

THE LEADERSHIP BEHAVIORS OF COLLEGE FRESHMEN

by

Kevin Paul Wallace

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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ABSTRACT

The purpose of this quantitative, causal-comparative study was to determine if a difference exists between leadership behaviors of male and female college freshmen and the amount of extra or co-curricular activities they participated in during high school. Leadership was measured using the Student Leadership Practices Inventory (S-LPI) (Kouzes & Posner, 2013) and was guided by the theoretical framework of leader identity development (LID) as promulgated by Komives, Owen, Longerbeam, Mainella, and Osteen (2005) and revised by Komives, Longerbeam, Osteen, Owen, and Wagner (2009). Participants consisted of 98 male and 84 female incoming college freshmen attending a mid-size Catholic university located in the US Midwest. The following two research questions informed this study: (a) Does a difference exist in the college freshmen leadership skills of students who participated in low, moderate, high, or very high levels of school sponsored extracurricular or co-curricular activities during high school? (b) Is there a biological sex (gender) difference in the leadership skills of students who participated in low, moderate, high, or very high levels of school-sponsored extracurricular or co-curricular activities during high school? Students were administered the S-LPI during the spring of their freshmen year, along with a demographic questionnaire asking for biological sex, number of extra or co-curricular activities, and estimated average number of hours of participation in extra or co-curricular activities during high school. Results indicated that three of the five sub-scales revealed significant differences based on student volume of participation. Biological sex was only significantly different on one sub-scale. Average hours of participation did not exhibit an effect for any of the sub-scales.

Keywords: Leadership, college students, student leadership, leadership development, extracurricular activities, co-curricular activities, deliberate practice

Copyright Page

Dedication

To my family for all their love, support, and understanding.

Acknowledgments

At the end of the day, there are far too many people who had a hand in this dissertation becoming a reality to thank them all without leaving someone out or creating a list of a dissertation length. However, I do want to thank several people who had a direct hand in making this a reality. First, to my loving wife Kim, who made my pursuit of a doctoral degree possible by returning to work full-time. Without her support spiritually, emotionally, and financially, this journey would never have been possible. Second, Thanks to my chair, Dr. Jeff Savage, whose willingness to accept my proposal and guide me through the process was indispensable. My father's challenges with a "difficult" chair led him to abandon the project, so I feel blessed to have such a supportive and helpful chair, which I believe was particularly important given the decentralized nature of distance education. In addition, I want to thank my committee members, including Dr. Michelle Barthlow, who I first met as my instructor for EDUC 919 and 980 and was always willing to listen to my many questions. Additionally, Dr. Beth Martin, my other committee member, has been a mentor to me and is always willing to share her vast knowledge of how things work within the university. Drs. Barthlow and Martin were crucial in providing the right feedback when I needed it and helping me stay on track and remaining close to my timetable for completion. Finally, I owe debts of gratitude to Dr. Jonathan Smith and Dr. Rosanna Miguel, who both provided some initial feedback during my topic development phase and a "sanity check" on the basic direction for my study.

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List of Abbreviations

Authentic Leadership (AL)

Deliberate Practice (DP)

Emotionally Intelligent Leadership (EIL)

Leadership Attitudes and Beliefs Scale (LABS)

Leadership Identity Development (LID)

Leader Member Exchange Leadership Theory (LMX)

Servant Leadership (SL)

Student Leadership Practices Inventory (S-LPI)

Transformational Leadership (TL)

CHAPTER ONE: INTRODUCTION

Overview

This study investigates if participation in high school extra and co-curricular activities influences the development of leadership behaviors as seen in college freshmen. This chapter begins with a brief background addressing leadership as a learnable skill and the theory of deliberate practice. Next, a historical overview of the views of leadership is provided, which is followed by a section discussing how society-at-large has moved away from a hierarchical view of leadership. The discussion then turns to the theoretical framework, the Leadership Identity Development (LID) model, and then to the purpose, problem statement, significance of the study, and research questions.

