic leadership has a great deal of conceptual ambiguity concerning the difference between authentic leadership and related constructs, particularly with respect to current conceptualizations of transformational leadership (Cooper et al., 2005 & Yukl, 2010).

Regardless of the differences proposed between transformational and authentic leadership it also was clear from a review of the literature that transformational leadership and authentic leadership have many similarities. There is a distinct ethical overlap between transformational and authentic leadership; some researchers even propose there is no difference between transformational leadership and authentic leadership (Bass & Steidlmeier, 1999). Therefore, the results of this experiment do not come completely unexpected. Transformational leadership, from its inception, proposed a moral dimension. Transformational leaders were expected to raise the level of human conduct and ethical aspirations of both the leader and the followers (Burns, 1978). There also is a body of literature on authentic transformational leaders, who increase followers' awareness of what is right, when they help to evaluate followers' needs

for achievement and self actualization, and when they move followers to go beyond their selfinterests, for the good of the organization (Bass & Steidlmeier, 1999).

The advent of work on authentic leadership development came as a result of the literature on transformational leadership, in which authors, such as Bass and Steidlmeier (1999) suggest that some transformational leaders are authentic, whereas others are really pseudo transformational, thus not authentic. Leaders are authentically transformational when they increase awareness of what is right, good and beautiful, when they help to evaluate followers' needs for achievement and self actualization. Leaders also are authentically transformational when they shift followers to go beyond their self-interests and recognize what is good for the organization (Bass & Steidlmeier, 1999). Therefore, Bass and Steidlmeier (1999) assert that authentic transformational leadership is a separate construct, but it appears it is simply an extension of transformational leadership. In addition, Avolio and Gardner (2004) explain that transformational leaders are described as optimistic, hopeful, and developmentally-oriented and of high moral character (Bass, 1998), all of which are components of authentic leadership.

On the other hand, May, Chan, Hodges, and Avolio (2003) state that authentic leadership is an over-arching concept that includes transformational leadership and all positive forms of leadership, which is similar to the propositions made by Lloyd-Walker and Walker (2011). These researchers propose authentic leadership incorporates transformational and ethical leadership into the same construct or at the very least, adds ethical leadership qualities to the established transformational style. On the other hand, all of the authors above agree that transformational and authentic leadership are similar, if not the same. The results of this research support the lack of perceptual difference between the two theories of leadership.

Although subjects in the experiment could differentiate authentic leadership from transformational leadership based on the manipulations, authentic leadership effects were not significantly different when compared to transformational leadership effects. As a result, analyses in my research do not support previous theoretical development of authentic leadership as a separate theory from transformational leadership. Consequently, lack of support for my hypotheses actually provides valuable information to the study of leadership and calls into question the continued pursuit of research on authentic leadership.

### Limitations

Even though the results from this experiment yield insight into the dynamics of transformational and authentic leadership, the experiment is not without limitations. First, the generalizability of findings should be interpreted in light of the sample used. Ilgen (1986) explains that it is a well accepted belief that the generalizations of experiments to actual field settings is greatest when there is a high degree of similarity between the experiment and the workplace. In order to simulate different types of leadership, scenarios were created that described a leadership situation in the context of an organization. Students from a business college were selected to interpret these scenarios. Although the scenarios were constructed, the manipulation checks showed evidence that the participants saw a difference between the constructs. Furthermore, the participants represented a large population of working students who had held some sort of leadership position at one time.

Also, when considering the generalizability of these findings to natural settings, individuals should consider whether the demands of the experimental settings in which this experiment was conducted may have restrained the participants given that subjects know that their evaluative behavior is under scrutiny when reading these scenarios. By using younger

participants, who have not had as many life experiences, students could have had some variety of social desirability bias (e.g., emotionally adequate, moral, honest, and unprejudiced) toward the scenarios. This phenomenon has been suggested, especially in terms of Rosenberg's (1969) concept of *evaluation apprehension*.

