

**Leaders Who Learn:  
The Intersection of Behavioral Science, Adult Learning and Leadership**

by

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of the requirements for the degree of  
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## **DEDICATION**

This dissertation is dedicated to my father, Emile Sabga.

The ultimate *Leader Who Learns*.

The more that you read, the more things you will know.

The more that you learn, the more places you'll go.

~ Theodor ("Dr. Seuss") Geisel

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## **ABSTRACT**

This study examines if a relationship exists among three rich research streams, specifically the behavioral science of motivation, adult learning and leadership. What motivates adult professionals to continue learning and how is that connected to their style and efficacy as leaders? An extension of literature to connect Andragogy, Self-determination and Transformational Leadership Theory is explored. Responses to questions adapted from the Carré Model of Adult Orientation and Implication on Learning and Training Activities (Carré, 1997) and the Multifactor Leadership Questionnaire (Avolio & Bass, 2000) are compared among a sample of adult professionals in leadership positions. Results indicate that learning motivation orientation is predictive of and positively correlated with leadership style. How learning motivation can be used as a tool to predict leadership style, enhance leader selection, development and succession is discussed along with further implications of the “learner-leader” for the purposes of research, practice and higher education initiatives. This quantitative study can offer important insights into how the attribute of an intrinsic motivation to learn can act as an antecedent to Transformational leadership behavior, and the impact that Transformational leaders have upon their teams and organizations.

### **KEYWORDS**

Adult Education, Andragogy, Learning Motivation, Continuous Learner, Lifelong Learner, Intrinsic Motivation, Mentorship, Leadership, Transformational Leadership, Transactional Leadership, Self-directed Learning, Self-determination, Maslow's Hierarchy of Needs

## CHAPTER 1: INTRODUCTION

### 1.1 Background

The keys to achieving sustainability and competitive advantage have never been more elusive to organizations than they are today. In order to meet the demands of change, uncertainty and the revolutionary transformation that surround them, organizations are recognizing that they must master agility and adaptability, both in their strategy and leadership (Reeves & Deimler, 2011). Increasingly, organizations must start with their leadership to manage this change and produce results (Cox, 2010).

As organizations are forced to adapt their strategy and execution to remain abreast of the rapid and widespread technological, social and economic backdrop of today, they must also reform their leadership approach. Traditional leadership methods and behaviors which may have suited the stability and predictability of decades past no longer suffice (Marquardt, 2000, p. 203). A leader's static experience alone is no longer adequate. To navigate this uncertain business landscape, organizations will benefit from leaders who effect positive disruption (Brooks, 2013; Hoque, 2015). These leaders relentlessly pursue knowledge and apply it in new ways to solve current business problems; they are decisive, seeking not only to maintain stability but also to guide organizations toward innovative thinking and new levels of competitive advantage amidst the challenges (Hoque, 2015). Organizations are increasingly recognizing that they need leaders whose skills and expertise evolve through the injection of continuous streams of new knowledge, broadened perspective and increased critical thinking skills;

the ideal leader is a constant learner (Mikkelsen, 2015). Cashman (2013, p. 2) coins a leader's ability to continuously learn and use acquired knowledge to solve problems as "learning agility", and his research ties leaders with a high learning agility to their proficiency in adapting to change and producing positive organizational outcomes. These leaders must also be role models above, below and across levels of the organization in order to advance positive performance outcomes. It is, therefore, important to assess the attributes that form this type of leader and examine how an organization can appropriately identify and nurture this leader profile within its succession planning pipeline.

Transformational leaders, as characterized by Tichy and Cohen (1997, p. 237), possess the attributes of this type of leader. Transformational leaders are learning agile; they are "lifelong learners" (Johnson, 2002, p.243) and they acquire knowledge as an antidote to change, uncertainty and ambiguity. Coad and Berry (1998) have found that Transformational leaders are differentiated by the amount of time and effort they devote to learning. Transformational leaders possess an inherent desire to learn, decisively choosing opportunities that advance their knowledge and skills, and an underlying belief in continuous personal growth and development (Coad & Berry, 1998, p. 164).

Transformational leaders cultivate their position as role models, sharing their knowledge and experience with their team members with the purpose of adding value across the organization (Bass & Avolio, 1994). They consciously teach and mentor so that team members are developed at the individual level, increase their performance and quality standards and bring results to the organizational whole (Scandura & Schriesheim, 1994; Sosik, Godshalk, & Yammarino, 2004). Transformational leaders

aspire to create conditions from which new leaders can emerge (Tichy & Devanna, 1986), in turn, grooming a robust leadership pipeline.

As such, the focus of this study is on Transformational leaders who are characterized by an intrinsic motivation to continuously learn, and who transform organizations by virtue of their learning agility and the application of their higher-order skills. These leaders develop collective values, communicate a vision and model an identity which drive performance and transformation across the organization (Rao, 2014).

## **1.2 Statement of Purpose**

Organizations want high performing employees whose efforts translate into business results; to this end, executives and stakeholders are acknowledging the significant contribution that leaders make as gatekeepers for individual employee accomplishments, organizational climate and overall firm performance (Hater & Bass, 1988; Sarros, Cooper, & Santora, 2008). Organizations are seeking leaders that are effective in managing despite the speed of change today and who are effective in the development of employees.

Identifying, developing and retaining individuals with the keen ability to hold effective leadership traits in balance are now integral components of organizational strategy and a critical organizational priority (Allio, 2008); in other words, firms now closely equate leadership strategy to organizational strategy (Bersin, 2012). There is no precedent for the rapid pace at which businesses are moving nor the emerging challenges that must be solved; and similarly, a leadership profile to meet these needs has yet to be defined.

U.S. companies, alone, spend in excess of \$31 billion annually on leadership development programs (Bersin by Deloitte, 2014). Yet, the results from leader development do not drive business results in proportion to the cost (Allio, 2008; Hedges, 2014). In a study of over 4,000 senior leaders and executives, Yakowicz (2015, p. 1) notes that leader development and talent management are rated as organizations' greatest perceived weaknesses. Organizations today are recognizing that leader development is a critical issue; organizational survival will be reliant upon leaders who are equipped with the skills necessary to drive change and transformation (PwC, 2017). Consequently, given the divide between leader development and results, this study is being conducted to identify if learning motivation orientation can be identified as a pre-requisite behavioral attribute that may be used to advance effective leader identification and development.

Specifically, the purpose of this research is to understand the motivation of adult learners to engage in continuous learning and define if motivational orientation is an antecedent to leadership style and behavior. Intrinsically motivated learners engage for the sheer pleasure, fulfillment and satisfaction of higher-order needs that the knowledge brings (Carré, 1997); for the intrinsic learner, learning activities facilitate self-development and well-being (Deci, 2000b). Extrinsically motivated learners, in contrast, pursue learning activities as a means to obtain external rewards or results (Carré, 1997).

Increasingly, scholars are introducing the proclivity to learn as a critical driver of effective leadership (Brown & Posner, 2001). Vaill (1998) asserts that leadership and learning are not mutually exclusive; rather, effective leadership is contingent upon on-

going learning and more concerned with the leader's character and values than experience (p. 2). Thus, the question, "*What type of leader does an intrinsically motivated to learn adult professional become?*" forms the basis for this study. Consistent with Transformational Leadership Theory (Bass, 1985), prior leadership research has documented that leaders who practice continuous learning are more adept at navigating change and effecting transformation amidst it (Brown & Posner, 2001). Numerous articles cite the value of a leader who learns, noting that *what and how* leaders learn are tied directly to their role efficacy (Marquardt, 2000, p.2).

Transformational leaders embody the attributes of self-propelled continuous learners (Johnson, 2002; Tichy & Devanna, 1986); they function as a bridge between employees' need for support, purpose, growth and goal attainment and organizations' need for stability, adaptability and results. These leaders continuously and positively pursue challenges which lead to new opportunities to learn and gain perspective. Their personal development and growth path translate into the ability to model and encourage the same conditions for their employees and to navigate their team and organizations through change. Thus, the connection can be made between learning and a Transformational style of leadership. This study's guiding hypothesis is that individuals who are intrinsically motivated to learn are more likely to be Transformational leaders.

Accordingly, the potential exists not only to identify current and future leaders as intrinsically or extrinsically motivated to learn, but also to connect an intrinsic motivation to learn with a Transformational leadership style. This bridge can be utilized to identify and develop Transformational leaders who will be more adept at guiding

teams and organizations to success despite the instability and unpredictability of current business environments.

This analysis will serve to better identify the profile of the intrinsically motivated adult continuous learner and determine if these attributes are antecedents to a Transformational style of leadership. It is intended to enhance academic literature by building upon previous lines of inquiry into adult learning and leadership via an exploration into the relationship between learning motivation and leadership style in adult professionals. Findings from this study may also demonstrate that learning motivation orientation is an important determinant of leadership style. Therefore, executives, human resource and talent management professionals should focus on this attribute in their selection and development processes, as they seek to increase the likelihood of hiring, developing and promoting effective future leaders.

### **1.3 Motivation and Research Questions**

Specifically, the motivation for this study is three-fold: (i) explore whether adult professionals' motivation to learn is intrinsically or extrinsically motivated; (ii) explore the theoretical framework underlying the Transformational and Transactional leader; and (iii) determine if there is a quantifiable relationship between learning motivation, as intrinsic or extrinsic, and leadership style, as Transformational or Transactional. In this way, this study will supplement existing literature by presenting quantifiable evidence of learning motivation as a predictive descriptor of leadership style. The study aims to introduce dimensionality into the presently understood motivations of adult learners, and their lived behavior as leaders, thereby creating a gauge for identifying potential leader effectiveness and facilitating development.

This study intends to create new understanding and relationally useful knowledge of learning motivation and leadership style to both inform and contribute to the practitioner community. Prior research has shown that developing leader potential is a priority imperative for organizations (Brown & Posner, 2001; Hackett, 1997; McCall, Lombardo, & Morrison, 1988) and learning is the most desirable and necessary competency of future leaders (Conger, 1999). However, these studies do not adequately address failures in leader development initiatives; for that reason, practitioners and scholars alike are calling for a new model to address failures in leadership development, talent management and succession planning (DeRue & Wellman, 2009; McCall, 1998; Vicere & Fulmer, 1998). A new approach would anticipate the need for human capital, identify the specific attributes of desired talent, and offer an effectively laid out plan to iteratively build and rebuild the organizational pool (Cappelli, 2008). The degree to which an organization can source and nurture effective leaders is fast becoming a source of strategic competitive advantage (Hitt, Keats, & DeMarie, 1998).

Given the criticality of securing a stable leadership pipeline, this study examines the relationship between individuals' motivation to learn and their leadership style with the intent of implementing learning motivation as a competency in leadership development and succession planning. In contrast to generic and wide-reaching leadership theory, which leaves organizations without an executable leadership development formula, this study is framed by the Theory of Transformational Leadership (Bass, 1985).

Transformational leadership is one of the most heavily studied leadership styles. These leaders are commonly recognized for their ability to move organizations through change, to positively influence constituents across the organization and, in turn, to

significantly impact organizational performance and outcomes (Hater & Bass, 1988; Riggio, 2009) .

Learning motivation is expected to be a tool to aid organizations in identifying individuals with the necessary attributes to be Transformational leaders. This study seeks to illustrate that intrinsic learners have the capacity to be Transformational leaders. Conceptually, the intrinsically motivated learner seeks to inform himself *first*, by willfully pursuing growth and advancement through opportunities for challenge, change and knowledge. This basis leads to the expectation that an intrinsic motivation to learn will further influence existing attributes of a Transformational leader. Relying upon the framework of Transformational Leadership Theory, application of these attributes should result in the Transformational leader applying his knowledge and first-hand experiences of growth to influence and inspire in ways that benefit the greater good of his team members and organization, and not merely personal self-interest. These leaders authentically lead by example, create a compelling vision and align the vision with the goals and needs of their team, holistically raising both team members and the organization to higher levels of performance (Bass & Riggio, 2006).

Results from this study may indicate that the degree of an individual's intrinsic motivation to learn has a measurable impact on the likelihood of Transformational leadership behavior. Accordingly, organizations can use learning motivation as a tool to identify Transformational leaders early in the career lifecycle, maximize their development opportunities and proactively satisfy their human capital needs of tomorrow.

This leads to the study's overarching research question, "*Can employees with the potential to be Transformational leaders be identified and developed based on an intrinsic motivation to learn?*" To answer this question, this study will examine a hypothesized relationship between learning motivation (i.e., intrinsic versus extrinsic) and leadership style (i.e., Transformational versus Transactional).

The study's first hypothesized research question of interest is: "*Are intrinsically motivated adult learners more likely to be Transformational leaders than their extrinsically motivated counterparts?*" Specifically, is an intrinsic learning motivation orientation correlated with an individual's leadership style, and is this association robust enough to differentiate future Transformational leaders? In comparison, the study's second hypothesized research question of interest is: "*Are extrinsically motivated adult learners more likely to be Transactional leaders than their intrinsically motivated counterparts?*" Specifically, is an extrinsic learning motivation orientation correlated with Transactional leadership behavior, and is this association robust enough to differentiate future Transactional leaders?

Evaluating these constructs in combination provides an opportunity to determine if the drivers of intrinsic<sup>1</sup> and extrinsic learning motivation<sup>2</sup>, when present in individuals with either learning motivation orientation, are reflective of the attributes of Transformational and Transactional leadership behavior respectively in the same individuals. Results of this study confirm that learning motivation has a predictive effect

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<sup>1</sup> *Intrinsic Learning Motivation* can be defined as 'an individual's focus on learning goals for the purpose of increasing competence; an intrinsic interest in work and opportunities for learning' (Coad & Berry, 1998, p. 164).

<sup>2</sup> *Extrinsic Learning Motivation* can be defined as 'An individual's focus on knowledge acquisition for the satisfaction of performance goals, and toward achieving positive evaluations from others of their current abilities and performance' (Coad & Berry, 1998, p. 164).

on leadership style, that intrinsic learning motivation is positively correlated with Transformational leadership behavior and that extrinsic learning motivation is positively correlated with Transactional leadership behavior. Consequently, these findings provide some evidence that identifying an individual's learning motivation early in the career lifecycle may prove to be the quintessential key for human resource management professionals to unlock the potential of employees today in search of the Transformational "super leader" of tomorrow.

#### **1.4 Study Significance**

This study veers from conventional dogma which implies that competency models for leadership development should be focused on leaders' skills and experience. Instead, this study introduces a new competency, the motivation to continue learning, as critical to early identification and later development of leaders in an organization's succession planning strategy (Folkman, 2014).

This research focuses on the type of leader who has moved from viewing learning as static knowledge to viewing it, instead, in terms of intellectual agility, critical thinking and ultimately growth, performance and transformation. More fundamentally, it seeks to highlight learning motivation as a competency that is essential for leader identification at the beginning of and throughout the career lifecycle. Scholarly research suggests that intrinsic motivation is an innate tendency (Koestner & Losier, 2002) and biological manifestation of the human propensity toward learning, growth and creativity (Ryan & Deci, 2000, p. 69) which is ever-present throughout the duration of an individual's life. Consequently, executives, human resource and talent management professionals and other organizational decision-makers will benefit from identifying an

individual's learning motivation orientation early in the career lifecycle and prior to promotion into a leadership role. Furthermore, research indicates that a leader's motivation and skill to learn is critical to organizational success (Marquardt, 2000). Therefore, as leadership remains a direct gateway to organizational results, leader selection and development are too costly to risk on unknown attributes and talent.

Respondents for this study are adult continuous learners who hold or who have held leadership positions. Argyris (1991) describes this individual as representative of a learned, committed professional who is highly ranked in an organization, and whose efforts are largely met with success and rarely failure (p. 4). As a result, Argyris cites a concern that these professionals may lack one important attribute, i.e., the skillset needed to manage failure when it inevitably occurs. Notwithstanding, this concern underscores the importance of the versatility and agility derived from growth and development vis a vis continuous learning as an antidote to a finite learning mindset.

Argyris' defense, therefore, offers a central validation for the significance of identifying an employee's learning motivation, as intrinsic, early in the career lifecycle and applying that insight to the employee's potential to become a Transformational leader. By emphasizing the value of its leaders' proclivity for learning and self-awareness, and establishing a conduit through which leaders' own practices facilitate a climate in which employees are also encouraged and supported to learn, organizations will be increasingly positioned to meet future challenges and improve their likelihood of sustainability and competitive advantage. While effective leadership is not solely a function of an intrinsic motivation to learn, focusing on this essential attribute will

improve the likelihood of advancing individuals with the capacity to become Transformational leaders and these individuals' potential to excel in that role.

Consequently, a primary objective of this study is to illustrate the responsibility that learning motivation has in effective leader identification, development and succession planning. By leveraging principles of adult learning, motivational science and Transformational leadership, the results of this study will offer greater understanding and new information which guides organizations to create competencies and contribute to a climate that advocates learning and fosters growth and transformation through its leaders. Additionally, higher education administrators and educators focused on designing and delivering impactful leadership development programs and marketing to adult learners will also benefit from the results of this study. This research will build upon previous lines of inquiry into adult learning and leadership, connecting these constructs in a novel manner; and, it may also encourage scholars to examine the behavioral attributes of leaders who self-direct their learning activities and development in the context of organizational outcomes.

## CHAPTER 2: THEORY AND HYPOTHESES

### 2.1 Background

The purpose of this research is to investigate the relationship between learning motivation and leadership style. This chapter offers a summary of theories germane to adult learning, motivation and Transformational leadership and their relevance to the study's research questions and hypotheses.

This study focuses on adult learners as its population of interest and examines their learning motivation orientation relative to their leadership style. To place the current research in context, three research streams merit mention. The profile of the adult learner and key factors related to their differences from other groups of learners along with their motivation and expected outcomes from learning activities (Knowles, 1950; Knowles, 1980; Knowles, Holton, & Swanson, 2014; Tough, 1971) have been examined in previous studies. Human motivational drivers as well as the role of motivation in learning have also been explored in detail (Carré, 1997; Deci, 1985; Maslow, 1943). Finally, leadership literature is abundant; specifically, the Transformational style of leadership is among the most studied (Riggio, 2009) in this field.

In sum, prior research has found that leaders who value learning are an asset to an organization (Brockett & Hiemstra, 1991; Cho, 2002; Choudhary, Akhtar, & Zaheer, 2013; Gomez, 2007), that Transformational leaders value learning and development for not only themselves but also their team members (Scandura & Schriesheim, 1994; Sosik et al., 2004) and that Transformational leadership is positively related to both higher

levels of learning and performance in an organization (Choudhary et al., 2013). As a result, the focus of this current study is on adult learners in leadership positions and the influence of learning motivation orientation on the manifestation of Transformational leadership behavior.

Adult learners have distinctive reasons and desired outcomes for pursuing learning activities as well as unique constraints which separate them from other learners (Stevens, 2014). These factors must be adequately understood to maximize the adult learning experience. The Theory of Andragogy (Knowles, 1980) is used to explain the adult learner. The Theory of Andragogy advances that the adult learner is primarily motivated to learn by internal rather than external factors (p. 43). Expanding upon this assertion, Self-Determination Theory (Deci, 2000a, 2000b), is used as a framework to gain insight into how the decision points of adult learners may be driven by either intrinsic or extrinsic motivations.

This research originated with the intent of understanding leaders who are learners. Prior literature offers evidence that the learning habits of leaders impact their behavior, practices, influence and impact at both the individual and organizational levels (Allio, 2008; Argyris, 1991; Johnson, 2002; Marquardt & Reynolds, 1994; Senge, 1990; Tichy & Cohen, 1997). Organizations are becoming increasingly attentive to the learning practices of their leaders, for a leader's ability to learn and the agility with which one applies the knowledge acquired may be the most meaningful competencies for leadership (Dechant, 1990; Marquardt, 2000). Furthermore, a leader's willingness to learn and the ability to inspire learning among one's team members are moderators of

individual development, goal achievement and performance (Scandura & Schriesheim, 1994).

Transformational leaders value learning and develop team members by influencing, inspiring, and intellectually stimulating them while also serving as coach, teacher, and mentor (Scandura & Schriesheim, 1994; Sosik et al., 2004). Stewart (2006) cites Transformational leadership as a dominant conceptual model of leadership. Leaders who model continuous learning and who encourage learning within their teams have a higher probability of increased effort, growth and innovation among team members; therefore the influence of these leaders directly and indirectly influence key performance indicators such as employee productivity, engagement, and output (Gomez, 2007; Marquardt, 2000).

However, learning motivation and leadership style have not been previously empirically linked. Therefore, this research seeks to expand on the impact of learning motivation on leadership style and behavior. Transformational Leadership Theory was selected for its constructs of 'Inspired Influence', 'Inspirational Motivation', 'Intellectual Stimulation' and 'Individualized Consideration' - collectively known as the "4 Is" (Bass, 1985). This leadership style, manifested through the "4 Is", mirrors the expected behavior of an intrinsically motivated adult learner and provides a structure through which to study the relationship between learning motivation and leadership style.

This study hypothesizes a relationship in which an intrinsic motivation to learn is indicative of Transformational leadership behavior. It is asserted that an intrinsic motivation to learn is more likely found in Transformational leaders and that an intrinsic motivation to learn is positively associated with the attributes of the

Transformational leader (Coad & Berry, 1998). Further, it is reasonable to conjecture that if learning agility, adaptability and inspirational influence are desirable traits of leaders, then organizations should prefer to identify, develop and secure leaders with a Transformational style (Barbuto, 2005).

Prior to launching into the hypotheses which guide this study, important literature streams which inform the aforementioned theories are explored and assimilated in the following sections. This literature review begins with the Theory of Andragogy and describes the elements which define adult learners, the population of interest for this study. Two pertinent motivational theories, Maslow's Theory of Motivation and Self-determination Theory are then reviewed to provide a background for the concept of learning motivation orientation, the study's independent variable. Finally, Transformational Leadership Theory is explained; this leadership style and its counterpart, Transactional leadership, form the study's dependent variable. Specifically, the literature describes the attributes, practices and impact of Transformational leadership. In summary, the constructs of adult learning, intrinsic motivation and Transformational leadership are discussed collectively to form the basis for the hypotheses established in this study.

## **2.2 Adult Learning and the Theory of Andragogy**

This study focuses on the adult learner as its population of interest. Knowles' Theory of Andragogy distinguishes the adult learner as an individual who has a fundamental urge to grow and learn vis a vis the learning process and who primarily self-directs<sup>3</sup> his learning activities (Knowles, 1950). More formally, the adult learner (see Figure 1): (i)

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<sup>3</sup> Self-directed learning is defined as 'a form of learning in which the individual has a primary responsibility for planning, directing, implementing and evaluating the effort' (Hiemstra, 1994, p. 9).

has an independent self-concept and can direct his or her own learning, (ii) has accumulated a reservoir of life experiences that is a rich resource for learning, (iii) has learning needs closely related to changing social roles, (iv) is problem-centered and interested in immediate application of knowledge, and (v) is primarily motivated to learn by internal rather than external factors (Knowles, 1980, p. 43).

Understanding the adult learner is critical for academicians and practitioners alike today. Researchers and academicians benefit from increased insight when designing studies or developing curricula that address this audience. Practically speaking, an examination of adult learners in leadership positions is warranted in the current global marketplace, where the speed of change is accelerating more rapidly than ever before. Leadership teams that fail to anticipate and manage this change will have profound ramifications on organizational health and sustainability. Mezirow (1991) addresses the extent to which learning aids leaders by resulting in a novel or broadened understanding of situations and experiences, which can then be used to guide behavior and decisions. This knowledge capital creates new levels of agility and critical thinking in the leader which are necessary for them to effectively lead their organization through change (Vaill, 1998, p. 19). Research by Bennis and Nanus (1985) supports that leaders who are able to influence team members such that their actions are collectively aligned toward the organizational vision greatly reduce the risks inherent to organizations that are not able to cope with change. Therefore, the motivation of leaders to learn and develop the intellectual agility to embrace and maximize change, and who inspire others to do the same are critical drivers of organizational sustainability. Learning across an organization and the leaders who mutually reinforce learning activities enhance the

Self-Concept	Adult Learner Experience	Readiness to Learn	Orientation to Learning	Motivation to Learn
As a person matures his/her self concept moves from one of being a dependent personality toward one of being a self-directed human being	As a person matures he/she accumulates a growing reservoir of experience that becomes an increasing resource for learning	As a person matures his/her readiness to learn becomes oriented increasingly to the developmental task of his/her social roles	As a person matures his/her time perspectives change from one of postponed application of knowledge to immediacy of application, and accordingly his/her orientation toward learning shifts from one of subject-centeredness to one of problem-centeredness	As a person matures the motivation to learn is internal

**Figure 1**  
 Knowles' Five Assumptions of Adult Learners. Adapted from (Knowles, 1980)  
<https://www.slideshare.net/elearningindustry/the-adult-learning-theory-andragogy-of-malcolm-knowles>

capabilities of the organization, thereby increasing its performance potential (Choudhary et al., 2013) and contributing to greater stability amidst change.

Correspondingly, the absence of effective leadership places an organization's current and future viability at risk (Angelo, Erik, & Steven, 2004). Involuntary leader churn costs organizations and shareholders over \$100 billion annually in lost market value (Botelho, 2017). This data illuminates the failure points that exist in upfront leader selection. Therefore, early identification of adult learners in leadership positions who invite new knowledge for the primary purpose of immediate application, who assimilate said knowledge into daily practice and who drive their own learning trajectory may help organizations create a more secure succession channel.

If continuous learning is an antecedent to effective leadership (Cunha & Louro, 2000), understanding which adult professionals continue to learn and why are also important to examine. Research from Houle (1961) may offer some evidence of adult

learners' motivations. Houle discovers that, for the learning-oriented adult, participation in learning activities is born from a natural proclivity toward growth and personal development and a continuous effort rather than an intermittent one. Continuous learners are, in fact, easily distinguished as such by those who know them (Houle, 1961). Houle is best known for bringing attention and clarity to the motivational drivers that propel adults to learn, and introducing these as pivotal attributes in the profile of the adult learner.

