LEADERSHIP EDUCATION RECONSIDERED:
EXAMINING SELF-PERCEIVED LEADERSHIP STYLES AND MOTIVATION SOURCES
AMONG UNDERGRADUATE LEADERS

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ABSTRACT

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This study examined the relationships between undergraduate leaders’ self-perceptions of their transformational and transactional leadership behaviors and their sources of work motivation. The sample was comprised of 145 elected and appointed leaders at a mid-west university. The survey included both the Motivation Sources Inventory and the Multifactor Leadership Questionnaire. Other survey items collected demographic and leadership-experience data. Participants overall scored higher for transformational self-perceived behaviors than for transactional, and higher for intrinsic motivation than extrinsic. Intrinsic motivation related positively to transformational self-perceived behaviors, and extrinsic motivation related positively to transactional self-perceived behaviors. By understanding undergraduates’ self-perceptions of their leadership behaviors and motivation, models and methods can be developed to foster and strengthen perspectives that embrace situational application of transformational and transactional behaviors.
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“Leadership is a dynamic and complex whole based on our relationships with others.”

– Sosik and Jung (2010)

CHAPTER I. INTRODUCTION TO THE PROBLEM

Organizational leadership studies since the early 1980s have focused heavily on competencies and behaviors (Conger & Ready, 2004; Judge & Bono, 2000; Judge, Ilies, Bono, & Gerhardt, 2002), leadership training and development (Conger, 2004; Day, 2000), shared organizational values and culture (O'Reilly III, Chatman & Caldwell, 1991; Yukl & Becker, 2006), and systems thinking (Senge, 2006). These studies have outlined practices and behaviors at both group and individual levels that positively influence organizational achievement and intra-group dynamics.

Beyond these organizational perspectives, other researchers have focused on leadership strategies and behaviors classified as transactional and transformational (Avolio & Bass, 1999; Kotter, 1995; Sosik & Jung, 2010). These studies have demonstrated clear distinctions between leadership practices which are transactional versus transformational in nature, as well as organizational differences attributed to these leadership styles that help define organizational culture. Transactional leadership behaviors rely upon quasi-contractual agreements to achieve organizational outcomes. Transformational leadership behaviors pull followers together with leaders to achieve change driven by shared vision and expectations. Full Range Leadership Development (FRLD) asserts that balanced, but not necessarily equal, application of transactional and transformational leadership behaviors leads to sustainable systems and performance outcomes that thrive within ever-changing contexts (Avolio, 1999; Sosik & Jung, 2010). These studies appear to be applicable to a broad array of leadership contexts, but
relatively little research has been conducted directly relating these theories to college-student leadership.

Recent research has slowly advanced the application of complexity theories (e.g., chaos theory) within organizational development and leadership development. From chaos theory’s origins in the study of weather patterns (Gleick, 1987), complexity theories have expanded to explore human systems, including organizations, as complex, non-linear systems (Cilliers, 2006; Wheatley, 2006). Several characteristics of complex systems provide a framework for leadership theory in harmony with transformational leadership, including an emphasis on relationships, forecasting within non-linear systems, self-organizing systems, and sensitivity to initial conditions (Cilliers, 2006; Wheatley, 2006).

A core component of complexity theories is the notion of relationships. Within the context of leadership and organizational complexity, interpersonal relationships are considered as well as relationships between persons and their contexts/environments. This emphasis on relationships creates a potential linkage between complexity theories and transformational leadership behaviors. In the realm of leadership, Quinn, Spreitzer, and Brown (2000) introduced the Advanced Change Theory, linking perspectives of complex human systems to strategies for adaptive change. In the specific realm of higher education leadership, Love and Estanek (2004) related complexity theories to the work of college student affairs professionals. Although Love and Estanek called for further research and application in their book, little research has been documented in this area, especially relative to undergraduate leadership.

As studies in organizational leadership have grown, so too has the emphasis on leadership development and leadership education for undergraduate college students (undergraduates). Research regarding college student development and involvement provides some insights
regarding the educational potential of undergraduate leadership experiences. For example, Astin (1993) concluded that any amount of student involvement, defined as “physical and psychological time and energy the student invests in the educational process,” tended to benefit student development and academic achievement. Astin also determined that the strongest influence on personal and academic development was peer-to-peer interaction; student-to-faculty interaction was determined to be the second strongest influence. Chickering and Reisser (1993) identified seven vectors of student development, including developing competence, managing emotions, moving through autonomy toward independence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity. Chickering and Reisser asserted that students can develop in each of the vectors at different rates, and that interactions exist between the vectors. These vectors provide foundation for leadership education experiences and learning outcomes. In addition to college student development theories, recent studies have focused on transformational leadership theories specifically tailored to undergraduate contexts (Komives & Wagner, 2009; Kouzes & Posner, 2008). Leadership research pertaining to undergraduates focuses primarily on transformational leadership theory, excluding other leadership behaviors advocated by FRLD for effective day-to-day and long-term leadership of organizations. For example, the Student Leadership Practices Inventory (Kouzes & Posner, 2008) and the Social Change Model (Komives & Wagner, 2009) both provide frameworks of transformational leadership, but neither addresses a broader range of leadership behaviors for undergraduate practitioners to utilize on a daily basis.

The models that have surfaced are highly applicable to undergraduate leadership studies (i.e., curricular/classroom and co-curricular/workshop programs), but they fail to provide a full-range framework of transactional and transformational leadership practices for co-curricular and
extra-curricular student leaders outside such classes/programs. These models appropriately challenge undergraduates to consider their leadership potential, and the associated texts offer much for consideration among learning cohorts and classes. However, they are less applicable in the immediate context of a new undergraduate leader faced with daily challenges of organization leadership. Further, these models advocate the development of transformational leadership practices, but they generally do not address pre-existing leadership perceptions and motivation factors. Little research has been conducted regarding the actual leadership preferences, perceptions, or practices of undergraduates. Leadership educators, student-group advisors, and student-employee supervisors benefit from the existing research and models, but few resources, if any, exist for bridging the theory-to-practice gap in student-organization settings.

**Purpose of the Study**

What remains to be addressed in the research literature are the specific views held by undergraduates regarding leadership, particularly their self-perceptions regarding transactional and/or transformational leadership behavior. Also remaining to be addressed is whether or not complexity theory paradigms are useful in helping undergraduate leaders to better understand, relate to, and ascribe to various leadership strategies.

This study examines the relationships between undergraduate leaders’ self-perceptions of their transformational and transactional leadership behaviors and their sources of work motivation. Discovering relationships between leaders’ motivations and behaviors establishes a foundation for developing new leadership models intended to develop a full range of leadership behaviors among the student leaders. By understanding undergraduates’ self-perceptions of their leadership behaviors (i.e. transformational or transactional) and motivation sources, models and
methods can be developed to foster and strengthen perspectives that embrace situational application of transformational and transactional behaviors.

Research Questions

Relative to undergraduate leaders’ self-perceptions, the current study focused on the following research questions:

Is the work of leaders more extrinsically or intrinsically motivated?

Do leader self-perceptions reflect their behaviors as more transactional or transformational?

Are leadership styles (transactional vs. transformational) significantly related to sources of work motivation (intrinsic vs. extrinsic)?

Are motivation sources (intrinsic vs. extrinsic) significantly related to organizational contexts (i.e., the type of organization)?

Is leadership style significantly related to the number of years in leadership roles?

Is gender significantly related to either motivation (intrinsic vs. extrinsic) or leadership style (transformational vs. transactional)?

Do students who have participated in leadership education experiences differ in their leadership style (transactional vs. transformational) from those who have not been through leadership education experiences?

What is the interaction among the independent variables being measured in relation to leadership style?

Significance of the Study

This study is significant relative to existing literature, college student development practitioners, and collegiate curriculum and policy development. Regarding the existing literature, this study provides (a) insights into undergraduate leaders’ self-perceptions of their
leadership behaviors, and (b) connections between undergraduates’ leadership behaviors and
motivation sources. Regarding practitioners in the field of college student development, this
study provides a paradigm for understanding undergraduates as transactional, transformational,
and/or full-range leaders, including their sources of work motivation. It also provides a
foundation for further research toward the development of relationship-oriented leadership
training models within undergraduate contexts. Regarding policy issues, this study provides
evidence supporting potential restructuring of curricula, training programs, organizational
expectations, and/or resource allocations for student leaders and student leadership training
programs.

Key Terms

Several terms require specific definitions relative to the current study. Undergraduate
leaders refers to undergraduate students holding official leadership positions, either elected or
appointed, within clubs or organizations sanctioned by the enrolling institution. This definition
aligns with Haber and Komives’s (2008) definition of a “formal leadership role.”

In the current study, motivation refers to work motivation, defined by Leonard, Beauvais,
and Scholl (1999) as “the process by which behavior is energized, directed, and sustained in
organizational settings” (p. 970). Motivation sources refer to “the factors that drive this process”
(Leonard et al., p. 970). The five categories of motivation sources measured in the current study
stem from a model developed by Leonard et al., integrating several decades of motivation
research.

In the current study, leadership styles refer to five behavioral categories identified by
Avolio and Bass (2004) as contributing factors to a full range of leadership behaviors. Although
the current study refers to each of the five categories as a separate leadership style, implications
for this study include combinations of these behavioral strategies applied in a more comprehensive style as proposed by FRLD (Avolio & Bass, 2004; Sosik & Jung, 2010). These five styles are not mutually exclusive, and the measuring instrument used in this study allows for the development and relative comparison of subscale averages for each style.

The current study examined variables within organizational contexts, so the term organization deserves some attention. Consistent with the previously stated definition of motivation, an organizational context is required for the measure of work motivation. Within the undergraduate setting, formal organizational structures exist in the form of student organizations or clubs established upon common interests. At the campus in the current study, the administrative offices for student life recognize over 300 registered student organizations in the following categories: academic department affiliate, community service, cultural, governing body, honors and recognition, recreation, social Greeks (fraternities and sororities), and special interest (BGSU Student Organization Directory, 2009). Rationale for this study’s sample parameters is detailed in the “sample” section of Chapter 3.

Leadership development describes educational and/or training methods focused on personal development of leadership perspectives and behaviors (Haber & Komives, 2008). Leadership development experiences can include formal curricular (i.e., classroom) experiences, co-curricular experiences that complement curricular learning but are not necessarily held to curricular standards (e.g., a leadership academy or living-learning community), and extracurricular experiences such as organizational involvement and leadership training workshops (Haber & Komives).

Transactional leadership, or contingent reward leadership, describes leadership methods based in quasi-contractual agreements between leader and follower (Sosik & Jung, 2010).
Transformational leadership describes leadership methods that empower followers, or organization members, to perform beyond expectations toward the transformation of group, organization, and larger entities in accordance with a shared vision (Sosik & Jung, 2010). These two terms are explored further in Chapter 2.

Organization of the Study

Chapter 2 presents a review of literature relevant to this study. Chapter 3 details the methodologies for data collection and analysis. Chapter 4 presents data analysis results from the survey sample. Chapter 5 presents summative conclusions from the data analysis, practical application recommendations based upon the study conclusions, and suggestions for further research.
CHAPTER II. LITERATURE REVIEW

Introduction

This overview of existing literature provides a set of frames through which to consider the present study, as well as demonstrating the practical need for the present study. To begin, a brief overview of leadership theories is presented, leading to specific exploration of transactional and transformational leadership. Next presented is literature regarding motivation as it pertains to leadership theories and leadership styles. The arena of higher education is next addressed by presenting developmental functions of undergraduate leadership. The educational perspective continues in an overview of leadership training and development research. In order to provide additional context for training and development perspectives, the next section highlights research regarding organizational cultures. Finally, current models utilized in undergraduate leadership education are explored, leading to an argument for further research on undergraduates as practicing leaders.

Leadership Theories

Transformational leadership, transactional leadership, and the other leadership styles measured within this study are best understood within a historical context of leadership theories. Sosik and Jung (2010) provide a succinct history of leadership theory, consistent with other texts (Antonakis, Cianciolo, & Sternberg, 2004; Hersey, Blanchard, & Johnson, 2001; Komives, Dugan, Owen, Slack, & Wagner, 2006a; Zaccaro & Horn, 2003) from which this overview is structured.