At the outset, results of my research provide useful information about the practical implications of authentic leadership. The results of this experiment suggest that individuals cannot discriminate between a transformational leader and an authentic leader. Consequently, it does not appear to be necessary to try to continue to research two such similar constructs. Because individuals cannot perceive a difference between the two leadership styles, organizational leaders should continue to focus on the development of transformational leadership given its well-documented, positive relationship with many valued outcomes. Furthermore, adding psychological capital into the research paradigm did not help distinguish authentic leadership from transformational leadership as suggested in previous theoretical reviews. Evidently, trust and psychological capital are too closely related to the leadership styles to add any significant results. If individuals have a transformational or authentic leader, they are likely to trust their leader due to the positive qualities associated with both styles of leadership. The same principle applies with psychological capital; when individuals have either a transformational or an authentic leader, they are likely to have positive psychological states.

### Future Research

When conducting a post hoc analysis of the data, an interaction was found that was not previously hypothesized. A significant interaction effect was observed for leadership style, trust, and gender on organizational citizenship behaviors, affective commitment and performance. Currently, only preliminary examinations of gender have been conducted when looking at both

leadership styles. Wolley, Caza, and Levy, (2011) investigated the relationship between authentic leadership and follower psychological capital. The results of this experiment revealed a positive relationship between authentic leadership and followers' psychological capital, partially mediated by a positive work climate, and a significant moderating effect from gender, providing evidence that gender affects the leadership process. The authors provide evidence that positive influence of authentic leadership on work climate did vary by follower gender. Although both genders perceived authentic leaders as contributing to the positive work climate, the contribution was perceived as greater by males. Moreover, the effect of authentic leadership on male follower' psychological capital was fully mediated by work climate perceptions. In contrast, positive work climate only partially mediated the psychological captial effects of authentic leadership among female respondents. The results suggest that comparable leader behaviors produced different outcomes among male and female followers. Findings support previous predictions about the effects of authentic leadership and begin to reveal the mechanisms by which authentic leaders affect followers and these outcomes are different based on gender. Furthermore, this research highlights the importance of the need for consideration of the influence of follower characteristics in understanding leadership outcomes. These results suggest that comparable leader behaviors produced different outcomes among male and female followers.

In addition, due to the age of the participants, future researchers should investigate if socialization of college females is different than that of males. Since women expected higher levels of outcomes under different conditions than men, perhaps women perceive more positive work outcomes because of their socializations patterns. Women are taught from a young age to be more accepting and communicative. Therefore, the mismatch between males and females in

this study may lie in the difference of gender-based values. Therefore, this question needs further investigation as to why females and males perceive their leaders as different.

Furthermore, I suggest systematic replication with an experienced group of participants. If I were to use Master's level business students, perhaps the fidelity would be higher, because the participant could relate more to the scenario proposed. If more advanced students were selected for the surveys, I believe gender effects would not emerge in this experiment because individuals would have enough previous work experience to relate the scenarios to their lives. In addition, the comparison groups were between leadership styles that were similar. In future research, transactional leadership also should be included, for example, as it is viewed as different from transformational leadership and, therefore, probably authentic leadership as well. This addition would clarify similarities of authentic leadership to transformational leadership and allow for an examination of whether they differed similarly from transactional leadership. By adding transactional leadership, participants may be able to detect a broader range in leadership behaviors.

#### Conclusion

In conclusion, results of this experiment provided the first causal investigation of many variables that are of interest in the leadership literature. First, this examination provided an investigation of the difference between transformational and authentic leadership. Second, this dissertation provided a thorough, quantitative, causal analysis of the relationship between authentic leadership and follower outcome variables. Finally, results revealed psychological capital and trust as independent variables relate to transformational and authentic leadership, providing a test of the theoretical framework first proposed by Luthans et al. (2007). Although this dissertation was constructed to investigate the differences between authentic leadership and

transformational leadership relative to follower outcomes, results found for gender differences may highlight an additional component to these leadership paradigms not previously considered.