Tough (1971) furthers the work of Knowles and Houle, and his research seeks to determine if the deliberate pursuit of learning among adults is common, what drives adults to continue learning and if the learning is self-propelled. Tough finds that 90% of the adults he studied undertook at least one and as many as 20 learning projects within one year (Tough, 1971, pp. 20-22), and that 99% of these projects were undertaken with the intent to learn, change and grow as opposed to for-credit<sup>4</sup> (p. 19). Tough's research offers anecdotal evidence that learning activities are important to adults and that their efforts are driven by the desire to acquire new knowledge, be exposed to new sources of information and enhance their perspective, perception, practices and performance.

Tough also finds that, for some adult learners, learning activities are not an isolated endeavor, but rather a social and community venture, importantly involving interaction with others (Tough, 1971). Among the benefits derived, the adult learner seeks continuous learning activities in order to use the knowledge acquired to make a contribution beyond personal gain and to teach others - whether through formal educational methods or community outreach. From Tough's anecdotal evidence, a

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<sup>4</sup> Tough defines for-credit endeavors as credit toward some degree, certificate or diploma...toward passing a test or examination, completing an assignment for a course, or producing a thesis, toward some license – or toward some requirement or examination or upgrading related to a job” (Tough, 1971, p. 19)

picture of the adult learner emerges as one who is driven to learn for tangible, material and intellectual reasons, but also emotional and psychological outcomes that include fulfillment, self-esteem, self-actualization and recognition (p. 45). Hence, the question remains as to whether the learning activities among the type of adult learners Tough studied were unselfishly driven and if their desire to use their knowledge to inform and transform became an underlying source of learning motivation.

Considering the reasons adults have for undertaking learning activities, including the benefits they anticipate receiving – both personal and external to them – and the underlying psychological forces which influence adult learners' decisions is one focal point of this study. Accordingly, the question of why adults choose to continue learning provides an excellent foundation for the study of motivation and its influence on adult learners' resulting actions.

### **2.3 Theories of Motivation**

To better understand an adult learner's primary motivation to learn, this study focuses on two influential theories in the study of human motivation: Self-determination Theory (Deci & Ryan, 1985) and Maslow's Theory of Motivation (Maslow, 1943). In Self-determination Theory, Deci and Ryan offer a model of an individual's motivational orientation, defining it as either intrinsic or extrinsic, which will be applied to an adult's motivation to learn in this study. Additionally, in the context of higher order needs such as learning, this study will refer to Abraham Maslow and Maslow's Hierarchy of Needs.

**2.3.1 Self-Determination Theory.** Knowles' Theory of Andragogy (1980, p. 43) posits that the decision points of adult learners may be driven by either intrinsic or extrinsic motivations. Self-determination Theory differentiates between the types of

motivation that influence individuals' actions (see Figure 2); this study focuses on: *intrinsic motivation*, which refers to the inherent, biological drivers which propel an individual's tendency to participate in an event, activity or goal-setting exercise, and/or participation in an event, activity, or goal because it is a source of interest or pleasure; and, *extrinsic motivation*, which refers to an individual's tendency to participate primarily based on the outcome or reward that the event, activity or goal produces. Moreover, Self-determination Theory describes an intrinsic motivational orientation as "self-determined" and thus self-propelled by the individual; individuals who are intrinsically motivated are, therefore, making decisions to pursue a goal or activity autonomously and without external compulsion (Deci & Ryan, 1985).

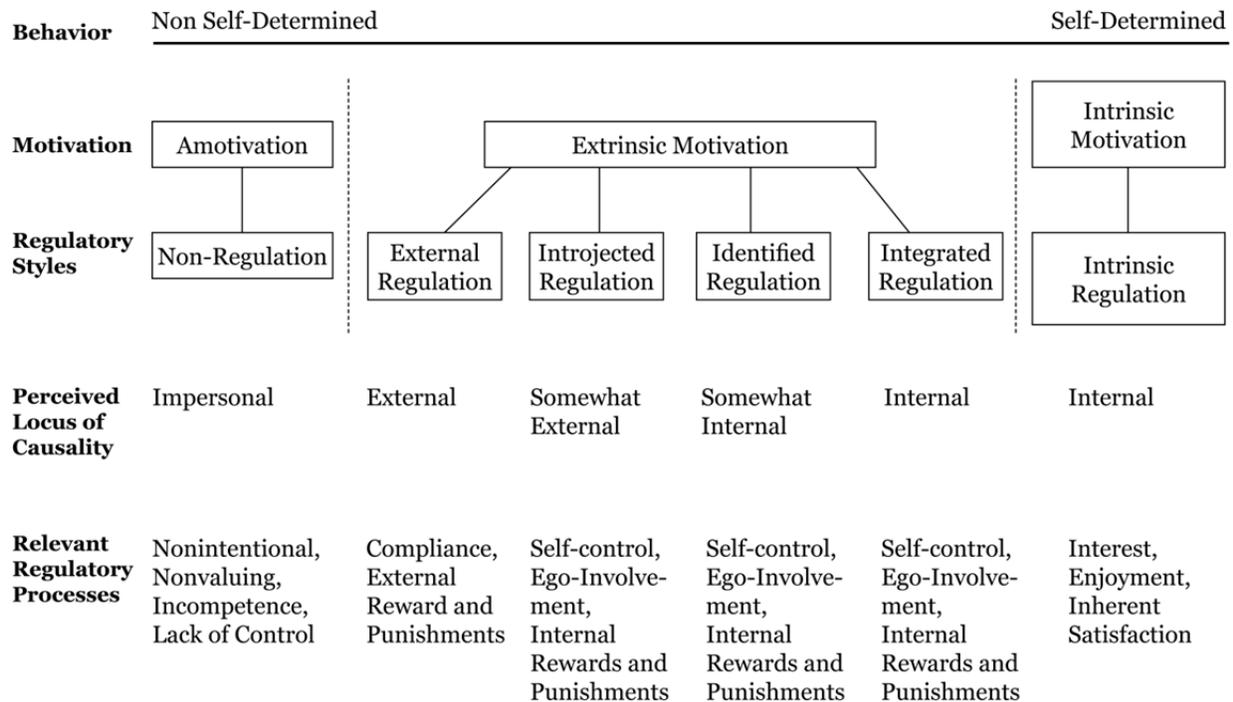
Of primary interest to this study is whether an adult professional's decision to pursue continuous learning activities<sup>5</sup> is intrinsically or extrinsically motivated. Consequently, Self-determination Theory presents a logical lens through which to examine adult learning and the inherent motivations which drive adult professionals to engage in continuous learning. Relying upon Self-determination Theory, this study's research questions address an adult's motivation to learn and its hypotheses strive to quantify if learning motivation and leadership style are related.

Highlighting the connections between theories central to this study, the academic research also supports the interaction of learning motivation and leadership. Solansky (2014), in a study of a substantial leader training program, finds that a leader's level of self-determination has a positive relationship with one's growth and advancement. In

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<sup>5</sup> For the purposes of this study, continuous learning activities are defined as *formalized* (degree-seeking; professional continuing/executive education; online courses/training; or certification programs) or *informal* (professional/industry-related learning; self-read; MOOCs; conferences/industry-related learning events; or video/YouTube).

addition, this study's research builds on assertions made in prior literature: for instance, Bennis (1984) states that leaders must value learning; Senge (1990) posits that leaders are responsible for their own learning; and, Argyris (1991) follows that it is critical for leaders to learn how to learn.



**Figure 2**

Intrinsic and Extrinsic Motivation. Adapted from (Deci, 1985; Edward & Ryan, 1985).

[http://slideplayer.com/slide/5384698/17/images/11/Ryan+&+Deci+\(2000\)+Self+Determination+Theory.jpg](http://slideplayer.com/slide/5384698/17/images/11/Ryan+&+Deci+(2000)+Self+Determination+Theory.jpg)

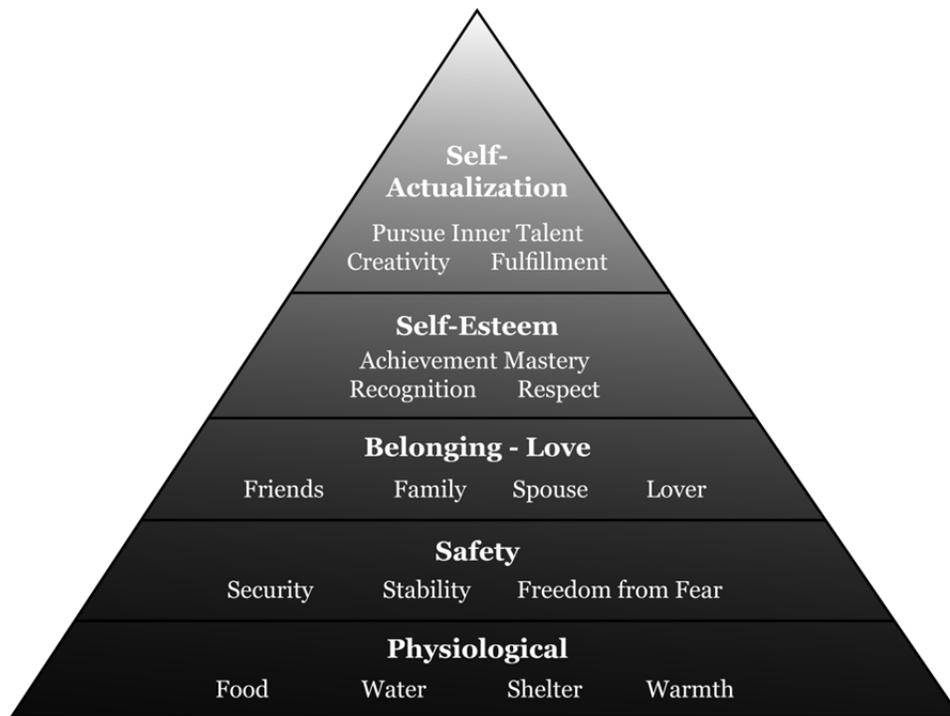
**2.3.2 Maslow's Theory of Motivation.** It is clear from Self-determination Theory that an adult's decision to pursue continuous learning may be linked to either intrinsic or extrinsic motivations. Correspondingly, Maslow's Theory of Human Motivation (1943) is based on the premise that human needs drive human motivation, and in turn, human behaviors. Maslow's Theory of Motivation is based upon a hierarchy of needs comprised of five distinct levels (see Figure 3). At the base of the pyramid are

human physiological needs and at its apex is self-actualization. Maslow postulates that individuals must satisfy their most base needs first; and, only when each successive level of need is met, can individuals concentrate on achieving their higher-order needs.

Therefore, the level of commitment necessary to continue learning contributes to an adult learner's decision process around learning activities. Given the challenges that face adult professionals pursuing advanced education, it is important to understand the context in which learning decisions, considered by this study as a higher-order need, are made and the pre-requisite satisfaction of base needs that must occur. The decision to continue learning as an adult requires a different type of commitment than at earlier life stages – i.e., the commitment of one's time, mental and emotional energies amidst the mounting responsibilities adulthood brings; assignment of financial resources; and, weighing the opportunity cost of continuous learning versus the potential return on its outcomes.

Maslow's theory is similarly applied toward adult learning; intrinsically or extrinsically motivated adult continuous learners are assumed to have fulfilled their base needs successfully or they would lack the motivation to seek esteem and self-actualization vis a vis continuous learning activities. Maslow recognizes that individuals' needs fall into a hierarchal range, and ties their capacity to satisfy these needs with workplace performance (Jerome, 2013).

Jerome (2013) recognizes that satisfaction of these needs has implications on organizational culture, human resource management and employee performance as well. Thus, while not directly tied to this study's hypotheses, both learning motivation and leadership style are anchored by Maslow's theory. In examining the leader who



**Figure 3**

Maslow's Hierarchy of Needs. Adapted from (Maslow, 1943)

<https://www.psychestudy.com/general/motivation-emotion/maslow-hierarchy-needs>

learns, the motivation to pursue continuous learning may be construed as a reflection of the importance of self-actualization. Additionally, both leaders and team members are influenced by Maslow's hierarchy wherein once attainment of basic needs and security is met, they are able to embrace and prioritize growth, self-development and the perception that learning will promote their ability to grow, develop and prosper themselves and others (Kiel, 1999).

## 2.4 Leadership

Scholarly literature on the leader's role is consistent with Maslow's theory. In his seminal work, Burns (1978) asserts that leadership necessitates an awareness and fulfillment of one's higher-order needs, for it is that awareness that will enable the

leader to define his values meaningfully, to model them in his behavior, and to be moved to purposeful action (Cox, 2010, p. 4).

Similarly, Bass' Theory of Transformational Leadership (Bass, 1985; Bass & Riggio, 2006) can be viewed through the lens of Maslow's hierarchy as well. Through their mentoring and individualized consideration of team members, Transformational leaders first ensure that the team members' lower-order needs are met; then, by their example and influence, Transformational leaders activate an awareness of higher-order needs in their team members, including the pursuit of learning and goal attainment.

**2.4.1 Transformational Leadership Theory.** Studies show that Transformational leaders are characterized by an inherent motivation to continue learning (Johnson, 2002; Tichy & Devanna, 1986). An intrinsic learning motivation is positively associated with the attributes of the Transformational leader (Coad & Berry, 1998). Transformational leaders are vital to advancing organizational learning, and in turn, positive performance outcomes (Senge, 1990).

Grounded in Bass' Transformational Leadership Theory (Bass, 1985; Bass & Riggio, 2006; Riggio, 2009), this study approaches leadership from the unique perspective of the adult learner turned Transformational leader; and, it further seeks to connect the constructs of motivation, adult learning and leadership by exploring the connection between the intrinsically motivated adult continuous learner and Transformational leader.

**2.4.1.1 James MacGregor Burns.** Burns (1978) is credited with introducing the concept of both Transformational and Transactional leadership. Burns establishes a leader as "transforming" if the leader is able to "raise his followers to higher levels of

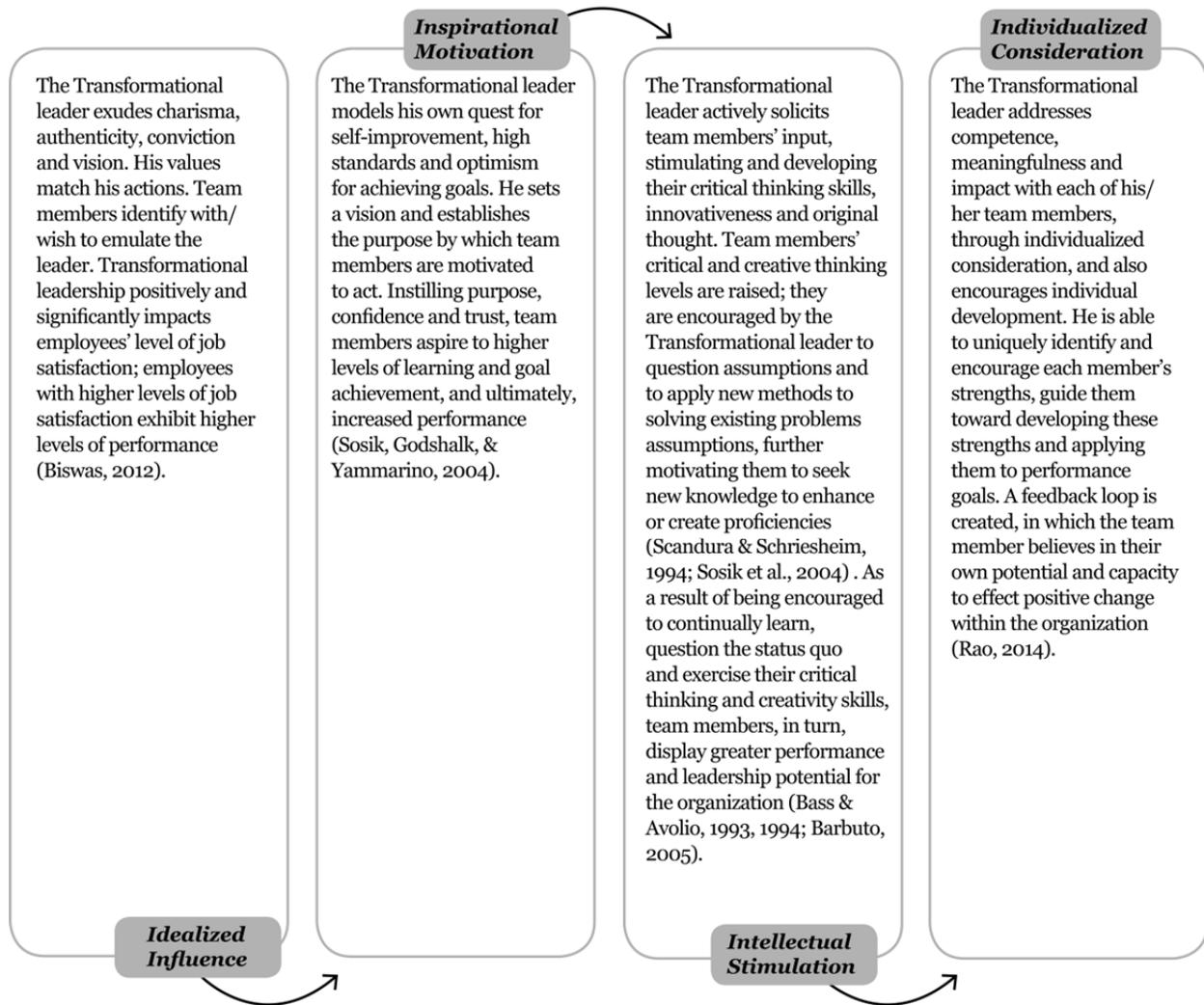
morality and motivation” (p. 20). Burns posits that Transformational leaders are able to influence their team members’ motivations and, in turn, their actions. Burns asserts that Transformational leaders are invested in creating other leaders. In this model, both individuals and organization mutually benefit.

While Transformational leaders take personal interest in their team members, function as mentors, and provide support toward higher levels of achievement, the Transactional leader, according to Burns (1978), monitors performance and, more specifically, a lack of compliance with performance standards in order to take corrective action. Transactional leaders motivate and lead their teams by appealing to their desires for personal reward and not necessarily the benefit of the organization as a whole. Burns considers the two styles of leadership to be mutually exclusive and as opposite ends of a continuum.

**2.4.1.2 Bernard Bass.** Bass (1985) furthers the work of Burns to formally introduce his Theory of Transformational Leadership. Bass delineates specific attributes upon which Transformational leadership behaviors can be measured, known as the “Four ‘Is’” (see Figure 4). These attributes include: ‘Idealized Influence’, ‘Inspirational Motivation’, ‘Intellectual Stimulation’, and ‘Individualized Consideration’ (Bass, 1985; Bass & Bass, 2008; Cox, 2010). Cox (2010, p. 5) defines these attributes as follows.

Less formally referred to as “charisma”, idealized influence refers to the degree to which the Transformational leader behaves in admirable ways that result in team members’ identifying with and wishing to emulate the leader. In addition, idealized influence is reinforced by a Transformational leader’s consistent conviction across

message and vision, modeling of high standards of integrity and authenticity and having a clear set of values that match one's actions. This behavior translates into authenticity



**Figure 4**  
The 4 Elements of Transformational Leadership.

which naturally builds trust within a Transformational leader's team and the organization.

Inspirational motivation refers to the degree to which a Transformational leader articulates a vision that is both appealing and inspiring to one's team. A Transformational leader leads with one's own journey for self-improvement, high

standards and optimism for achieving goals. They establish the purpose by which team members are motivated to act and guide team members through the execution of these actions. Transformational leaders also use inspirational motivation to effectively communicate with team members and instill optimism and purpose.

Intellectual stimulation refers to the degree to which a Transformational leader challenges assumptions and encourages team members to do the same. The Transformational leader solicits team members' input, thereby actively stimulating and developing their critical thinking skills, innovativeness and original thought. The leader's own knowledge reservoir and decision-making agility lay the framework for team members to emulate and ultimately visualize how their investment in learning and development will similarly translate to future opportunities and contributions. A Transformational leader's ability to intellectually stimulate a team is the bridge which connects one's own personal development to the team members' increased growth and opportunity and overall organizational results. As a result of being encouraged to continually learn, question the status quo and exercise their critical thinking and creativity skills, team members, in turn, display greater performance and leadership potential for the organization.

Individualized consideration refers to the degree to which the Transformational leader attends to team members' needs, mentors them and creates personalized growth paths for each. Transformational leaders, vis a vis their individualized consideration of team members, are able to uniquely identify and encourage each member's strengths, guide them toward developing these strengths and applying them to performance goals. A feedback loop is created, in which the team member believes in their own potential

and capacity to effect positive change within the organization. Here, Transformational leaders mentor, educate and develop the next generation of leaders from within their own team and are able to guide and inspire team members toward fulfillment of their own higher-order needs of self-actualization.

Studies of Transformational leaders build on the assertion that these leaders can materially impact the reality of their team members by influencing their awareness, beliefs, values, motivations, ambitions, expectations of success, and performance and offer evidence that Transformational leaders have a positive impact within an organization and on its performance. For example, Biswas (2012, p.108) cites that Transformational leadership leads to follower-organization congruence which then becomes a significant source of positive organizational outcomes...the impact of leadership on organizational culture, vision, the empowerment of team members results. Transformational leaders, according to Avolio, Waldman, and Yammarino (1991) and Warrick (2011), are able to motivate constituents to rise above personal interest and apply their efforts toward a greater shared purpose.

Transactional leadership differs from Transformational leadership in its intent and expected outcomes. Transactional leadership involves contingent reinforcement; followers are motivated by the leader's promises, praise, and rewards, or they are corrected by negative feedback, reproof, threats, or disciplinary actions. A Transactional leader behaves in response to team members' performance on the agreed upon responsibilities they are transacted to do (Bass & Steidlmeier, 1999). As such, Transactional leadership tactics draw upon the extrinsic motivation of team members who are both incentivized to meet and exceed performance goals and potentially

punished when performance standards are not met or exceeded. There is an element of positive and negative reinforcement to Transactional leadership practices, based on expected versus actual performance. Conversely, Transformational leaders inspire team members and derive their greatest satisfaction from seeing these team members contribute at higher levels, believe in their own growth potential and, collectively impact organizational outcomes in a positive manner (Avolio & Bass, 1993, 2001; Rao, 2014; Sarros et al., 2008; Sosik et al., 2004). A schematic comparison of Transformational versus Transactional leadership styles is included in Appendix E.

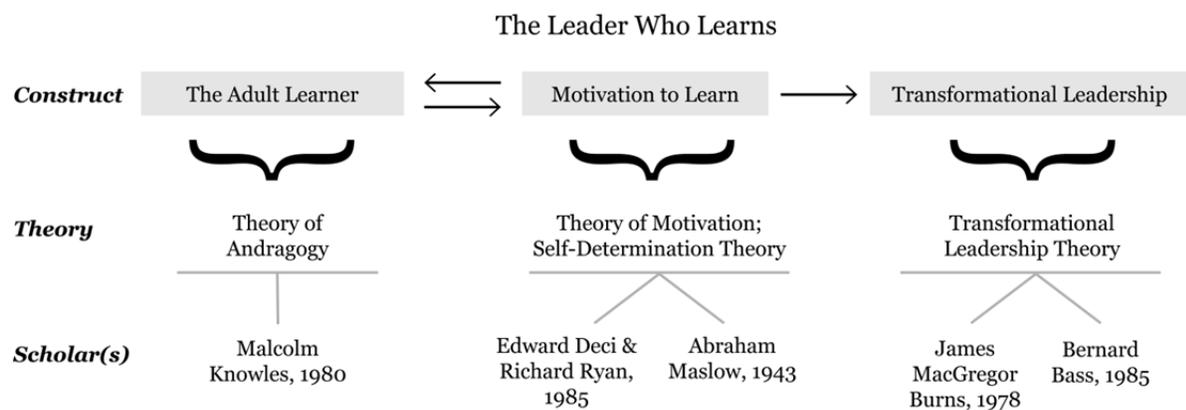
Importantly, there is one primary differentiation between Burns' and Bass' approach. Unlike Burns, Bass theorizes that Transformational and Transactional leadership behaviors exist on a continuum and are not mutually exclusive. Bass asserts that both types of leaders focus on goal achievement and organizational objectives – however, the process by which the leader motivates and the type of goals set differ (Hartog, Muijen, & Koopman, 1997, p. 21). Similarly, current scholars support Bass' research, acknowledging that these two leadership styles lie on a continuum (Avolio & Bass, 2001; Hartog et al., 1997; Sarros et al., 2008) further that, while there are distinctly contrasting elements of Transformational versus Transactional leadership styles, the models are not entirely unrelated. Furthermore, Hater and Bass (1988) contend that Transformational leadership enriches Transactional leadership behaviors to a more altruistic level by its approach toward motivation and goals attainment. This study seeks to confirm that individuals align more closely with one leadership style or the other.

Notwithstanding, while the research clearly supports the positive attributes of a Transformational leader and one's focus on self-development (Hater & Bass, 1988; Rao, 2014; Sarros et al., 2008), the literature declines sharply in support of a direct relationship between a leader's motivation to continue learning and leadership style. This literature review has thoroughly covered the extensive research that has been done on each of these constructs individually. To support the relational connections among them, Appendix F provides a schematic illustration of the literature equation. An opportunity exists for this study to create a new literature stream focusing on the relationship between learning motivation and leadership style; and, specifically, how an intrinsic learning motivation orientation may be used to determine an individual's potential to become a Transformational leaders.

## **2.5 Hypotheses Development**

Limited scholarly literature exists to examine the direct relationship between learning motivation orientation and leadership style. Transformational leadership is one of the most heavily documented styles in the leadership research (Riggio, 2009), and discussions of the adult learner and learning motivation are also well represented by scholars. Nevertheless, prior research is concerned with these constructs in isolation from each other; therefore, the purpose of this study is to examine these constructs jointly and form a theoretical basis which supports the connection between the intrinsically motivated adult continuous learner and the Transformational leader.

This study relies upon three individual theories as previously detailed: Andragogy, Self-determination Theory and Transformational Leadership Theory and analyzes their related elements to develop its hypotheses (see Figure 5).