Industrial Theories. Industrial leadership theories focus on leader characteristics, and behaviorally utilizing those characteristics to influence follower behaviors and outcomes (Komives et al., 2006a). Industrial theories include trait, psychodynamic, skill, and style theories.
Trait theories of leadership were developed from the earliest leadership research (Sosik & Jung, 2010). These theories attribute power and greatness of leaders to specific personal traits such as intelligence, confidence, and sociability (Sosik & Jung; Hersey, Blanchard, & Johnson, 2001). Although trait theories identify observable traits common among some leaders, they fail to explain significant behavioral differences between leaders with similar traits, and variances among their achievements or outcomes as leaders; they also fail to address contextual issues, such as follower or group characteristics, which, according to Sosik and Jung (2010), partially contribute to leader effectiveness as measured through group effectiveness.

Psychodynamic theories of leadership attribute leadership competency to leaders’ self-awareness and identity development (Sosik & Jung, 2010). Essentially, these theories assert that through a strong sense of self-awareness (how one perceives, processes, and applies information), and through an ability to influence followers’ mental perceptions, leaders are best able to achieve desired results. Although there is evidence that self-awareness and orientation to others’ perceptions can be beneficial to leadership efforts, application of such theories tends to guide leaders toward specific personality-based strategies rather than encouraging development of general leadership practices (Sosik & Jung).

Skill theories of leadership focus on development of social interaction skills, problem solving skills, and emotional management skills. The development of these skills remains important within later theories, with the addition of contextual considerations such as follower and situation characteristics (Sosik & Jung, 2010). However, more behaviorally focused theories allow greater consideration of leadership potential among individuals at various levels of skill development, thus broadening the population of potential leaders (Sosik & Jung).
Style theories focus on leaders’ understanding and development of behavioral styles, typically categorized as task-oriented and relationship-oriented (Sosik & Jung, 2010). Style theories are the first leadership theories to clearly consider follower characteristics and situational characteristics relative to leadership behaviors. They also represent a shift to behavioral leadership theories, advancing the concept that leadership can be trained or learned, as opposed to leadership linked to innate personal qualities or characteristics (Sosik & Jung).

*Situational Theories.* Situational leadership theories are an extension of style theories, advocating specific matching of leader styles to follower-readiness levels for maximum outcome achievement (Hersey, Blanchard, & Johnson, 2001; Sosik & Jung, 2010). Situational theories generally measure leadership styles along two axes, leader involvement (low to high) and leader style (task-oriented to relationship-oriented). The appropriate mixture of involvement and style is determined by the follower’s, or group’s, current ability (or “readiness”) to independently achieve a stated objective. Since FRLD, the basis for the Multifactor Leadership Questionnaire (MLQ), considers various mixtures of leadership behaviors relative to situational needs, several specific situational leadership theories deserve attention in the following paragraphs (Sosik & Jung, 2010; Hersey, Blanchard, & Johnson, 2001).

The earliest situational leadership model is the Continuum of Leadership Behavior proposed by Tannenbaum and Schmidt (1958), which delineates seven levels of manager delegation. The continuum stretches between “boss-centered leadership” and “subordinate-centered leadership,” calling for counterbalancing levels of manager authority and subordinate freedom along the continuum.

Contingency Theory is a situational leadership theory that assumes leaders to have innate preferences toward task-oriented and relationship-oriented behaviors (Sosik & Jung, 2010;
Hersey, Blanchard, & Johnson, 2001). Using this theory, a leader’s predisposition would be measured, and then the leader would be matched to a situation most responsive to his/her leadership style. In contrast to Contingency Theory, more recent theories involving transformational leadership assume that leaders are capable of possessing, developing, and applying multiple leadership styles or strategies applicable to a broad range of situations (Sosik & Jung). While there is still some value in matching strategies to situational needs, effective leaders should be able to match appropriate mixtures of task-oriented and relationship-oriented behaviors to situational needs (Sosik & Jung).

Path-Goal Theory is another variation of situational leadership theory in which the leader establishes a goal and subsequently prepares a pathway to successful completion by followers (Hersey, Blanchard, & Johnson, 2001; Sosik & Jung, 2010). The uniqueness of this situational theory is that it measures multiple situational characteristics (personal and environmental) rather than just leader readiness, and also that it defines four unique leadership styles (directive, supportive, participative, and achievement-oriented) rather than style measured simply upon task- and relationship-orientation (Sosik & Jung).

Relational Theories. Leader-Member Exchange (LMX) Theory proposes that leaders form a unique relationship with each individual follower; the nature of the relationship determines behavioral patterns, or exchanges, between the leader and follower (Sosik & Jung, 2010; Yukl, O'Donnell & Taber, 2009). The specific content of individual leader-follower exchanges determines whether a follower falls within an “in” group or “out” group relative to the leader (Sosik & Jung). The associated leader behaviors represent preferential treatment towards specific followers. LMX and FRLD both acknowledge unique relationships and exchanges between leaders and individual followers; however, FRLD promotes varied leadership behaviors
toward a balanced system rather than the imbalances produced by preferential treatment (Sosik & Jung).

Authentic Leadership Theory, as well as related theories such as servant leadership, spiritual leadership, and charismatic leadership, advocates that highly effective leaders demonstrate value-based decision making aligned with personal and organizational values (Avolio & Gardner, 2005; Sosik & Jung, 2010). This alignment requires high levels of leader and follower self-awareness, positive psychological capital (confidence, optimism, hope, and resiliency), and self-regulation (Avolio & Gardner). Within this theory, organizational outcomes are strongly linked to positive psychological states, positive work contexts, and self-development processes (Avolio & Gardner).

Transaction and Transformational Leadership

Although many theories and perspectives on leadership exist, the dominant trend in undergraduate leadership is towards transformational leadership, particularly in contrast to transactional leadership (Komives & Wagner, 2009; Kouzes & Posner, 2008). The terms “transactional” and “transformational” have been used by multiple researchers to describe observed leadership behaviors. Burns (2003) identifies transactional leadership behaviors as those attending to the immediate needs of followers, seeking their cooperative actions towards specified goals in return for compensation or gain. Burns contrasts transformational leadership behaviors as those aiming to significantly change followers, fellow group members, organizations, and/or cultures.

Looking ahead more than thirty years beyond Burns’s (1978) initial terming of transactional leadership, Sosik and Jung (2010) describe transactional leadership as follows:
The leader sets goals, clarifies roles, and explains expectations for the follower regarding performance targets. In return, the follower promises to meet the performance expectations set by the leader. If the follower meets expectations by following through with his side of the deal, the leader rewards the follower in accordance with their implied contract. (p. 13)

In contrast, Bass (1999) describes transformational leadership as behavior that “elevates the follower’s level of maturity and ideals as well as concerns for achievement, self-actualization, and the well-being of others, the organization, and society” (p. 11).

Avolio and Bass (1999) state that excellent leaders employ a blend of transactional and transformational leadership. This perspective is a partial foundation for their FRLD theory. FRLD is structured around the following three leadership styles, listed in order from more effective and more active to less effective and less active: transformational, transactional, and passive/avoidant (Sosik & Jung, 2010). Transformational leadership encompasses idealized influence (attributes and behaviors), inspirational motivation, intellectual stimulation, and individualized consideration. Transactional leadership at its best is identified as “contingent reward,” which equates to earlier descriptions of transactional leadership. Transitioning between transactional and passive leadership is a style termed “management-by-exception” (MBE), which is essentially leadership through response to mistakes (passive, or MBE-P) or in anticipation of problems/mistakes (active, or MBE-A); MBE-A is more transactional in nature, while MBE-P is more avoidant in nature. At the end of the continuum lies “laissez-faire,” the most passive style within the FRLD framework. Avolio and Bass developed the MLQ to measure usage of leadership behaviors within these categories.
Transformational and transactional leadership have been researched relative to other variables. Bass and Steidlmeier (1999) explored the moral foundations and ethical considerations of transformational and transactional leadership; in doing so, they termed “pseudo-transformational” leaders as those who exhibit transformational qualities, but do not meet standards of moral character, ethical values, or moral processes. Through meta-analysis of MLQ studies, Eagly, Johannesen-Schmidt, and van Engen (2003) found that female leaders tended to be more transformational than male leaders. Barbuto (2005) investigated correlations between MLQ measures and Motivation Sources Inventory (MSI) measures of motivation (intrinsic process, instrumental, self-concept external, self-concept internal, and goal internalization). These are just a few studies regarding transformational and transactional leadership, selected for the pertinence to the current study.

**Leader Motivations**

McClelland and Burnham (1995), in their study of large U.S. corporation managers, investigated psychological motivations; they concluded that power motivation, defined as “a desire to have impact, to be strong and influential” (p. 128), was positively correlated with effective management behaviors. Such research into leader motivations, specifically as related to behavioral self-perceptions of student leaders, can provide advisors, mentors, and trainers of student leaders with starting points and frameworks for leadership development initiatives.

In their synthesis of several motivation theories, Hersey, Blanchard, and Johnson (2001) identified three overarching conclusions regarding motivation: people seek security, people seek social systems, and people seek personal growth. All three of these motivations can potentially be related to student-leader motivations, exemplified as follows. A student’s choice to affiliate with an organization could, in part, reflect a desire for social interaction. Affiliation with
organizations may be driven by security motivations such as benefits of a support
system/network, resources to meet personal needs made available through the organization, and
future needs for success (e.g., experiences listed on a resume). A desire for personal growth
might be fulfilled through dialogue and interactions around common interests within the
organization, and an organization’s leader might be seeking experiential learning of effective
leadership practices. Even though specific motivations for each leader will be unique, identifying
which motives significantly relate to particular leadership styles can aid in the development of
training and development resources for student leaders that aim to broaden each student’s range
of leadership practices.

Leonard, Beauvais, and Scholl (1999) proposed a framework of worker motivations,
identifying the following five motivation sources: intrinsic process, extrinsic/instrumental
rewards, external self-concept, internal self-concept, and goal internalization. Barbuto and Scholl
(1998) later developed measurable scales for these motivation sources. Barbuto (2005)
categorized the five sources into “intrinsic/internal” and “extrinsic/external” sources. Intrinsic
motivation refers to a drive toward action based upon an inherent interest in the action (Ryan &
Deci, 2000); Barbuto categorized intrinsic process, internal self-concept, and goal internalization
motivators as intrinsic. Extrinsic motivation refers to a drive toward action based upon a
perceived outcome separate from the action itself (Ryan & Deci); Barbuto categorized
instrumental rewards and external self-concept as extrinsic.

Barbuto (2005) examined relationships between these motivation sources and leadership
behaviors (charismatic, transactional, and transformational) as measured through both self-report
and observer instruments. Findings from Barbuto’s study included, but are not limited to, the
following: (a) a positive relationship between internal self-concept and transformational
leadership behaviors (b) a positive relationship between external self-concept and transactional leadership behaviors, and (c) a positive relationship between intrinsic process and transformational leadership behaviors. Barbuto’s study involved organization employees, all of whom participated in a twelve-month leadership-training program.

In their study of recent college graduates, Niemiec, Ryan, and Deci (2009) concluded that intrinsic aspirations (i.e., relationships, involvement, growth, and health) were positively related to psychological health or well-being, whereas extrinsic aspirations (i.e., money, fame, and image) related positively to indicators of psychological ill-being. These findings support the exploration of intrinsic versus extrinsic motivation sources among undergraduates relative to post-college psychological health. In the same study, it was concluded that intrinsic and extrinsic aspirations were positively related to intrinsic and extrinsic goal attainment respectively (Niemiec, Ryan, & Deci). Since leadership involves the attainment of goals through group efforts, leadership training programs present an excellent platform for examination of intrinsic versus extrinsic aspirations relative to leadership expectations. Results of the current study further inform whether leadership styles can be linked to intrinsic or extrinsic motivation sources.