Background

In households where one or both parents have leadership positions, it is not uncommon to see the children also emerge as leaders. The expression “the apple does not fall far from the tree” may be at work, and captures the concept of parents’ early influences on their children’s development (Hartman & Harris, 1992). In terms of developing expertise, 10 years of deliberate practice (DP) is frequently cited as a requirement to reach expert levels of performance in a variety of activities including music, athletics, and scientific endeavors (Ericsson & Pool, 2016; Ericsson, 2014a; Ericsson, Krampe & Tesch-Romer, 1993). Additionally, top levels of performance are not reached without changes and increases in developmental activities, such as a musician practicing increasingly more difficult pieces of music, or an athlete adjusting his or her training to develop evermore specific physical abilities; simply repeating entry-level skills will not develop expertise (Ericsson, 2014b). Given the fact that leadership is currently regarded as a

learnable skill (Allen & Middlebrooks, 2013; Allen, Miguel, & Martin, 2014; Hartman, Allen, & Miguel, 2015), it follows that students who are involved in activities that separate them from their peers in noticeable ways are potentially exercising a form of deliberate practice of antecedent leadership behaviors. These activities may include athletics or participation in clubs, and may also include specific leadership components. The purpose behind the current study is to investigate whether students who participate in high school extracurricular and co-curricular activities are building a cachet of leadership skills and knowledge through deliberate practice that influences their leadership behaviors, even if they are not in traditional leadership positions (e.g. president, vice president, captain, or some other formally designated leadership role). An additional focus will be on the amount of student participation in high school level activities, hypothesizing that the more they increase their tacit knowledge about leadership (Kutz & Bamford-Wade, 2013; Allen et al., 2014) the more well-positioned the students will be to become leaders in college. Therefore, quantity of participation is a second variable of interest.

High school students typically have a limited concept of leadership that is often restricted to formal leadership roles, and this limited view affects how they approach learning about leadership. Wielkiewicz, Fischer, Stelzner, Overland, and Sinner (2012) noted that participation in the number of activities in high school was a strong predictor of students' beliefs in their leadership abilities, and those students who held formal leadership positions exhibited more confidence. These early roles in formal positions in a high-structured high school environment may shape how students view later developmental programs. Therefore, it should not be surprising that students tend to view leadership activities or programs aimed at leadership development, in college, very differently from that of the teachers of such programs. For example, Eva and Sendjaya (2013) found that leadership instructors felt that ethical decision-

making should be a key component of leadership training, yet students did not place much value on the ethics instruction they received. Further, it may be that students value participation in activities that are perceived to show leadership partially as a resume builder for college applications. Regardless of the viewpoint of the students or the instructors, leadership programs have been shown to be effective in developing students' leadership skills (Hartman et al., 2015; Muammar, 2015; Ogurlu & Emir, 2014).

The question remains, if leadership development programs do in fact increase leadership abilities in students, do activities that are not necessarily aimed at leadership development (e.g., athletics, marching band, and clubs) still have a positive influence on developing students' leadership abilities? Beck (2014) noted that adult leaders showed “characteristics, behaviors, and life experiences” (p. 307) that acted as predictive markers of leaders. One of the predictive markers found by Beck (2014) was volunteering for at least an hour a week. Volunteering is a form of participation, and a volunteer does not necessarily hold a leadership role. Further, Beck suggests that volunteering may be an expression of intrinsic goal motivation and a sense of connecting to something bigger. Therefore, it seems reasonable that the predictive marker of volunteering found in adults might also hold true for high school and college-age students. The extension of this logic is that high school or college-age students who participate in voluntary extra or co-curricular activities are enacting a form of experiential learning involving leadership components (Day, 2010) even if those experiences are devoid of intentional meaning-making of their leadership aspects.

The working definition of *leadership* that will be used throughout this paper comes from Nahavandi's (2015) recent work, which incorporates classic conceptions of this notoriously difficult-to-define construct: Leadership is a group phenomenon that involves an influence

process focused on the attainment of a group goal and assumes some hierarchical arrangement in the group, though it may be a very informal arrangement. This study's theoretical basis is transformational leadership theory and its four key elements of charisma, inspiration, intellectual stimulation, and group consideration (Bass, 1990). Leadership levels will be assessed using the Student Leader Practices Inventory (S-LPI) (Kouzes & Posner, 2013) which has five subscales (modeling, inspiring, challenging, enabling, encouraging) that generally align with transformational leadership.