**Figure 5**  
Theoretical Flow.

Hypotheses development begins with arguments that support the shared attributes between adult professionals who are intrinsically motivated to learn and those who demonstrate Transformational leadership behavior. As defined, intrinsically motivated learners derive pleasure and satisfaction from the learning process itself; they wish to communicate what they learn and establish a socio-emotional contribution from the newly acquired knowledge (Carré, 2000).

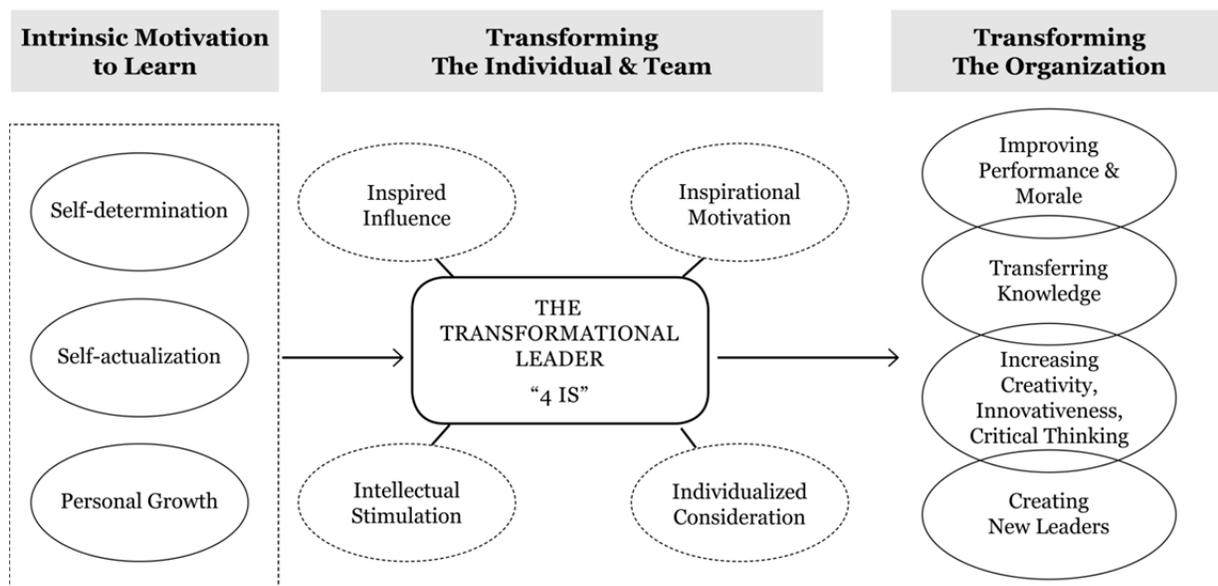
Similarly, a Transformational leader is dedicated to personal growth and seeks to use what one learns to influence, inspire, inform and mentor through one's life and career (Bennis & Nanus, 1985). A study by Coad and Berry (1998) also recognizes a potential relationship between an intrinsic learning motivation orientation and Transformational leadership, describing an intrinsic learning motivation as the type of learning motivation most associated with Transformational leadership tendencies.

The Transformational leader forms a mentor-follower relationship with team members in which a mutual learning and growth mindset are established (Scandura & Schriesheim, 1994; Sosik et al., 2004). Research addresses conditions in which the

Transformational leader's behavior embodies the factors ("4 Is") noted in Bass' theory (Bass, 1985). By modeling one's own personal accomplishments, setting learning goals which align with a larger vision and principles, the Transformational leader is perceived as authentic. A Transformational leader's influence results in team members elevating the value of learning while their guidance and coaching are affirmed as having the potential to also lead team members to increased levels of success ('Idealized Influence') (Scandura & Schriesheim, 1994; Sosik et al., 2004). Team members' critical and creative thinking levels are raised; they are encouraged by the Transformational leader to question assumptions and to apply new methods to solving existing problems, further motivating them to seek new knowledge to enhance or create proficiencies ('Intellectual Stimulation') (Scandura & Schriesheim, 1994; Sosik et al., 2004). The leader's own knowledge reservoir and decision-making agility is a model for team members to emulate and ultimately visualize how their investment in learning and development will similarly translate to future competences, opportunities and contributions. Lastly, the leader's investment and belief in each individual team member is both articulated and developed such that the individual team members visualize higher-level goal attainment for themselves ('Inspirational Motivation', 'Individualized Consideration'). This investment, in turn, results in team members' ability to view themselves as important organizational contributors and instills the confidence in them to perform in such a way that give rise to higher-level goal achievement.

Figure 6 depicts a proposed research model which illustrates how an intrinsic motivation to learn leads to Transformational leadership behavior, portraying the constructs' cooperative impact on outcomes at the individual and organizational levels.

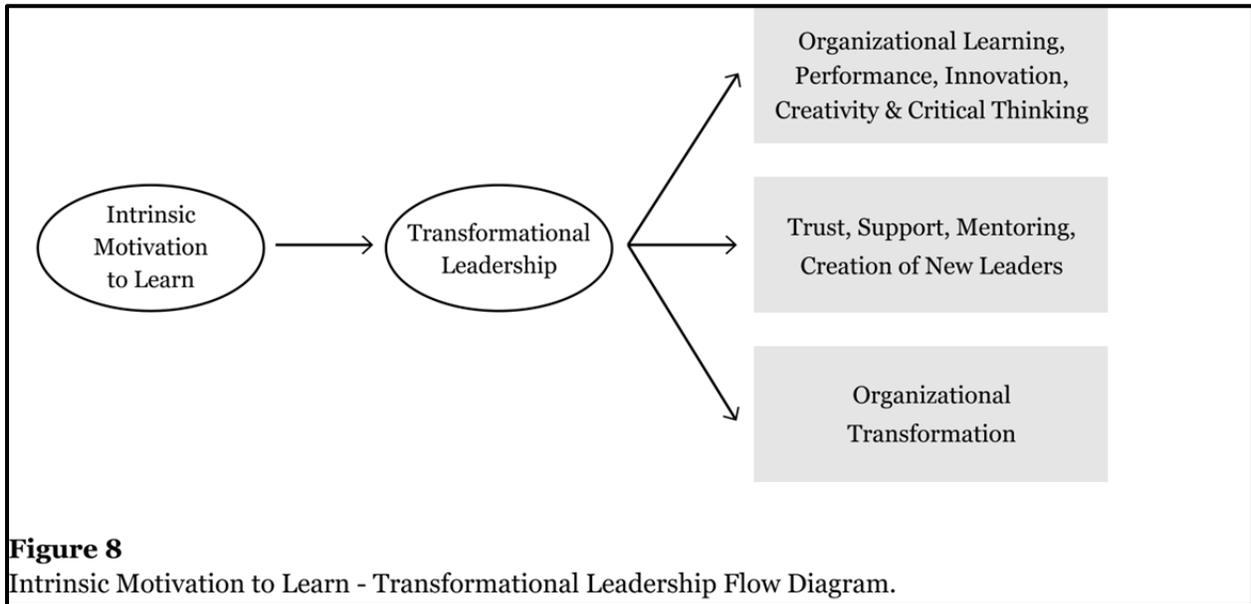
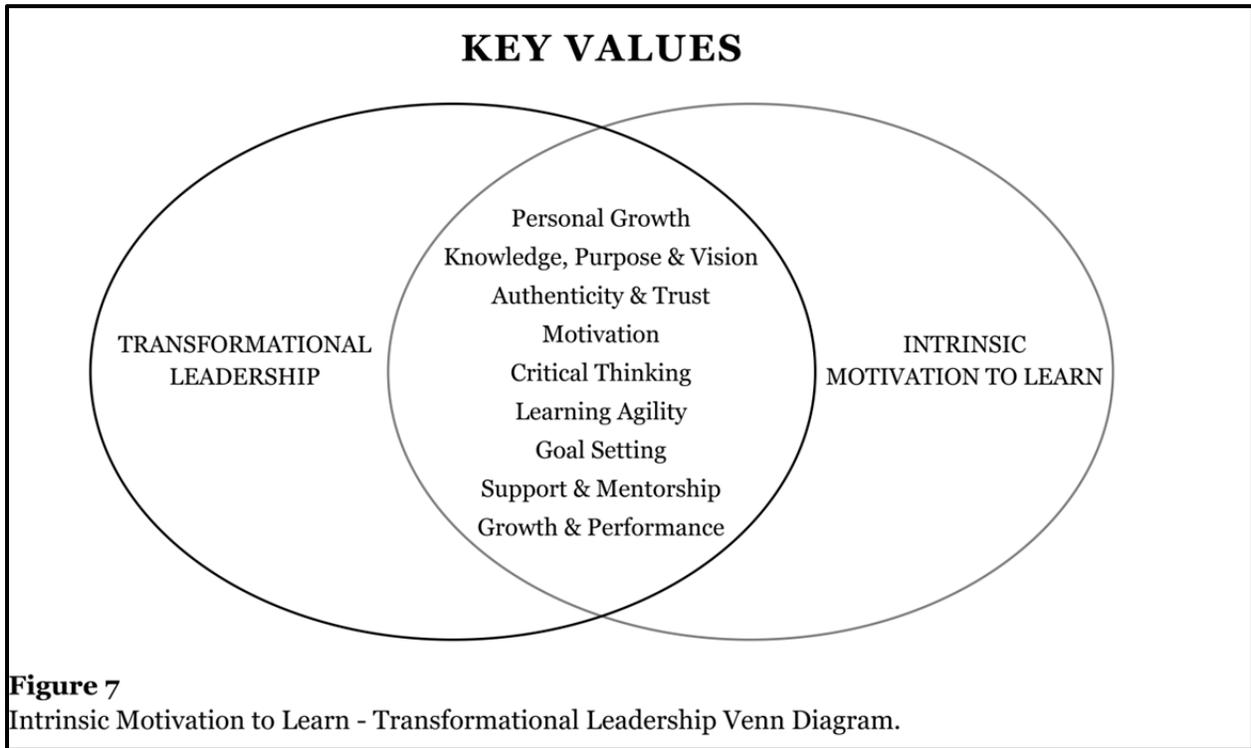
Figures 7 and 8 further demonstrate how the attributes of an intrinsically motivated individual are congruent with Transformational leadership behavior, and in turn, how Transformational leadership behavior becomes a reliable indicator of positive organizational outcomes (Biswas, 2012, p. 108). According to Bass (1998), a Transformational leader’s vision and his implementation thereof directly and positively affect his subordinates’ attitude, goals and performance, and, by extension, overall organizational results.



**Figure 6**  
Intrinsic Motivation to Learn - Transformational Leadership Model.

Thus, in this study, arguments in support of a positive relationship between an intrinsic learning motivation and Transformational leadership style form the basis of its hypotheses. Compared to adult professionals propelled by an extrinsic motivation to learn, individuals who are intrinsically motivated will be more likely to emerge as Transformational leaders. Consequently, learning motivation orientation may be a key indicator of leadership behavior, influence and efficacy that can be used as a tool by

practitioners for the purposes of leader identification, development and succession planning. In turn, learning motivation orientation may also be considered a key competency for inclusion in organizations' talent management plans.



Given that executives and scholars are increasingly recognizing the benefits to organizations of identifying and promoting leaders who are intrinsically motivated to learn and who view continuous learning as both a tool and as a responsibility (Marquardt, 1996), this study posits that an intrinsic learning motivation and desire for self-development are critical to a leader's overall influence on performance and organizational effectiveness (McCall et al., 1988). As Transformational leaders are credible mentors and co-learners (Marquardt, 1996, p. 27; Tichy & Devanna, 1986) seeking to influence, inspire, and motivate constituents toward a set of organizational objectives, they possess the potential to raise organizational performance and generate sustainable competitive advantage for their organizations (Jyoti & Dev, 2015).

The conjectured complementary relationship between an intrinsic learning motivation and Transformational leadership is reflected in Hypothesis 1. Conversely and as noted previously, Transactional leaders draw upon the extrinsic motivation of team members to propel their performance and are driven by external gains and shared reward among both leader and team alike; accordingly, the joint attributes of extrinsic learning motivation and Transactional leadership are reflected in Hypothesis 2.

The hypotheses in this study are designed to test the relationship between learning motivation orientation and leadership style, with the independent variables as (IV<sub>a</sub>) intrinsic learning motivation and (IV<sub>b</sub>) extrinsic learning motivation and the dependent variables as (DV<sub>a</sub>) Transformational leadership style and (DV<sub>b</sub>) Transactional leadership style.

**H<sub>1</sub>** : Adult learners with an intrinsic learning motivation are more likely to be Transformational leaders than those with an extrinsic learning motivation.

**H<sub>2</sub>** : Adult learners with an extrinsic learning motivation are more likely to be Transactional leaders than those with an intrinsic learning motivation.

Learning motivation, the independent variable, encompasses the learning motivation orientation of participants, i.e., intrinsic or extrinsic, and the relevance of such an orientation to individuals' pursuit of knowledge and the impact of the learning process on individuals' growth and behavior in the leadership context. The dependent variable, leadership style, encompasses the leadership style of participants, i.e., Transformational or Transactional and the attributes of each type of leader. A summary of the study's hypotheses and relationship among its research questions, variables and theories are presented in Tables 1 and 1A, respectively.

**Table 1**  
Relationship among Research Questions, Variables and Theory.

<i>Hypothesized Research Question</i>	<i>Independent Variable</i>	<i>Dependent Variable</i>	<i>Theory</i>
1. Are intrinsically motivated adult learners more likely to be Transformational leaders than their extrinsically motivated counterparts?	IVa: Intrinsic learning motivation	DVa: Transformational leadership	Self-determination Theory; Transformational Leadership Theory
2. Are extrinsically motivated adult learners more likely to be Transactional leaders than their intrinsically motivated counterparts?	IVb: Extrinsic learning motivation	DVb: Transactional leadership	Self-determination Theory; Transformational Leadership Theory
<i>Non-Hypothesized Research Question</i>	<i>Independent Variable</i>	<i>Dependent Variable</i>	<i>Theory</i>
3. Is there a relationship between intrinsically motivated adult learners and a Transactional style of leadership?	IVa: Intrinsic learning motivation	DVa: Transformational leadership	Self-determination Theory; Transformational Leadership Theory
4. Is there a relationship between extrinsically motivated adult learners and a Transformational style of leadership?	IVb: Extrinsic learning motivation	DVb: Transactional leadership	Self-determination Theory; Transformational Leadership Theory

**Table 1A**  
Research Hypotheses.

<i>Hypothesis</i>	<i>Number</i>	<i>Tested</i>
Are intrinsically motivated adult learners more likely to be Transformational leaders than their extrinsically motivated counterparts?	H1	Transformational Leadership = f{Intrinsic Learning Motivation} Intrinsic > Extrinsic
Are extrinsically motivated adult learners more likely to be Transactional leaders than their intrinsically motivated counterparts?	H2	Transactional Leadership = f{Extrinsic Learning Motivation} Extrinsic > Intrinsic

## CHAPTER 3: METHODOLOGY

### 3.1 Participant Selection

This study uses a purposeful sampling strategy to select research participants because they can “purposefully inform an understanding of the research problem and central phenomenon in the study” (Creswell, 2012, p. 156). The total study population consists of 137 adult learners in leadership positions. Participants in this study are individuals who have held or currently hold leadership positions, and are diversified across title, industry, race and gender.

The study defines the following criteria for inclusion: individuals who hold or have held the title of Supervisor, Department Head, Manager, Director, Executive, VP, C-suite, or Business Owner/Entrepreneur) for a minimum of five cumulative years and have direct management responsibility for at least two team members in each position; adult learners who have participated in or continue to participate in formalized continuous learning activities or informal professional/industry-related learning; and, individuals aged 35 years or above.

Participants for the purposeful sample were sourced from: a population of DBA (Doctor of Business Administration) students at a State University located in Florida – selected based on convenience and feasibility of data collection; LinkedIn, the world’s largest professional social media site – selected from this researcher’s large network and group affiliations; and, requests extended by invited participants themselves to their broad network of professional contacts. Notably, invitations were extended to other

Doctorate of Business Administration programs across the United States but refused by respective program administrators in order to shield their constituents' time and focus.

Of approximately 400 invitations distributed to individuals who met the criteria for inclusion, a response was received from 137 individuals willing to participate in the study, indicating an approximately 34% response rate. Acceptable response rates for a given study are determined, in part, by its overarching purpose, how the data is collected and the statistical measurements used to evaluate the data. An appropriate response rate for an online survey is typically acknowledged to be 30% (The University of Texas at Austin, pp. 1-2). This study's population provides the participation level necessary to arrive at descriptive statistics with sufficient power and accuracy.

### **3.2 Research Design**

The study employs a 2x2 experimental design (see Figure 9), whereby the adult learners sampled participated in an online survey which positions them as belonging to one of four learning motivation/leadership style categories: (i) intrinsic learning motivation/ Transformational leadership style, (ii) intrinsic learning motivation/ Transactional leadership style, (iii) intrinsic learning motivation/ Transactional leadership style and (iv) extrinsic learning motivation/ Transactional leadership style. While this researcher hypothesizes (i) and (iv) to be most true, all other conditions held constant, it is possible that alternative mutations (ii) and (iii) will exist within the study population.

### **3.3 Experimental Procedures**

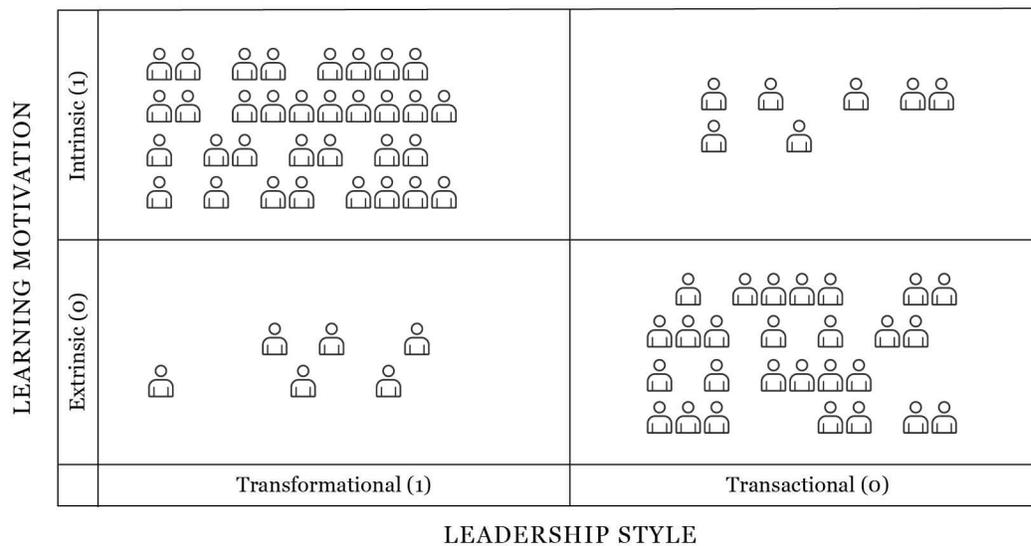
The data collection method for this study is an online survey, powered by Qualtrics.<sup>6</sup>

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<sup>6</sup> Qualtrics ([www.qualtrics.com](http://www.qualtrics.com)) is a leading research and experience software, and the platform most widely used at the University of South Florida for research purposes.

Given the type of data being collected for this study, the intent to quantitatively measure responses and the accelerated timeframe in which the study needed to be completed, online surveying is the most efficient data collection method.

**3.3.1 Study Invitation.** A detailed invitation letter was sent to the purposeful sample of participants. Participants could option to self-select into the study. The invitation letter includes a brief, non-leading explanation of the study and why the individual would be considered an ideal participant, an informed consent clause, a link to the online survey and an offer to be entered into an anonymous reward lottery. This letter was drafted and approved in accordance with the University of South Florida’s Institutional Review Board’s (IRB) protocol. A copy of the invitation letter is included in Appendix A.



**Figure 9**  
Learner - Leader Distribution, Projected.

**3.3.2 Survey Instrument.** The survey instrument for this study was adapted from existing validated instruments and comprised of three sections. The first section

includes questions to assess the independent variable - participants' primary learning motivation (i.e., intrinsic or extrinsic), and the dependent variable - leadership style (i.e., Transformational or Transactional). Participants are asked to answer questions that measure their attitudes toward the pursuit of continuous learning activities and perceived behaviors related to leadership style. Questions that measure both the independent and dependent variables are scored on a sliding five point Likert scale; the sliding scale facilitates a more accurate measurement of statistical differences among responses. The second section of the survey includes open-ended questions; these questions are non-numerically scored and allow participants to provide their perspective on their lived experience as continuous learners and leaders. The open-ended questions allow for some inference of data, qualitative interpretation of results and identification of themes or patterns which may emerge. Finally, a series of questions designed to capture demographic data is included and examined for meaningful interactions between these ancillary covariates and the independent/dependent variables.

The survey instrument was subjected to a rigorous development, revision and peer review process. A pilot survey was distributed to a select group of academicians and practitioners, for peer review and validation. Feedback received was incorporated into 11 revised iterations of the instrument. The results of the pilot generated material changes to question verbiage, quantity and scaling and which were ultimately used to form the final study survey. Individuals surveyed in the pilot were excluded from the study's formal survey release. A copy of the study survey is included in Appendix B.

**3.3.2.1 Validation.** To maximize validity of results, survey questions are adapted and developed from existing validated instruments that have been grounded in extensive testing and prior research. Questions are adapted and developed, rather than adopted, to ensure that the questions would be appropriate for the unique participants of this study. Responses are measured on scales that were modified from their original, validated, counterparts; adaptations are made based on feedback from the study survey pilot and with the intention of measuring the variables to support the desired data analysis.

Participants are asked to answer two sets of survey questions. Section one includes 14 questions measuring the independent variable - learning motivation orientation (Questions 5-10 of the survey measure an intrinsic learning motivation and Questions 11-18 measure an extrinsic learning motivation). The learning motivation questions have been adapted from the Carré Model of Adult Orientation and Implication on Learning and Training Activities (Carré, 1997). Section one of the survey also includes 22 questions measuring the dependent variable - leadership style (Questions 20-31 measure a Transformational leadership style and Questions 32-41 measure a Transactional leadership style ). The leadership style questions have been adapted from the Multifactor Leadership Questionnaire (Avolio & Bass, 2000).

**3.3.2.2 Carré Model.** Consistent with the Carré Model of Adult Orientation and Implication on Learning and Training Activities (Carré, 1997), survey questions measuring the independent variable, learning motivation, were adapted and designed to capture participants' rationale and expected outcomes from pursuing continuous learning activities. The Carré Model examines the motivation of adult learners (i.e., the

reasons acknowledged and given by adults to explain their learning/training choices), measures an intrinsic/extrinsic orientation toward learning and is theoretically based on Self-determination Theory (Deci, 1985). Carré (1997) designed the tool to measure an intrinsic learning motivation based on the assertion that the main motive to learn is the satisfaction gained by the process of learning itself and the main result of the action is intrinsic to the activity of learning. The tool measures an extrinsic learning motivation wherein the extrinsic learning is a means to obtain external rewards or results. This instrument is considered a conceptual research model for the study of adult motives and orientations toward learning (Carré, 2000; de Oliveira Pires, 2009, p. 133; Rothes, 2014). Validity evidence was provided by cluster analysis and a large-scale, longitudinal study of adult learners at the commencement of and throughout a structured learning program.

Carré identifies three primary intrinsic motives that drive adults to enter into the learning process and which reflect learning as a source of satisfaction and pleasure (de Oliveira Pires, 2009, pp. 134-135). Carré also identifies seven extrinsic motives linked to the satisfaction or rewards externally obtained from the learning process. Learning is seen as a means to obtain other goals and rewards, which are external to the process (de Oliveira Pires, 2009, pp. 134-135).

Furthermore, the Carré Model contains a complete validated list of motives, organized according to learning orientation; a clarified vision of the reasons adults enroll in continuous learning activities; an operationalized, theoretical model of adult motivation for learning and an internally consistent instrument for measuring the two orientations which drive adult motivation toward learning (p. 4). A list of the intrinsic

and extrinsic motives defined by the Carré Model of Adult Orientation and Implication on Learning and Training Activities is included in Appendix C.

**3.3.2.3 Multifactor Leadership Questionnaire.** Similarly, participants responded to survey questions intended to capture perceptions of their leadership style and behavior; and, these survey questions were consistent with the Multifactor Leadership Questionnaire (“MLQ”—also known as ‘MLQ 5X short’ or the ‘standard MLQ’). This instrument reports on the likelihood that an individual engages in a specific type of leadership behavior. It identifies the characteristics of Transformational and Transactional leaders and is widely used as the research benchmark for leadership style (Bass, 2000; Lowe et al., 1996; Rowold, 2005). The MLQ, given its ability to assess leadership styles at the individual level, has been found to be the preferred model for evaluating leadership style. Validity evidence was provided through confirmatory factor analyses across cultures and different contexts (Antonakis, Avolio, & Sivasubramaniam, 2003). The MLQ also enables a unique three-level profiling of validated leadership profiles: across cultures, different organizational types and at different organizational levels (Avolio, Bass & Jung, 1997). Questions from the MLQ have been modified to reflect verbiage that slightly masks any obvious discrimination between Transformational versus Transactional leadership styles, to avoid response bias. Adapted questions preserve the researcher’s ability to capture honest and direct assessment of leadership behaviors by study participants.

**3.3.3 Data Collection.** The data gathered from the survey has been evaluated and statistically interpreted to determine if relationships exist between the independent and dependent variables. Findings have been quantified by statistical analysis of the raw

data. Statistical tests are aimed at both providing evidence of the study hypotheses as well as testing of the relationship between the variables. Descriptive analysis included the following: analysis of demographic data, tests of relationships between variables, arriving at participant's "Learning Quotient" (average score for learning motivation across the 14 learning motivation survey items) and "Leadership Quotient" (average for leadership style across the 22 leadership style survey questions ), and a linear regression test to provide support for the relationship between learning motivation and leadership style, a key focal point of this study. Tests of the study's hypotheses included: chi-square testing to determine dependence or independence between the independent variable and the dependent variable ( if the study's hypotheses hold, this test shows dependence), comparison of proportions test to test the proportion of each leadership style (Transformational, Transactional) at each level of learning motivation (Intrinsic, Extrinsic), and a logistic regression test to confirm the predictive capability of learning motivation on leadership style.