Kuhnert and Lewis (1987) posited correlations between leadership styles and Kegan’s six stages of human development (incorporative, impulsive, imperial, interpersonal, institutional, and inter-individual). They utilized Kegan’s theory specifically because of its constructivist paradigm, stating “understanding the processes through which people construct meaning out of their experiences may advance our knowledge of how leaders understand, experience, and approach the enterprise of leading” (p. 650). In their analysis, persons at lower developmental stages (i.e., impulsive and imperial stages) viewed their roles within societal contexts as
transactional, hoping to achieve goals according to personal agendas; they posited that such developmental capacity is linked to a transactional leadership perspective. They further posited that persons moving into Kegan’s fourth stage of development (interpersonal), when a person is able to understand himself/herself in relation to his/her environment, were enabled to adopt more transformational leadership perspectives. The Leadership Identity Model (Komives, Longerbeam, Owen, Mainella, & Osteen, 2006b) posits that student leaders progress through developmental stages of awareness, exploration, identification, differentiation, generativity, and integration. As students transition through these stages, their leadership views shift from hierarchical to more shared and process-oriented. In recognition of potential developmental stages, the current study examined the relationships between (a) leadership behaviors and (b) age, class year, leadership training, and formal leadership experience. Although these measures do not specifically account for developmental stages, they do reflect differences in experiences that may help explain leadership style and motivation differences between students.

**Developmental Functions of Undergraduate Leadership**

Chickering and Stamm (2002) stated that the purpose of higher education is “to prepare students for responsible and satisfying lives in a pluralistic democracy” (p. 30). Curricular leadership studies and co-curricular leadership experiences (i.e., student-organization involvement) in collegiate contexts are ripe with educational potential and, from a professional perspective, demand commitment to learning outcomes (Astin, 1993; Chickering & Reisser, 1993; Pascarella & Terenzini, 2005). Chickering and Reisser highlighted ways that curricular and co-curricular programs support student learning within seven vectors, or dimensions, of human development involving competence, emotions, autonomy and interdependence, interpersonal relationships, personal identity, individual purpose, and integrity. Astin included
organizational involvement within the realm of peer-to-peer interaction, which his research demonstrated as the “single most powerful source of influence on the undergraduate student's academic and personal development” (p. 3). Although not specifically related to student leaders or organizations, Kuh’s (1993) qualitative study of college seniors identified 13 self-reported areas of learning from out-of-classroom experiences (a 14th area labeled “other” was also identified).

Within the context of student development, the notions of leadership training and development take on different purposes than in many other contexts. For the college student, leadership development is connected to the entirety of developmental experiences within college life. Conger (2004) acknowledged that college is often a time for students to practice leadership behaviors in organizational settings. Posner (2008) asserted that leadership education in college must include experiential learning (i.e., “doing” leadership) in order to be highly effective in post-collegiate contexts.

Training and Development

In his contextual review of leadership development theories, Day (2000) differentiated between “leader” development and “leadership” development as follows:

...leader development can be interpreted as a form of individual-based differentiation in terms of helping individuals enhance a unique self-understanding and construct independent identities... [whereas] leadership development can be thought of as an integration strategy by helping people understand how to relate to others, coordinate their efforts, build commitments, and develop extended social networks by applying self-understanding to social and organizational imperatives. An overall approach to leadership development as a type of organizational development strategy requires a purposeful
transformation toward higher levels of both leadership integration and differentiation. (p. 586)

From this perspective, it can be argued that college student leaders benefit from both “leader” development and “leadership” development. Developing students’ self-concept as leaders is arguably as important as developing their leadership behaviors. Day (2000) posited leader development strategies attend to self-understanding, development of identity and attitude, and the ability to apply self-understanding to organizational outcomes; competencies addressed in leader development include self-awareness, self-regulation, and self-motivation. Attention to personal motivations and styles provide starting points for leader development strategies.

Conger (2004) asserted that familial influences primarily determined leader characteristics “of self-confidence, achievement drive, communications skills, and interpersonal competence” (p. 136), while academic experiences provided initial opportunities for leadership endeavors. Chickering and Reisser (1993) also addressed developmental transitions in their seven-vector model of student development, particularly within the vectors of developing confidence, establishing identity, and developing integrity (e.g., clarifying personal values and shifting from self interest to social responsibility). Taking these perspectives together, it becomes apparent that training programs for college-student leaders should attend to students’ initial leadership perspectives and developed competencies as a starting point for leader development.

Organizational Cultures

The current study investigated undergraduate leaders’ self-perceptions within organizational contexts. As such, a few perspectives regarding organizational culture are worth noting. An organization’s culture can be defined by its shared values, beliefs, norms, and assumptions (Jaskyte & Dressler, 2005; Yukl & Becker, 2006). Organizational culture is
pertinent to organizational leadership because leaders need to motivate individuals and groups whose behaviors are also influenced by organizational culture. Organizational culture is also important because of the potential effects on leader behaviors. Jaskyte and Dressler (2005) posited that organizational cultures “help organizational members understand organizational functioning and thus guide their thinking and behavior” (p. 30). If organizational culture guides members’ behaviors, then the culture of a leader’s organization might influence his or her leadership style.

One factor contributing to an organization’s culture is member empowerment. Yukl and Becker (2006) specifically consider psychological empowerment, defined as a “perception by members that they have the opportunity to help determine work roles, accomplish meaningful work, and influence important decisions” (p. 210). Central factors to such empowerment are members’ perceptions of meaningfulness in their work, personal competence, self-determined choice, and degree of influence on outcomes or an environment (Yukl & Becker, 2006).

Another factor contributing to an organization’s culture, particularly as it relates to empowerment, is its functional structure. Yukl and Becker (2006) explore the merits of centralized versus decentralized structures. They assert that centralized structures “can limit the opportunities for managers to use job enrichment and delegation with direct reports” (Yukl & Becker, p. 213), thus limiting empowerment. Conversely, decentralized structures can “provide more opportunities for employees to take initiative in determining how to do the work” (Yukl & Becker, p. 213).

Yukl and Becker (2006) advocated empowerment-focused leadership through role modeling, goal setting, support, valuing member contributions, and demonstrating competence in members. Yukl and Becker also presented effective empowerment programs for businesses,
including formal sharing of information throughout the organization, sharing of power, self-managed teams, and decision making through democratic processes.

Leading an organization with a culture of empowerment requires a leader who is flexible enough to incorporate and accommodate empowerment strategies. Toward this end, Yukl and Lepsinger (2005) identify strategies for flexible leadership, including maintenance of situational awareness, embracing systems thinking, building a commitment to a core ideology, and leading by example. In examination of flexible leadership theory, Yukl (2008) posited that specific application of task-oriented, relation-oriented, and change-oriented (or transformational) behaviors to specific circumstances positively influenced performance determinants. The application of various leadership strategies across organizational contexts is consistent with FRLD theory (Sosik & Jung, 2010).

In Jaskyte and Dressler’s (2005) study of non-profit human service organizations, they reported a negative correlation between cultural consensus and innovation. However, they also reported positive correlations between cultural consensus and (a) team-orientation and (b) stability. Given the educational nature of student organizations, including peer-to-peer learning, team-orientation and stability associated with cultural consensus can be viewed as desirable toward organizational learning. Also, organizations that require or benefit from innovation might explore how innovation can be instilled within their cultures. Both of these perspectives highlight the importance of leadership practices that attend to cultural consensus.

Yukl (2009) addressed leader influences on organizational learning, a factor particularly relevant to student organizations given their educational purposes. Yukl advocated facilitating and empowering behaviors of leaders, such as cultivating creative ideas, encouraging experimentation among organization members, and reflective analysis of team processes.
Obstacles to organizational learning included reliance upon management for innovation, restriction of information exchange, and stakeholder conflict (Yukl, 2009).

**Undergraduate Leadership Models**

There are currently four prevalent leadership models within the context of undergraduate leadership: *The Leadership Challenge / Student Leadership Practices Inventory (SLPI)*, Social Change, Relational Leadership, and Servant Leadership (Komives et al., 2006b).

The SLPI is an instrument which measures five transformational leadership behaviors: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart (Kouzes & Posner, 2008). The SLPI is a derivative of the Leadership Practices Inventory (LPI) designed specifically for use among college students (Posner, 2004). The LPI was developed out of Kouzes and Posner’s research of thousands of leaders worldwide in which they identified the aforementioned five best practices across a wide range of contexts, providing the foundation for their book, *The Leadership Challenge* (Kouzes & Posner, 2007).

*The Student Leadership Challenge*, published in 2008, presents the five practices within the context of undergraduate leadership. Designed to help students measure their self-perceptions of behavior (self form) in comparison to others’ perceptions (observer form), the SLPI focuses on levels of transformational behavior without comparison to other types of behavior. As such, it provides students a starting point for becoming more transformational, but does not provide evidence or feedback regarding other leadership behaviors. Contrasting *The Leadership Challenge* with FRLD, an additional or alternative model that helps students explore a full range of leadership behaviors might better empower them for the complex demands of organizational leadership. Relative to Day’s (2000) perspectives, an additional model may help further address
“leader” development, including attention to students’ behavioral self-perceptions, as well as development of “leadership” practices.

The Social Change Model (SCM) is another model designed specifically for college students. The SCM focuses on leadership as a means for social change (Komives & Wagner, 2009). It promotes the development of seven core values (i.e., consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, and citizenship) across individual, group, and societal dimensions (Dugan, Komives, & Segar, 2008). Instruments associated with the SCM include the Socially Responsible Leadership Scale (SRLS) and the Multi-Institutional Study of Leadership (MSL) (Dugan et al.). With its focus on change at group levels, SCM can be categorized as a transformational leadership model. As such, it joins the SLPI as a model intended to develop transformational leadership perspectives without attention to non-transformational leadership behaviors. The SCM does address motivation sources through the values of consciousness of self, congruence, and commitment; it attempts to focus leader motivation toward transformational behaviors.

The Relational Leadership Model (RLM) frames leadership as a process built around a core purpose; the core purpose provides a connecting point for leadership behaviors that are ethical, inclusive, and empowering (Komives et al., 2006b). This model overlaps well with FRLD and complexity paradigms because it attends to the relational aspects of leadership and encourages transformational behaviors. Similar to The Leadership Challenge, the RLM provides an excellent transformational framework for conceptualizing leadership behaviors, but it may leave students unprepared for dealing with situations where more industrial leadership paradigms prevail (Komives et al.) or situations demanding more task-oriented (as opposed to relationship-oriented) behaviors.
Servant Leadership is a paradigm developed outside of higher education, but utilized within undergraduate education. A servant leader is one who primarily views oneself as a servant to an organization, and then takes on leadership roles as a way to serve the organization (Komives et al., 2006b). This model emphasizes a commitment to serve rather than accumulation of power, a motivational perspective that is arguably connected to intrinsic versus extrinsic motivation sources. However, as noted by Komives et al., Servant Leadership within the undergraduate context offers little in terms of specific leader behaviors, “often better as a concept rather than giving prescriptions for practice” (p. 9).

**Research Need: Undergraduates as Leaders**

Despite the special nature of leadership development among college students, very little research exists regarding college students as practicing leaders. Even though approximately 64% of leadership research in the past century has involved college students (Avolio et al., 2005), results are typically not framed within the context of student development (Dugan, Komives, & Segar, 2008). The following paragraphs present some of the few research findings relative to college-student leaders.

From their grounded theory study of student leaders, Komives, Owen, Longerbeam, Mainella, and Osteen (2005) identify six progressive stages of leader development: awareness, exploration, identification, differentiation, generativity, and integration. According to their model, each stage is reached through a cycle of self-development that is influenced by group and contextual influences. This study, however, intentionally sampled 13 students exhibiting “relational” leadership behaviors, including but not limited to inclusiveness, empowerment, and process orientation (Komives et al.). As such, the findings may not be generalizable to students primarily exhibiting other leadership behaviors (e.g., more transactional behaviors).
Recent studies have attempted to demonstrate the value, or outcomes, of collegiate leadership development programs. Cress, Astin, Zimmerman-Oster, and Burkhardt’s (2001) longitudinal study demonstrated increases in skills and knowledge among undergraduate leadership-program participants, and the effects were generally similar across the sample regardless of formal leadership positions held. In findings from his qualitative study of 6 undergraduate fraternity men, DiPaolo (2008) suggests that exposure to leadership opportunities, and subsequently opportunities to learn from success and failure, might result in greater influence on leader behaviors than curricular or theoretical experiences. In his single-institution study examining effectiveness of a leadership certificate program, Vogt (2007) reported no significant differences in SLPI scores between certificate-program students and non-certificate program students; however, certificate-program students who also completed a practicum as part of their certificate experience scored significantly higher than the other students, offering further evidence toward the value of practical experiential learning activities. In attempting to identify correlations between motivation sources and leadership styles, the current study may contribute to new leader development models conducive to practicing student leaders whose behaviors may be influenced more by organizational experience than by curricular experiences.