APPENDIX A

# IRB APPROVAL, INSTRUCTIONS FOR PILOT STUDY, INFORMED CONSENT,

# DEMOGRAPHIC SURVEY, AND DEBRIEF

# Welcome!

Thank you for agreeing to participate in this study. It is greatly appreciated and will assist in furthering our knowledge in the field of Management. If at any time you have problems completing the survey, please do not hesitate to contact Victoria McKee at xxx-xxx or e-mail her at Victoria.McKee@unt.edu if you have any questions or problems. You will have every opportunity to complete each section of this survey. E-mail or call Victoria McKee at the above contact information rather than your professor if you need assistance.

# **Instructions**

The survey consists of multiple sections, including this one. Though you only see 1 section right now, more will eventually appear as you complete certain portions of the survey by clicking the next button ">>" to continue. As you are answering the questions, you will either need to check the correct box, enter in information, or move the slider. Please read the scenario very carefully, and make sure you have answered every question. The questions simply ask your perception of a situation, so there is no right or wrong answers, only your opinion.

If you proceed with the survey, it indicates your voluntary willingness to do so.

# Information Notice

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose and benefits of the study and how it will be conducted.

**Purpose of the Study:** You are being asked to participate in a research study which involves your perceptions of leaders, followers, and how they interact.

**Study Procedures:** You will be asked to read a scenario and answer questions about it. It should take no more than 25 minutes of your time.

# **Foreseeable Risks:**

No foreseeable risks are involved with this study.

# **Benefits to the Subjects or Others:**

This study is not expected to be of any direct benefit to you, though it will aid researchers in the understanding of how people think about leadership, and the importance of the interactions between leaders and followers.

# **Procedures for Maintaining Confidentiality of Research Records:**

Your responses to this survey will remain completely confidential, the results being separately coded and stored anonymously. The confidentiality of your individual information will be maintained in any publications or presentations regarding this study.

**Questions about the Study:** If you have any questions about the study, you may contact Victoria McKee, Department of Management, at telephone number xxx-xxx, or e-mail at Victoria.McKee@unt.edu. You may also contact Dr. Vicki Goodwin, Department of Management at Vicki.Goodwin@unt.edu.

**Review for the Protection of Participants:** This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

**Research Participants' Rights:** Proceeding with this survey indicates that you have read all of the above and that you confirm all of the following:

- You understand this study, having read the above, and have been told the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- You understand why the study is being conducted and how it will be performed.

• You understand your rights as a research participant and you voluntarily consent to participate in this study.

# Demographic Survey Questions

1. How old are you in years?

(1) 17-25, (2) 26-30, (3) 31-35, (4) 36-40, (5) 41-50, (6) 51-60, (7) 61 or older

2. What is your gender?

(1) Male (2) Female

3. What is your classification?

(1) Freshman (2) Sophomore (3) Junior (4) Senior (5) Graduate Student

4. How many more years of full time work experience have you had (40 hours a week or more)?

(1) Less than 1 year, (2)1-5 years, (3) 6-10 years, (4) 11-15 years, (5) 16-20 years, (6) Greater than 20

5. How many years of part-time work experience have you had (Less than 40 hours per week)?

1) How many years of part-time work experience have you had (Less than 40 hours per week)?, (2)1-5 years, (3) 6-10 years, (4) 11-15 years, (5) 16-20 years, (6) Greater than 20

6. Have you ever been a committee chair person? If so, how long (in years)?

(1) I have not been a committee chair person, (2) Less than one year, (3) 1-5 years, (4) 6-10 years, (5) More than 10 years

7. Have you ever been the president of a club or organization? If so, how long?

(1) I have never been the president of a club or organization, (2) Less than one year, (3) 1-5 years, (4) 6-10 years, (5) More than 10 years

8. Have you ever managed others in a business setting (1 or more employees)? If so, how long (in years)?

(1) I have never managed others in a business setting, (2) Less than 1 year, (3) 1-5 years, (4) 6-10 years, (5) 11-15 years, (6) 16-20 years, (7) More than 20 years

## Debrief

Thank you for your participation in this study. The survey you have just completed was one of several surveys. Together, these surveys will tell me about ideal forms of leadership, relationships between leaders and followers, and people's basic beliefs about leadership.