**3.3.4 Permission to Conduct the Study: IRB Approval.** Permission to conduct the study has been sought and obtained from the Institutional Review Board (IRB) of the University of South Florida. A copy of the official IRB Approval response is included in Appendix D.

The IRB has been informed that participants of the study are business professionals in leadership positions recruited to voluntarily participate in the study by email invitation. If they chose to participate, participants completed an online survey which should take no more than 10-15 minutes to complete. The survey has been designed to

ensure anonymity for each participant and the data did not capture any personally identifiable information from the participant.

This study involved minimal risk to participants. It required participants to voluntarily view and answer survey questions related to their learning motivation orientation and leadership style. Participation was strictly voluntary and participants were able to terminate their participation at any point during experimentation (i.e., not complete the survey).

## CHAPTER 4: RESULTS

### 4.1 Overview

This chapter presents the findings which emerge from a quantitative analysis of the data collected. To demonstrate rigor, this study invoked numerous statistical methods to confirm its hypotheses. The results of these methods are demonstrated herein. A fundamental goal drove the central purpose of this study and its resulting research questions: develop a base knowledge of leaders' motivational orientation to continue learning and determine if learning motivation can be used as a viable indicator of Transformational leadership potential. This objective was accomplished and the findings presented herein demonstrate potential for talent management professionals, executives, and scholars alike to use learning motivation as an indicator for optimizing leader identification and development.

The primary task of this study involves examining a sample population of adult learners, identifying their learning motivation orientation as either intrinsic or extrinsic, and determining if that is related to their behavior as either Transformational or Transactional leaders. This study asserts that intrinsically motivated adult learners are more likely to be Transformational leaders given their inherent drive to learn and develop continuously and desire to manifest their influence toward others' self-development, performance and goal attainment. Similarly, this study is expected to show that the extrinsically motivated adult learner is driven by the same type of external reward which characterizes their leadership style as Transactional.

## **4.2 Sample Criteria and Response Rate**

A total of approximately 400 invitations were sent to the target audience for this study. As noted in Chapter 3, the purposeful sample includes individuals from three cohorts of The University of South Florida's Doctorate of Business Administration (DBA) program, the researcher's own professional network, as well as invitations extended by invited participants themselves to their broad network of professional contacts. Invitations were extended to other Doctorate of Business Administration programs across the United States but refused by administrators of these programs citing an unfair constraint on constituents' time and focus. Criteria for inclusion in the study, also detailed in Chapter 3, limits participation to individuals who are known to have pursued or be actively pursuing continuous learning activities and who have held or currently hold a leadership position with oversight of at least two employees.

One hundred and thirty seven surveys were returned within a constricted availability window of just over three weeks. Twelve survey responses were unfinished, resulting in a total of 125 useable responses; unfinished observations have been excluded from further analysis due to incomplete response.

## **4.3 Preliminary Analysis of Demographic Data**

Survey responses provide demographic data, including gender as well as information on respondents' qualifications, which include industry, title, number of years (cumulative) in a leadership position, type of learning activities pursued and reimbursement method for learning activities. Tables 2 to 12 provide descriptive statistics for the aforementioned demographic conditions tested for the subjects in this study.

**4.3.1 Gender.** Participants in the study are primarily male. Of the 125 participants who completed the survey, 29.6 % are female and 70.4% are male. The proportional distribution of intrinsically motivated versus extrinsically motivated Transformational leaders and extrinsically motivated versus intrinsically motivated Transactional leaders across gender is seen below in Tables 2 and 3.

**4.3.2 Title and Experience.** A more proportional split exists when examining learning motivation against leadership style by title. This analysis focuses on individuals who reside in the C-Suite - i.e., CEO CFO CIO CTO VP, Director, Partner (57.6 %) and those who are self- employed entrepreneurs or solopreneurs (12%).

**Table 2**  
Frequency by Gender.

	Frequency	Percent
Female	37	29.6%
Male	88	70.4%
Total	125	100%

**Table 3**  
Learning Motivation and Leadership Style by Gender.

	Female		Male	
	Intrinsic	Extrinsic	Intrinsic	Extrinsic
Transformational	27%	11%	38%	17%
Transactional	24%	38%	13%	33%

Tables 4 and 5 illustrate that, within both the C-Suite and among business owners/entrepreneurs, there is a greater likelihood of those with an intrinsic learning motivation to be Transformational leaders. Notably, among the C-Suite sub-population, the distribution is equal between respondents who are extrinsically motivated to learn

Transformational leaders (6%) and extrinsically motivated to learn Transactional leaders (6%).

**Table 4**  
Learning Motivation and Leadership Style by C-Suite.

	Other		C-Suite <sup>a</sup>	
	Intrinsic	Extrinsic	Intrinsic	Extrinsic
Transformational	26%	10%	8%	6%
Transactional	9%	22%	6%	12%

<sup>a</sup> C-Suite combines the following titles: CEO, CFO, CIO, CTO, VP, Director, Partner.

**Table 5**  
Learning Motivation and Leadership Style by Business Owner/Entrepreneur.

	Other		Business Owner/Entrepreneur	
	Intrinsic	Extrinsic	Intrinsic	Extrinsic
Transformational	30%	16%	5%	0%
Transactional	12%	30%	3%	4%

In the overall population, the leadership experience of survey participants is widely distributed from a minimum of five to up to 50 years. However, the majority of individuals surveyed report 15 or more years' experience as a leader.

**4.3.3 Reimbursement for Learning Activities.** Almost three-fourths (72%) of the study population are funding their own continuous learning activities; and, the total percentage of intrinsically motivated adult learners paying for their own learning activities (48 %) is roughly equal to the extrinsically motivated adult learners (52%). Approximately 47.2 % of adult learners surveyed receive some form of company reimbursement. The survey question design permitted multiple selection, and 70% of participants report that their continuous learning activities were funded by more than

one source (i.e., self-pay *and* company reimbursement (partial); self-pay *and* military/government reimbursement (partial)). Results are noted in Tables 6, 7, 8

**Table 6**  
Frequency by Self-pay.

	Frequency	Percent
Other	35	28%
Self-pay	90	72%
Total	125	100%

**Table 7**  
Frequency by Company Reimbursement.

	Frequency	Percent
Other	66	52.8%
Self-pay	59	47.2%
Total	125	100%

**Table 8**  
Learning Motivation and Leadership Style by Self-pay.

	Intrinsic	Extrinsic
Transformational	30	14%
Transactional	18	38%

**Table 9**  
Learning Motivation and Leadership Style by Company Reimbursement.

	Intrinsic	Extrinsic
Transformational	34	27%
Transactional	10	29%

**4.3.4 Industry.** The distribution of participant responses on industry is diverse, showing no strong correspondence with learning nor leadership style respectively (see Tables 10, 11 and 12).

#### 4.4 Analysis of Relationships between Variables

Participants were asked to answer two sets of survey questions, with 14 questions measuring the independent variable - learning motivation orientation (Questions 5-10 measure an intrinsic learning motivation and Questions 11-18 measure an extrinsic learning motivation) and 22 questions measuring the dependent variable - leadership style (Questions 20-31 measure a Transformational leadership style and Questions 32-41 measure a Transactional leadership style ). All questions were answered on a five point Likert sliding scale, ranging from 'Not at All' to 'Very Often' with a midpoint of 'Sometimes', wherein participants were asked to rate if a behavior 'Is True of Me'. The scale was flipped for both extrinsic and Transactional survey questions in order to unify the direction of scoring and support the subsequent analyses.

**Table 10**  
Frequency by Industry.

	Frequency	Percent	Cumulative Percent
Construction	5	4.0%	4.0%
Education	14	11.2%	15.2%
Finance/Banking	11	8.8%	24.0%
Healthcare	15	12.0%	36.0%
Hospitality	1	0.8%	36.8%
Manufacturing	4	3.2%	40.0%
Military	5	4.0%	44.0%
Professional Services	18	14.4%	58.4%
Sales	3	2.4%	60.8%
Technology	24	19.2%	80.0%
Other	25	20.0%	100.0%
Total	125	100.0%	

**Table 11**  
Industry by Leadership Style.

	Transformational	Transactional
Construction	33	2
Education	8	6
Finance/Banking	5	6
Healthcare	12	3
Hospitality	0	1
Manufacturing	2	2
Military	1	4
Professional Services	7	11
Sales	1	2
Technology	13	11
Other	11	14
<b>Total</b>	<b>63</b>	<b>62</b>

**Table 12**  
Industry by Learning Motivation.

	Intrinsic	Extrinsic
Construction	3	2
Education	5	9
Finance/Banking	7	4
Healthcare	10	5
Hospitality	0	1
Manufacturing	2	2
Military	2	3
Professional Services	11	7
Sales	1	2
Technology	9	15
Other	12	13
<b>Total</b>	<b>62</b>	<b>63</b>

Several statistical tests seeking evidence in support of the relationship between the independent variable, intrinsic or extrinsic learning motivation, and dependent variable, Transformational or Transactional leadership style were conducted. Transformational Leadership Theory suggests that the leader leverages influence based on his own prior

actions, modeling a dedication to knowledge acquisition and sharing, and intellectually stimulating his team (Bass, 1985). As expected, prior research has found that the Transformational leader has a direct and positive impact on team member development, enhances team member motivation and effects an increase in individual performance and, in turn, aggregate, organizational results (Dvir, Eden, Avolio, & Shamir, 2002, p. 736). In all, this study posits a positive and linear relationship, where the attributes of the intrinsically motivated adult learner act as antecedents to Transformational leadership behavior. Similarly, the extrinsically motivated adult learner will be inherently inclined to exhibit Transactional leadership behavior.

First, to determine each participant's predisposition toward learning motivation orientation and leadership style, an average learning score and leadership score was calculated by taking the average of each respondent's answers to the 14 learning motivation and 22 leadership style questions; this average score is heretofore known as the respondent's "Learning Quotient" and "Leadership Quotient". Nunnally (1967) cites justification for the use of average scores versus individual survey items as reliable when testing hypotheses and suggests using 0.7 as the cut-off point for scale reliability. Therefore, using 0.7 as a reliable cut-off point, a Cronbach's Alpha score of 0.702 confirms learning scale reliability and 0.796 confirms leadership scale reliability, respectively (see Table 13).

**Table 13**  
Cronbach's Alpha: Score Reliability.

	Cronbach's Alpha	N
Learning Motivation Score Reliability	0.702	14
Leadership Style Score Reliability	0.796	22

Based on the scale reliability tests ((learning scores = 0.702 > 0.7) and (leadership scores = (0.796 > 0.7)), it is valid to use each respondent's average scores across the survey items to represent the learning and leadership constructs.

Next, following the approach suggested by Johnson and Wichern (1988) and Kadous, Kennedy, and Peecher (2003), a median split was calculated to categorize continuous variables into two groups. The two continuous variables in this study are average learning motivation scores (i.e., Learning Quotient) and average leadership style scores (i.e., Leadership Quotient). The median split method divides the population in half based on the values of each continuous variable (Kadous et al., 2003, p. 767)

The median score for Learning Quotient is 2.58 and 2.73 for Leadership Quotient, respectively. Participants with a Learning Quotient greater than or equal to 2.58 are considered intrinsically motivated to learn and those with a Leadership Quotient greater than or equal to 2.73 on the leadership scale are considered Transformational leaders. Conversely, any participant with a Learning Quotient less than 2.58 is considered extrinsically motivated to learn and any with a Leadership Quotient less than 2.73 is considered a Transactional leader. The two continuous variables, Learning Quotient and Leadership Quotient were re-coded as two dummy variables set as follows: Learning Style (1 = intrinsic, 0 = extrinsic) and Leadership Style (1 = Transformational, 0 = Transactional). Accordingly, this study's hypotheses predict that:

**H1:** Those with an intrinsic learning style (Learning Quotient  $\geq$  2.58) are more likely to be classified as a Transformational leader (Leadership Quotient  $\geq$  2.73) than those with an extrinsic learning style (Learning Quotient < 2.58).

**H2:** Those with an extrinsic learning style (Learning Quotient < 2.58) are more likely to be classified as a Transactional leader (Leadership Quotient < 2.73) than those with an intrinsic learning style (Learning Quotient > 2.58).

These expectations lead to the presumption that as learning motivation is more intrinsic, leadership style will present as more Transformational; and, similarly, as learning motivation is more extrinsic, leadership style will present as more Transactional.

Prior to testing the hypotheses, a potential correlation between the Learning Quotient and the Leadership Quotient of the study population was tested using Pearson's correlation coefficient (see Table 14). This statistic indicates that the average of learning motivation scores across the entire sample is positively correlated (+0.504) with the average of leadership style scores across the entire sample and is highly significant ( $p < 0.001$ ). This result provides evidence that participants with a Learning Quotient greater than or equal to 2.58, should also display a Leadership Quotient of 2.73 or greater, with the converse also being true. In other words, participants whose Learning Quotient scores reveal an intrinsic motivation to learn will also be shown as having a Transformational style of leadership. Similarly, Learning Quotient scores less than 2.58 should be followed by Leadership Quotient scores of less than 2.73, indicating that participants whose Learning Quotient scores reveal an extrinsic motivation to learn will also be shown as having a Transactional style of leadership. Consequently, these results support both Hypothesis 1 and Hypothesis 2.

**Table 14**

Pearson Correlation: Learning Motivation and Leadership Style.

Learning Motivation x Leadership Style	
Pearson Correlation	0.504
Significance (2-tailed)	<0.001
N	125

With evidence of a positive correlation between the independent and dependent variables, a linear regression model can be used to examine how the dependent variable (DV) changes in the presence of the independent variable (IV). The average of the leadership style scores (DV) is regressed on the average of the learning motivation scores (IV). With a positive significant coefficient (0.45,  $p < 0.001$ ), the results indicate that the value of Leadership Quotient will increase as the value of Learning Quotient increases (see Table 15).

**Table 15**

Linear Regression.

DV: Leadership Style

	B	Std. Err.	t	R-squared	Sig.
(Constant)	1.587	0.186	8.533	1	<0.001
Learning Motivation	0.452	0.070	6.471	0.254	<0.001

The linear regression model's R-squared value, 0.254, further substantiates this relationship and supports that 25.4% of the variance in the study's dependent variable (i.e., leadership style) is explained by the variance in its independent variable (i.e., learning motivation orientation). Therefore, there is evidence that the more intrinsically motivated to learn that a participant is, the higher the tendency that the individual is to be a Transformational leader. The results of this linear regression provide support for

the relationship between learning motivation and leadership style, a key focal point of this study.

#### **4.5 Tests of Hypotheses**

Hypothesis 1 predicts that if a participant is intrinsically motivated to learn, then one will also be more likely to be a Transformational leader than his extrinsically motivated counterpart. Descriptive data of the study population shows that, for Transformational leaders, 68.3% are intrinsic learners and 31.7% are extrinsic learners; these results are aligned with the relationship predicted in H1.

Hypothesis 2 predicts that if a participant is extrinsically motivated to learn, then one will also be more likely to be a Transactional leader than one's intrinsically motivated counterparts. Results show that, for Transactional leaders, 69.4% are extrinsic learners and 30.6% are intrinsic learners; these results are aligned with the relationship predicted in H2.

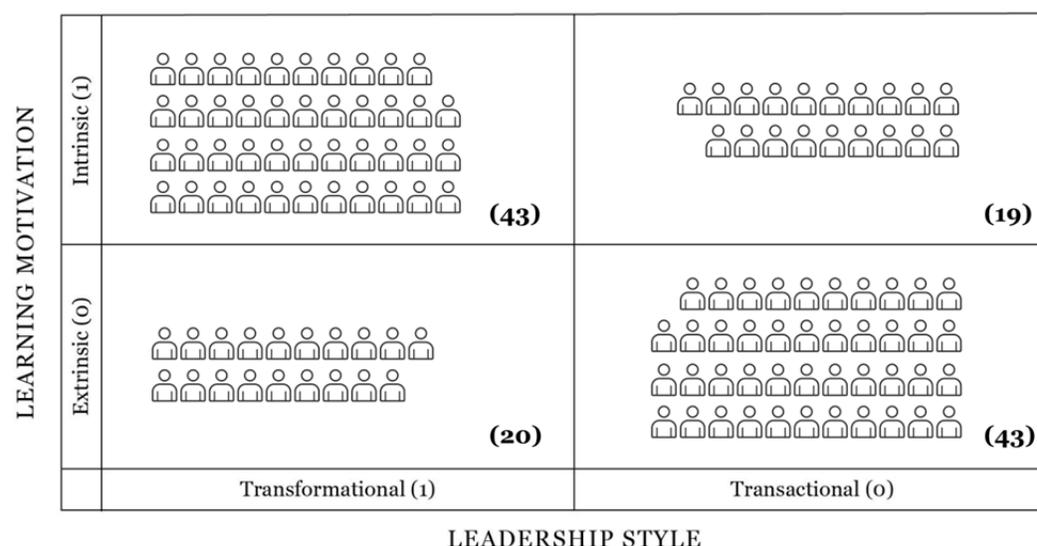
Using the median cut of both learning motivation and leadership style scores across the study population, Table 16 illustrates findings consistent with the study's hypotheses: Transformational leaders who are intrinsically motivated to learn exceed those that are extrinsically motivated to learn; Transactional leaders who are extrinsically motivated to learn exceed those that are intrinsically motivated to learn. The distribution supports both hypotheses, and confirms the expected non-random dependence of leadership style on learning motivation within the study's population.

Figure 10 includes the 2x2 experimental design into which participants were categorized. As hypothesized, quadrants (i) and (iv) are proven to be most true, while

alternative mutations (ii) and (iii) do exist among the study population in smaller quantities.

**Table 16**  
Median Cut: Learning Motivation and Leadership Style.

		Learning Motivation Median Cut			
		Intrinsic		Extrinsic	
		Count	N%	Count	N%
Leadership Style Median Cut	Transformational	43	68.3%	20	31.7%
	Transactional	19	30.6%	43	69.4%



**Figure 10**  
Learner - Leader Distribution, Actual.

Next, a chi-square test on the overall proportions is reported in Table 17. The chi-square value (17.689) is robust and significant ( $p = 0.000 < .05$ ) with respect to the distribution of the data, confirming dependence of leadership style on learning motivation. This result illustrates that the study's sample is significantly different than the null hypothesis of no relationship between learning motivation and leadership style.

**Table 17**

Pearson Chi-square Test.

	Learning Motivation Median Cut	
	Chi-square	17.689
Leadership Style Median Cut	df	1
	Sig.	.000 <sup>b</sup>

<sup>b</sup> The Chi-square statistic is significant at the .05 level.

The chi-square test demonstrates that the study's categorical variables (learning motivation and leadership style) are dependent/related (i.e., an intrinsically motivated learner is likely to exhibit a Transformational leadership style and an extrinsically motivated learner is likely to exhibit a Transactional leadership style.) Consequently, this test provides additional evidence that an individual's learning motivation is associated with leadership style.

A follow-up test of column proportions directly tests Hypothesis 1 and Hypothesis 2 (see Table 18), and affirmatively answers the question, "*can learning motivation be used to forecast leadership style?*" This test examines the median cut of learning motivation independently, comparing it against the leadership style values. It tests whether the proportion of respondents in one column is significantly different from the proportion in the other column. In this study, H1 predicts that the Intrinsic-Transformational column count will be greater than the Extrinsic-Transformational column count; and, similarly, H2 predicts that the Extrinsic-Transactional column count will be greater than the Intrinsic-Transformational column count. In other words, Table 18 affirms that intrinsic learners are more likely to be Transformational leaders than their extrinsic counterparts (Chi-squared = 7.329, p-value = 0.0068); and, extrinsic learners are more likely to be Transactional leaders than their intrinsic

counterparts (Chi-squared = 7.987, p-value = 0.0047). The Chi-squared values (7.329 /7.987) and p-values (0.0068/0.0047) are significant and once again support dependence between the variables.

Collectively, the test of column proportions and chi-square statistic tests are consistent with the study’s proportional predictions in H1 and H2. Overall results indicate that the null hypothesis of equal proportions is rejected, the presence of an intrinsic motivation to learn is more likely to result in Transformational leadership behavior than an extrinsic learning motivation and the presence of an extrinsic motivation to learn is more likely to result in Transactional leadership behavior than an intrinsic learning motivation.

**Table 18**  
Test of Column Proportions.

		Learning Motivation Median Cut				Test of Column Proportions	
		Intrinsic		Extrinsic			
		Count	N%	Count	N%		
Leadership Style Median Cut	Transformational	43	68.3%	20	31.7%	Chi-square = 7.329	p = 0.0068
	Transactional	19	30.6%	43	69.4%	Chi-square = 7.987	p = 0.0047

To address research questions one and two, “*Are intrinsically-motivated adult learners more likely to be Transformational leaders than their extrinsically motivated counterparts?*” and... “*Are extrinsically-motivated adult learners more likely to be Transactional leaders than their intrinsically motivated counterparts?*”, proportions of respondents whose leadership style is Transformational are compared to those whose leadership style is Transactional, respectively, at each level of learning motivation. The column of proportions test is the most accurate measure to explore the research

questions and test the study's hypotheses, given that this study is exploring how much *more likely* an intrinsic learner is to be a Transformational leader compared to an extrinsic learner (RQ1/H1); and, how much *more likely* an extrinsic learner is to be a Transactional leader compared to an intrinsic learner (RQ2/H2).

The test of column proportions offers statistical evidence to confirm both Hypothesis 1 and Hypothesis 2. For Transformational leaders, 68.3% are intrinsically motivated to learn and 31.7% are extrinsically motivated to learn– supporting the relationship predicted in H1. For Transactional leaders, 69.4% are extrinsically motivated to learn and 30.6% are intrinsically motivated to learn – supporting the relationship predicted in H2. The p-values are both significant ( $p=0.0068$  and  $p= 0.0047$ ) after the Bonferroni adjustment as shown in Table 18. The proportion of Transformational leaders with an intrinsic learning motivation (68.3%) is statistically higher ( $p=0.0068$ ) than those with an extrinsic learning motivation (31.7%) and the proportion of Transactional leaders with an extrinsic learning motivation (69.4%) is higher ( $p=0.0047$ ) than those with an intrinsic learning motivation (30.6%).

Further justification of these findings is seen in Table 19. If knowledge of learning motivation was not associated with leadership style, then the cell distribution would most likely be balanced as shown by the 'expected count' values: 31.2, 30.8, 31.8, and 31.2. In contrast, the observed distribution behaves in this pattern: 43, 19, 20, and 43, providing further evidence that leadership style is significantly affected by learning motivation. This finding has already been confirmed vis a vis the chi-square test of column proportions (see Table 18) which confirms that the two variables are dependent upon each other and their distributions, therefore, are disproportional.

**Table 19**  
Learning Motivation and Leadership Style Cross-Tabulation.

		Learning Motivation Median Cut			
		Intrinsic	Extrinsic	Total	
Leadership Style Median Cut	Transformational	Count	43	20	63
		Expected Count	31.2	31.8	63.0
	Transactional	Count	19	43	62
		Expected Count	30.8	31.2	62.0
Total		Count	62	63	125
		Expected Count	62.0	63.0	125.0

Finally, given that this study also asserts that learning motivation holds value for organizations to *pre-* identify, develop and promote potential Transformational leaders, a logistic regression to test the predictive capability of learning motivation on leadership style is conducted (see Table 20). The results of this analysis illustrates that, in the presence of the independent variable - learning motivation, the overall prediction accuracy of the dependent variable - leadership style is increased from 50% (i.e., predicting by chance (if you do not know anything about learning style)) to 68.8%. Therefore, knowing and acknowledging an individual's learning motivation provides an 18.8 % improvement of evaluating leadership style accurately.

**Table 20**  
Logistic Regression.

		Learning Motivation Orientation		
		Intrinsic	Extrinsic	Percentage Correct
Leadership Style Median Cut	Transformational	43	Observed 19	68.3%
	Transactional	20	43	69.4%
Overall		63	62	68.80%

Chapter five examines the implications of these findings. Results of the statistical tests will be discussed in the context of the study's hypothesized predictions and the assertion that learning motivation can be used to anticipate leadership style.

## 4.6 Supporting Analysis

**4.6.1 Survey Design Evaluation.** A confirmatory factor analysis of the learning motivation and leadership style questions suggests that some of the construct-specific questions are more indicative measures of participants' variance in learning motivation and leadership style, respectively. Questions with an R-squared value of  $> 0.40$  are noted to be the most impactful at explaining this variance.

As noted previously, participants were asked to answer two sets of survey questions, with 14 questions measuring the independent variable - learning motivation orientation (Questions 5-10 measure an intrinsic learning motivation and Questions 11-18 measure an extrinsic learning motivation) and 22 questions measuring the dependent variable - leadership style (Questions 20-31 measure a Transformational leadership style and Questions 32-41 measure a Transactional leadership style).

Question five (R-squared 0.489) - "Continuous learning is a source of fulfillment and satisfaction." is the most impactful at explaining variance in intrinsic learning motivation orientation while questions 14 (R-squared 0.526) - "I participate in continuous learning activities because the knowledge I acquire will result in career advancement/earning more money." and 18 (R-squared 0.579) - "I primarily participate in continuous learning activities when the knowledge I acquire will help me advance in my career (promotion, new position, new functional area or field." - explain the greatest variation in extrinsic learning motivation. Questions six through ten all

have insignificant R-squared values ( $< 0.40$ ) and are not useful in explaining variance in intrinsic motivation, while questions 12, 13, 14, 15, and 16 are similarly inadequate in explaining variance in extrinsic learning motivation.