Historical Overview

Studies of leadership are not new. However, older research of leadership, in general, typically looked at the traits or characteristics of leaders (Stogdill, 1948). For example, Hannah (1979) looked at leadership at the high school level in terms of matching nine student leadership positions, grouped as either task-centric, maintenance-centric, or task-maintenance-centric, to 12 observable competencies, labeled as either expressive or instrumental, and collectively termed these resources. Hannah's goal was to see which resources were perceived as a best fit for specific leadership situations. Students were asked to match which competencies they thought best fit which leadership positions. Hannah found that expressive resources were perceived as most important to maintenance-centric leadership positions, that both expressive and instrumental resources were considered equally important to task-maintenance-related leadership positions, and finally, that expressive resources were considered marginally important to task-related leadership positions. Hannah's study viewed resources in terms of visible characteristics or attributes such as work ethic, athleticism, or organization. Although leading someone to accomplish a common task or goal is still the crux of leadership, this older view is more mechanical and trait-centric (Northouse, 2015). It does not consider social and interpersonal

relationship dynamics of leadership, nor does it address any possible levels of learned leadership expertise (Ericsson, Krampe, & Tesch-Römer, 1993). When measured at the college level, students who participated in activities at the high school level, such as a class officer or other formal leadership position, showed an increase in perceived leadership development; specifically, administrative and problem solving skills, along with a sense of community (Birkenbolz, & Schumacher, 1994). Additionally, various forms of academic training in leadership were also found to increase students' knowledge about leadership, as well as increase their confidence in their ability to apply leadership concepts and principles (Brungardt & Crawford, 1996; Hartman et al., 2015). Furthermore, some studies (Hartman & Harris, 1992; Wielkiewicz et al., 2012; Manyibe & Otiso, 2013; Cho, Harrist, Steele, & Murn, 2015) noted gender differences in how males and females approach leadership. For example, Cho, Harrist, Steele, and Murn (2015) noted that male students approached leadership based more on extrinsic rewards motivation, whereas females did not.

While learning about leadership or any subject from an academic or classroom perspective may be useful, researchers generally agree that hands-on application of leadership skills is, or should be, a key component of a leadership development program (Allen et al., 2014; Hartman et al., 2015). However, experience alone is often insufficient for the development of leadership skills. Students may lack awareness that a given experience contains a specific learning point and, if not accompanied by deliberate reflection and guided interpretation of the experience against leadership theories and concepts, important lesson(s) may be lost (Day, 2010; Massey, Sulak, & Iram, 2013). Although extra and co-curricular activities may not have leadership development as a stated or implicit goal, it may be that participation in these types of activities does foster some antecedent leadership development.

Finally, one of the challenges of researching leadership and leadership development is that *leadership*, as a construct, has many definitions, and forms the basis of an excessive number of theories, both anecdotal and empirical (Hartman et al., 2015). For example, in recent years, servant leadership has emerged as the latest theory to undergo intense study; however, according to Liden, Wayne, Zhao, and Henderson (2008), servant leadership, transformational leadership, and leader member exchange leadership theory (LMX) have significant construct overlap. Further complicating the leadership landscape is the emergent theory of emotionally intelligent leadership (EIL), which postulates that leaders must have a heightened awareness of self, others, and situational context (Allen, Shankman, & Miguel, 2012). Therefore, given the ambiguity of leadership as a construct, it is unlikely that high school or college students will have a sound understanding of leadership or knowingly employ any specific leadership theory, especially if they have not had any formal introduction to leadership principles or concepts. What is more likely is that student leaders employ a bricolage approach, testing what they have seen their parents, teachers, and coaches use as they develop their own leadership styles. The exact style of leadership that a student may ultimately develop as an adult is surely open for discussion; however, it is likely that students will develop individual leadership styles that are some combination of the styles they see exhibited from parents, teachers, and coaches. Although the ideal high school teacher or coach would seemingly exhibit elements of transformational leadership--charisma, inspiration, intellectual stimulation, and group consideration (Bass, 1990)--that is not always the case. Parents may push their children to be overly competitive. Some teachers may exhibit favoritism or narcissistic behavior, and generally set a poor example for their students. Likewise, coaches may also set a poor example by being hyper-competitive, playing only the very best players and focusing on wins and league championships over positive

development of all their student athletes. Therefore, it is likely that students' early leadership development will parallel that of the examples they see in their lives, and hopefully those examples are positive ones.

Society-at-Large

During the 1970s and 80s, leadership saw the introduction of several new theories: charismatic leadership, transformational leadership, servant leadership, and authentic leadership. The common thread among these new leadership theories was an emphasis on the relationship between the leader and the followers, and the use of vision and inspiration (Nahavandi, 2015). As the paradigmatic shift away from a hierarchical view of leadership has occurred over the last 40 years, leadership in general has de-emphasized position and moved towards a view that involves advancing the common good and creating positive social change (Stone-Johnson, 2014). As noted above, the main theme of the current leadership theories is the relationship between the leader and followers, and how that relationship affects the attainment of group goals. For example, charismatic leaders are often described as highly self-confident, expressive, energetic and enthusiastic (Nahavandi, 2015). However, charisma is also a key element of transformational leadership theory (Bass, 1990); therefore, transformational leadership seems to have overshadowed charismatic leadership in a practical sense (Conger, 1999). Furthermore, Conger (1999) suggests that in business, the terms charismatic leader or charismatic leadership are often perceived as “an esoteric and rarer form of leadership” (p. 148) and that most business leaders would not see charisma as a requisite quality of an effective leader. On the other hand, the distinguishing element of servant leadership is that those leaders deemed to be servant-oriented tend to have much closer personal contact with their followers as they attempt to empower them so that each individual follower can add to the common good in the ways in