I am using this study to test my surveys in a preliminary fashion. I am very interested in any comments you might have concerning my survey. Was the scenario easy to understand? Was the format easy to use? Any comments you think that may help me improve my survey would be greatly appreciated and can be emailed to Victoria.McKee@unt.edu

Again, thank you for the time you spent today in assisting me with this project.

APPENDIX B

PILOT STUDY 1 SURVEYS AND MEASURES

## Scenario 1.1

Condition: Transformational Leadership: Between subjects design (without trust) Without Trust:

John is a leader in Average American Company. He has provided the organization with ideas that have challenged his subordinates to think out of the box. His over arching goal is to create a positive, optimistic organizational culture that breeds hope at all levels of the organization. John is the type of person that gets to know everyone. He is very good at recalling people's names, and shows a genuine interest in getting to know each individual. He tends to focus a lot of his energy on figuring out what an individual's strengths are, and then sets about challenging that individual to use those strengths to achieve his or her full potential. John has frequently demonstrated his commitment to his organization. He is generally the last one to leave the building after the day is done, and after an event. He makes a lot of personal sacrifices in terms of his time and resources to help his employees be the kind of employees he knows they can be.

## Scenario 1.2

Condition: Transformational Leadership: Between subjects design (with trust)

John is a leader in Average American Company. He has provided the organization with ideas that have challenged his subordinates to think out of the box. His over arching goal is to create a positive, optimistic organizational culture that breeds hope at all levels of the organization. John is the type of person that gets to know everyone. He is very good at recalling people's names, and shows a genuine interest in getting to know each individual. He tends to focus a lot of his energy on figuring out what an individual's strengths are, and then sets about challenging that individual to use those strengths to achieve his or her full potential. John has frequently demonstrated his commitment to his organization. He is generally the last one to leave the building after the day is done, and after an event. He makes a lot of personal sacrifices in terms of his time and resources to help his employees be the kind of employees he knows they can be.

Because John's employees trust him, they have positive expectations about his intentions and behavior. The employees developed trust in John because of his personal commitment to achieving the vision of the organization. Furthermore John's effort to empower and encourage his employees to think for themselves causes them to trust him.

# Scenario 2.1

Condition: Authentic Leadership: Between subjects design (without trust)

John is a leader in Average American Company. John shows an understanding of his strengths and weaknesses, which include gaining insight into himself through exposure to others, and being aware of the impact that he makes on his employees. John shows who he really is to his employees through self-disclosures that involve openly sharing information and expressions of his true thoughts and feelings, while trying to minimize displays of inappropriate emotions. He objectively analyzes all relevant information before coming to a decision within the organization. John also has a concern for the impact any decision might have on his employees. He is guided by internal moral standards and values rather than group, organizational, and societal pressures. His employees know that John's decisions and behavior are consistent with his internalized values.

## Scenario 2.2

Condition: Authentic Leadership: Between subjects design (with trust)

John is a leader in Average American Company. John shows an understanding of his strengths and weaknesses, which include gaining insight into himself through exposure to others, and being aware of the impact that he makes on his employees. John shows who he really is to his employees through self-disclosures that involve openly sharing information and expressions of his true thoughts and feelings, while trying to minimize displays of inappropriate emotions. He objectively analyzes all relevant information before coming to a decision within the organization. John also has a concern for the impact any decision might have on his employees. He is guided by internal moral standards and values rather than group, organizational, and societal pressures. His employees know that John's decisions and behavior are consistent with his internalized values.

Because John's employees trust him, they have positive expectations about his intentions and behavior. The employees developed trust in John because of his personal commitment to achieving the vision of the organization. Furthermore John's effort to empower and encourage his employees to think for themselves causes them to trust him.

# Scenario 3.1

Condition: Authentic Leadership: Between subjects design (with trust)

John is a leader in Average American Company. John shows an understanding of his strengths and weaknesses, which include gaining insight into himself through exposure to others, and being aware of the impact that he makes on his employees. John shows who he really is to his employees through self-disclosures that involve openly sharing information and expressions of his true thoughts and feelings, while trying to minimize displays of inappropriate emotions. He objectively analyzes all relevant information before coming to a decision within the organization. John also has a concern for the impact any decision might have on his employees. He is guided by internal moral standards and values rather than group, organizational, and societal pressures. His employees know that John's decisions and behavior are consistent with his internalized values.