Gibson and Pason (2003) suggested that development of “attitudes and ethical codes” (p. 23) was critical to effective implementation of learned leadership competencies. Their research involving undergraduate students in a community-service living-learning community evidenced that first-year students expressed greater affiliation with non-transformational perspectives of servant leadership, whereas graduating students expressed greater affiliation with transformational perspectives. Within a context of service-oriented leadership, their study highlights (a) motivating factors for student leadership at entering and exiting program stages,
and (b) evidence that motivating factors toward leadership may change as students move from transactional to transformational leadership perspectives. The current study further examined the prevalence of transformational and transactional behaviors at various levels of collegiate experience.

Conclusion

The preceding literature review provided a set of frames through which to consider the present study, including a brief history of leadership theories, motivation research, developmental functions of leadership education, leadership training, and leadership within organizational cultures. Detailed explanations were presented for both (a) intrinsic and extrinsic motivation and (b) transactional and transformational leadership in support of the current study’s use of these variables. Practical needs for the current study were presented, framed against existing models of leadership development utilized in undergraduate settings. Specifically, the current study examined self-perceptions of active undergraduates leaders, setting it apart from other research that is focused on the learning outcomes of in-depth leadership development programs. The study is also practically applicable in examining self-perceived levels of transactional and transformational behaviors among undergraduates, whereas recent trends in related research are focused primarily on transformational leadership practices.

The next chapter presents the specific methodology for collecting and analyzing data in the current study.
CHAPTER III. METHODOLOGY

The current study examined the relationship between motivation sources and leadership styles among undergraduate student-organization leaders. Motivation sources were measured using the MSI, and leadership styles were measured using the MLQ, specifically Form 5X Short.

Sample

The sample consisted of undergraduate students at Bowling Green State University (BGSU) holding elected or appointed leadership positions within University-registered organizations. There are approximately 300 registered student organizations across the following categories: academic department affiliate, community service, cultural, governing body, honors and recognition, recreation, social greeks (fraternities and sororities), and special interest (BGSU Student Organization Directory, 2009). Although current trends in student-leadership models incorporate leader potential from broader populations (Komives, Lucas, & McMahon, 1998; Komives & Wagner, 2009; Kouzes & Posner, 2008), elected/appointed students were identified for this study in order to focus on students most able to formally self-identify as a leader, and also to frame their responses in relation to specific organizational involvement.

Data Sources

Motivation Sources Inventory (MSI). The MSI integrates several areas of motivation research to measure distinctly different sources of work motivation (Barbuto, 2001a). The self-report instrument consists of thirty items answered using a 5-point scale as follows: 0=Entirely Disagree, 1=Somewhat Disagree, 2=Neutral, 3=Somewhat Agree, and 4=Entirely Agree. The thirty items are measured in sub-scales, with five items per sub-scale, in the following motivation-source categories as defined by Barbuto. Intrinsic process motivation involves perceived enjoyment or fun derived from work. Instrumental motivation involves one’s
expectation of tangible gain or reward for work. *External self-concept* motivation stems from one’s desire to have a positive image among other people. *Internal self-concept* motivation stems from one’s desire to fulfill personal expectations or standards. *Goal internalization* stems from one’s principled or value-driven dedication to a cause or effort.

The MSI measurement scales were originally validated by Barbuto and Scholl (1998). Barbuto and Scholl initially developed 78 items that were juried by two independent panels through a categorization system. Items which were categorized as expected by the authors by more than 60% of the panelists on both panels were included in the study; this method yielded 60 items. The test sample was comprised of 156 undergraduate participants selected from upper-level business courses at a small northeastern university. Four of the six courses were evening courses; the subjects included many full-time workers, with an average age of 27. The sample was 56% male, and 20% of the participants held an earned bachelors or associates degree. As a result of this study, 30 items were determined statistically valid. Internal consistency (coefficient alpha) for the five sub-scales ranged from .83 to .92.

*Multifactor Leadership Questionnaire (MLQ)*. The MLQ measures individual leaders’ styles according to the following behavioral categories: transformational, transactional, active management-by-exception, passive management-by-exception, and laissez-faire (Avolio & Bass, 2004). This assessment is particularly applicable to FRLD theory, which advocates blended and balanced uses of multiple leadership behaviors, especially transformational and transactional behaviors (Sosik & Jung, 2010). The MLQ consists of 45 items answered using a five-point scale as follows: 0=Not at all, 1=Once in a while, 2=Sometimes, 3=Fairly often, and 4=Frequently, if not always. The 45 items are measured in sub-scales, including nine leadership-behavior factors and three leadership-outcome measures. The nine leadership-behaviors sub-scales comprise the
following three broader leadership-style categories: transformational, transactional, and passive/avoidant (Avolio and Bass).

Transformational leadership is measured by the MLQ using five sub-scales. Idealized Influence (Attributes) and Idealized Influence (Behaviors) involve the building of a trusting mutual relationship between leader and follower where the followers respect and admire the leader. Inspirational Motivation is achieved through behaviors that cultivate meaning and challenge within organizational work. Intellectual Stimulation behaviors encourage creativity and innovation among organization, including the maintenance of an environment that is open to exploration and experimentation. Individual Consideration involves mentoring behaviors attentive to organization members’ individual development.

Transactional leadership is measured by the MLQ using two sub-scales. Contingent Reward behaviors set goals for achievement and establish rewards to be gained for meeting goals. Active Management-by-Exception behaviors involve the setting of standards and expectations, as well as leader responses to unmet standards.

Passive/Avoidant leadership is measured by the MLQ using two sub-scales. Passive Management-by-Exception behaviors are generally hands-off relative to member work and reactive to situations where things do not turn out as anticipated. Laissez-Faire behaviors are even more passive, including a leader’s absence during times of organizational challenge or situations involving conflict.

Although the MLQ incorporates self-report and observer-report forms, the current study utilized only the self-report form to focus on the relationship between leaders’ self-perceived leadership styles and motivation sources. The MLQ Manual includes U. S. percentiles for individual scores based on self ratings, against which the current study data were compared.
Avolio and Bass (2004) thoroughly reported consideration of external validity, citing numerous studies conducted worldwide in a variety of organizational settings. These studies generally supported the measures of transformational leadership as positive indicators of organizational achievement, and transactional leadership behaviors as positive indicators to a lesser degree than transformational (Avolio & Bass). The authors also offered extensive information regarding the MLQ’s construct validity, citing other researchers’ concerns with earlier versions and adjustments made from subsequent research (Avolio & Bass). A validation study of the current instrument (Avolio & Bass, 1999) involving a sample (n=1,394) and replication sample (n=1,498) revealed reliabilities (coefficient alphas) ranging .63 to .92 and .64 to .92 respectively, and all reliabilities except active management-by-exception were above .70.

Other Variables Measured. The following variables were also measured in order to determine possible interactions with the MSI or MLQ variables: gender (nominal: male, female, transgender), academic class status (nominal: freshman, sophomore, junior, senior), total number of semesters in elected/appointed leadership in any collegiate organizations (interval), current/prior enrollment in leadership education course or training program in college (nominal: yes or no), and enrollment in leadership education course or training program prior to college (nominal: yes or no).

Barbuto, Fritz, and Plummer (2003) found no significant differences between men and women in their measures of work motivation. However, Eagly, Johannesen-Schmidt, and van Engen (2003), in their meta-analysis of 45 studies, found small but significant differences between the two genders relative to leadership style; women scored higher in transformational leadership and men scored higher in transactional and laissez-faire leadership. More recently, Dugan, Komives, and Segar (2008) found that women scored higher than men on seven out of
eight leadership measures associated with a transformational social-change leadership model. Correlations between gender and other variables in the current study build upon previous findings.

As posited by Kurt Lewin, human behavior is a function of the interaction between persons and their environment (as cited in Hersey, Blanchard, and Johnson, 2001). Thus, environmental considerations relative to leader behaviors (e.g., leadership style) warrant examination. Organizational culture is one environmental factor that can be explored within the undergraduate setting. As referenced in Chapter 2, Jaskyte and Dressler (2005) defined organizational culture as “a set of shared values that help organizational members understand organizational functioning and thus guide their thinking and behavior” (p. 30). Although a specific exploration of organizational cultures is beyond the scope of the current study, categorical groupings related to organizational purpose and mission were measured.

Procedures

Through the BGSU Office of Campus Activities, student e-mail addresses were acquired for elected/appointed student-organization leaders; this list included, at minimum, a president and treasurer for each organization. Duplicate addresses were filtered out by the researcher using computer software in order to minimize sampling error. Students were sent an invitation to participate in the research via the BGSU e-mail system, including a brief description of the research study and a URL for the research instrument web page. Two reminder e-mails were sent, one twelve days later (prior to semester final exams) and the other fourteen additional days later (after semester final exams). The web page contained a full description of the research study, including goals and identified risks (see Appendix A). As stated in the opening web page, participants verified their understanding of the study and identified risks, as well as their
minimum age of eighteen years, through their continuation with the survey. The survey included items in the following order: academic class status, classification of organization, the MSI items, the MLQ items, and questions regarding leadership experience and demographics. A final screen thanked participants, provided them with researcher contact information, and presented a link to a separate data collector for anyone wishing to enter an incentive prize drawing.

Data from online submissions were collected and stored on the survey-software server (SurveyMonkey.com). No personal identification data were collected. Collected data were downloaded by the researcher. Responses for the MSI and MLQ sub-scales were calculated according to author instructions. Sub-scale scores and responses to the other items were imported to SPSS for analysis.

As an incentive to participate, participants were offered the opportunity to enter a prize drawing upon submission of their responses. Although research results vary regarding response-rate effects of survey incentives (Davis, Cannon, Corso, Lenaway, & Baker, 2009; Petrolia & Bhattacharjee, 2009; Shaw, Beebe, Jensen, & Adlis, 2001), there is evidence of increased response rate with prize drawing incentives relative to web surveys (Bosnjak & Tuten, 2003) and among students (Porter & Whitcomb, 2003). An incentive was utilized in this study because the survey took place very near the end of an academic year, a time the researcher acknowledged to be very busy for undergraduates and also a time when many survey requests exist on college campuses. The prize was a $25 gift card to either the BGSU Bookstore or a specified national retailer at the winner’s choosing. The different prize options were offered in order to avoid bias regarding (a) sample members’ accessibility to either vendor or (b) desirability of academic or non-academic merchandise; the Bookstore should appeal to students expecting to make future academic purchases, and the national retailer offers a broad selection of merchandise in a
plethora of markets nationwide. In order to be included in the prize drawing, following survey completion, participants were re-directed to a web page where they could enter to win; identification information from the incentive program remained completely separate from the survey data. The winner was chosen by random drawing and was contacted by e-mail.

Participants were not required to participate in the prize drawing.

Data Analysis

Data were downloaded from the survey web server and imported to SPSS for analysis. Descriptive statistics included mean responses for all sub-scales of both the MSI and the MLQ. As with Barbuto’s (2005) study, two additional sub-scales were measured for the MSI representing intrinsic processes (intrinsic process, internal self-concept, and goal internalization) and extrinsic processes (external self concept and instrumental) in order to examine potential significance of intrinsic and extrinsic motivation sources.