which they are best capable (Liden, Wayne, Zhao, & Henderson, 2008). Authentic leadership (AL) also seems to capture aspects of transformational leadership. However, like charismatic and transformational leadership theories, authentic leadership also has multiple nuanced definitions and no single definition is generally agreed upon (Gardner, Cogliser, Davis, & Dickens, 2011). Additionally, Avolio and Gardner (2005) suggest that authentic leadership might be an underpinning for all other forms of positive leadership due to construct overlap among authentic, transformational, charismatic, and servant leadership, as all of these forms of leadership require some element of authenticity. Specifically, Avolio and Gardner (2005) produced a list of 29 components of authentic leadership with 25 of the 29 components contained in transformational leadership theory, 14 in charismatic leadership, and 13 in servant leadership as either focal components or as discussed points.

As society has moved away from a hierarchical view of leadership, such as a traits- or skills-based approach to leadership (Northouse, 2016), some have raised concerns that a dark side of leadership may arise as relationships with follower(s) may be exploited. For example, Adolf Hitler had a strong charismatic element. Another potential shortcoming of servant-based leadership is that it may overemphasize the individual and thus place the greater good of the organization or organizational goals at risk (Lynch & Friedman, 2013). Another concern is that because society is in a near constant state of change, adopting too closely the values, beliefs, or ideologies of a specific leader may create dysfunctional organizations that are unable to adapt to changes in society (Conger, 1999).

An inherent challenge for any leadership development education program is to determine exactly what to teach and how to teach it (Hartman et al., 2015). Although no single model for leadership development is preeminent, several recent studies have highlighted the need for an

experiential component while acknowledging that many possible approaches to leadership development education exist (Allen & Middlebrooks, 2013; Allen et al., 2014; Hartman et al., 2015). An outcome from this study will be to inform leadership educators on the role that prior experience with high school extra and co-curricular activities may exert on shaping college students' nascent leadership behaviors and will assist educators in developing programs to increase leadership potential for students who do not necessarily hold formal leadership positions.

Theoretical Framework

This study will use the Leadership Identity Development (LID) model, as advanced by Komives, Owen, Longersbeam, Mainella, and Osteen (2005) and Komives, Longersbeam, Osteen, Owen, and Wagner (2009). The framework is based on a postindustrial, value-centric relational view of leadership (Komives et al., 2005). The LID model is particularly useful for the following reasons: first, the model is based on a relational view of leadership (Komives et al., 2005), which is consistent with the leadership theories advanced since the 1970s and 80s, including transformational, charismatic, servant, and authentic perspectives. As noted previously, the common theme among these new leadership theories is the emphasis on the relationship between the leader and the followers (Nahavandi, 2015). Second, the model was built with the study's target audience in mind, college students, using a grounded theory approach (Komives et al., 2005). Third, the model specifically identifies meaningful involvement and adult interactions as key longitudinal elements of leadership development in college students (Komives et al., 2005). Therefore, the model helps explain how an increase in experiences in high school and the influence of teachers, coaches, and peers may be linked to increases in leadership development. Fourth, the development of the LID model specifically

references *The Leadership Challenge* (3rd ed.) by Kouzes and Posner (cited in Komives et al., 2005) as being one of the sources addressing a value-centric form of leadership. Since the assessment instrument for this study is the S-LPI (Kouzes & Posner, 2013), one can be confident that the LID model and the S-LPI are congruent with the constructs evaluated.

The LID model comprises six developmental stages: first, awareness; second, exploration and engagement; third, leader identification; fourth, leadership differentiation; fifth, generativity; and sixth, integration and synthesis (Komives et al., 2005). The LID model also identifies four developmental influences: adults, peers, meaningful involvement, and reflective learning. The proposed study situates participation in high school activities in the area of meaningful involvement in the LID model with an assumption that meaningful involvement contains aspects of DP. The influence of reflective learning is also supported by the findings of Day (2010) and Massey, Sulak, and Iram (2013), who noted that experience by itself may not be enough to influence leadership development in students.