Because John's employees trust him, they have positive expectations about his intentions and behavior. The employees developed trust in John because of his personal commitment to achieving the vision of the organization. Furthermore John's effort to empower and encourage his employees to think for themselves causes them to trust him.

# Scenario 3.2

Condition: Authentic Leadership: Between subjects design (with trust and psycap)

John is a leader in Average American Company. John shows an understanding of his strengths and weaknesses, which include gaining insight into himself through exposure to others, and being aware of the impact that he makes on his employees. John shows who he really is to his employees through self-disclosures that involve openly sharing information and expressions of his true thoughts and feelings, while trying to minimize displays of inappropriate emotions. He objectively analyzes all relevant information before coming to a decision within the organization. John also has a concern for the impact any decision might have on his employees. He is guided by internal moral standards and values rather than group, organizational, and societal pressures. His employees know that John's decisions and behavior are consistent with his internalized values.

Because John's employees trust him, they have positive expectations about his intentions and behavior. The employees developed trust in John because of his personal commitment to achieving the vision of the organization. Furthermore John's effort to empower and encourage his employees to think for themselves causes them to trust him.

John's employees believe that if they exert effort they will be successful. John's employees also are hopeful. His employees pursue goals enthusiastically, work because they love their job, and are creative when implementing their strategies. Also, John's employees are optimistic. They take credit for favorable events in their lives, strengthening their self-esteem and morale. Finally John's employees are able to hang in there and stick with the job even when things get rough, which allows them to gain new knowledge and experiences and deeper relationships with others. They have an energetic approach to life, are curious and open to new experiences, and when faced with challenges, they will work through them and complete the task.

## Scenario 4.1

Condition: Transformational Leadership: Between subjects design (with trust)

John is a leader in Average American Company. He has provided the organization with ideas that have challenged his subordinates to think out of the box. His over arching goal is to create a positive, optimistic organizational culture that breeds hope at all levels of the organization. John is the type of person that gets to know everyone. He is very good at recalling people's names, and shows a genuine interest in getting to know each individual. He tends to focus a lot of his energy on figuring out what an individual's strengths are, and then sets about challenging that individual to use those strengths to achieve his or her full potential. John has frequently demonstrated his commitment to his organization. He is generally the last one to leave the building after the day is done, and after an event. He makes a lot of personal sacrifices in terms of his time and resources to help his employees be the kind of employees he knows they can be.

Because John's employees trust him, they have positive expectations about his intentions and behavior. The employees developed trust in John because of his personal commitment to achieving the vision of the organization. Furthermore John's effort to empower and encourage his employees to think for themselves causes them to trust him.

## Scenario 4.2

Condition: Transformational Leadership: Between subjects design (with trust and psycap)

John is a leader in Average American Company. He has provided the organization with ideas that have challenged his subordinates to think out of the box. His over arching goal is to create a positive, optimistic organizational culture that breeds hope at all levels of the organization. John is the type of person that gets to know everyone. He is very good at recalling people's names, and shows a genuine interest in getting to know each individual. He tends to focus a lot of his energy on figuring out what an individual's strengths are, and then sets about challenging that individual to use those strengths to achieve his or her full potential. John has frequently demonstrated his commitment to his organization. He is generally the last one to leave the building after the day is done, and after an event. He makes a lot of personal sacrifices in terms of his time and resources to help his employees be the kind of employees he knows they can be.

Because John's employees trust him, they have positive expectations about his intentions and behavior. The employees developed trust in John because of his personal commitment to achieving the vision of the organization. Furthermore John's effort to empower and encourage his employees to think for themselves causes them to trust him.

John's employees believe that if they exert effort they will be successful. John's employees also are hopeful. His employees pursue goals enthusiastically, work because they love their job, and are creative when implementing their strategies. Also, John's employees are optimistic. They take credit for favorable events in their lives, strengthening their self-esteem and morale. Finally John's employees are able to hang in there and stick with the job even when things get rough, which allows them to gain new knowledge and experiences and deeper relationships with others. They have an energetic approach to life, are curious and open to new experiences, and when faced with challenges, they will work through them and complete the task.