Research questions were addressed using statistical methods as follows. Question one (measures of extrinsic and intrinsic motivation) and question two (measures of transformational and transactional behaviors) were considered through descriptive statistics, primarily mean comparisons. Bivariate correlation (Pearson’s Correlation) was used to examine questions three (relationships between leadership behaviors and motivation sources) and question five (relationships between leadership styles and years of leadership experience). Although a one-way ANOVA was originally expected with question four (relationships between motivation sources and organizational contexts), comparisons of descriptive statistics were used instead due to insufficient sample sizes within the organization categories. Questions six (relationships between gender and leadership style or motivation sources) and question seven (relationships between leadership styles and leadership education experiences) were considered through t-tests. Finally,
multiple regression and factorial ANOVA were used to explore variable interaction as presented in question eight.

Limitations of the Study

The current study examined students at a single institution; although the sample included students across a broad range of organizations, commonalities within the campus culture limit generalizability beyond this institution. The sample consisted specifically of elected/appointed organization officers, reducing generalizability to broader populations of undergraduate leaders. Although implications of this study may eventually be applied in a broader context to undergraduate leaders without formal leadership positions, this initial specificity provides delimitation for instrumentation and data collection. Instruments utilized were not specifically designed for undergraduate populations. Data were entirely self-reported, limiting generalizability to self-perceptions of leader behaviors as opposed to measures incorporating observer (non-self) data.
CHAPTER IV. RESULTS

This chapter presents the statistical findings from the research study, beginning with a summary of the research participants. Summative descriptive statistics are provided for the sample, followed by analysis for each of the eight research questions.

Description of Participants

The primary purpose of this study was an examination of work motivation sources and self-perceived leadership styles among undergraduate leaders. The sample included undergraduate students holding elected/appointed leadership positions within student organizations at a mid-size public university in the midwestern United States.

A contact list of organization leaders was procured from the university. The original list contained 736 student contacts for all undergraduate and graduate student organizations. Several groups were identified by the researcher as graduate-student-only groups, resulting in 71 contacts being removed. The researcher checked for duplicate e-mail addresses, resulting in the removal of 45 duplicate contacts. From the original list, 620 unique e-mail addresses were used for survey solicitation. After the initial solicitation for participants, the researcher identified 34 additional leaders for solicitation; these additional student leaders were members of residence hall councils, a set of university-sponsored organizations not included in the original list. The addition of hall council leaders brought the solicitation total to 654.

From the e-mail solicitation, 9 solicited students notified the researcher of their status as graduate students; their e-mail addresses were removed from the study. Additionally, 30 students formally opted out of the survey (29 using the online survey opt-out feature, and one via e-mail communication with the researcher). Initial response data included 185 participants (approximately 28% return). Of the 185 participants, 38 did not fully complete the survey, so
their data were not included in analysis. Additionally, two participants responded as “graduate” for class status, so their responses were removed prior to analysis. After this initial data screening, data from 145 participants (approximately 22% of the solicited population) were entered for analysis. According to research by Bartlett, Kotrlik, & Higgins (2001), and calculating a population size of 654, this sample size is adequate for continuous data (margin of error=.03, $\alpha=.05, t=1.96$), but below minimal expectations for categorical data (recommended 187-196, margin of error=.05, $p=.50, t=1.65$). Considering generalizability to a much larger population of student leaders, the sample size is still adequate as presented above, but would need to be over 200 for $\alpha=.01$ relative to continuous data, and over 250 for categorical data.

The respondents were 59% female and 41% male with a mean age of 20.9 years (range: 18-24). Respondent academic class status included 5% freshman, 13% sophomore, 32% junior, and 50% senior. Duration of collegiate leadership experience among respondents included 31% at 1-2 semesters, 34% at 3-4 semesters, 26% at 5-6 semesters, and 9% at 7 or more semesters. The number of collegiate leadership positions held ranged from 1 to 21 with mean of 3.6 positions. Fifty-five percent of respondents reported having a formal leadership education or training experience in college, and 39% reported having a formal leadership education or training experience prior to college.

Survey Description

Respondents completed the MLQ and the MSI along with several demographic questions. The MSI is a 30-item instrument that yields 5 sub-scales with scores ranging from 0 to 4. In this study, three of the sub-scales were combined for a measure of intrinsic motivation, and the other two sub-scales were combined for a measure of extrinsic motivation. The MLQ is a 45-item instrument that yields 12 sub-scales with scores ranging from 0 to 4. In this study, 5 of the sub-
scales were combined for a measure of transformational leadership behaviors, and 2 of the sub-
scales were combined for a measure of transactional leadership behaviors. Demographic
questions included academic class year, organization type, gender, age, time served in college
leadership positions, number of college leadership positions held, and leadership education
experience before and in college (see Appendix A for full questions).

*Explanation of “Preference” Scores*

Barbuto (2001b) published a ratio scoring method for the MSI subscales. Since the
current study primarily averaged the MSI subscale scores into two groupings of intrinsic and
extrinsic motivation, the resulting effect when using the ratio method was a perfect negative
correlation between intrinsic and extrinsic measures, $r(145)=-1.000$, $p<0.01$; this dichotomous
result shrouded the true variance among the non-dichotomous subscales when correlated with
other data. Therefore, this study utilized the original sub-scale scoring method. For comparative
purposes, correlations using ratio scoring for the MSI are presented in Table 4.

Aligned with Barbuto’s (2001b) advancement of a ratio scoring method, the current study
utilizes two relative measures of subscale data, one for each of the primary instruments. For the
MSI scores, “intrinsic preference” was calculated by subtracting the extrinsic score from the
intrinsic score for each participant, thus resulting in a calculation of difference between the two
scores. More than 85% of respondents scored higher on intrinsic than extrinsic, so the term
“intrinsic preference” was selected to represent the calculated difference, whereby a positive
result indicated a higher intrinsic score and a negative result indicated a higher extrinsic score.

A similar calculation was conducted for the differences between transformational and
transactional scores as measured using the MLQ, reported as “transformational preference”
score. The term was selected because more than 90% of respondents scored higher on
transformational than transactional. A positive result for a participant’s transformational preference indicated a transformational score higher than transactional, and a negative result indicated a higher transactional score.

**Question 1: Is the work of leaders more extrinsically or intrinsically motivated?**

Intrinsic motivation was measured for each participant using the mean average of three MSI sub-scales (intrinsic process, self-concept [internal], and goal internalization), and extrinsic motivation was measured using the mean average of two MSI sub-scales (instrumental and self-concept [external]). Overall, participants (n=145) scored higher on intrinsic motivation (\(\bar{x}=3.18, SD=.345\)) than extrinsic motivation (\(\bar{x}=2.63, SD=.586\)); the difference between the means was .55 on a 5-point scale.

**Question 2: Do leader self-perceptions reflect their behaviors as more transactional or transformational?**

Transformational leadership was measured for each participant using the mean average of five MLQ sub-scales (idealized influence [attributed], idealized influence [behavioral], inspirational motivation, intellectual motivation, and individualized consideration), and transactional leadership was measured using the mean average of two MLQ sub-scales (management-by-exception [active] and contingent reward). Overall, participants (n=145) scored higher on transformational leadership (\(\bar{x}=2.98, SD=.466\)) than transactional leadership (\(\bar{x}=2.26, SD=.486\)); the difference between the means is .73 on a 5-point scale.

**Question 3: Are leadership styles (transactional vs. transformational) significantly related to sources of work motivation (intrinsic vs. extrinsic)?**

Bivariate correlation was used to relate transactional and transformational leadership scores to intrinsic and extrinsic motivation scores. Six outliers were identified using stem-and-
leaf diagrams and boxplots, and analysis was conducted both with and without outliers; results were different with outliers removed, so those results are reported (n=139). Intrinsic motivation was positively related to transformational leadership, $r(137)=0.409, p<0.01$, two-tailed. A weaker yet still significant relationship was found between intrinsic motivation and transactional leadership, $r(137)=0.291, p<0.01$, two-tailed. Extrinsic motivation was positively related to transactional leadership, $r(137)=0.300, p<0.01$, two-tailed. Extrinsic motivation was not significantly related to transformational leadership, $r(137)=0.002, p=.98$, two-tailed.

Bivariate correlation was also used to relate the above variables with the additional variables of transformational preference and intrinsic preference. For this analysis, eight outliers were identified, and analysis was conducted both with and without the outliers; results were different with outliers removed, so those results are reported (n=137). A significant positive relationship was found between intrinsic preference and transformational leadership, $r(135)=0.262, p<0.01$, two-tailed. Intrinsic preference was not significantly related to transactional leadership, $r(135)=-.112, p=.19$, two-tailed. A significant negative relationship was found between transformational preference and extrinsic motivation, $r(135)=-0.232, p<0.01$, two-tailed. No significant relationship was identified between transformational preference and intrinsic motivation, $r(135)=.134, p=.118$, two-tailed.

**Question 4:** Are motivation sources (intrinsic vs. extrinsic) significantly related to organizational contexts (i.e., the type of organization)?

Although one-way ANOVA was run to examine this question, the low representation of participants in each of the prescribed categories did not provide enough variance for statistical significance. However, descriptive statistics do provide some data for consideration (see Table 1). For the variable intrinsic motivation, mean score groupings went from low to high as follows:
governing body, recreation, special interest, academic, honors, cultural, social Greek, and community service. For the variable extrinsic motivation, mean score groupings went from low to high as follows: cultural, governing body, community service, special interest, academic, recreation, honors, and social Greek. For the variable intrinsic preference, mean score groupings went from low to high as follows: honors, social Greek, recreation, governing body, academic, special interest, cultural, and community service.

*Question 5: Is leadership style significantly related to the number of years in leadership roles?*

The unit of measure used in the survey for time spent in collegiate leadership positions was semesters. For the purpose of analysis regarding this question, the data were transformed from “semesters” to “years,” where 1 year=1-2 semesters, 2 years=3-4 semesters, 3 years=5-6 semesters, and 4 years=7 semesters or greater. It is important to note that “years” is a categorical label for the groupings as indicated and should not assume continuous experience or enrollment.

Bivariate correlation (Pearson Correlation) was utilized to examine relationships between leadership style and time in leadership positions for the full data set (n=145) and with outliers removed (n=134). No meaningful relationships were discovered within this analysis. The strongest relationship found was between years of leadership and transformational behaviors, \( r(132)=.158, p<.05 \), one-tailed, which was determined to be a weak relationship given the small sample size and lack of significance at the .01-level.

*Question 6: Is gender significantly related to either motivation (intrinsic vs. extrinsic) or leadership style (transformational vs. transactional)?*

T-tests were used to relate scores between male and female participants for each of the four variables (intrinsic motivation, extrinsic motivation, transformational leadership, and transactional leadership), as well as the measures of intrinsic preference and transformational
preference. Analysis was completed with both the full data set and with outliers removed; data are reported here with outliers removed. No significant difference was found between males and females for intrinsic motivation, extrinsic motivation, transformational leadership, or transactional leadership. However, even though both male and female groups scored higher on transformational than transactional, females (n=85) demonstrated greater preference for transformational leadership relative to transactional leadership than did males (n=58), \( t(141)=.240, p<.01 \), two-tailed.

**Question 7: Do students who have experienced leadership education experiences differ in their leadership style (transactional vs. transformational) from those who have not been through leadership education experiences?**

T-tests were used to relate transformational leadership, transactional leadership, and transformational preference scores between students who experienced leadership education programs (in college and before college, measured separately) and those who had not experienced leadership education programs. Analysis was completed with both the full data set and with outliers removed. No significant differences were found between the “yes” and “no” groups in any of the tests for either in-college leadership experiences or pre-college leadership experiences.

**Question 8: What is the interaction among the independent variables being measured in relation to leadership style?**

For this question, three regression analyses were conducted using three different dependent variables: transactional leadership, transformational leadership, and transformational preference.
In order to run regression analysis, categorical variables were transformed as indicated in Table 2. Prior to running regression analysis, outliers were identified and normality was determined for each regression using procedures prescribed by Mertler and Vannatta (2005). For this data screening, four interval variables were examined: the dependent variable for each regression, intrinsic preference, age, and years served in collegiate leadership positions. Outliers were identified by calculating Mahalanobis Distance and comparing results to the critical p-value, $x^2=16.266 \ (df=3, \ p<.001)$. For the dependent variables of transformational and transformational preference, no outliers were identified where Mahalanobis Distance $\geq 16.266$. For the dependent variable transactional, one outlier was identified; upon review of the outlier case, the case was removed for that analysis. Scatterplots were run and a test regression analysis was conducted for each regression to assess normality.