Variance in Transformational leadership style is most robustly measured in questions 24 (R-squared = 0.403) – “I encourage my team members to learn so they can experience personal growth and development.”, 28 (R-squared = 0.449) – “As a leader, I help my team members develop their strengths.”, 29 (R-squared = 0.459) – “I encourage and support team members to exceed their potential and set personal goals for achievement.” and 30 (R-squared = 0.415) – “As a leader, I strive to heighten others' desire to succeed.” while a Transactional leadership style is most robustly measured by questions 37 (R-squared = 0.406) – “I implement detailed instructions for my team and monitor progress on deliverables” and 38 (R-squared = 0.460) – “Measuring team members' performance on individual tasks increases the potential for successful results.” As reported in Table 21, questions 20-23, 25-27 and 31 through ten all have insignificant R-squared values ( $< 0.40$ ) and are not useful in explaining variance in Transformational leadership style, while questions 32-26 and 39-41 are similarly inadequate in explaining variance in Transactional leadership style.

These values are reported in Table 21. The findings contribute to an assessment of the most loaded and, therefore, valuable questions included in the study survey and subsequent measurement of participants' learning motivation orientation and

leadership style. In future studies that seek to evaluate these constructs, questions with

**Table 21**

Confirmatory Factor Analysis: Survey Question Evaluation.

	Question No.	Estimate (r-squared)	S.E.	Est./S.E.	P-value
Intrinsic Learning Motivation	Q.5	0.489	0.097	5.025	0.000
	Q.6	0.28	0.086	3.265	0.001
	Q.7	0.297	0.089	3.351	0.001
	Q.8	0.353	0.091	3.868	0.000
	Q.9	0.168	0.074	2.282	0.023
	Q.10	0.351	0.090	3.909	0.000
Extrinsic Learning Motivation	Q.11	0.185	0.076	2.439	0.015
	Q.12	0.002	0.009	0.204	0.838
	Q.13	0.016	0.026	0.606	0.545
	Q.14	0.526	0.094	5.581	0.000
	Q.15	0.089	0.056	1.597	0.110
	Q.16	0.369	0.090	4.102	0.000
	Q.17	0.250	0.082	3.055	0.002
Transformational Leadership Style	Q.10	0.579	0.095	6.079	0.000
	Q.20	0.320	0.080	1.015	0.000
	Q.21	0.204	0.073	2.808	0.005
	Q.22	0.248	0.076	3.255	0.001
	Q.23	0.345	0.079	4.348	0.000
	Q.24	0.403	0.079	5.091	0.000
	Q.25	0.273	0.076	3.577	0.000
	Q.26	0.179	0.069	2.591	0.010
	Q.27	0.321	0.078	4.113	0.000
	Q.28	0.449	0.079	5.689	0.000
	Q.29	0.459	0.080	5.740	0.000
Transactional Leadership Style	Q.30	0.415	0.080	5.177	0.000
	Q.31	0.325	0.078	4.152	0.000
	Q.32	0.003	0.011	0.267	0.790
	Q.33	0.255	0.080	3.198	0.001
	Q.34	0.388	0.085	4.555	0.000
	Q.35	0.322	0.084	3.850	0.000
	Q.36	0.140	0.068	2.066	0.039
	Q.37	0.406	0.085	4.761	0.000
	Q.38	0.460	0.085	5.385	0.000
	Q.39	0.162	0.070	2.321	0.020
	Q.40	0.197	0.076	2.599	0.009
Q.41	0.285	0.082	3.490	0.000	

insignificant R-squared values require additional caution prior to inclusion, and researchers may consider modifying the content of those items.

**4.6.2 Open-ended Responses.** To obtain further insight into participants' learning motivation and leadership style, responses to the open-ended questions included in the survey have been reviewed. The quotations are anecdotal only and formal coding methods have not been applied. Inclusion of these responses is solely intended to offer a first-hand understanding of respondents' lived experiences as adult learners and leaders. Analysis of open-ended responses is independent of Learning Quotient or Leadership Quotient.

Responses to each of the four open-ended questions were reviewed to identify indicators of participants' learning motivation and its relationship with leadership style, attributes of the participants, their perspective on leaders who learn, and their lived experiences as leaders. The four open ended questions presented are:

Question 43: *How has your participation in continuous learning activities (and acquisition of new knowledge) impacted the way you lead?*

Question 44: *Do you believe that there are any adverse effects [to teams and/or organizations] when leaders do not pursue continuous learning activities?*

Question 45: *Has your leadership style changed significantly based on the position, situation or organization you were in at the time? Please provide examples if appropriate.*

Question 46: *Describe a few characteristics that you have which you believe make you a good leader.*

For Question 43, collectively 95% of survey respondents cite positive affirmation of the impact that continuous learning has had on their leadership efficacy and development while 5% of participants cite no impact. Responses detail improvements in awareness, emotional intelligence, critical thinking and knowledge application gains, learning agility and broadening of perspective, increases in ability to motivate and influence and mentor, and improvements in adaptability and diversity of thought. The affirmative responses are consistent with the iterative impact that continuous learning at the leadership level has on both the leader and his constituents. Sosik et al. (2004) confirm that the mentor-mentee connection between leader and team member progresses as a result of the learning motivation and developmental journey of the mentor but bears positive results for both. These leaders manifest their personal journey of learning and development to followers by inspiring them to increased levels of goal attainment and performance, intellectually stimulating them, and forming them into leaders themselves (Scandura & Schriesheim, 1994; Sosik et al., 2004, p. 245)

For Question 44, an overwhelming 98% of respondents responded affirmatively, with only 2% citing that learning habits of the leader do not adversely impact the team or organization. From a practical perspective, leaders who learn tend to model and promote learning to their constituents, creating a ripple effect whereby informing leads to transforming. Collectively, the leader who learns, when coupled with learning of team members, incites improvements in creativity, critical thinking, agility, flexibility, and quality which can be translated into sustainable competitive advantage across the entire organization (Jyoti & Dev, 2015).

Responses to Question 45 and Question 46 are examined for relevance to the participants' perspectives on continuous learning, specifically. The results of a schematic content analysis reveal that continuous learning is viewed as a tool and catalyst for expanded leadership efficacy, assisting these learner-leaders to proactively adapt to rapid change, increasing their decision-making agility and overall impact on the business environment. Conversely, participants cite a concern that leaders who do not seize the opportunity to broaden their perspective, knowledge base and critical thinking risk stagnation and, in turn, organizational status quo.

The responses reveal other insights into participants' perception of the impact that continuous learning has had on their leadership style, behaviors and trajectory. One participant cites that his leadership style has evolved as a result of continuous learning; the knowledge gained has allowed him to adapt more easily, achieve higher levels of lucidity and focus amidst challenging changes because one has a reservoir of experience, knowledge and perspective from which to draw. Continuous learning has offered insight, information and, in turn, solutions that can be injected into to current issues – all assets that this participant's other leader peers lacked – and which contributed to his subsequent upward mobility within his organization. Another notes that as a leader evolves, the tools and skills one develops should grow as well. Continuous learning has contributed to another participant's ability to create solutions and/or modify current methods to drive results; furthermore, he has consistently contributed and driven growth because of what his organization considers to be his unique "outside perspective".

Among the most notable discoveries from participants' responses, these learner-leaders demonstrate the indirect effects that the pursuit of continuous learning has had on their leadership style and efficacy. One participant states that "Knowledge is power. The more I know and understand, the more I can successfully lead others to work through their challenges to realize success and achievements"; and, another cites that "Continuous learning is a form of humility, and humility is a necessary component to truly exceptional leadership." One study participant notes that his own continuous learning has increased his understanding of and support for other team members' individual goal attainment; this participant, in turn, provides more mentoring and individualized consideration to these constituents in an effort for them to be successful. In conclusion, one participant's response offers a concise summation of the significance that openness to new knowledge and the innate, relentless pursuit of it may bring: "We cannot take someone where we have not been. Therefore, continuous learning allows me to advance and teach others how to do the same." Overall, these responses map a pathway back to the value of continuous learning and its perceived impact on decision-making and leadership efficacy from those in role.

## CHAPTER 5: DISCUSSION

### 5.1 Background

Given the results of the statistical tests in this exploratory study, regarding the correlation between learning motivation and leadership style, this discussion will explore the effectiveness of using learning motivation as a tool for leader selection and development. Results of a logistic regression indicate that the ability to project leadership style is 18.8% higher when awareness of learning motivation orientation is present. These results suggest that learning motivation is a viable marker of leadership style; they also offer insights for learning motivation to be used as a tool for organizations to access employees with the potential to be Transformational leaders and to leverage learning motivation as an effective leadership competency.

### 5.2 Key Findings and Contributions

The primary goal of this study is to identify if a relationship exists between an individual's learning motivation and leadership style. Specifically, the study's hypotheses predict that intrinsically motivated adult learners are more likely to be Transformational in leadership style, and conversely, extrinsically motivated adult learners are more likely to be Transactional in leadership style.

The overarching research question of this study asks if learning motivation orientation may serve as an indicator of leadership style. The Pearson correlation statistic measures the linear correlation between the study's continuous variables, Learning Quotient and Leadership Quotient; results from this test confirm that learning

motivation is correlated with leadership style (Pearson correlation coefficient 0.504). In further response to this research question, a linear regression model provides support for a positive relationship between these two variables<sup>7</sup>. Specifically, these results indicate that the more intrinsically motivated to learn that a participant is, the higher the tendency that the individual is to be a Transformational leader. This finding supports the study's intention of employing learning motivation as a predecessory marker of leadership style. The results of these preliminary statistical tests position leadership style in the context of learning motivation, and show that intrinsically motivated adult continuous learners have a high likelihood and potential predisposition to be Transformational leaders.

Analogous to the Pearson correlation and linear regression tests, results of both a chi-square test of overall proportions and a test of column proportions provide strong evidence in support of both Hypothesis 1 and Hypothesis 2. As indicated in the study's hypotheses, learning motivation and leadership style are shown to be dependent on each other (Chi-square = 17.689;  $p < 0.0001$ ). The test of column proportions offers evidence that the proportion of respondents who are Transformational in leadership style and intrinsically motivated to learn is significantly different from the proportion of those who are extrinsically motivated to learn (68.3% vs. 31.7%) and that the proportion of respondents who are Transactional in leadership style and extrinsically motivated to learn is significantly different from the proportion of those who are intrinsically motivated to learn (69.4% vs. 30.6%). Therefore, as predicted, these tests find that intrinsic learners are more likely to be Transformational leaders than their extrinsic

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<sup>7</sup> The linear regression equation for predicting Learning Quotient is:  $y=1.58+.45x$  where 'x' is the average learning motivation score and 'y' the average leadership style score.

counterparts while extrinsic learners are more likely to be Transactional leaders than their intrinsic counterparts.

Unlike prior research, which examines each construct separately, this study aims to tie together the constructs of motivation, adult learning and leadership by assimilating existing scholarly research and presenting it in the context of new statistical evidence. These findings support both objectives. Results of these tests can be used to consider the rationale which underlies the relationship between learning motivation and leadership style.

**5.2.1 Practical Contribution.** From a practitioner perspective, it remains of interest to investigate if learning motivation, identified early on in an individual's career lifecycle, has implications for an organization's talent management and succession planning practices. Among this study's most important discoveries, its findings suggest that learning motivation orientation is a reliable indicator of leadership style. This finding is noteworthy to executives, human resource management professionals and talent managers who may implement a learning motivation orientation test or include it in competency modeling to measure an individual's learning motivation orientation. Based on the results of this test, they will be positioned to identify the learning motivation orientation of high performing, high potential emerging leaders as either intrinsic or extrinsic and reliably forecast these individuals' leadership style as Transformational or Transactional. This is important particularly in the context of organizations that may require either a Transactional or Transformational style of leadership to thrive.

Furthermore, results of this study offer perspective on the central role that learning as a competency may play in identifying leader potential and maximizing the efficacy of leadership development programs. In line with this study's research, Dechant (1990) posits that the ability to learn might be the "most salient" competency for leadership; and, encouraging others to learn is a leader's most important task (Marquardt, 2000, p. 237). Cunha and Louro (2000) suggest that the development of self-awareness and pursuit of personal development are significant contributors to a leader's effectiveness; Senge (1990) and Bennis (1984) concur that leaders must both value and be responsible for learning. Organizations at the forefront of sustainability, competitive advantage and innovation differentiate themselves from their peers by the exceptional degree of their focus and commitment to leadership identification, selection, and development programs (Gomez, 2007). Therefore, a learning motivation orientation metric could prove very informative to practitioners seeking to develop and implement such programs.

Additional research in the past two decades submits a more wide-spread belief that learning is a leadership core competency required for success at the individual, team and organizational level. In fact, a leader's inclination to and capacity for learning may be his most significant attribute and predictor of role efficacy (Dechant, 1990; Marquardt, 2000). The advent of the "Learning Organization" (Senge, 1990) provides further corroboration that learning is becoming critical for the success of the business, and that great leaders must also be mentors, coaches and co-learners (Marquardt, 2000, p. 237). While identifying learning motivation orientation as an antecedent of leadership

style may sound deceptively simple, the results of this study illustrate that it is a robust indicator of the potential to identify an individual's style of leadership in role.

This study set out to identify if there is a relationship between an individual's learning motivation orientation and leadership style. Accordingly, Hypothesis 1 predicts and the statistical results from this study confirm that the proportion of Transformational leaders with an intrinsic learning motivation (68.3%) is higher than those with an extrinsic learning motivation (31.7%) in this study's population. A Transformational leader is intrinsically motivated to learn (Coad & Berry, 1998). Recognizing that Transformational leaders have a distinct ability to contribute to organizational success, this style of leadership is growing in demand in today's unprecedented and uncertain business landscape (PwC, 2017). They view learning as a source of both fulfillment and pleasure; learning is a means by which to establish relationships and nurture others' development as much as their own (Carré, 1997).

Transformational leaders pursue a parallel path of internal growth and transformation which is then transferred to the individual and team level and which produces results and growth that are transformative for the organization (Anthony & Schwartz, 2017). They have confidence in their ability to learn and, in turn, to teach others and propel them to greater levels of success than they could achieve on their own. They are not afraid to be challenged or made uncomfortable in the face of new tasks or uncharted professional or intellectual territory. In fact, they seek to be developed vis a vis the unknown; they view continuous learning as a means to develop competencies they did not know they needed, or in preparation for that which they might need at some unknown point in the future. In a study conducted by Botelho (2017), in

conjunction with Harvard Business School's "CEO Genome Project", executives cited the ability to proactively adapt to their changing organizational environment as a critical success factor. Transformational leaders are learning agile; they electively acquire knowledge as an antidote to change, uncertainty and ambiguity (Cashman, 2013; Johnson, 2002, p. 243). Consequently, while effective leadership is not solely a function of one attribute, the results of this study support utilizing learning motivation orientation as an enhanced technique to identify individuals with an intrinsic motivation to learn as more likely to possess the attributes of a Transformational style of leadership. Therefore the last statistical test, a logistic regression, addresses the predictive capability of learning motivation on leadership style. The results of this test provide evidence that if an individual's learning motivation orientation is known, those requiring this information benefit from an improved ability<sup>8</sup> to forecast leadership style. In turn, organizations for which a Transformational style of leadership is well-suited and critical to performance will significantly increase their chances of advancing individuals with the optimal leadership profile (Botelho, 2017) and creating a robust succession channel.

In summary, Transformational leaders are most likely to value learning as a lifelong endeavor (Johnson, 2002, p. 243; Tichy & Devanna, 1986). Numerous studies also cite transformational leadership as vital to advancing organizational learning, thus enhancing organizational performance (Choudhary et al., 2013; Senge, 1990).

Transformational leaders intentionally seek intellectual challenges and learning

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<sup>8</sup> As noted in Chapter 4 (Table 20), the overall prediction accuracy of the dependent variable - leadership style is increased from 50% to 68.8% in this study, thereby producing an 18.8 % improvement of predicting leadership style accurately.

opportunities; in turn, they encourage critical thinking, communication and alignment of tasks with the organizational vision in role. These leaders offer a holistic approach to leadership by first providing team members with a vision to which to aspire, and the values, enhanced skills, and confidence to exceed performance expectations; as a consequence, transformation begins to occur and perpetuate throughout the organization (Avolio, Bass, & Jung, 1997). It is for these reasons that this study aims to enhance research efforts around the science of learning motivation, and specifically, the manifestation of an intrinsic learning motivation in Transformational leaders.

**5.2.2 Academic Contribution.** Limited scholarly literature exists to examine the direct relationship between learning motivation orientation and leadership style. This study approaches leadership from the unique perspective of the adult learner turned Transformational leader; and, it further seeks to connect the constructs of motivation, adult learning and leadership by exploring the connection between the intrinsically motivated adult continuous learner and Transformational leader. Consequently, there are numerous possibilities for how future research on the learning motivation orientation of leaders may enrich the selection process of the learning activities for these individuals. This research may also inform higher education institutions and learning professionals how to best satisfy the needs and expectations of these learner-leaders. They could apply this information when examining the format and delivery of professional continuing education courses to maximize adult learner satisfaction and balance their constraints, designing marketing collateral to appeal to these learners' intrinsically or extrinsically motivated drivers, and/or connecting intrinsic versus extrinsic motivations to learn to employee performance metrics.

**5.2.3 Exploratory Findings – Demographic Data.** Analysis of the demographic data produced findings that build on this study's assertion that leaders of various ages, gender and industries are embracing continuous learning as a tool to develop, contribute and advance in today's increasingly complex business world.

**5.2.3.1 Gender.** Based on the study's population, females with an intrinsic learning motivation are almost equally likely to be Transformational (27%) versus Transactional (24%) leaders; however, females with an extrinsic learning motivation skew in favor of H2, with 38% Transactional and only 11% Transformational. Therefore, regardless of learning motivation orientation, these results suggest that continuous learning is viewed as a fundamental leadership necessity for females. Furthermore, studies conducted by educational psychologists suggest that females consistently set higher learning expectations for themselves and evaluate their own performance more critically (Feingold, 1994). Males surveyed in this study follow the proportional split as predicted in H1 and H2: intrinsically motivated subjects (38%) are more than double their extrinsically motivated equivalents (17%) in Transformational leadership style scores with the converse also true that extrinsically (33%) motivated male subjects outweigh their intrinsically motivated equivalents (11%) in Transactional leadership style scores. These results are noted in Table 3.

**5.2.3.2 Reimbursement.** Also interesting and unexpected, the participants surveyed who pay for their own continuous learning activities are equally allocated within the intrinsic/extrinsic learner subsets (48%/52% respectively). Considering a simplified cost-benefit analysis, one might expect that intrinsically motivated adult learners would be more willing to sponsor their own continuous learning

activities/cover the cost of their own personal development based on the inherent satisfaction and fulfillment they derive from the activities. Yet, a large percentage (34%) of intrinsically motivated learners in the study population had their activities sponsored by company reimbursement. Extrinsically motivated learners exhibit approximately the same percentage willingness to be sponsored by company funds, whether Transformational (27%) or Transactional (29%) in leadership style, as expected. A demographic reality, therefore, one can posit that funding is valuable to the learners surveyed *regardless of learning motivation orientation*. These results are noted in Tables 8 and 9.

**5.2.3.3 Industry.** Notably, adult continuous learners in leadership positions in the Technology industry are almost twice as likely to be extrinsically motivated learners than they are to be intrinsically motivated, which may be a sign of the sheer necessity to keep pace with advancements in this field. In the healthcare industry the reverse is true. Intrinsically motivated adult learners are double in quantity compared to their extrinsic colleagues and are four times as likely to be Transformational in leadership style. Once again, this may support the nature of the role alignment in this industry.

### **5.3 Future Research**

The results of this study offer an opportunity to provide a meaningful contribution to the body of knowledge surrounding leadership in the context of both behavioral science and adult learning. The findings reflect that the adult professional's pursuit of continuous learning is, indeed, a conscious endeavor and one which is driven by either intrinsic or extrinsic motivations. Further, the motivational drivers that contribute to

the adult professional's decision to pursue continuous learning are analogous to and associated with subsequent leadership style and behavior.

Moreover, the results of this study suggest that stakeholders, such as human resource and talent management professionals, executives, higher education professionals and leaders themselves, for whom the adult learner is a constituent, should consider learning motivation orientation as a viable aid in assessing leader potential and development trajectories. The future business landscape belongs to leaders who are able to navigate their teams and organizations through rapid and volatile change and affect transformation on the other side of this change; therefore, insight into the dimensions of an effective leader and the ability to predict the factors that activate both human and strategic potential are critical to ensuring a viable leadership pipeline (Cashman, 2013). To that end, there are numerous opportunities for future research which examines different facets of the learning motivation – leadership style relationship.

While the results of this study point to learning motivation orientation as a viable indicator of leadership style, in a future grounded theory study, researchers may take a multi-level approach to the leader profile. This approach would include a dimensional examination of the ancillary variables that display potential interactions with learning motivation; for example, these might consist of the leader's past experience, the role of mentors, or other external influences ( socio-economic background, familial influence, social and emotional intelligence), and the influence of these factors on learning motivation.

Similarly, this study attempts to draw inferences about the intrinsically motivated Transformational leader and the extrinsically motivated Transactional leader. In contrast, a future study would serve to expand on and contrast results across their non-hypothesized counterparts - i.e., the extrinsically motivated Transformational leader and the intrinsically motivated Transactional leaders. Results of such a study would provide a more robust cross-sectional perspective into the lived experiences of each type of learner-leader and how both their motivational orientation and other ancillary variables guide their resulting leadership style.

Noticeably, this study focuses heavily on leaders who *do* pursue continuous learning; therefore, it leaves an obvious gap and the need to address scenarios borne of the converse - i.e., *“What impact do leaders who consider learning finite have on organizational adaptability, performance and morale; are there risks borne by organizations with these types of leaders...?”* A case study analysis across various organizations, examining the organizational climate, team member experience, and performance metrics when leaders do *not* embrace learning as a tool to take on greater challenges bears further examination. Secondly, a study may also wish to evaluate leaders who are continuous learners but who do not necessarily utilize nor share their acquired knowledge altruistically, for the advancement of their team members or organizational outcomes, preferring to focus on personal gain only.

Finally, factoring learning motivation into competency modeling and succession planning frameworks forms the basis for a future longitudinal study. Aside from using learning motivation as a benchmarking tool to evaluate Transformational leadership potential, future research may include tests of interaction between intrinsically

motivated learners and other organizational competencies. These results may not only mitigate the risks of an empty leadership pipeline but also ensure that talent management assessments are robust and aligned with organizational strategy. Biswas (2012) suggests that Transformational leadership is a meaningful predictor of the amount of effort exerted by team members, positively impacting overall employee performance and effectiveness; by extension, Transformational leadership positively impacts organizational performance (Bass, 1998). Thus, the derivative of learning motivation and its congruence on Transformational leadership practices can be used as a guideline for short term or long term assessments which pre-identify and promote Transformational leaders vis a vis improved performance models.

## 5.4 Limitations

Limitations of the present study exist. These have implications for the generalization of findings and could be improved upon in future research. Known limitations of this study are acknowledged as follows.

**5.4.1 Sample Size and Convenience Sampling.** This study focuses on and controls for a population of known adult learners. Due to an accelerated timeframe in which to execute this study, the sample size collected is limited to 137 adult learners in leadership positions<sup>9</sup>. A larger study population would render results as more statistically powerful.

Additionally, participants were recruited via convenience sampling, as opposed to random sampling, and include known continuous learners. As a result the sample may

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<sup>9</sup> A total of approximately 400 invitations were sent to the target audience for this study. One hundred and thirty seven surveys were returned within a constricted availability window of just over three weeks.

not be fully representative of the comprehensive population of adult learners in leadership positions.

**5.4.2 Survey Question Design and Self-Assessment Bias.** The study's reliance upon survey data constrains data to include responses based solely on the nature and tone of survey questions asked. Questions were adapted from existing instruments and included in a pilot release to minimize bias and allow for optimal provisioning; however, given that participants are asked to self-report on learning motivation and leadership style, individualized interpretation of survey questions may result in unintended bias.

Moreover, adapting questions from existing validated instruments and/or using fewer questions in a different format may affect reliability and validity of the study instrument. However, adaptation is the most logical choice for this study as it seeks to explore variables in a novel context and contribute new knowledge to the existing body of literature on learning and leadership.

Further limitations of this study include its cross-sectional design. A cross-sectional, in contrast to a longitudinal, design limits causal inferences from being drawn from results of the study data. Future studies may benefit from a longitudinal design in which mediating variables that influence participant learning motivation and leadership style are included, and which studies participants at varying points in their professional career.

**5.4.3 Exploratory Study Design.** The exploratory nature of the study and its delimited audience present various issues including but not limited to the following. Reverse causality: the study does not examine direct “cause and effect”; conclusions will

be drawn based on any relationships which appear from statistical analysis of the data collected. Endogeneity: the study does not control for potential intangible and unobservable variables that influence its IV and DV; for example, an extrinsically-motivated transactional leader may not have been positioned toward each of those orientations were it not for a youth spent in poverty and the threat of deprivation which ultimately led to a career focused on external reward satisfaction. Omitted variables: the study does not include any variety of external variables which may impact its IV and DV; for example, the presence of a transformational mentor may supersede any other influence in the creation of a subsequent transformational leader, regardless of motivation toward learning.

Finally, this researcher leaves complex modeling and forecasting of leadership style outside of this review, choosing instead to first quantify if a relationship exists between variables: intrinsic versus extrinsic learning motivation and Transactional versus Transformational leadership styles. Exploring more specific quantitative and qualitative factors that determine leadership style may make sense in future longitudinal studies of distinctive populations of adult learners in leadership positions.

**5.4.4 Researcher Bias.** This study is conducted by a researcher who defines herself as a continuous learner, who has been surrounded and influenced by adult continuous learners throughout her lifetime and who has witnessed the positive impact that “leaders who learn” have on team and organizational performance. However, the study relies on participants’ willingness and ability to reveal their true motivations, constraints and desired outcomes of pursuing continuing learning, and their authentic leadership style. This study assumes that responses are not biased toward the

researcher's background. Research questions asked and interpretations drawn are done through a lens of knowledge and credibility; statistical objectivity has been applied to participants' responses, in search of patterns, outliers and contradictions - in order to interpret the data in a meaningful way.