Measure to test hypothesesDependent variable measure: Satisfaction, Performance, Commitment, Organizational Citizenship Behavior, Wellbeing

# **Affective Commitment**

# To what degree do *you* believe John's employees would...

-be very happy to spend the rest of their career with Average American Company?

-enjoy discussing their organization with people outside it?

-feel as if Average American Company's problems are their own?

-be able to easily become as attached to another organization? (R)

-<u>not</u> feel like part of the family at Average American Company? (R)

-find a great deal of personal meaning in the organization?

-<u>not</u> feel a strong sense of belonging to Average American Company? (R)

# OCB

# To what degree do <u>you</u> believe John's employees would...

- have attendance at work that is above the norm?
- waste a lot of time complaining about trivial matters? (R)
- attend meetings that are not mandatory, but are considered important?
- take steps to try to prevent problems with other workers?
- help others who have been absent?
- **<u>not</u>** take extra breaks?
- focus on what's wrong, rather than the positive side? (R)
- attend functions that are not required, but help the organization's image?
- -be mindful of how his/her behavior affects other people's jobs?
- help others who have heavy workloads?
- obey company rules and regulations even when no one is watching?

- tend to make "mountains out of molehills?" (R)
- seek knowledge of changes in the organization?
- abuse the rights of others? (R)
- help orient new people even though it is not required?
- read and keep up with organization announcements, memos, and so on?
- try to avoid creating problems for coworkers?
- be willing to help others who have work related problems?
- believe in giving an honest day's work for an honest day's pay?
- consider the impact of his/her actions on coworkers?
- be ready to lend a helping hand to those around them?

## Well-being To what degree do *you* believe John's employees would...

- be able to make independent decisions?

- be able to acknowledge other employees and show consideration and concern for them?

-be in a positive state of mind?

-be happy?

- be active and energetic?
- lead a life with purpose?
- make quality connections with other employees?
- be confident in their tasks?
- be empowered?

-be able to see that although work can be tough, there is a purpose given to each task?

## Performance

# To what degree do <u>you</u> believe John's employees would be...

- -able to perform to their best ability?
- effective in the Average American Corporation?
- able to complete their tasks?
- -able to reach their goals?

# Satisfaction

# To what degree do <u>you</u> believe John's employees would be...

- satisfied with their work group?
- satisfied with John?
- satisfied with their jobs?
- satisfied with their jobs compared to the same jobs in other organizations?
- thinking about quitting their jobs? (R)

APPENDIX C

MANIPULATION CHECKS FOR PILOT STUDY 1

# Manipulation Checks for Scenarios in Pilot 1

C-1: Transformational Leadership Manipulation

To what degree do you believe...

- that John inspired his followers toward accomplishment of the vision for the organization?

- John provided the resources necessary for developing his employees' personal potential?

- John increased followers' aspirations and encouraged them to develop their higher-order values (like showing unselfish concern for others, for example).

-John treated his employees as individuals providing them with specific help they made need?
-John stimulated his employees intellectually?
-John shared his vision for the future with his employees?
C-2: Authentic Leadership Manipulation

To what degree do you believe...

- John had self-knowledge and a personal point of view that reflected clarity about his values and convictions?

- John understood his strengths and weaknesses?

- John showed who he really was to his employees, but also tried to minimize displays of inappropriate emotions?

- John objectively analyzed all relevant information before coming to a decision within the organization?

-John had a concern for the impact any decision might have on his employees?

- John was guided by internal moral standards and values rather than by group, organizational, and societal pressures?

-John's decisions and behavior were consistent with his internalized values?

- John was confident?

- John was hopeful?

- John was optimistic?

- John hung in there even when he wasn't sure of the outcome?

-John hid his feelings and beliefs? (r)

-John had an ethical orientation toward the future?

C-3: Trust Manipulation

To what degree do you believe...

- John's employees trusted him?

- John's employees had positive expectations about his intentions and behaviors?