For the dependent variable transactional leadership, little variance was attributed to the independent variables, $R^2=.079, \ F(7,133)=1.64, \ p=.129$. No meaningful relationships were identified. For the dependent variable transformational leadership, little variance was attributed to the independent variables, $R^2=.087, \ F(7,134)=1.82, \ p=.089$. No meaningful relationships were identified. For the dependent variable transformational preference, some variance was attributed to the independent variables, $R^2=.174, \ F(7,134)=4.03, \ p<.001$. The one variable shown to significantly relate to transformational preference was intrinsic preference, $b=.274, \ t(134)=3.73, \ p<.001$.

Acknowledging the lack of data variance for several variables (category, age, years in leadership position, pre-college leadership education, and collegiate leadership education), additional regression analysis could have been conducted excluding those variables. However,
the few remaining variables did not warrant regression analysis given other analysis already conducted in this study.
CHAPTER V. CONCLUSIONS

The primary focus of this study was leaders’ self-perceptions of their leadership behaviors and their motivation sources. However, the usefulness of the study is in framing that data within a perspective of leadership systems that, at their core, include leaders, followers, and situational context (Sosik & Jung, 2010). Since the majority of current undergraduate leader and leadership education programs focus on transformational perspectives (Komives et al., 2006b), the conclusions from this study explore the broadening of undergraduate leadership education to include situational application of both transformational and transactional leadership behaviors.

The primary model through which this idea is presented is FRLD, as conceptualized by Avolio and Bass (1999) and advanced by Sosik and Jung (2010). In the FRLD model, leaders develop multiple types of leadership behaviors (primarily transformational and transactional) and learn to selectively apply those behaviors contingent upon specific situational contexts. Similar to the existing undergraduate models, FRLD is constructed within a transformational paradigm, but it advances selective use of transactional behaviors within the transformational paradigm. Evidence from the present study reveals undergraduate leaders perceive their leadership behaviors as both transactional and transformational, with greater use of transformational; use of a full range paradigm in their leadership education will help undergraduates understand, develop, and learn to effectively apply their full range of leadership behaviors.

As presented in Chapter 2, Day (2000) differentiated between “leader” and “leadership” development, where leader development is concerned with self-perspective and self understanding, and leadership development is concerned with application of self-understanding within contexts of relationships. Therefore, the conclusions presented in this chapter apply results of the study to the context of undergraduate training and development, specifically
providing frameworks for considering and applying undergraduate self-perceptions in their development as leaders and their leadership education.

The pathway of these conclusions generally follows the order of the research questions (Q1-Q8), beginning with motivation sources (Q1), and followed by leadership behaviors (Q2). The interaction between those two variables is then discussed (Q3), as well as the interaction between motivation sources and organizational context (Q4). Relations to variables of gender and experience are then explored relative to Questions 5-8. A comprehensive consideration of the conclusions is then applied to perspectives on leader/leadership training and development. Finally, limitations of this study are presented along with recommendations for further research.

**Intrinsic and Extrinsic Sources of Motivation**

Participants in this study scored higher for intrinsic than extrinsic sources of motivation. From these data, it can be concluded that the participants perceived themselves as more motivated by sources classified as intrinsic than by sources classified as extrinsic. These results suggest that the participants were more motivated by inherent interests in their work rather than perceived outcomes that are separate from the work. There was greater variance for extrinsic scores than for intrinsic scores, indicating that levels of intrinsic motivation were more consistent throughout this sample than extrinsic motivation. If these results reflect patterns among the broader population of student leaders, then undergraduate leaders should be receptive to leadership education initiatives that explore inherent worth and value of organizational efforts (i.e., organizational goals, shared member values, etc.) based upon Barbuto’s (2001a) defining characteristics of intrinsic motivation. Consistent with Hersey, Blanchard, and Johnson’s (2001) assertion that people seek personal growth, this assertion aligns growth opportunities with students’ intrinsic motivations. By catering to students’ intrinsic motivations, emotional well
being is supported in alignment with Niemiec, Ryan, and Deci’s (2009) assertion that intrinsic aspirations are positively related to psychological health.

It is worth noting that the sample mean scores only varied by a half-point on a five-point scale. This reveals the participants as substantially motivated by extrinsic sources even though intrinsic motivation is greater. Leadership education for undergraduates should acknowledge both sources of motivation, offering opportunities and perspectives reflecting extrinsic and intrinsic benefits, and encouraging students to intentionally explore both the intrinsic and extrinsic natures of their own motivation sources.

Transaction and Transformational Leadership Behaviors

In the study sample, participants’ self-perception scores for transformational leadership behaviors were higher than their self-perception scores for transactional leadership behaviors. From this data, it can be concluded that the participants perceive themselves more often engaged in behaviors classified as transformational than behaviors classified as transactional. From regression analysis, these scores do not appear significantly moderated by age, academic class, leadership education experience, or years served in leadership positions. These results suggest that the participants self-perceive usage of both transformational and transactional leadership behaviors, and that they self-perceive more frequent use of transformational behaviors. This perceived behavioral pattern reflects effective leadership within a full range leadership paradigm (Sosik & Jung, 2010). If this condition is prevalent among undergraduate leaders, then undergraduate leadership education may be more effective by exploring rationale and context for various leadership behaviors than simply training for transformational and/or transactional behaviors.
Compared to U.S. percentile scores reported by the MLQ authors (Avolio & Bass, 2004), this study sample’s overall means were between the 40th and 50th percentiles for the five sub-scales comprising transformational behaviors and the two sub-scales comprising transactional behaviors (see Table 3). Comparatively, the current study participants scored between the 50th and 60th percentiles for the three sub-scales comprising “passive/avoidant” behaviors. These results suggest that undergraduate leadership education should identify the differences between active and passive leadership behaviors, and encourage greater use of active behaviors. However, these results should not be over generalized; relative to the U.S. percentile data, it is possible that leader behaviors represented in the current study reflect organizational cultures and missions that are less transformational in nature. Further consideration of this issue is presented in the Organizational Context of Motivation section.

Interaction Between Motivation Sources and Leadership Behaviors

Results from this study indicate significant relationships between intrinsic motivation and both transformational and transactional self-perceived behaviors, the stronger relationship being with transformational. Results also indicate a positive relationship between extrinsic motivation and transactional self-perceived behaviors, but no significant relationship between extrinsic motivation and transformational self-perceived behaviors. These findings, as with previous research results (Barbuto, 2005), suggest that intrinsic motivations are more closely related to transformational leadership, and extrinsic motivations are more closely related to transactional leadership. This is also foundational evidence that identification and strengthening of intrinsic motivation sources may benefit full range leadership development among undergraduate leaders; further causal research is required to demonstrate this potential.
Intrinsic preference, the measure of difference between intrinsic motivation and extrinsic motivation, also related positively to transformational self-perceived behaviors, but not to transactional self-perceived behaviors. This finding suggests that the degree to which intrinsic motivation is greater than extrinsic motivation correlates with transformational behaviors: the greater the degree of difference, the greater the transformational behaviors. Extrinsic motivation related negatively to transformational preference, the measure of difference between transformational and transactional self-perceived behaviors. This finding suggests that the degree to which transformational behavior is greater than transactional behavior correlates with extrinsic motivation: the greater the degree of difference between transformational and transactional behaviors, the less the measure of extrinsic motivation. Together with the findings above, this is evidence that undergraduate leadership education attending to identification and strengthening of intrinsic motivation sources may benefit efforts for full range leadership development.

Organizational Context of Motivation

Sample sizes for the organization classifications used in this study were too low for broadly generalizable conclusions. However, as reported in Chapter 4, descriptive statistics do reveal interesting variances for further research. On the variable of intrinsic motivation, most of the mean scores grouped by organization type were within .05 of the sample mean; however, the group of governing body leaders scored 0.16 below the sample mean, the group of social Greek leaders scored 0.15 above the sample mean, and the group of community service leaders scored 0.16 above the sample mean. On the variable of extrinsic motivation, most of the mean scores grouped by organization type were within .20 of the sample mean; however, the leaders within the honors and social Greek organization categories were 0.39 and 0.50 above the sample mean respectively. On the measure of intrinsic preference, three organization types (governing body,
academic, and special interest) were grouped within .06 of the sample mean; however, mean scores for three organization groupings scored further below the sample mean (recreation, -0.19; social Greek, -0.35; honors, -0.36) and mean scores for two organization groupings scored further above the sample mean (cultural, +0.23; community service, +0.26). The following paragraphs provide more detailed consideration of these contextual differences.

Governing body leaders scored further below the mean than any other groups for intrinsic preference. Examining specific subscales, governing body leaders scored below average on Goal Internalization and Internal Self-Concept, but near average on Intrinsic Process. These data reveal that governing body leaders, relative to other student leaders, were similarly motivated by enjoyment of work, but were less motivated by principled beliefs or standards reflecting an idealized self. These characteristics reflect the uniqueness of student-government positions where a primary role is to represent and serve constituents, as opposed to many other student organizations that primarily serve organization members and the advancement of organizational causes. Toward full range leadership development and making use of their extrinsic motivation, based upon defining characteristics from Sosik and Jung (2010) and Barbuto (2001a) respectively, governing body leaders would be well served by educational initiatives emphasizing rewards and reputation enhancement for both organizations and their constituents, while exploring concepts of “fun” and “enjoyment” as related to various transformational and transactional leadership behaviors.

Social Greek organization leaders, relative to other student leaders, scored higher for both intrinsic and extrinsic motivation, and lower for intrinsic preference. So, even though both intrinsic and extrinsic scores were greater than average, social Greek leaders scored higher for extrinsic motivation to a greater degree than they did for intrinsic preference. This collection of
data reveals social Greek organization leaders were more extrinsically motivated than other student leaders. Examining the specific subscales of External Self-Concept and Instrumental, social Greek leaders scored highest and second highest in each respectively, evidence that social Greek leaders were more highly motivated by reputation/image and tangible rewards than other organization leaders, based Barbuto’s (2001a) subscale descriptions. This characteristic of extrinsic motivation is possibly attributable to the nature of social Greek organizations as entities grouped together as “fraternities and sororities” while striving to differentiate themselves from one another in terms of mission, values, and membership. This differentiation is highly visible through extensive recruitment processes designed to “match” potential members with organizations. Social Greek organizations not only compete for members, but also formally compete in events such as annual Olympic-style games and intramural sports. Social Greek organizations also deal with various stereotypes of “greeks” popularized through folklore, media images, and historical accounts. Student leaders for social Greek organizations are faced with leadership challenges regarding all of these facets of Greek life, most of which involve group image and competition. In this respect, it is not surprising to find higher levels of extrinsic motivation among social Greek organization leaders. Toward full range leadership development and making use of their reputation-based motivation, social Greek organization leaders would be well served by educational initiatives emphasizing how intentional use of both transformational and transactional leadership behaviors can lead to stronger organization and organization-member reputation.

Community service organization leaders scored higher than other student leaders for intrinsic motivation and also for intrinsic preference, revealing these leaders were more intrinsically motivated than other student leaders, and to a greater degree relative to extrinsic
motivation than other student leaders. While this group scored high on all three intrinsic subscales, it scored furthest from the mean on intrinsic process, revealing that these leaders were significantly motivated by the enjoyment of their work (Barbuto, 2001a) relative to other student leaders. Based on these data, leadership educators might connect well with community service organization leaders by utilizing fun activities that also connect with principled causes and encourage personal explorations of idealized self perceptions. The blending of self-exploration and behavioral activities also attends to both leader and leadership development as described by Day (2000).

Student leaders of honors organizations, relative to other student leaders, scored above the mean for extrinsic motivation and demonstrated the greatest degree of preference for extrinsic, rather than intrinsic, motivation, indicating a motivation source of reward and reputation (Barbuto, 2001a). One explanation for this relationship is that membership in an honors organization is contingent upon measured and recognized achievement in some area, typically an area of academic study; with an organizational foundation of recognition and reward for personal achievement, it is not surprising that students taking leadership roles in honors organizations are motivated by rewards and reputation. Toward full range leadership development and making use of their recognition-based motivation, honors organization leaders would be well served by educational initiatives emphasizing benefits to both the leaders and the organization members achievable through intentional application of both transactional and transformational leadership behaviors.