## **5.5 Conclusions**

This study contributes to the existing vast library of literature on adult learning, motivational science and leadership by connecting the constructs of learning motivation and leadership style and proving that a positive relationship exists between them. Participants studied offer a unique perspective into the adult professional's motivation to pursue continuous learning, expected outcomes from the learning activities and the lived experience during the process of learning itself.

In this study a controlled experiment was conducted, whereby subjects were given the opportunity to anonymously self-assess and be categorized by their appropriate learning motivation orientation and leadership style, thus providing a more authentic and informed appraisal of the relationship being measured. While prior research focuses heavily on the positive impact of Transformational leaders within an organization, and cites them as an asset to any organization, studies which offer a roadmap toward identifying key attributes of this type of leader and a tool to predict their rise do not yet exist.

Therefore, this study adds to the existing literature by providing evidence of its hypotheses, supporting a positive relationship between learning motivation and leadership style. Results have also shown that intrinsically motivated adult learners are

more likely to be Transformational leaders, and conversely, that extrinsically motivated adult learners are more likely to be Transactional in leadership style.

Leaders who exhibit Transformational behaviors are known to have a direct influence on team member development, dedication and goal attainment and an indirect influence on overall performance. Transformational leadership behaviors, including setting and aligning vision with organizational strategy, encouraging high performance through goal setting and individualized mentoring of team members, and inspiring fellow team members to seek and apply intellectual collateral, position these leaders as significant and positive contributors to team member and organizational growth compared to leaders who do not exhibit these types of leadership practices (Hater & Bass, 1988; Yammarino & Bass, 1990). Studies which provide evidence of the positive impact that Transformational leaders have on team members' cumulative performance serves to strengthen the proof that these leaders have on overall organizational results, in turn (Dvir et al., 2002). These findings further substantiate the positive impact of the attributes of these leaders as set forth in Transformational Leadership Theory: i.e., 'Idealized Influence', 'Inspirational Motivation', 'Intellectual Stimulation' and 'Individualized Consideration'. Fundamentally, there is strong evidence in support of the prominent role that Transformational leaders play in an organization's performance, stability and growth compared to other styles of leadership (Antonakis et al., 2003; Dvir et al., 2002; Lowe et al., 1996).

The markedly positive impact of the transformational leader strengthens the core proposition of this study which seeks to connect an intrinsic learning motivation with a Transformational leadership style. Using learning motivation as a tool to maximize the

identification of optimal human capital will enhance organizations' probability of nurturing a long line of successive Transformational leaders, and in turn, organizational health, performance and sustainability.

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**APPENDIX A:**  
**STUDY INVITATION LETTER AND INFORMED CONSENT**

**TO:** Potential University of South Florida Doctor of Business Administration Study Participant

**FROM:** Natalya Sabga, PMP, DBA ('17)

**RE:** Pro00029034 Doctoral Study, "Leaders Who Learn"

**Dear Participant,**

I would like to survey you about your experience as an adult learner in a leadership position.

This research study seeks to:

- 1) Contribute to the understanding of the motivation to pursue continuous learning activities among adult learners in leadership positions;
- 2) To explore if these motivations are related to leadership style; and,
- 3) To examine if the process of learning itself is impactful to both motivation and leadership style.

**Who is Eligible?**

**You** are - by virtue of your leadership position and experience .

This study uses a purposeful sampling strategy by which research participants are selected for study because they can "purposefully inform an understanding of the research problem and central phenomenon in the study" (Creswell, 2007, p. 156).

## Your Opportunity

A short, completely anonymous, survey that assesses your motivation toward learning and leadership style is available at ([Survey link closed](#)). The survey should take no more than ten (10) minutes of your time to complete and will be open from Feb. 15, 2017 to March 15, 2017.

All participants will be entered into a raffle to win a \$100.00 Amazon gift card.

! THREE winners will be chosen at random !

**If you would like to be entered into the raffle,**  
email [natallyas@mail.usf.edu](mailto:natallyas@mail.usf.edu)  
with your preferred contact email address.

## Guidelines & Informed Consent

This study is in fulfillment of the doctoral degree requirements of The University of South Florida for Natalya Sabga, who has also acted as a Director and Advisor in the Executive Education division at a large State University in addition to designing and delivering customized Executive Education programs to local, national and international corporations.

Data will be collected will be collected via an anonymous online survey and accessible only to the researcher and the University. Actual names are not used in this study. The research involves complete confidentiality. You may withdraw from the study at any point for any reason without consequences. If you decide to withdraw, any information that you have provided to the study will be excluded.

An authorized *Informed Consent* form will be included separately for your review. If you have questions regarding the research, please contact the Principal Investigator at [natallyas@mail.usf.edu](mailto:natallyas@mail.usf.edu) (Natalya Sabga).

We thank you in advance for your time and involvement in this important study.

With Best Regards,



University of South Florida  
Doctorate of Business Administration, 2017  
✉ [natallyas@mail.usf.edu](mailto:natallyas@mail.usf.edu)



**TO:** Potential University of South Florida Doctor of Business Administration Study Participant

**FROM:** Natalya Sabga, PMP, DBA ('17)

**RE:** Pro00029034 Doctoral Study, “Leaders Who Learn” - Informed Consent to Participate in Research

Researchers at the University of South Florida (USF) study many topics. To do this, we need the help of people who agree to take part in a research study. This form tells you about this research study. We are asking you to take part in a research study entitled: “The Leader Who Learns: *Examining the Intersection of Behavioral Science, Adult Learning, & Leadership*”. The person in charge of this research study is Natalya Sabga. This person is known as the “Principal Investigator”.

### **Purpose of the Study**

The purpose of this study is to gain a better understanding of the relationship between motivation toward learning and leadership style. To do so, you are asked to assume the role of a leader who self-directs their own learning activities and to describe your motivation toward learning and your leadership style. You will be asked to read the survey questions and respond accordingly with that information.

### **Why are you being asked to take part?**

We are asking you to take part in this research study because your academic and business history makes you a desirable candidate who can purposefully inform an understanding of the research problem being studied.

## **Study Procedures**

If you take part in this study, you will be asked to assume the role of a leader who self-directs their own learning activities and to describe your motivation toward learning and your leadership style. You will be asked to read the survey questions and respond accordingly with that information. All information will be collected online and will be anonymous.

## **Alternatives / Voluntary Participation / Withdrawal**

You have the alternative to choose not to participate in this research study. You should only take part in this study if you want to volunteer; you are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study

## **Benefits and Risks**

We are unsure if you will receive any benefits by taking part in this research study. This research is considered to be minimal risk.

## **Compensation**

We will not pay you for the time you volunteer while being in this study. However, you will have the opportunity to enter into a raffle for one of three Amazon gift cards valued at \$100.00. In order to be eligible for the raffle, you will be asked to email Natalya Sabga ([natalyas@mail.usf.edu](mailto:natalyas@mail.usf.edu)), Principal Investigator, directly outside of the survey. We will be unable to link your email back to your survey response, thereby protecting anonymity.

## Privacy and Confidentiality

We must keep your study records as confidential as possible. It is possible, although unlikely, that unauthorized individuals could gain access to your responses because you are responding online.

Certain people may need to see your study records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are Natalya Sabga, University of South Florida; Dr. Lisa Gaynor, University of South Florida; Dr. Donald Addison, University of South Florida; Dr. Dahlia Robinson, University of South Florida; Dr. Jung Park, University of South Florida; Dr. Chris Pantzalis, University of South Florida; Dr. Matthew Mullarkey, University of South Florida; Dr. Grandon Gill, University of South Florida and The University of South Florida Institutional Review Board (IRB).

We may publish what we learn from this study. If we do, your responses will remain completely anonymous and identity masked. We will not publish anything that would reveal your identity in any way.

You may print a copy of this consent form for your records.

*It is possible, although unlikely, that unauthorized individuals could gain access to your responses. Confidentiality will be maintained to the degree permitted by the technology used. No guarantees can be made regarding the interception of data sent via the Internet. However, your participation in this online survey involves risks similar to a person's everyday use of the Internet. If you complete and submit an anonymous survey and later request your data be withdrawn, this may or may not be possible as the researcher may be unable to extract anonymous data from the database.*

## Contact Information

If you have questions regarding the research, please contact the Principal Investigator (Natalya Sabga) at [natalyas@mail.usf.edu](mailto:natalyas@mail.usf.edu).

## Consent

I freely give my consent to take part in this study. I understand that by proceeding with this survey that I am agreeing to take part in research, and that I am 18 years of age or older.

**To participate in the study, please visit the following anonymous link (unable to track identifying information of respondents):**

[\(Survey link closed\)](#)

**APPENDIX B:**  
**STUDY SURVEY INSTRUMENT**

## *Leaders Who Learn*

### **Introduction**



This survey will focus on adult learners in leadership positions. If you are a leader who has engaged in continuous learning activities throughout your career (past) or if you are currently pursuing continuous learning, we would be very interested in your feedback.

Thank you for your participation in this important study.

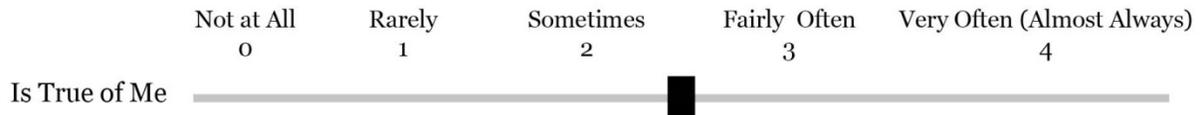
## **Glossary of Terms**

- **Leader** – An individual who holds, or has held, a leadership position(s), for at least 5 cumulative years, and who has managed/supervised at least 2 employees while holding the position(s).
- **Continuous Learning** – The process of acquiring knowledge through continuous formal and/or informal learning activities, including:
  - **Formal:**
    - Master’s Degree
    - Doctoral Degree
    - Professional Continuing/Executive Education Program
    - Certification (example: PMP, CFP, CFA, PHR/SPHR, Six Sigma, ITIL, CMP, CPSM or any other industry-related certifications)
  - **Informal:**
    - Professional/industry-related learning
    - Vendor Training
    - Company-provided Training
    - Massive, Open, Online Courses (MOOCs)
    - Webinar
    - Conferences
    - YouTube Ted/Tedx Talks
    - Industry –related Publications, Books (Self-read)
- **Knowledge** – Information acquired by engaging in the learning activities defined above.
- **Team Members** – Employees

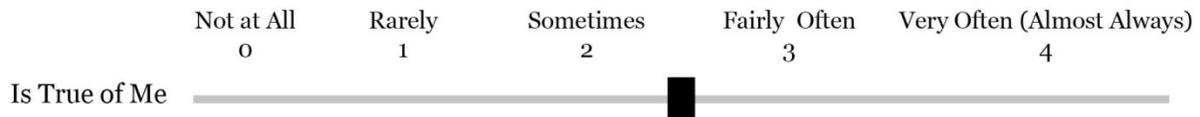
## **Continuous Learning**

The questions in this section are intended to describe your learning style and continuous learning choices as you perceive them. Indicate the extent to which the following statements are *most* true of you.

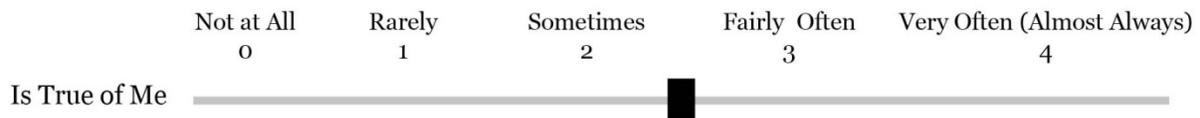
**Continuous learning is a source of fulfillment and satisfaction.**



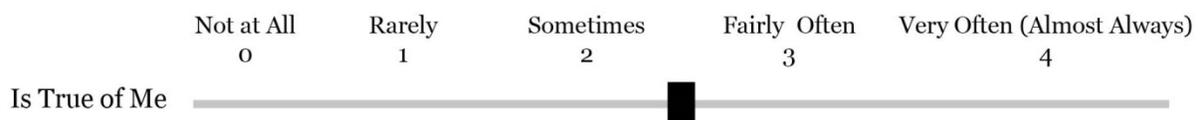
**The knowledge I acquire through continuous learning activities broadens my perspective (how I evaluate situations and people).**



**I participate in continuous learning activities because the knowledge I acquire makes future decision-making easier.**

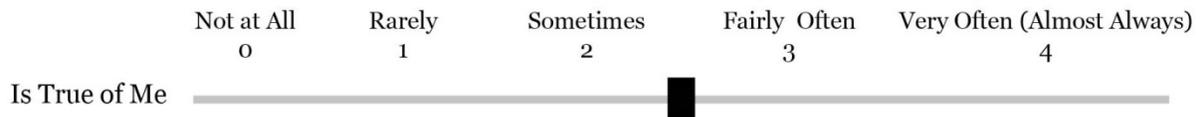


**I find myself seeking new opportunities to learn.**

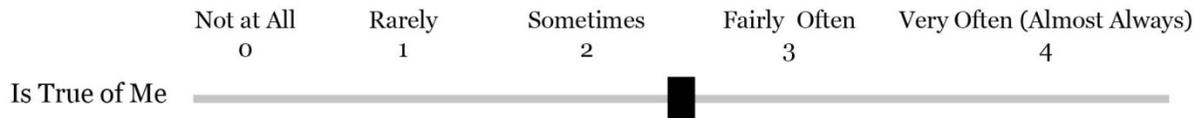


**I enjoy using the knowledge that I acquire to benefit others by (any or all of the below):**

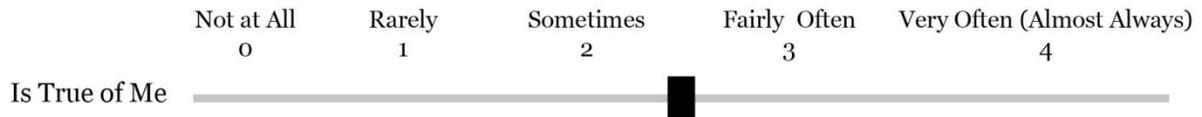
- Making their lives/jobs easier
- Helping others grow personally (personal development)
- Helping others grow professionally



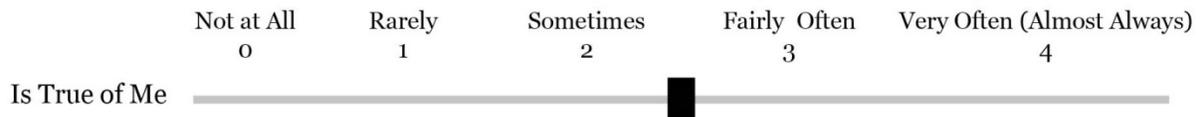
**I participate in continuous learning activities because I like to learn for the sheer pleasure of it.**



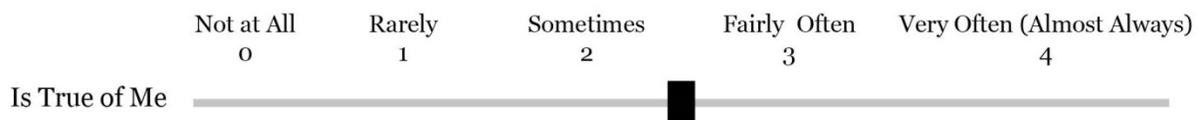
**Continuous learning is a means to satisfy job requirements.**



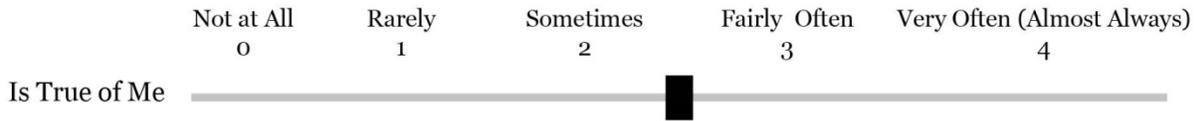
**I participate in continuous learning activities because I can meet new people.**



**I participate in continuous learning activities because I enjoy being exposed to new learning environments.**



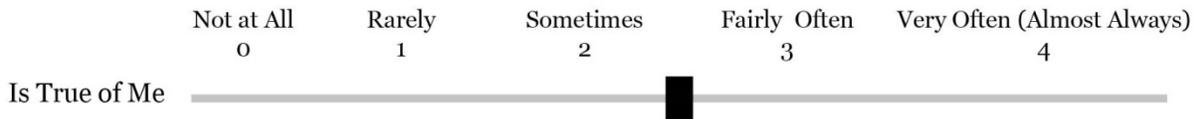
**I participate in continuous learning activities because the knowledge I acquire will result in career advancement/earning more money.**



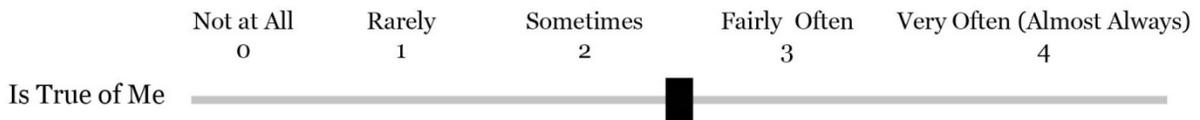
**I like being recognized for my level of knowledge.**



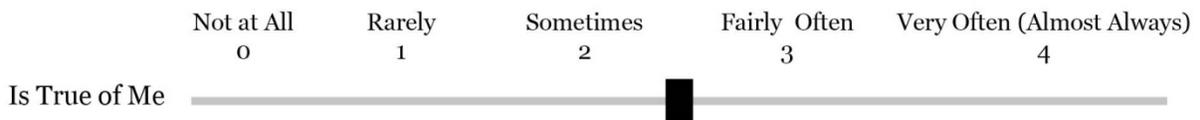
**I participate in continuous learning activities because I want to avoid feeling stuck or falling into a career rut.**



**Acquiring knowledge makes it easier to adapt to professional changes.**



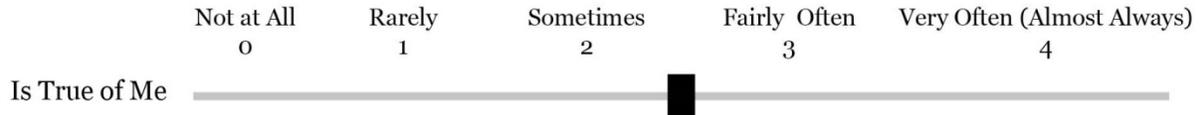
**I primarily participate in continuous learning activities when the knowledge I acquire will help me advance in my career (promotion, new position, new functional area or field).**



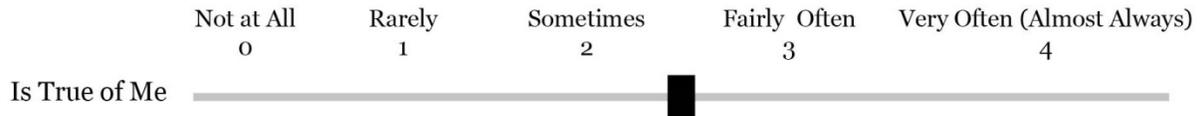
## Leadership

The questions in this section are intended to describe your leadership style and behaviors as you perceive them. Indicate the extent to which the following statements are *most* true of your general leadership style.

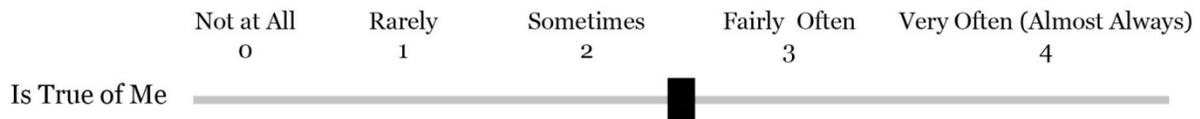
**I base decisions on the big picture and for the good of the group, team, and/or organization.**



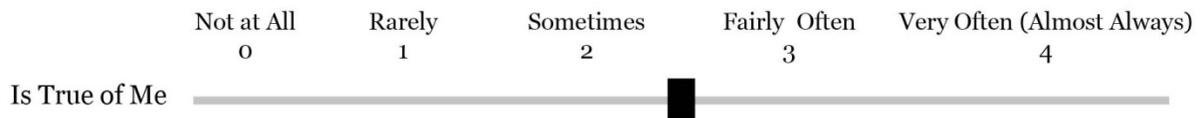
**As a leader, I consider the moral and ethical consequences of my decisions.**



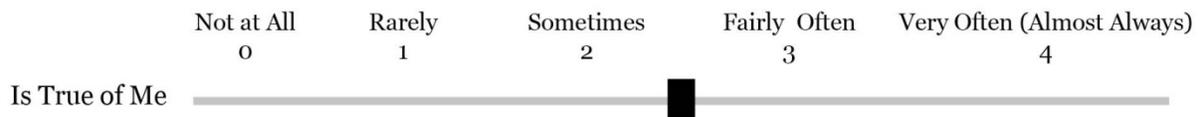
**I have a vision for my team and match this vision with the organization's strategy and goals.**



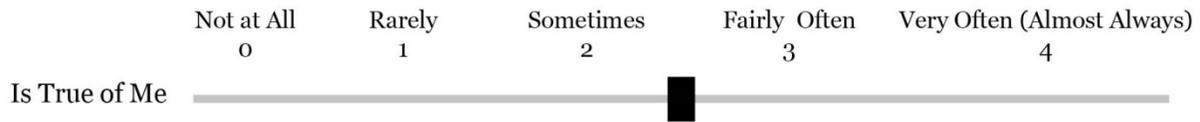
**As a leader, I examine my assumptions prior to making a decision.**



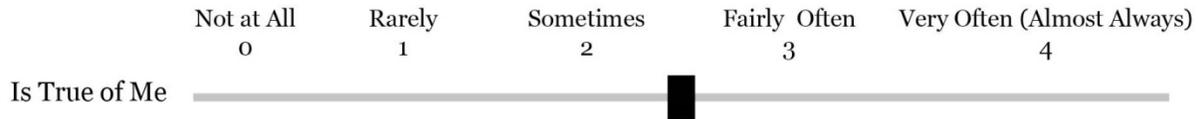
**I encourage my team members to learn so they can experience personal growth and development.**



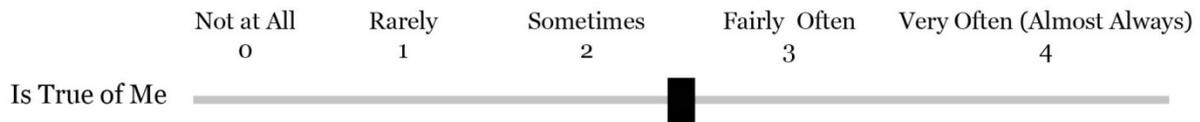
**I focus on creating value for all stakeholders.**



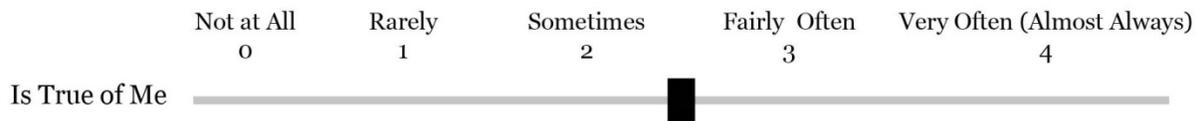
**I place a high value on transparency.**



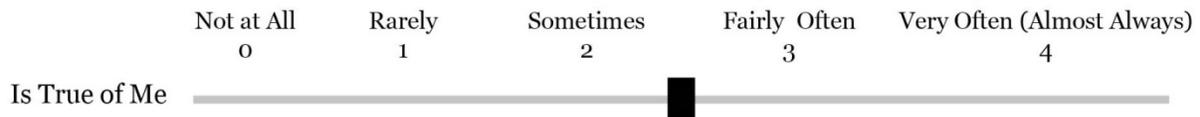
**I encourage team members to have an ownership mindset.**



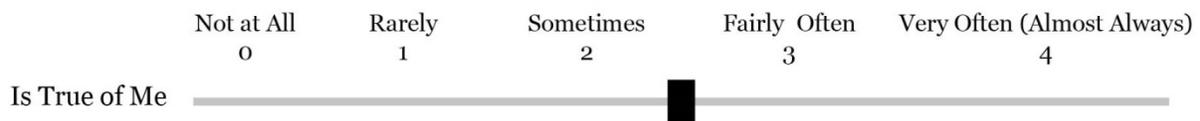
**As a leader, I help my team members develop their strengths.**



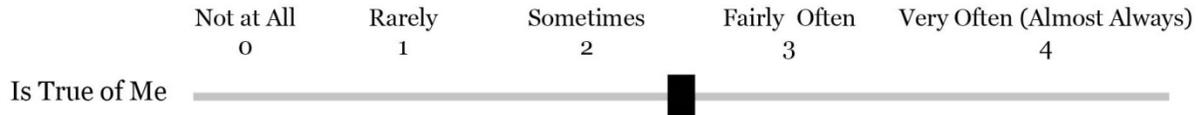
**I encourage and support team members to exceed their potential and set personal goals for achievement.**



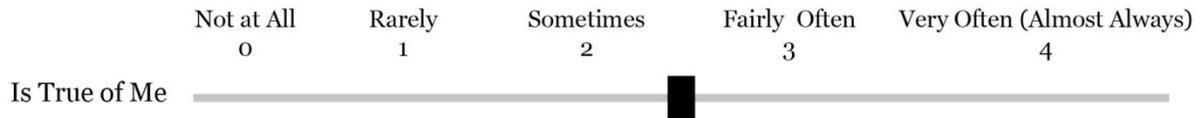
**As a leader, I strive to heighten others' desire to succeed.**



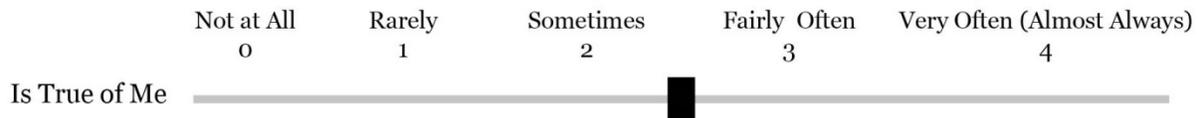
**I encourage team members to work toward common goals and the organization's strategy.**