- John's employees developed confidence in him because of his personal commitment to achieving the vision of the organization?

- John's efforts empowered and encouraged his employees to think for themselves?

- John helped his employees feel better about their work?

- John pushed his employees to perform beyond simple transactions and base-level expectations?

C-4: Psychological Capital Manipulation

To what degree do you believe...

- John's employees made the necessary effort to succeed at challenging tasks?

- John's employees believed they would succeed in their current tasks?

-John's employees believed they would succeed on future tasks?

- John's employees worked toward goals even when they were difficult to accomplish, and when necessary, redirected the paths to their goals in order to succeed?

- John's employees had the ability to bounce back when they encountered problems related to successful accomplishment of their job? John's employees felt good about themselves?

John's employees were energetic?

John's employees were curious and open to new experiences?

APPENDIX D

PILOT STUDY 2 SURVEYS AND MEASURES

## Scenario 1.1

Condition: Transformational Leadership: Between subjects design (without trust) John is a leader in Average American Company. His employees think he is charismatic. He is a very inspirational leader who inspires his workers toward accomplishment of the company vision. John also treats his employees as individuals by providing them with the specific help they need. He stimulates his employees intellectually, encouraging them to think about things in new ways.

## Scenario 1.2

Condition: Transformational Leadership: Between subjects design (with trust)

John is a leader in Average American Company. His employees think he is charismatic. He is a very inspirational leader who inspires his workers toward accomplishment of the company vision. John also treats his employees as individuals by providing them with the specific help they need. He stimulates his employees intellectually, encouraging them to think about things in new ways.

John's **employees trust him**. They **trust that his intentions are good** and that he **will do the right thing**. The employees **trust John to lead them** because of his **personal commitment to achieving the vision** of the organization. Because of their **consistently positive experiences** with John and because they know **he looks out for them**, John's employees trust him.

## Scenario 2.1

Condition: Authentic Leadership: Between subjects design (without trust) John is a leader in Average American Company. John is **very clear about what his values and convictions are** and he is guided by them rather than by group, organizational, and social pressures. He **understands his strengths and weaknesses** as a leader. John is able to **show who he really is** to his employees, but tries to **minimize displays of inappropriate emotions**. John **carefully considers any decision he makes** within the organization, and **is concerned for the impact** it might have on his employees. His **decisions and behaviors are always consistent with his internalized values**.

### Scenario 2.2

Condition: Authentic Leadership: Between subjects design (with trust)

John is a leader in Average American Company. John is very clear about what his values and convictions are and he is guided by them rather than by group, organizational, and social pressures. He understands his strengths and weaknesses as a leader. John is able to show who he really is to his employees, but tries to minimize displays of inappropriate emotions. John carefully considers any decision he makes within the organization, and is concerned for the impact it might have on his employees. His decisions and behaviors are always consistent with his internalized values.

John's **employees trust him**. They **trust that his intentions are good** and that he **will do the right thing**. The employees **trust John to lead them** because of his **personal commitment to** 

achieving the vision of the organization. Because of their consistently positive experiences with John and because they know he looks out for them, John's employees trust him.

## Scenario 3.1

Condition: Authentic Leadership: Between subjects design (with trust)

John is a leader in Average American Company. John is very clear about what his values and convictions are and he is guided by them rather than by group, organizational, and social pressures. He understands his strengths and weaknesses as a leader. John is able to show who he really is to his employees, but tries to minimize displays of inappropriate emotions. John carefully considers any decision he makes within the organization, and is concerned for the impact it might have on his employees. His decisions and behaviors are always consistent with his internalized values.

John's employees trust him. They trust that his intentions are good and that he will do the right thing. The employees trust John to lead them because of his personal commitment to achieving the vision of the organization. Because of their consistently positive experiences with John and because they know he looks out for them, John's employees trust him. Scenario 3.2

Condition: Authentic Leadership: Between subjects design (with trust and psycap) John is a leader in Average American Company. John is very clear about what his values and convictions are and he is guided by them rather than by group, organizational, and social pressures. He understands his strengths and weaknesses as a leader. John is able to show who he really is to his employees, but tries to minimize displays of inappropriate emotions. John carefully considers any decision he makes within the organization, and is concerned for the impact it might have on his employees. His decisions and behaviors are always consistent with his internalized values.