The proposed study is also situated within the LID model from the perspective of adult and peer influences. High school activities are more guided by teachers and advisors than is typically the case in the college setting, where student organizations tend to operate with greater autonomy--the notable exception being varsity athletics. In keeping with the concept of DP, high school students have an opportunity to practice leadership and antecedent behaviors in a low-risk environment. As noted by Wielkiewicz et al. (2012), first semester college freshmen are largely situated in stages two (Exploration/Engagement) and three (Leader Identified, which involves understanding positional leaders in a group) of the LID model, which makes sense on an intuitive level as high school is a more structured environment than the college campus in terms of student autonomy. Therefore, it seems logical that college freshmen would tend to take a more

hierarchical and positional view of leadership than a college senior or working adult who has been exposed to a wider array of leadership experiences and developmental opportunities.

In keeping with the importance of early influences on children's leadership development (Hartman & Harris, 1992), Murphy and Johnson (2011) proposed a longitudinal model of leadership development. They note that starting at about college age and continuing through later adulthood, research is plentiful; however, less research has been directed at the very early years of childhood and leadership development. The researchers proposed a model of leadership development that is lifelong (Murphy & Johnson, 2011). Further, they proposed three early developmental factors that affect children's leadership development: early influences (which include genetic temperament and gender), parental style, and early learning experiences (including sports and school activities). What is interesting to note is that parental style and early learning experiences correlate with adult influences and meaningful involvement (Hartman & Harris, 1992; Komives, et al., 2005, 2009). The key point is that Hartman and Harris (1992), Komives, et al., (2005, 2009) and Murphy and Johnson (2011) all recognize the influence of meaningful involvement and adult influences in the lives of children and adolescents. However, as noted by Murphy and Johnson (2011), other than a few studies, a dearth of research exists on the leadership development of students prior to reaching college.

Problem Statement

Past research has focused primarily on three areas of leadership development in high school and college-age students: (a) students who have held formal positional leadership roles, such as team captains or class presidents (Wielkiewicz, Fischer, Stelzner, Overland, & Sinner, 2012); (b) comparisons between gifted and non-gifted students (Reichard et al., 2011; Ogurlu & Emir, 2014; Muammar, 2015); (c) and studies limiting participation in extracurricular activities

only to the current school year (Hancock, Dyk, & Jones, 2012).

Reichard et al. (2011) specifically noted that future research should “include prior leadership experiences, such as the number of leadership roles during high school or college” (p. 10). Additionally, Hancock et al. (2012) noted that their study only investigated the current school year and, therefore, did not take into account longitudinal effects of participation in activities over several school years. The literature, therefore, appears devoid of studies investigating the total number of extra or co-curricular activities a student has participated in during high school relative to his or her level of leadership development. The problem is that no study has examined the relationship between amount of participation in high school activities, regardless of role, and development of leadership behaviors of students entering college as freshmen.

Purpose Statement

The purpose of this quantitative, causal-comparative study was to determine if a difference exists between leadership behaviors of male and female college freshmen and the amount of extra or co-curricular activities they participated in during high school. Three independent (categorical) variables were used in this study: gender, number of high school sponsored extra or co-curricular activities (participation level) measured as low, moderate, high or very high levels of participation, and average number of weekly hours of participation in high school sponsored extra or co-curricular activities also measured as low, moderate, high or very high levels. A cluster sample of students were asked to report their participation both by number of high school sponsored activities and the average number of hours of total participation per week. Gender differences were expected in regards to how males and females approached leadership (Hartman & Harris, 1992; Wielkiewicz et al., 2012; Manyibe & Otiso, 2013, Cho et

al., 2015); therefore, it was anticipated that there may be differences between male and female S-LPI scores due to gender-based differences. Participation is defined as involvement in an activity or sport for the entire time for which the activity normally occurs, either a season or, in some cases, the entire school year. If a student participates in several activities over multiple years or seasons, then that activity was counted as multiple incidences of participation. For example, a student who participated in two seasons of football and one year of debate club would count participation in three events. Average number of hours of participation refers to self-reported average combined total of hours that a student participated in all activities. The dependent variable was the participant's sub-scores on the S-LPI (Kouzes & Posner, 2013).