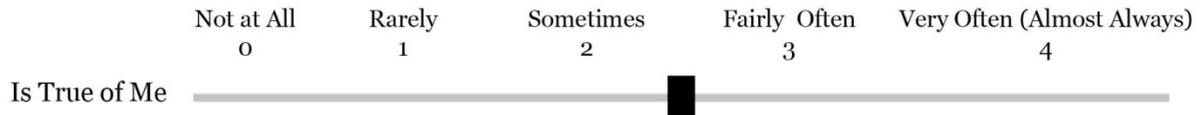
**When making leadership decisions, I primarily consider the operational consequences of the decision more than the moral/ethical consequences.**



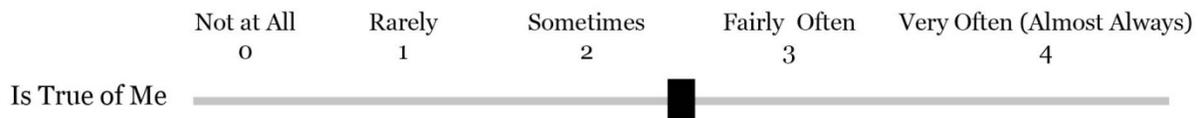
**As a leader, I clearly communicate the expected rewards or consequences of achieving or not achieving performance goals to my team members.**



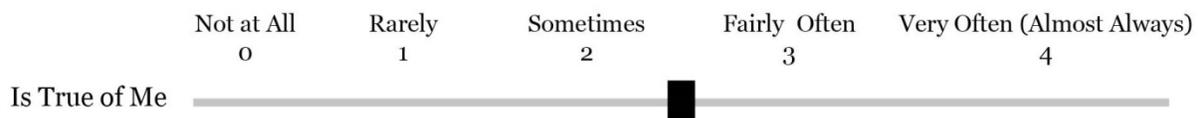
**I focus on ensuring that my team members complete tasks correctly.**



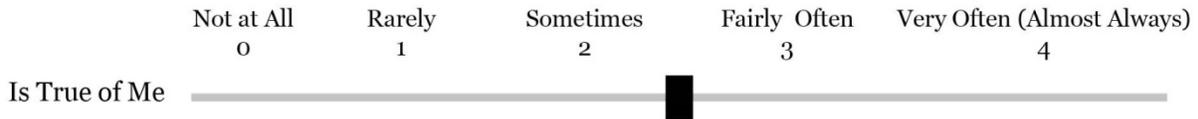
**Managing goals, targets and metrics are among the most important parts of my job.**



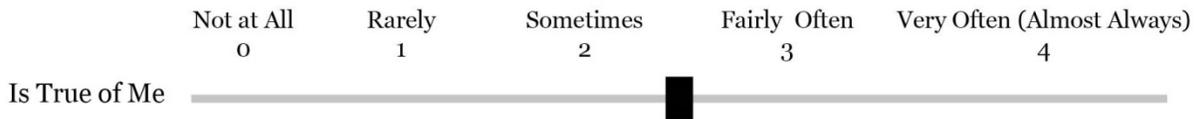
**I reward team members for meeting or achieving performance goals with tangible incentives (financial reward, prizes).**



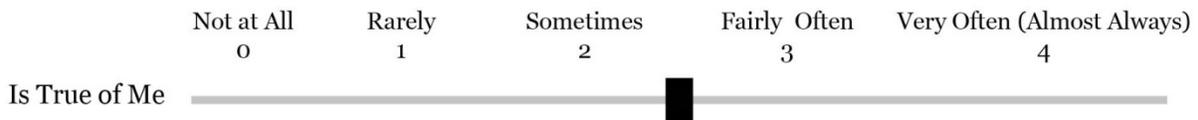
**I implement detailed instructions for my team and monitor progress on deliverables.**



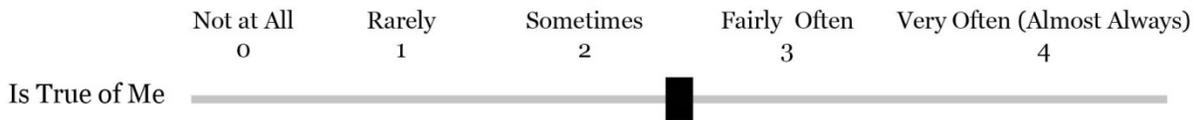
**Measuring team members' performance on individual tasks increases the potential for successful results.**



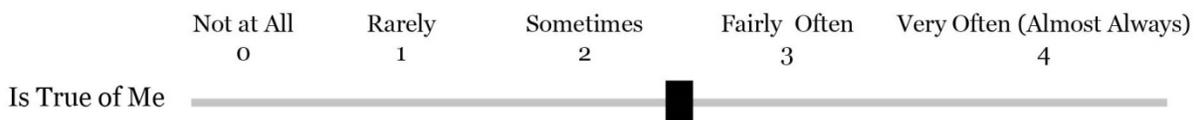
**I encourage team members to develop their skills and acquire knowledge in order to meet organizational goals.**



**I motivate my team members primarily through incentives, rewards, and the potential for promotion.**



**I judge myself to be successful as a leader if, as a result of my leadership, team members meet stated expectations and performance goals.**



### **Open Ended Questions**

Thank you so much for your time and for sharing your personal experiences as a leader and learner!

Now, just a few more questions, which will inform our study.

(Responses are optional, but highly desired.)

**How has your participation in continuous learning activities (and the acquisition of new knowledge) impacted the way you lead?**

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**Do you believe that there are any adverse effects [to teams and/or organizations] when leaders *do not* pursue continuous learning activities?**

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**Has your leadership style changed significantly based on the position, situation or organization you were in at the time? Please provide examples if appropriate.**

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**Describe a few characteristics that you have which you believe make you a good leader.**

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## **Demographics**

(Reponses are optional but highly desired.)

### **Gender:**

Female

Male

### **Reimbursement for Learning Activities Type (may select more than one):**

Self-pay

Company Tuition Reimbursement (full or partial)

Military/Government Tuition Reimbursement (full or partial)

**Industry - current:**

- Technology
- Finance/Banking
- Healthcare
- Manufacturing
- Hospitality
- Professional Services
- Sales
- Construction
- Education
- Military
- Other

**Title - current:**

- CEO
- CFO
- CIO
- CTO
- VP
- Director
- Manager
- Supervisor
- Department Head
- Business Owner/Entrepreneur
- Partner
- Other

**Title(s) - previously held (may select more than one):**

- CEO
- CFO
- CIO
- CTO
- VP
- Director
- Manager
- Supervisor
- Department Head
- Business Owner/Entrepreneur
- Partner
- Other

**Number of Years - cumulative - in a Leadership Position(s):**

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**Continuous Learning Activity(ies) Engaged in (may select more than one):**

- Doctorate Business (e.g.: DBA; PhD Finance/Marketing/Management, etc)
- Doctorate (Non-Business Related)
- Masters Business (e.g.: MBA; Economics/Finance/Marketing/Management, etc)
- Masters (Non-Business)
- Executive/Professional Education
- Certification
- Webinars
- Massive Open Online Courses (MOOCs)
- Conferences
- Company-sponsored Training
- YouTube
- Ted/Tedx Talks
- Other - Newsletters, Online Articles, Professional/Trade Publications
- Knowledge sought through mentor/peer/colleague
- Other

**Ethnicity:**

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**APPENDIX C:**  
**CARRÉ MODEL OF ADULT ORIENTATION AND IMPLICATION ON**  
**LEARNING AND TRAINING ACTIVITIES**

## INTRINSIC MOTIVES

1	<p><b>The epistemic motive</b> Learning and knowledge are a source of satisfaction and pleasure. Motivation is linked to the content ('I like everything related to economics', 'I like the intellectual perspective of things'). The emotional dimension is a presence in this type of motive (to like, to love, etc.); and sometimes the pleasure of learning is oriented to the opening of the mind, metacognition development, and the aim of widening and enriching the spirit.</p>
2	<p><b>The socio-emotional motive</b> Adults are interested in learning/training activities because they want to establish social contacts, to develop new relationships; they want to be integrated into a group, they want to communicate, to reinforce social links. The emotional dimension, the pleasure to be with others is present in this motive.</p>
3	<p><b>The hedonic motive</b> Adults' participation in learning activities is also related to the pleasure to participate, but linked to the conditions of the training environment itself, with the materials, the resources, documents, etc. Pleasure is independent from the content of learning.</p>

## EXTRINSIC MOTIVES

1	<p><b>The economic motive</b> Reasons for participation in learning activities are explicitly material: economic advantages (direct or indirect – such as a promotion, or to get a job).</p>
2	<p><b>The prescriptive motive</b> In some cases participation is due to explicit external pressures, such as an obligation or an imposition, coming from an external context. Sometimes there are more subtle pressures, such as the social pressure to conform, influences of hierarchy, and so on.</p>
3	<p><b>The derivative motive</b> The reason for participation is to avoid unpleasant situations or activities; adults prefer to participate in learning/training activities to escape from suffering or boredom at work (such as unhappy environment, routine, lack of professional interest, personal conflicts, etc.)</p>
4	<p><b>The professional operative motive</b> The reason for learning is related to developing competences, knowledge and skills that are needed for specific professional activities. The aim is to improve professional performance, to anticipate or adapt to changes. Learning is 'a professional tool', an instrumental answer to a professional challenge. It is related to the classical function of continuing training (development of competences).</p>
5	<p><b>The personal operative motive</b> Adults learn to get competences, knowledge and skills that are understood as necessary for activities outside the job and working life (such as leisure, family life, associative responsibilities, and so on) but always with a clear goal. Learning is a means to a project, an interest, or to satisfy a specific need.</p>
6	<p><b>The identity motive</b> This learning motive is for acquiring competences, knowledge, skills or symbolic recognition to transform or preserve adult identity characteristics. This motive can be understood from the perspective of professional, cultural or social status (to get a diploma, a qualification, to keep or get a position, etc.). It is centered on social image and is external to economic motives.</p>
7	<p><b>The vocational motive</b> Learning is oriented by a logic of professional guidance, carrier management, or getting a job. Adults want to develop competences, knowledge or skills to keep their job, get a new job, or improve their job (they refer to 'career', 'mobility', 'professional future', 'opportunities', and so on.).</p>

**APPENDIX D:**  
**INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL**

From: [rsch-arc@usf.edu](mailto:rsch-arc@usf.edu)  
Subject: eIRB: Study Processing Complete  
Date: February 8, 2017 at 10:14 AM  
To: [natalyas@mail.usf.edu](mailto:natalyas@mail.usf.edu)



**IRB Study Processing Completed**

To: Natalya Sabga  
RE: Leaders Who Learn  
PI: Natalya Sabga  
Link: [Pro00029034](#)

You are receiving this notification because processing has been completed on the above-listed study. For more information, please navigate to the project workspace by clicking the Link above.

Please note, as per USF IRB Policy 303, "Once the Exempt determination is made, the application is closed in eIRB. Any proposed or anticipated changes to the study design that was previously declared exempt from IRB review must be submitted to the IRB as a new study prior to initiation of the change."

If alterations are made to the study design that change the review category from Exempt (i.e., adding a focus group, access to identifying information, adding a vulnerable population, or an intervention), these changes require a new application. However, administrative changes, including changes in research personnel, do not warrant an amendment or new application.

Given the determination of exemption, this application is being closed in ARC. This does not limit your ability to conduct your research project. Again, your research may continue as planned; only a change in the study design that would affect the exempt determination requires a new submission to the IRB.

*DO NOT REPLY: To ensure a timely response, please direct correspondence to Research Integrity & Compliance either through your project's workspace or the contact information below.*

Research Integrity & Compliance  
University of South Florida - Research and Innovation  
ARC Help Desk (eIRB, eIACUC, eCOI): (813) 974-2880  
Email: [rsch-arc@usf.edu](mailto:rsch-arc@usf.edu)  
Mail: 12901 Bruce B. Downs Blvd, MDC 35, Tampa, FL 33612-4799

Template: \_000 - IRB Study: Certified Exempt

## APPENDIX E:

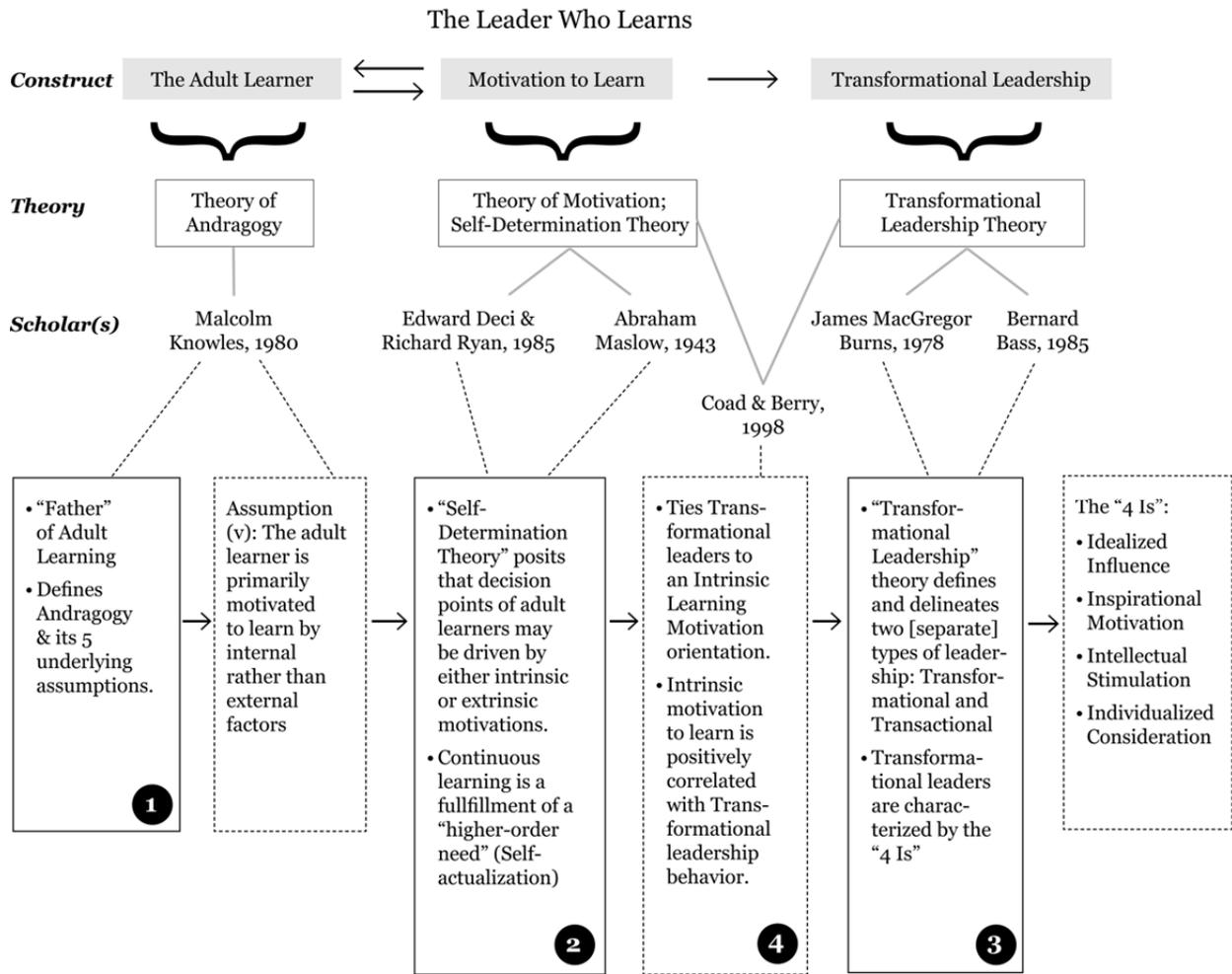
### TRANSFORMATIONAL VERSUS TRANSACTIONAL LEADER COMPARISON

#### Transformational *versus* Transactional LEADERSHIP

<b>Category</b>	<b>Leadership Style</b>	
	<b>Transformational</b>	<b>Transactional</b>
<b>Focus/Time Frame</b>	Long Term, Big Picture Outcomes	Salary, Promotion, Recognition
<b>Leader's Source of Power</b>	<i>Referent:</i> based on Charisma, Character, Knowledge, Authenticity & Trust	<i>Coercive:</i> based on Rank, Title, Reward/Punishment
<b>Team Member Response</b>	Commitment	Compliance
<b>Relationship Dynamic (Leader-Team Member)</b>	Enhanced Relationship between Leader-Team Member (Mutual Respect, Knowledge-exchange, Mentor-Protege)	Leader versus Team Member (On Opposite Sides)
<b>Reward</b>	Pride, Self-esteem, Growth, Opportunity, Contribution	Salary, Promotion, Recognition
<b>Supervision Level</b>	Low	High
<b>Individualized Focus</b>	Developmental	Evaluative
<b>Where Change Occurs</b>	In Team Member Values, Performance, Goal Attainment	In Team Member Reactions, Compliance, Task Attainment
<b>Leadership Impact</b>	Team Member and Organizational Growth, Performance & Transformation	Team Member Behavior, Regulation, Reward-based Outcomes

## APPENDIX F:

### COMBINED CONSTRUCT NOMOLOGICAL LITERATURE MAP



**APPENDIX G:  
LITERATURE TABLES**

Construct	Source	Summary /Key Findings
Adult Learning	Boshier, P. (2006). Perspectives of Quality in Adult Learning. A&C Black.	Learning seen as a cumulative experience which helps adult learners become more effective as they continue the learning process. Findings discovered that continuous, adult learning results in: <ul style="list-style-type: none"> <li>■ More confidence in abilities and intellectual capacity</li> <li>■ Seeing the bigger picture</li> <li>■ Adapt quickly</li> <li>■ [Re]learn how to learn</li> <li>■ Confidence in mixing with others with different outlooks, how to express own views and be exposed to ideas and views of others.</li> <li>■ Learning offers new opportunities and "second chance".</li> </ul>
Adult Learning	Brockett, R. G., & Hiemstra, R. (1991). Self-direction in adult learning : perspectives on theory, research, and practice. London; New York : Routledge, 1991.	Ties self-direction in learning to adult learning principles and discusses different types of learners.
Adult Learning	Carré, P. (1997). Motivations et formation d'adultes: état de la question. Revue de Psychologie de l'éducation, 2(2), 227-258.	The Carré Model of Adult Orientation and Implication on Learning and Training Activities - considered a conceptual research model for the study of adult motives and orientations toward learning. The Carré model is invoked to measure the learning motivation of leaders who exhibit either an intrinsic or extrinsic motivation to learn and establishes criteria for each motivation orientation.
Adult Learning	Carré, P. (2000). Motivation in Adult Education: From engagement to performance. Paper presented at the Adult Education Research Conference (AERC), Vancouver, British Columbia. Canada. Retrieved from <a href="http://newprairiepress.org/cgi/viewcontent.cgi?article=2153&amp;context=aerc">http://newprairiepress.org/cgi/viewcontent.cgi?article=2153&amp;context=aerc</a>	Research presentation and findings of adult motivation toward education and training.
Adult Learning	Coare, P., & Thomson, A. (1996). Through the Joy of Learning. Diary of 1,000 Adult Learners. Leicester (England);National Inst. of Adult Continuing Education.	Based on a national project to collect "diaries of 1,000 adult learners," cites significant themes that emerged in the experiences of the diarists about the motivations, challenges, learning experiences, and achievements of adult learners.
Adult Learning	de Oliveira Pires, A. L. (2009). Higher Education and Adult Motivation Towards Lifelong Learning: An Empirical Analysis of University Post-Graduates Perspectives. European journal of vocational training, 46(1), 129-150.	Validation and validity evidence vis a vis longitudinal studies for the Carré Model of Adult Orientation and Implication on Learning and Training Activities.
Adult Learning	Garrison, D. R. (1992). Critical Thinking and Self-directed Learning in Adult Education: An Analysis of Responsibility and Control Issues. Adult Education Quarterly, 42(3), 136-148.	Examines two dominant theoretical frameworks in adult education : critical thinking and self-directed learning. Concludes that that there is an intimate relationship between self-directed learning and critical thinking among adult learners.
Adult Learning	Hiemstra, R. (1994). The sourcebook for Self-directed Learning, 9-20.	Examines the history and application of self-directed learning.

Adult Learning	Houle, C. O. (1961). <i>The inquiring mind</i> . Madison, University of Wisconsin Press, 1961.	The main subject of this work is adult continuing education-- <i>who continues to learn and why</i> . Some of the findings of the study were the following: (1) more people continue their education from the late 20s until age 50 than at any other time; (2) the higher the formal education of the adult, the more likely it is that he or she will take part in continuing education; (3) learners were usually readily discerned as such by their friends; (4) for the learning oriented, education was an almost constant rather than occasional activity; (5) enrollment in formal education is largely vocational in nature; (6) some learners attend educational classes for the activity itself and the social opportunities the educational setting provides; and (7) influences on learning included family background, teachers and schools, public libraries, occupations, and the examples of friends.
Adult Learning	Houle, C. O. (1996). <i>The Design of Education</i> . Jossey-Bass Higher and Adult Education Series. Jossey-Bass Inc., Publishers, 350 Sansome Street, San Francisco, CA 94104.	Houle defines adult education as "the process by which men and women (alone, in groups, or in institutional settings) seek to improve themselves or their society by increasing their skill, knowledge, or sensitiveness; or it is any process by which individuals, groups, or institutions try to help men and women improve in these ways" (p. 32).
Adult Learning	Knowles, M. S. (1950). <i>Informal adult education: A guide for administrators, leaders, and teachers</i> . New York, Association Press, 1950.	"Each individual [adult learner] has a fundamental urge to grow – to achieve greater maturity and self-direction" (p. 62).
Adult Learning	Knowles, M. (1975). <i>Self-directed Learning</i> . Chicago: Follett Publishing Company	Seminal work positioning Knowles at the center of the adult education discourse. Includes Knowles' perspective on the intersection of andragogy, self-direction in learning and informal adult education. While he did not produce a "formal" theory of adult learning, he did conclude that at its center, adult learning should produce these outcomes: <ul style="list-style-type: none"> <li>■ Adults should acquire a mature understanding of themselves</li> <li>■ Adults should develop an attitude of acceptance, love, and respect toward others.</li> <li>■ Adults should develop a dynamic attitude toward life</li> <li>■ Adults should learn to react to the causes, not the symptoms, of behavior</li> <li>■ Adults should acquire the skills necessary to achieve the potentials of their personalities.</li> <li>■ Adults should understand the essential values in the capital of human experience</li> <li>■ Adults should understand their society and should be skillful in directing social change.</li> </ul>
Adult Learning	Knowles, M. S. (1980). <i>The Modern Practice of Adult Education: From pedagogy to andragogy</i> . New York, Cambridge Books, 1980.	Knowles' seminal work from which his Theory of Andragogy is derived and defined. Andragogy is the 'art and science of helping adults learn' (Knowles, 1980, p. 43). There are five assumptions which underlie Andragogy and which describe the adult learner as someone who: <ol style="list-style-type: none"> <li>i.) Has an independent self-concept and who can direct his or her own learning,</li> <li>ii.) Has accumulated a reservoir of life experiences that is a rich resource for learning,</li> <li>iii.) Has learning needs closely related to changing social roles,</li> <li>iv.) Is problem-centered and interested in immediate application of knowledge,</li> <li>v.) Is motivated to learn by internal rather than external factors.</li> </ol>

Adult Learning	Knowles, M. (1989). <i>The Making of an Adult Educator: An Autobiographical Journey</i> . Jossey-Bass Inc Publishing	Knowles himself came to concur that andragogy is less a theory of adult learning than “a model of assumptions about learning or a conceptual framework that serves as a basis for an emergent theory” (1989, p. 112)
Adult Learning	Knowles, M. S., Holton III, E. F., & Swanson, R. A. (2014). <i>The adult learner: The definitive classic in adult education and human resource development</i> : Routledge.	Applying Malcolm Knowles' adult learning principles to human resource development.
Adult Learning	Kungu, K., & Machtmes, K. (2009). <i>Lifelong Learning: Looking at Triggers for Adult Learning</i> . <i>International Journal Of Learning</i> , 16(7), 501.	Examines triggers for adult learning and the implications these triggers may have for understanding participation in lifelong learning.
Adult Learning	Lovell, R. B. (1980). <i>Adult Learning</i> . London : Croom Helm ; New York : Halsted Press, 1980.	Adult learning predicated upon characteristics of the learner, the social context within which the learning takes place and the way in which instruction is conducted and evaluated.
Adult Learning	Merriam, S. B. (2001). <i>Andragogy and Self-directed Learning: Pillars of Adult Learning Theory</i> . <i>New directions for Adult and Continuing Education</i> , 2001(89), 3-14.	The question of whether adults could learn was put to rest, and the new focus of what was different about adult learning emerged. Focuses on the two "foundational theories of adult learning (andragogy and self-directed learning), with the intent of evaluating their contribution to a present-day understanding of adult learning.
Adult Learning	Mezirow, J. (1991). <i>Transformative dimensions of adult learning</i> . San Francisco : Jossey-Bass, 1991.	Explores adult learning in the context of the meaning adults derive from the learning activity/process and the role of meaning in motivation to learn.
Adult Learning	Roths, A., Lemos, M., Gonçalves, T. (2014). <i>Motives and Beliefs of Learners Enrolled in Adult Education</i> <i>Procedia - Social and Behavioral Sciences</i> , 112, 939-948.	Validation and validity evidence vis a vis longitudinal studies for the Carré Model of Adult Orientation and Implication on Learning and Training Activities.
Adult Learning	Stevens, J. (2014). <i>Perceptions, Attitudes &amp; Preferences of Adult Learners in Higher Education: a National Survey</i> . <i>Journal of Learning in Higher Education</i> , 10(2), 65.	A longitudinal study which examines the perceptions, attitudes, and preferences of the adult learners in higher education institutions in the United States. The study's aim is to generate insight into how higher education institutions can create programs to better meet the needs of their adult learning population.
Adult Learning	Tough, A. M. (1971). <i>The Adult's Learning Projects: a Fresh Approach to Theory and Practice in Adult Learning</i> : Ontario, Canada: Ontario Institute for Studies in Education, c1971.	Establishes Tough as a pioneer in the field of "adults learning alone". Realized that adult learners set their own goals, figured out how to learn as they went along, obtained resources, and evaluated their progress.  Examined what adults learn and why.
Motivation & Self-determination	Baard, P. P., Deci, E. L., Ryan, R. M. (2004). <i>Intrinsic Need Satisfaction: A Motivational Basis of Performance and Well-Being in Two Work Settings</i> . <i>Journal of applied social psychology</i> , 34(10), 2045-2068.	Self-determination not only impacts motivation and performance but is also critical for development to occur.