John's employees trust him. They trust that his intentions are good and that he will do the right thing. The employees trust John to lead them because of his personal commitment to achieving the vision of the organization. Because of their consistently positive experiences with John and because they know he looks out for them, John's employees trust him.

John's **employees** have **positive feelings about their ability to be successful**. **They pursue goals enthusiastically** and work because they **love their jobs**. They **take credit for their successes**, which makes them **feel good about themselves**. John's employees are able to **hang in there and stick with the job even when things get rough**, which allows them to gain new knowledge and experiences and deeper relationships with others. John's employees are **curious** and **open to new experiences**. **Challenges don't bother them** at all; they work through them until they have successfully completed the job.

### Scenario 4.1

Condition: Transformational Leadership: Between subjects design (with trust)

John is a leader in Average American Company. His employees think he is charismatic. He is a very inspirational leader who inspires his workers toward accomplishment of the company vision. John also treats his employees as individuals by providing them with the specific help they need. He stimulates his employees intellectually, encouraging them to think about things in new ways.

John's **employees trust him**. They **trust that his intentions are good** and that he **will do the right thing**. The employees **trust John to lead them** because of his **personal commitment to achieving the vision** of the organization. Because of their **consistently positive experiences** with John and because they know **he looks out for them**, John's employees trust him.

### Scenario 4.2

Condition: Transformational Leadership: Between subjects design (with trust and psycap) John is a leader in Average American Company. His employees think he is charismatic. He is a very inspirational leader who inspires his workers toward accomplishment of the company vision. John also treats his employees as individuals by providing them with the specific help they need. He stimulates his employees intellectually, encouraging them to think about things in new ways.

John's **employees trust him**. They **trust that his intentions are good** and that he **will do the right thing**. The employees **trust John to lead them** because of his **personal commitment to** 

achieving the vision of the organization. Because of their consistently positive experiences with John and because they know he looks out for them, John's employees trust him. John's employees have positive feelings about their ability to be successful. They pursue goals enthusiastically and work because they love their jobs. They take credit for their successes, which makes them feel good about themselves. John's employees are able to hang in there and stick with the job even when things get rough, which allows them to gain new knowledge and experiences and deeper relationships with others. John's employees are curious and open to new experiences. Challenges don't bother them at all; they work through them until they have successfully completed the job. APPENDIX E

MANIPULATION CHECKS FOR PILOT STUDY 2

# Manipulation Checks for Scenarios in Pilot 2

### Manipulations

E-1: Transformational Leadership Manipulation

How confident are you THAT YOU READ ABOUT a leader who...

- was considered to be charismatic by his followers?
- inspired his followers toward accomplishment of the company vision?
- treated his employees as individuals by providing them with specific help they needed?
- stimulated his employees intellectually, encouraging them to think about things in new ways?

# E-2: Authentic Leadership Manipulation

How confident are you THAT YOU READ ABOUT a leader who...

- was very clear about what his values and convictions were?
- understood his strengths and weaknesses as a leader?
- showed who he really was to his employees, but also tried to minimize displays of inappropriate emotions?
- carefully considered any decision he made within the organization?
- was concerned for the impact any decision might have on his employees?
- made decisions and behaved in ways that were consistent with his internalized values?

#### E-3: Trust Manipulation

How confident are you THAT YOU READ ABOUT a leader whose employees...

- trusted him?

- trusted his intentions and that he would do the right thing?

- trusted him to lead them because of his personal commitment to achieving the vision of the organization?

- trusted him because of their consistently positive experiences with him and because they knew he looked out for them?

E-4: Psychological Capital Manipulation

How confident are you THAT YOU READ ABOUT a leader whose employees ...

- have positive feelings about their ability to be successful?

- pursue goals enthusiastically and love their jobs?

- feel good about themselves when they succeed?

- hang in there and stick with the job even when things get rough?

- are not bothered by a challenge?

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