Student leaders of recreation organizations scored significantly below the mean for intrinsic preference, indicating an above average gap between intrinsic and extrinsic scores with extrinsic being higher. Since most organizations categorized as “recreation” are focused on
competitive activities, it is understandable that the organizations and their members (including leaders) exhibited reward-based motivations, a defining characteristic of extrinsic motivation (Barbuto, 2001a). Toward full range leadership development and making use of their competition-based motivation, recreation organization leaders would be well served by educational initiatives emphasizing competitive advantages achievable through intentional application of both transactional and transformational leadership behaviors.

Of the organization types identified in this study, mean scores for leaders in social Greek, community service, and honors organizations appeared outstanding (high or low) in at least two of the three measures summarized above; these measures demonstrate potential meaningful variance from the population mean relative to motivation sources. Studies of larger samples might reveal significant differences in motivation sources between leaders and/or members of the various organization types. Additional research might also utilize different categorizations of organization types better aligned with potential motivation variance, especially relative to “special interest” groups. Since both organizational affiliation and motivation for organizational work might significantly relate to organization identity (e.g., purpose, mission, and values), categories for organizations in further research might stem from perceived differences in organization identity relative to extrinsic and intrinsic motivation sources. If significant variance is discovered, leadership educators may be inclined to fine-tune educational practices relative to organization types (i.e., grouping students of similarly-motivated organizations together for discussion, brainstorming, reflection, etc.).

Gender and Experiences as Intervening Variables

Analysis in this study revealed no significant relationships between gender and transformational self-perceived behaviors, transactional self-perceived behaviors, intrinsic
motivation, or extrinsic motivation; this finding is consistent with findings from Barbuto, Fritz, and Plummer (2003). The measure of transformational preference did, however, positively correlate with gender such that the difference between transformational and transactional scores for females was greater than the difference for males. Further analysis of the sub-scales revealed a significant difference between male’s and female’s scores for active management-by-exception (MBE-A), a transactional behavior set. Similar to findings from Eagly, Johannesen-Schmidt, and van Engen (2003) and Dugan, Komives, and Segar (2008), these findings suggest that undergraduate female leaders self-perceive utilization of transformational behaviors rather than transactional behaviors to a greater degree than do undergraduate male leaders, with specific variance identified for MBE-A behaviors. Although the strength of this relationship is not great enough to warrant different treatment of males and females in leadership education, it does support educational practices that intentionally explore both male and female perceptions regarding leadership behaviors. Specific behavioral differences relative to MBE-A would include active monitoring of deviant or unexpected member behaviors and quick corrective measures by the leader (Avolio & Bass, 2004).

Meaningful relationships were not found between self-perceived leadership behaviors (transactional or transformational) and years served in collegiate leadership roles, grade level, age, or participation in leadership education experiences (in college or prior to college). Considering the potential of these variables as intervening, it appears that they do not meaningfully influence other relationships identified in this study. Considering these variables as potential indicators of development stages such as those studied by Kuhnert and Lewis (1987) and Komives et al. (2006), no meaningful conclusions can be drawn from the current study. Although this study did not provide evidence of leadership development relative to these
measures of time and experience, longitudinal studies with larger samples might reveal meaningful relationships. Such additional research should span from in-college to post-college years in order to best account for progression through cognitive and/or moral developmental stages; within a narrow range of four academic years, evidence of development may be lacking.

**Leadership Education Reconsidered**

This study’s findings of correlations between motivation sources and self-perceived leadership behaviors, particularly the positive relationship between intrinsic motivation sources and transformational self-perceived behaviors consistent with Barbuto’s 2005 findings, support leadership education initiatives that challenge students to consider their motivation sources relative to their leadership behaviors. Such self-examination provides students the opportunity to develop leadership behaviors effectively aligned with their motivation sources, a blending of Day’s (2000) “leader” introspection and “leadership” behavior development as explored further in the following paragraphs.

Returning to the concepts of “leader development” and “leadership development” (Day, 2000), leader development is focused on self-qualities of the individual leaders whereas leadership development is focused on relationships and interactions between leaders and followers. Whether through a structure of sequence, stages, cycles, or concurrent strategies, many leadership education initiatives are likely to address both leader and leadership issues as learning foci. The Leadership Identity Development Model serves as a researched example of a cyclical strategy that incorporates both foci (Komives et al., 2006).

Relative to leader development, presenting students with evidence of linkages between motivation sources and leadership behaviors (extrinsic to transactional and intrinsic to transformational/transactional) may assist them in focused self-discovery regarding their own
motivation sources and leadership behaviors. Leadership education that challenges students to practice and develop leadership behaviors may benefit by helping the students draw connections between their motivation sources and behaviors, thus assisting them in discerning what types of behaviors may work well, or be challenging, for them based upon motivation sources. Although beyond the scope of the current study, it is possible that helping students to discover, develop, and focus on certain motivation sources may help them increase their usage of certain leadership behaviors; further research into effects of educational practices may support this hypothesis.

Relative to leadership development, the extension of the above concepts into the realm of interpersonal relationships may prove effective to undergraduate leaders. Having a strong awareness of one’s own motivation sources, and how those motivation sources relate to behaviors, gives a leader a reference point for better understanding motivational and behavioral cues exhibited by organization members. That same understanding also provides a leader with self-identity references that may be useful in building relationships with organization members (e.g., sharing insights of one’s motivations in order to establish a relationship of trust, sharing, and mutual understanding). Further, by understanding how motivation sources influence one’s own behaviors, a leader may better understand how group motivations (i.e., motivation sources of the collective organization) effect group and individual member behaviors. Thus, a leader might find greater empowerment in identity-development processes such as defining shared values, defining an organizational mission and/or mission, and determining organizational goals.

As introduced in Chapters 1 and 2, a full range approach to leadership development incorporates both transformational and transactional behaviors relative to situational contexts, and with an overarching leadership approach of transformation (Sosik & Jung, 2010). While transformational models for undergraduates such as the SLPI and SCM are beneficial, a full
range perspective would include exploration of transactional and transformational strategies, including effective matching of those strategies to situational contexts. The results of this study indicate that undergraduate leaders, regardless of formal leadership education experience, self-perceive utilization of both transactional and transformational behaviors. Whereas transformational leadership education programs address and attempt to strengthen transformational behaviors, a full range approach to leadership education would help students understand their full range of leadership behaviors within the frameworks of transactional and transformational leadership. Especially when considering that certain types of behaviors may be linked to certain types of motivation sources, an educational program which focuses mostly or entirely on one set of behaviors might also be catering to a partial set of students’ motivations. Implementing leadership education programs that attend to a full range of leadership behaviors has the potential to capitalize on a wider range of students’ motivations.

Suggestions for Further Research

The sample size for this study was smaller than expected, thus lessening the generalizability of results, especially regarding categorical variables. Correlations found in this study warrant further investigation with larger samples of student leaders. Additionally, although this initial study was focused specifically on elected/appointed leaders within student organizations, undergraduate leadership education would be well served with research including broader undergraduate populations. It may be particularly useful to know if a larger sample reveals significant differences in behaviors or motivation sources at various points in academic career (i.e, academic class level).

Additional research specifically geared toward causal relationships between motivation sources and leadership behaviors might lead to better (or at least more informed) leadership
education practices. Longitudinal, experimental, and qualitative methods may prove more revealing to causation or lack thereof.

As reported earlier in this chapter, the current study yielded meaningful yet inconclusive variance among leaders of different classifications of organizations for motivation source measures. Further research in this area is warranted, including intentional classification of organizations relative to potential motivational variance (e.g., classifications based on mission, values, goals, etc.). Also regarding organizational context, and as posited in Chapter 2, leader behaviors may be influenced by organizational context; further research, particularly qualitative, could explore this potential.

Findings in the current study revealed no significant relationship between leadership education experiences and leadership behaviors. However, the survey questions limited results through use of dichotomous inquiry (yes or no). It is conceivable that behavioral changes result from cumulative exposure to leadership education experiences. Therefore, future research is suggested that examines relationships between leadership behaviors and quantity of leadership education experiences. More detailed research might also differentiate effects of various types of educational experiences (e.g., half-day workshops, full-day workshops, multi-day institutes, academic classes, etc.).

Finally, as introduced in Chapter 1, recent research explored the use of complexity theories in leadership development models. The current study provides foundational data for understanding undergraduate leaders through their self-perceptions. This data can be used in designing complexity-based leadership frameworks for undergraduate leaders that are attuned to their self-perceptions relative to motivation sources and leadership behaviors. Such complexity-based models may help undergraduate leaders better understand their leadership roles within
complex systems of interpersonal relationships. Just as complexity theories are attuned to sensitivity of initial conditions within complex systems, the results of the current study, and related future studies, can help attune new leadership models to the initial conditions of aspiring and developing undergraduate leaders.

**Summation**

Summation of this study must be considered within the context of its limitations. The study sample included students from a single institution, possibly influenced by unrecognized cultural or community variables. The sample size, while large enough to legitimatly study, warranted further research with larger samples. As indicated previously, representative samples for organizational types were too small in this study for any generalization, warranting further research with larger representative samples, possibly including more functionally meaningful organization categories. The study focused entirely on elected/appointed organization officers, and specifically officers with contact information on record with the university; results may be different for other student leaders or aspiring student leaders. The instruments used (MLQ and MSI) were not specifically designed for undergraduate populations; further research in the areas of undergraduate leadership behaviors and motivation sources could lead to the development of specialized instruments, similar to the development of the SLPI from the LPI. Connected to the issue of undergraduate uniqueness is the limit of available research on undergraduate organizations; future research of undergraduate organizations may compare and contrast these groups with professional and community organizations, providing data for specialized instruments and possibly specialized training considerations. The data were entirely self reported, reflecting leaders’ self-perceptions without observer feedback of actualized behavior; leadership training and development should include observer feedback regarding actualized
behaviors (as supported by observer forms for the MLQ, SLPI, and other “360-degree” assessments). Finally, the current study lacked longitudinal data for in-school and beyond-school influences of motivation sources and leadership behaviors; planning of training and education programs intended to best prepare undergraduates for post-college experiences would be well served with longitudinal data.

Current research (Avolio & Bass, 2004; Avolio & Gardner, 2005; Sosik & Jung, 2010) supports the development of a full range of leadership behaviors, particularly transformational and transactional behaviors, within an overarching paradigm of transformational leadership. This transformational leadership paradigm is also advocated by leading researchers in the arena of undergraduate leadership development (Dugan, Komives, & Segar, 2008; Komives et al., 2006; Komives, Lucas, & McMahon, 1998; Komives & Wagner, 2009; Kouzes & Posner, 2008). Insights from the current study, such as the relationship between intrinsic motivation sources and transformational self-perceived leadership behaviors, may prove beneficial to educators and trainers working with student leaders when developing educational initiatives. Initiatives well aligned with student motivation sources may prove effective in strengthening and developing a full range of leadership behaviors. Further, by understanding the relationship between motivation sources and leadership behaviors, leadership educators should be better able to assist student leaders through self-reflective initiatives helping them to understand the relationships between their own motivations and leadership behaviors.

Building upon current practices, undergraduate leadership education should be focused on specific aspects of “leader” self qualities, including motivations, as well as “leadership” behaviors and relationships. Broadening existing transformational models of undergraduate leadership education to include situational application of both transformational and transactional
leadership behaviors will help students develop both types of behaviors. Training initiatives that explore inherent value of organizational efforts will be attuned to intrinsic motivation sources, an effect that may be effective both educationally and toward personal wellbeing for the students. Educational efforts should also encourage students to intentionally explore both the intrinsic and extrinsic natures of their own motivation sources toward deeper self-understanding and realization of how their motivations may influence interpersonal relationships. Acknowledging that both intrinsic and extrinsic motivation factors are present among undergraduates, comprehensive training programs should be constructed around the complexity of motivation factors, both for leader self-understanding and for deeper understanding of potential organization member motivations. Educational activities should also intentionally explore both male and female perceptions regarding leadership behaviors, encouraging perspective sharing while not presuming differences or prescribing different strategies. Finally, presenting students with evidence of linkages between motivation sources and leadership behaviors (extrinsic to transactional and intrinsic to transformational/transactional) may assist them in focused self-discovery regarding their own motivation sources and leadership behaviors as well as increased understanding of motivational and behavioral cues exhibited by organization members.
REFERENCES


APPENDIX A. SURVEY ITEMS

Page 1: Introduction

Greetings, and welcome to my dissertation survey!