Motivation & Self-determination	Deci, E. L., Ryan, R. M. (1985). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. Contemporary educational psychology, 25(1), 54-67.	Deci and Ryan's seminal work, defining Self-determination Theory and the different dimensions of motivation.
Motivation & Self-determination	Deci, E. L., & Ryan, R. M. (1985). Intrinsic and extrinsic motivations: Classic definitions and new directions. Contemporary Educational Psychology, 25(1), 54-67.	In support of assertion (v.) of Knowles' Andragogy, "Self-Determination Theory" (Edward & Ryan, 1985) posit that decision points of adult learners may be driven by either intrinsic or extrinsic motivations.
Motivation & Self-determination	Deci E.L., Connell J.P., Ryan R.M. (1989). Self-determination in a Work Organization. Journal of Applied Psychology, 74(4): 580-590.	Self-determination theory considers individual differences and how diverse settings of choice versus no choice impact individual processes and performance.
Motivation & Self-determination	Deci, E. L., Ryan, R. M. (2000) The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-determination of Behavior. Psychological Inquiry 11(4): 227-268.	Research in psychology suggests that individuals are more committed to initiatives when they have choice in the process (Deci and Ryan, 2000).
Motivation & Self-determination	Deci, E. L., & Ryan, R. M. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American psychologist, 55(1), 68.	Examines self-determination and intrinsic motivation in the context of social influences/factors.
Motivation & Self-determination	Koestner, R., & Losier, G. F. (2002). Distinguishing three ways of being highly motivated: A closer look at introjection, identification, and intrinsic motivation.	Explores intrinsic versus extrinsic motivational drivers.
Motivation & Self-determination	Maslow, A. H. (1943). A Theory of Human Motivation. Psychological review, 50(4), 370.	Seminal theory of human motivation; defines five levels of human goals/needs hierarchally.
Motivation & Self-determination	Solansky, S. T. (2014). Self-determination and leader development. Management Learning, 46(5), 618.	An empirical examination of a large-scale leader training program with the hope of detangling how <u>autonomy or self-determination</u> impacts leader skill development. Finding: Significant statistical differences exist between individuals in a leader development programme depending on their level of self-determination
Leadership	Allio, R. J. (2008). In the Crucible: Robert J. Thomas Explains How Leaders Learn. Strategy & Leadership, 36(5), 4-8.	An internal look at organizational learning and re-examination of how successful leaders actually learn.
Leadership	Angelo, M., Erik, R. E., & Steven, J. L. (2004). The importance of personal and professional leadership. Leadership & Organization Development Journal(5), 435.	Examines how organizational viability hinges upon effective leaders. Also examines how leadership of oneself ("personal leadership" may function as a mediator of the relationship between professional leadership and cooperation of constituents. Implications for the impact of in-role leader persona and influence.
Leadership	Anthony, S., & Schwartz, E. I. (2017). What the Best Transformational Leaders Do. Harvard Business Review Digital Articles, 2-9.	A review of organizations that have gone through transformation and the qualities of their leaders which enabled the process.

Leadership	Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. <i>The Leadership Quarterly</i> , 14(3), 261-295.	A study of the validity of Bass and Avolio's Multifactor Leadership Questionnaire (MLQ)(Form 5X). Study conducted with a sample consisting of 2279 males and 1089 females.
Leadership	Argyris, C. (1991). Teaching smart people how to learn. <i>Harvard Business Review</i> , (3), 99.	Addresses the learning dilemma within organizations; awareness of what learning is within an organization and how to optimize it.
Leadership	Avolio, B. J., & Bass, B.M. (1993). Transformational Leadership and Organizational Culture. <i>Public Administration Quarterly</i> , 112-121.	Defining organizational culture in terms of type of Transformational leadership. Examines "high-contrast" cultures with both strong transformational and transactional qualities to the "garbage can" which lacks either kind of leadership of consequence. Posits that an organization's culture develops in large part from its leadership.
Leadership	Avolio, B. J., & Bass, B. M. (2000). MLQ: Multifactor Leadership Questionnaire: Mind Garden.	Leading assessment tool used to identify the characteristics of Transformational/Transactional leadership behavior.
Leadership	Avolio, B. J., & Bass, B. M. (2002). Developing potential across a full range of leadership. [electronic resource] : cases on transactional and transformational leadership. Mahwah, N.J. : Lawrence Erlbaum Associates, 2002.	A 29 case study review covering multi-faceted leadership model; argues that the most effective leaders are both transformational and transactional in their leadership style.
Leadership	Avolio, B. J., Bass, B.M. & Jung, D.I. (1997). Replicated Confirmatory Factor Analyses of the Multifactor Leadership Questionnaire. Binghamton, NY: Center for Leadership Studies, Binghamton University.	Validation and validity evidence for the Multifactor Leadership Questionnaire (MLQ).
Leadership	Avolio, B. J., Bass, B.M. & Jung, D.I. (1997). Replicated Confirmatory Factor Analyses of the Multifactor Leadership Questionnaire. . Binghamton, NY: Center for Leadership Studies, Binghamton University.	Validation and validity evidence for the Multifactor Leadership Questionnaire (MLQ) using Confirmatory Factor Analysis
Leadership	Avolio, B. J., Waldman, D. A., & Yammarino, F. J. (1991). Leading in the 1990s: The Four I's of Transformational Leadership. <i>Journal of European Industrial Training</i> , 15(4).	Characterizes Transformational leaders by four separate components or characteristics denoted as the "4 Is of transformational leadership."
Leadership	Barbuto, J. E. (2005). Motivation and transactional, charismatic, and transformational leadership: A test of antecedents. <i>Journal of Leadership &amp; Organizational Studies</i> , 11(4), 26-40.	Study of leaders' general motivation and relationship with Transformational/Transactional leadership style.
Leadership	Bass, B. M. (1985). Leadership and performance beyond expectations. New York : Free Press ; London: Collier Macmillan, c1985.	Transformational leaders change their culture by first understanding it, and then realigning the organization's culture with a new vision and a revision of its shared assumptions, values, and norms.
Leadership	Bass, B. M. (2000). The Future of Leadership in Learning Organizations. <i>Journal of Leadership &amp; Organizational Studies</i> , 7(3), 18-40.	Developments in the confirmation of the utility of transformational leadership for increasing organizational satisfaction, commitment, and effectiveness, this paper aims to illustrate how transformational leadership is directly related to the creation and maintenance of the learning organization.

Leadership	Bass, B. M., & Avolio, B. J. (1994). Improving organizational effectiveness through transformational leadership: Thousand Oaks : Sage Publications, c1994.	Examines the intentions of Transformational leaders and how they use their beliefs, knowledge and role for the greater organizational purpose and advancement vis a vis team influence.
Leadership	Bass, B. M., Bass, R. R., & Bass, B. M. . (2008). The Bass Handbook of Leadership : Theory, Research, and Managerial Applications: New York : Free Press, 2008.	Cites that the Transformational leader goes beyond a transaction with followers and instead motivates them to higher levels on Maslow's hierarchy of needs.
Leadership	Bass, B. M., & Riggio, R. E. (2006). Transformational leadership. Mahwah, N.J.: L. Erlbaum Associates, 2006.	Outlines the steps organizations can take to develop leaders to be more Transformational, including techniques.
Leadership	Bass, B. M., & Steidlmeier, P. (1999). Ethics, Character, and Authentic Transformational Leadership Behavior. The Leadership Quarterly, 10(2), 181-217.	This paper argues that to be truly transformational, leadership must be grounded in moral foundations.
Leadership	Bennis, W. (1984). The Four Competencies of Leadership. Training and Development Journal, 38(8), 14-19.	An account of interviews with 60 corporate leaders and 30 leaders from the public sector to uncover common leadership traits. Four competencies were found in every leader, including: management of attention, meaning, trust, and self. Findings also indicate that empowerment was the collective effect of successful leadership. In organizations with effective leaders, empowerment was most evident in 4 themes: People feel significant, learning and competence matter, people are part of a community, and work is stimulating.
Leadership	Bennis, W. G., & Nanus, B. (1986). Leaders: The strategies for taking charge. New York : HarperPerennial, 1986, c1985.	Examines the competencies organizations need to evaluate their leaders and the difficulty in identifying, measuring or developing these.
Leadership	Bennis, W. G., & Thomas, R. J. (2007). Crucibles of Leadership. Harvard Business Review, 80.	Researches the elusive question, what makes a successful leader. Findings conclude that one of the most reliable indicators and predictors of true leadership in a leader is the ability to conquer adversity and emerge stronger and more committed.
Leadership	Bersin, J. (2012). It's Not The CEO, It's The Leadership Strategy That Matters. Forbes. Retrieved from <a href="https://www.forbes.com/sites/joshbersin/2012/07/30/its-not-the-ceo-its-the-leadership-strategy-that-matters/#788b6eb6db86">https://www.forbes.com/sites/joshbersin/2012/07/30/its-not-the-ceo-its-the-leadership-strategy-that-matters/#788b6eb6db86</a>	Discusses enduring leadership attributes and the necessity of tying strategy to leadership approach and practices.
Leadership	Biswas, S. (2012). Impact of Psychological Climate & Transformational Leadership on Employee Performance. Indian Journal of Industrial Relations, 105-119.	A study of the influence of psychological climate and transformational leadership on job satisfaction, which is shown to lead to better levels of employee performance.
Leadership	Botelho, E. L., Kincaid, S., & Wang, D. (2017). What sets successful CEOs apart: The four essential behaviors that help them win the top job and thrive once they get it. Harvard Business Review, (3), 70.	An examination of conventionally accepted Leadertraits and behaviors versus what actually makes leaders successful and lead organizations to higher levels of performance.

Leadership	Brooks, A. (2013). The Power of Positive Disruption. Retrieved from <a href="http://nsight2success.com/nsights/the-power-of-positive-disruption/">http://nsight2success.com/nsights/the-power-of-positive-disruption/</a>	Covers the benefits of 'leading intentionally', and leaders who adopt a mindset of positive disruption.
Leadership	Brown, L. M., & Posner, B. Z. (2001). Exploring the relationship between learning and leadership. <i>Leadership &amp; Organization Development Journal</i> , 22(6), 274-280.	Holistic look at the cross-section of learning and leadership; Invokes the learning tactics inventory and leadership practices inventory are compared for a managerial sample to measure learning and leadership practices.
Leadership	Burns, J. M. (1978). <i>Leadership</i> . New York, New York: Harper and Row Publishers, 1978.	Burns' seminal work regarding Transformational/Transactional leadership in which he asserts that these two leadership styles are mutually exclusive.
Leadership	Cappelli, P. (2008). Talent management for the twenty-first century. <i>Harvard Business Review</i> , (3), 74.	HBR article citing the issues that failures on talent management create for modern day companies and examines how organizations should most effectively anticipate the need for human capital and maximize the acquisition of talent.
Leadership	Cashman, K. (2013). The Five Dimensions Of Learning-Agile Leaders. <i>Forbes</i> , (45), 108. Retrieved from <a href="https://www.forbes.com/sites/kevincashman/2013/04/03/the-five-dimensions-of-learning-agile-leaders/#74fc2f107457">https://www.forbes.com/sites/kevincashman/2013/04/03/the-five-dimensions-of-learning-agile-leaders/#74fc2f107457</a>	Forbes article in which authors coins the term "learning agility" and explains why leaders need to be learning agile.
Leadership	Charbonneau, D., Barling, J., & Kelloway, E. K. (2001). Transformational leadership and sports performance: The mediating role of intrinsic motivation. <i>Journal of applied social psychology</i> , 31(7), 1521-1534.	Examines the interaction of intrinsic motivation and Transformational leadership; asserts that there is a relationship between these two constructs.
Leadership	Cho, D. (2002). The connection between self-directed learning and the learning organization. <i>Human Resource Development Quarterly</i> , 13(4), 467-470.	Extols the value and necessity of self-directed learning as a function of adult learning; examines the advantages of SDL and asserts that organizations and HR professionals seek SDL as an essential attribute in employees/leaders.
Leadership	Choudhary, A. I., Akhtar, S. A., & Zaheer, A. (2013). Impact of Transformational and Servant Leadership on Organizational Performance: A Comparative Analysis. <i>Journal of Business Ethics</i> , 116(2), 433-440.	Explores the relationship between organizational performance and Transformational leadership; asserts that there is a relationship between Transformational leadership and organizational learning, and in turn, organizational learning with organizational performance.
Leadership	Coad, A. F., & Berry, A. J. (1998). Transformational leadership and learning orientation. <i>Leadership &amp; Organization Development Journal</i> , 19(3), 164-172.	Cites that transformational leadership is associated with an intrinsic learning-goal orientation and transactional leadership with an extrinsic performance-goal orientation. Connects transformational leadership with organizational learning and , in turn, performance.
Leadership	Conger, J. A. (1999). Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research. <i>The Leadership Quarterly</i> , 10(2), 145-179.	Compares charismatic and transformational leadership styles; examines the impact of both in organizations..

Leadership	Cox, R. (2010). The Transformational Leadership Report. Retrieved from <a href="http://www.transformationalleadership.net/products/TransformationalLeadershipReport.pdf">http://www.transformationalleadership.net/products/TransformationalLeadershipReport.pdf</a>	Explores, in depth, the attributes of the Transformational leader based on Bass' 4 Is.
Leadership	Cunha, P. V., & Louro, M. J. (2000). Building teams that learn. The Academy of Management Executive, 14(1), 152-153.	Cites the significance of self-development in leader efficacy.
Leadership	DeRue, D. S., & Wellman, N. (2009). Developing leaders via experience: The role of developmental challenge, learning orientation, and feedback availability. Journal of applied psychology (4), 859.	Emphasizes the value of learning in leader development; asserts that challenges are a vehicle for learning and it is the leader's responsibility to reflect on outcomes as a result of these experiences.
Leadership	Dechant, K. (1990). Knowing How to Learn: The "Neglected" Management Ability. Journal of Management Development, 9(4), 40-49.	Posits that leaders must self-direct their own learning and development and that this competence must be acknowledged in leader development programs.
Leadership	Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. Academy of Management Journal, 45(4), 735-744.	A study of the impact of transformational leadership training on team member development and performance with an sample of leaders who received transformational leadership training and those who received a generic training.
Leadership	Folkman, J. & Zenger, J. . (2014). The Skills Leaders Need at Every Level. Harvard Business Review Digital Articles, 2-4.	Examines the skills that have the greatest impact on a leader's success and includes them in an assessment of performance of these competencies across leaders at different levels.
Leadership	Gomez, D. (2007). Practitioner's Corner : The Leader as Learner. International Journal of Leadership Studies, 2(3), 280-284.	Asserts that for organizational innovation and sustainability, leaders must be learners and view learning as an investment in their own development and that of the organizational whole.
Leadership	Hartog, D. N., Muijen, J. J., & Koopman, P. L. (1997). Transactional versus transformational leadership: An analysis of the MLQ. Journal of Occupational and Organizational Psychology, 70(1), 19-34.	Validation and validity evidence for the Multifactor Leadership Questionnaire (MLQ).
Leadership	Hater, J. J., & Bass, B. M. (1988). Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership. Journal of applied psychology, 73(4), 695.	Cites the "significant" contribution of Transformational leaders to organizational performance and culture .
Leadership	Hedges, K. (2014). If You Think Leadership Development Is A Waste Of Time, You May Be Right. Forbes. Retrieved from: <a href="https://www.forbes.com/sites/work-in-progress/2014/09/23/if-you-think-leadership-development-is-a-waste-of-time-you-may-be-right/#15e6c8a25bf4">https://www.forbes.com/sites/work-in-progress/2014/09/23/if-you-think-leadership-development-is-a-waste-of-time-you-may-be-right/#15e6c8a25bf4</a>	A study which examines what factors contribute to effective leader development programs, what type of development actually results in better leaders, and the investment ROI for organizations investing in said programs.

Leadership	Hater, J. J., & Bass, B. M. (1988). Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership. <i>Journal Of Applied Psychology</i> , (4), 695.	Examines leadership in the context of the rapid rate of change and economic/technological/competitive landscape and the new competencies and strategies organizations need.
Leadership	Hitt, M. A., Keats, B. W., & DeMarie, S. M. (1998). Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. <i>The Academy of Management Executive</i> , 12(4), 22-42.	The role of leadership and attributed needed by leaders to build strategic flexibility within a 21st century organization.
Leadership	Hoque, F. (2015). 5 Habits Of Truly Disruptive Leaders. <i>Fast Company</i> . Retrieved from <a href="https://www.fastcompany.com/3052725/5-habits-of-truly-disruptive-leaders">https://www.fastcompany.com/3052725/5-habits-of-truly-disruptive-leaders</a>	Examines how the most effective leaders achieve positive disruption; the attributes and behaviors which guide these leaders' practices and decisions, and the impact these leaders have on organizational challenges and uncertainty.
Leadership	Jerome, N. (2013). Application of the Maslow's hierarchy of need theory; impacts and implications on organizational culture, human resource and employee's performance. <i>International Journal of Business and Management Invention</i> , 2(3), 39-45.	Examines Maslow's hierarchy of need in the context of its interaction with organizational culture, leadership, influence on employees and overall performance.
Leadership	Johnson, J. R. (1998). Embracing change: a leadership model for the learning organisation. <i>International Journal of Training and Development</i> , 2(2), 141-150.	The manifestation of leadership style and behaviors within a learning organization.
Leadership	Johnson, J. R. (2002). Leading the learning organization: Portrait of four leaders. <i>Leadership &amp; Organization Development Journal</i> , 23(5), 241-249.	Examines the role of learning and leadership practices necessary within an organization.
Leadership	Jyoti, J., & Dev, M. (2015). The impact of transformational leadership on employee creativity: the role of learning orientation. <i>Journal of Asia Business Studies</i> , 9(1), 78.	Examines the relationship between transformational leadership and employee creativity. Also includes the role that learning motivation plays in leadership practices and performance.
Leadership	Kiel, J. M. (1999). Reshaping Maslow's hierarchy of needs to reflect today's educational and managerial philosophies. <i>Journal of Instructional Psychology</i> , 26(3), 167-167.	Explores Maslow's hierarchy with a focus on self-actualization and its ongoing evolution.
Leadership	Koestner, R., & Losier, G. F. (2002). Distinguishing three ways of being highly motivated: A closer look at introjection, identification, and intrinsic motivation. <i>Handbook of Self-Determination Research</i> .	Focuses on intrinsic motivation and internalization as two innate growth tendencies that may explain much of the variance in individuals' vitality, development, and psychological adaptation.

Leadership	Knutson, C. (2012). Millennial Anxiety in the Workplace. Retrieved from <a href="http://www.forbes.com/sites/forbesinsights/2012/07/31/millennial-anxiety-in-the-workplace/">http://www.forbes.com/sites/forbesinsights/2012/07/31/millennial-anxiety-in-the-workplace/</a>	An examination of millennials in executive positions, and the qualities they attribute to assisting them with achieving their current levels of success.
Leadership	Hedges, K. (2014). If You Think Leadership Development Is A Waste Of Time You May Be Right. Retrieved from Forbes website: <a href="https://www.forbes.com/sites/work-in-progress/2014/09/23/if-you-think-leadership-development-is-a-waste-of-time-you-may-be-right/#15e6c8a25bf4">https://www.forbes.com/sites/work-in-progress/2014/09/23/if-you-think-leadership-development-is-a-waste-of-time-you-may-be-right/#15e6c8a25bf4</a>	Cites the efficacy, or lack thereof, of leader development programs.
Leadership	Lieberson, S., & O'Connor, J. F. (1972). Leadership and organizational performance: A study of large corporations. <i>American sociological review</i> , 117-130.	Case studies of leadership and organizational performance within large US corporations.
Leadership	Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. <i>The Leadership Quarterly</i> , 7(3), 385-425.	
Leadership	Marquardt, M. J., & Reynolds, A. (1994). <i>The global learning organization</i> . Burr Ridge, Ill. : Irwin Professional Pub., c1994	Explores the role and necessity of learning for organizations in the global economy.
Leadership	Marquardt, M. J. (1996). <i>Building the learning organization : A systems approach to quantum improvement and global success</i> . New York : McGraw-Hill, c1996.	An examination of leading learning organizations world-wide, and presentation of a model for the learning organization.
Leadership	Marquardt, M. J. (2000). Action learning and leadership. <i>The Learning Organization</i> , 7(5), 233-241.	Further previous work and integrates the role of action learning in leader efficacy and the learning organization.
Leadership	McCall, M. W. (1998). <i>High flyers: Developing the next generation of leaders</i> : Brighton, Boston, Mass. : Harvard Business Press, c1998.	Offers a new and dimensional framework for organizations to develop executives and identify the most relevant competencies for success.
Leadership	McCall, M. W., Morrison, A. M., & Lombardo, M. M. (1988). <i>The lessons of experience : how successful executives develop on the job</i> . Lexington, Mass. : Lexington Books, c1988.	Lessons/case studies of executive leader development and methods.
Leadership	Mikkelsen, K., & Jarcho, H. (2015). The Best Leaders Are Constant Learners. <i>Harvard Business Review Digital Articles</i> , 2-4.	Asserts that the best leaders are constant learners and the trickle-down benefits therein.

Leadership	Rao, M. (2014). Success tools for CEO coaches: Be a learner, leader and ladder. Human Resource Management International Digest, 22(5), 33-36.	Examines the direct and indirect [positive] impact of Transformational leaders on individual and organizational performance.
Leadership	Reeves, M., & Deimler, M. (2011). Adaptability: the new competitive advantage: in a world of constant change, the spoils go to the nimble. Harvard Business Review, (7-8), 134.	Examines the attributes leaders need to assist organizations with adapting to current market volatility.
Leadership	Riggio, R. E. (2009). Are you a transformational leader? Psychology Today, 18-24.	Cites Transformational leadership as the most studied style of leadership.
Leadership	Rowold, J. (2005). Multifactor leadership questionnaire. Psychometric properties of the German translation by Jens Rowold. Redwood City: Mind Garden.	Validation and validity evidence for the Multifactor Leadership Questionnaire (MLQ).
Leadership	Sarros, J. C., Cooper, B. K., & Santora, J. C. (2008). Building a climate for innovation through transformational leadership and organizational culture. Journal of Leadership & Organizational Studies, 15(2), 145-158.	Cites Transformational leadership as positively tied to improved organizational performance and connects the attributes of the Transformational leader as influencers of employee-culture-organizational outcomes.
Leadership	Scandura, T. A., & Schriesheim, C. A. (1994). Leader-member exchange and supervisor career mentoring as complementary constructs in leadership research. Academy of Management Journal, 37(6), 1588-1602.	Explores how Transformational leaders impart the value of learning and development onto constituents.
Leadership	Senge, P. M. (1990). The fifth discipline : the art and practice of the learning organization. New York : Doubleday/Currency, c2006.	Senge's seminal work in which he strongly asserts that an organization's only means to success and sustainability is its ability to learn.
Leadership	Senge, P. M. (1996). Leading learning organizations. Training & Development, 50(12), 36-37.	Ties Senge's seminal work on the role of learning to the leadership required to lead a learning organization to success.
Leadership	Sosik, J. J., Godshalk, V. M., & Yammarino, F. J. (2004). Transformational leadership, learning goal orientation, and expectations for career success in mentor-protégé relationships: A multiple levels of analysis perspective. The Leadership Quarterly, 15(2), 241-261.	Explores the mentor-mentee relationship which develops between the Transformational leader and his team members as one that forms based on the leader's inherent learning orientation and motivation and which influences his team members, in turn.
Leadership	Stewart, J. (2006). Transformational Leadership: An Evolving Concept Examined through the Works of Burns, Bass, Avolio, and Leithwood. Canadian Journal of Educational Administration and Policy, 54, 1-29.	Examines the evolution and impact of Transformational leadership as reflected in scholarly literature.

Leadership	Tichy, N. M., & Cohen, E. B. (1997). The leadership engine : building leaders at every level. Dallas, TX : Pritchett & Associates, Inc.	The authors present a model for organizations to follow for a "winning" leadership development system to create leaders at every level of the organization.
Leadership	Tichy, N. M., & Devanna, M. A. (1986). The transformational leader. New York : Wiley, c1986.	Studies the impact that Transformational leaders' authentic and self-effacing style has on follower development; the Transformational leader focuses on the greater good and not his own self-interest when leading.
Leadership	Vaill, P. (1998). Spirited leading and learning. San Francisco : Jossey-Bass, c1998.	Redefines traditional concepts of management versus leadership into "managerial leadership" and studies the attributes which maximize efficacy of both.
Leadership	Vicere, A. A., & Fulmer, R. M. (1998). Leadership by design:[how benchmark companies sustain success through investment in continuous learning]: Harvard Business School Press.	Study of organizations that invest in learning .
Leadership	Warrick, D. (2011). The urgent need for skilled transformational leaders: Integrating transformational leadership and organization development. Journal of Leadership, Accountability, and Ethics, 8(5), 11-26.	Studies the need for and scarcity of Transformational leaders in today's organizations, as an antidote for current levels of uncertainty and change.
Leadership	Yakowicz, W. (2015). Three Reasons Leadership Training Is a Huge Waste. Inc. Magazine. Retrieved from <a href="https://www.inc.com/will-yakowicz/companies-spend-billions-on-leadership-development-no-results.html">https://www.inc.com/will-yakowicz/companies-spend-billions-on-leadership-development-no-results.html</a>	Issues pertaining to leadership training and failure rates.
Leadership	Yammarino, F. J., & Bass, B. M. (1990). Transformational leadership and multiple levels of analysis. Human Relations, 43(10), 975-995.	Multi-level study of Transformational leader-follower interactions.