The survey is intended for undergraduate students. If you are a graduate student, please disregard the invitation to participate and close the survey now with my apologies for taking up your time.

As indicated in the invitation e-mail, I am examining the relationships between student leaders’ sources of work motivation and their leadership styles. This information will potentially contribute to new leadership training and education models that attend to students’ pre-existing perspectives on leadership. You have been invited to participate as an elected/appointed officer within a registered student organization at BGSU.

Beyond the basic correlation between leadership style and motivation sources, the study will examine differences in leadership style relative to gender, age, academic class status, number of semesters as a leader, experience in leadership education course or training, and type of organization being led.

The study is completely anonymous. There are no risks anticipated with participation in this study. You are free to stop completing the survey at any time. You are not required to participate, and participation (or not participating) will not impact your relations with BGSU in any way. The information will be summarized in grouped statistical data only with no reference to individuals.

Completion of the survey implies that you are over the age of 18 years and your consent to participate in this study.
The survey is divided into three sections. Section 1 contains 30 items from the Motivation Sources Inventory (used with permission) and Section 2 contains 45 items from the Multifactor Leadership Questionnaire (used with permission); for each of these sections, you will provide a scale response (0-4) indicating level of agreement for each item. The third section contains a few demographic and other questions.

The survey should take 10-15 minutes to complete thoughtfully. The entire survey must be completed in one session; your progress cannot be saved for later.

Beyond my dissertation, results of the study will also be shared with the author of the Motivation Sources Inventory, Dr. Jay Barbuto (University of Nebraska-Lincoln), for ongoing scale development purposes.

I realize this is a busy time of year, so I am offering an incentive for you to complete the survey. Upon completion, you will be given the opportunity to enter a drawing for a $25 gift certificate to either the BGSU Bookstore or Wal-Mart (the winner will choose which store). Please do not complete the survey more than once; only one entry will be allowed per person.

If you have any questions, you are welcome to contact me via e-mail at dwagner@bgsu.edu or by phone at 419.494.5148. My dissertation chair, Dr. Mark Earley, can be contacted at earleym@bgsu.edu or by phone at 419.372.0247.

Additionally, you may contact the Chair, Human Subjects Review Board, Bowling Green State University, 419.372.7716 (hsrb@bgsu.edu), if any problems or concerns arise during the course of the study.

Please remember to clear your browser’s cache and page history after you submit the survey in order to protect your privacy. Some employers use tracking software to monitor
and record keystrokes, mouse clicks, and web sites visited. This could impact the confidentiality of your responses. Therefore, you may wish to complete the survey on your personal computer or a public computer.

Sincerest thanks,

David Wagner

Doctoral Student, Leadership Studies

BGSU HSRB - APPROVED FOR USE

ID#H10D275GX2

EFFECTIVE: 4-5-10

EXPIRES: 4-4-11

By clicking the "next" button below and continuing with the survey, you acknowledge the following:

--you are at least 18 years old

--you consent to participate in the study

--you are an undergraduate college student

Page 2

• What is your academic class status? [Freshman] [Sophomore] [Junior] [Senior] [Graduate]

Page 3

• You have been invited to participate in this survey because of your involvement as an elected or appointed leader within a student organization at BGSU. Although it is
possible that you serve in multiple organizations, you are asked to complete the survey thinking about your leadership in just one organization.

Please select a category from the drop-down list below that best describes the focus of your student organization. If you are an elected or appointed leader in more than one organization, choose the leadership role that is most important to you and respond relative to that organization. To assist, a list appears below of BGSU registered student organizations categorized by the Office of Campus Activities.

[Academic Department Affiliate] [Community Service] [Cultural] [Governing Body] [Honors and Recognition] [Recreation] [Social Greeks] [Special Interest]

Page 4: MSI [not reprinted here for copyright reasons]

After consultation with the MSI author, the wording of the following items was revised for this study’s population (undergraduate students).

Original items:

- I work hard for a company if I agree with its mission.
- When choosing jobs, I consider which job will be most fun.
- I like to keep looking for better business opportunities.

Revised items:

- I work hard for an organization if I agree with its mission.
- When choosing new opportunities, I consider which ones will be most fun.
- I like to keep looking for better resume-building opportunities.

Page 5: MLQ [not reprinted here for copyright reasons]

Page 6

Please provide answers to the following questions.
• Indicate the total number of semesters you have served in any elected/appointed leadership positions within collegiate student organizations (rounded up to the nearest semester).

[1 semester] [2 semesters] [3 semesters] [4 semesters] [5 semesters] [6 semesters] [7 semesters] [8 or more semesters]

• How many leadership positions have you filled during your collegiate career? [text-input]

• Have you participated in a leadership education course or leadership training experience during your collegiate career? [yes] [no]

• Did you participate in a leadership education course or leadership training experience prior to the start of your collegiate career? [yes] [no]

• What is your gender? [Male] [Female] [Transgender] [Other]

• What is your current age? [text-input]

Page 7: Final Page

This is the last page of the survey.

By clicking the "SUBMIT" button below, you will submit your anonymous responses to the survey, and your browser will be re-directed to another page.

The next page contains additional information for your reference, as well as an entry form for the prize drawing.

To complete this survey and be re-directed to the follow-up page, click the "SUBMIT" button below.
Table 1

*Motivation Source Means by Organization Type*

<table>
<thead>
<tr>
<th>Organization Type</th>
<th>Intrinsic Mean (SD)</th>
<th>Extrinsic Mean (SD)</th>
<th>Intrinsic Preference Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>3.17 (.309)</td>
<td>2.61 (.584)</td>
<td>.566 (.530)</td>
</tr>
<tr>
<td>Community Service</td>
<td>3.34 (.198)</td>
<td>2.53 (.593)</td>
<td>.809 (.635)</td>
</tr>
<tr>
<td>Cultural</td>
<td>3.22 (.309)</td>
<td>2.44 (.533)</td>
<td>.775 (.596)</td>
</tr>
<tr>
<td>Governing Body</td>
<td>3.02 (.281)</td>
<td>2.45 (.711)</td>
<td>.566 (.678)</td>
</tr>
<tr>
<td>Honors</td>
<td>3.21 (.376)</td>
<td>3.02 (.606)</td>
<td>.191 (.424)</td>
</tr>
<tr>
<td>Recreation</td>
<td>3.13 (.329)</td>
<td>2.77 (.573)</td>
<td>.357 (.559)</td>
</tr>
<tr>
<td>Social Greek</td>
<td>3.33 (.417)</td>
<td>3.13 (.669)</td>
<td>.196 (.406)</td>
</tr>
<tr>
<td>Special Interest</td>
<td>3.15 (.397)</td>
<td>2.54 (.477)</td>
<td>.611 (.464)</td>
</tr>
<tr>
<td>SAMPLE</td>
<td>3.18 (.345)</td>
<td>2.63 (.586)</td>
<td>.549 (.548)</td>
</tr>
</tbody>
</table>
Table 2

*Key to Categorical Variable Transformation for Multiple Regression Analysis*

<table>
<thead>
<tr>
<th>Category: Variable</th>
<th>Transformed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender: Male</td>
<td>1</td>
</tr>
<tr>
<td>Gender: Female</td>
<td>2</td>
</tr>
<tr>
<td>Ed-PreCollege: No</td>
<td>1</td>
</tr>
<tr>
<td>Ed-PreCollege: Yes</td>
<td>2</td>
</tr>
<tr>
<td>Ed-College: No</td>
<td>1</td>
</tr>
<tr>
<td>Ed-College: Yes</td>
<td>2</td>
</tr>
<tr>
<td>Class: FR</td>
<td>1</td>
</tr>
<tr>
<td>Class: SO</td>
<td>2</td>
</tr>
<tr>
<td>Class: JR</td>
<td>3</td>
</tr>
<tr>
<td>Class: SR</td>
<td>4</td>
</tr>
<tr>
<td>OrgType: Academic</td>
<td>1</td>
</tr>
<tr>
<td>OrgType: Community Service</td>
<td>2</td>
</tr>
<tr>
<td>OrgType: Cultural</td>
<td>3</td>
</tr>
<tr>
<td>OrgType: Governing Body</td>
<td>4</td>
</tr>
<tr>
<td>OrgType: Social Greek</td>
<td>5</td>
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<tr>
<td>OrgType: Recreation</td>
<td>7</td>
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<tr>
<td>OrgType: Special Interest</td>
<td>8</td>
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</tbody>
</table>
Table 3

Comparison of MLQ Percentile Scores (U. S.) to Current Study

<table>
<thead>
<tr>
<th>MLQ Subscale</th>
<th>Published Percentiles</th>
<th>Current Study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Score</td>
</tr>
<tr>
<td>Idealized Influence (Attributed)</td>
<td>3755</td>
<td>2.75 - 3.00</td>
</tr>
<tr>
<td>Idealized Influence (Behavior)</td>
<td>3755</td>
<td>2.75 - 3.00</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>3755</td>
<td>3.00 - 3.25</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>3755</td>
<td>2.75 - 3.00</td>
</tr>
<tr>
<td>Individual Consideration</td>
<td>3755</td>
<td>3.00 - 3.25</td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>3755</td>
<td>2.75 - 3.00</td>
</tr>
<tr>
<td>MgmtByException (Active)</td>
<td>3755</td>
<td>1.50 - 1.75</td>
</tr>
<tr>
<td>MgmtByException (Passive)</td>
<td>3755</td>
<td>1.00 - 1.25</td>
</tr>
<tr>
<td>Laissez-faire</td>
<td>3755</td>
<td>0.50 - 0.75</td>
</tr>
</tbody>
</table>
Table 4

Pearson Correlations using MSI ratio scores

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<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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<tr>
<td>1. Intrinsic</td>
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<td>.016</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>2. Extrinsic</td>
<td>.177</td>
<td>.024</td>
<td>-1.000**</td>
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<td>3. Transactional</td>
<td>2.26</td>
<td>.491</td>
<td>-.132</td>
<td>.132</td>
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<td></td>
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<tr>
<td>4. Transformational</td>
<td>2.99</td>
<td>.464</td>
<td>.208*</td>
<td>-.208*</td>
<td>.468**</td>
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</tr>
<tr>
<td>5. Transformational pref</td>
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<td>-.328**</td>
<td>-.555**</td>
<td>.476**</td>
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</tr>
<tr>
<td>6. Gender</td>
<td>1.59</td>
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<td>-.172*</td>
<td>-.185*</td>
<td>.040</td>
<td>.223**</td>
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<tr>
<td>7. Category</td>
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<td>.059</td>
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<td>-.039</td>
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<td>8. Age</td>
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<td>.002</td>
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<td>9. Class</td>
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<td>.085</td>
<td>-.062</td>
<td>.034</td>
<td>.094</td>
<td>-.011</td>
<td>-.043</td>
<td>.771**</td>
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<tr>
<td>10. Lead Ed (College)</td>
<td>1.54</td>
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<td>.020</td>
<td>-.020</td>
<td>-.031</td>
<td>.015</td>
<td>.045</td>
<td>.101</td>
<td>-.074</td>
<td>-.101</td>
<td>-.103</td>
<td></td>
<td></td>
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<tr>
<td>11. Lead Ed (Precollege)</td>
<td>1.39</td>
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<td>.043</td>
<td>-.043</td>
<td>-.016</td>
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<td>.285**</td>
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<td>12. Lead Years</td>
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<td>.063</td>
<td>-.033</td>
<td>.471**</td>
<td>.498**</td>
<td>.180*</td>
<td>.132</td>
</tr>
</tbody>
</table>

*Correlation is significant at the .05 level (2-tailed)

**Correlation is significant at the .01 level (2-tailed)