The sample for this study was a cluster sample drawn from University A, which is a mid-size Catholic university in the Great Lakes region of the United States. University A is approximately 83% white, with male students slightly overrepresenting female students 51% to 49%. The university draws from a predominantly middle to upper-middle class socioeconomic demographic. Published University A undergraduate statistics indicated the freshmen population for the fall of 2016 was approximately 715 students.

Significance of the Study

Prior research on college students' leadership development has often focused on developmental activities carried out while in college. For example, findings from Dugan, Turman, and Torrez (2015) strongly suggest that collegiate recreational sports are an excellent venue for leadership development; however, their study did not control for leadership skills the students may have brought into the recreational setting. It may be that students who choose to participate in collegiate recreational sports possess a propensity for sports and have gained some tacit knowledge of leadership through participation prior to entering the collegiate ranks.

Further, Cho et al. (2015) noted that the affective-identity motivation to lead was higher in students who were more advanced in college--that is, juniors and seniors--as compared to freshmen. However, they also found that the affective-identity motivation to lead did not grow through general development. They suggest that it may have been the result of some other variable, and that the upperclassman may have had more leadership experiences that influenced them (Cho et al., 2015). The artifact that the authors refer to could be a predisposition to lead developed during their high school years, which is consistent with the concept of DP (Ericsson, Krampe, & Tesch-Römer, 1993; Ericsson, 2014b).

Incoming college freshman may believe that they possess leadership abilities; however, Wielkiewicz, et al. (2012) concluded that incoming college freshmen have a rather limited concept of leadership. Typically, college freshmen tend to think in hierarchical and formal positional terms regarding leadership. Although Wielkiewicz, et al. (2012) did investigate participation in high school activities, leadership was assessed using the Leadership Attitudes and Beliefs Scale (LABS), which assesses hierarchical-positional versus relational thinking towards leadership and is based on an ecological systems model of leadership (Wielkiewicz, 2000) and, therefore, may not adequately capture antecedent behaviors developed through DP in school extracurricular and co-curricular activities.

This study used the Student Leader Practices Inventory (S-LPI), which assesses students on leadership behaviors, not psychological factors of leadership such as attitudes or socially responsible thinking (Posner, 2012). This study's aim was to bridge the gap between volume of participation, average hours of participation in a variety of high school activities, and the leadership behaviors that a student brings into the college setting. The goal is for a better understanding to emerge about how participation in high school activities influences and shapes

the leadership behaviors a student brings to college.

Research Questions

RQ1: Does a difference in college freshmen leadership skills (as measured by the S-LPI) exist based on level of school sponsored extracurricular or co-curricular activities during high school (grouped as low, moderate, high, or very high levels and composed of both volume of participation and average hours of participation)?

RQ2: Does a difference in leadership skills (as measured on the S-LPI) exist between male and female college freshmen who participated in low, moderate, high, or very high levels of school-sponsored extracurricular or co-curricular activities during high school (volume of participation and average hours of participation) and their scores on the S-LPI?

Definitions

1. *Authentic leadership* - “persons who have achieved high levels of authenticity in that they know who they are, what they believe and value, and they act upon those values and beliefs while transparently interacting with others” (Avolio et al., 2004, p. 802).
2. *Deliberate practice* – “a highly structured activity, the explicit goal of which is to improve performance (Ericsson et al., 1993, p. 368).
3. *Leadership (general definition)* - “is a group or social phenomena...involving influence...is goal directed and action oriented...assumes some form of a hierarchy in a group” (Nahavandi, 2015, p. 3).
4. *Servant leadership* – “Servant leadership stresses personal integrity and serving others, including employees, customers, and communities” (Liden et al., 2008, p. 161).
5. *Transformational leadership* – “occurs when leaders broaden and elevate the interests

of their employees, when they generate awareness and acceptance of the purpose and mission of the group, and when they stir their employees to look beyond their own interest for the good of the group” (Bass, 1990, p. 21).

CHAPTER TWO: LITERATURE REVIEW

Overview

This chapter begins with a brief historical overview of leadership before turning to the current state of leadership studies, including the direction that the field of leadership practice and research is moving. Attention will then turn to the theoretical framework that will be used to guide the proposed study: The leadership identity development model developed by Komives et al., (2005) and the concept of deliberate practice (DP) (Ericsson et al., 1993; Ericsson & Pool, 2016). Next, the literature section will review current literature specifically focused on high school and college-age students, noting four thematic elements that emerge from the literature: Positional leadership roles, gender, the teaching of leadership, and athletics and experience in the development of leadership. Finally, the summary section will highlight gaps found in the four thematic elements and illustrate how the proposed study will address a gap in the literature.

Historical Background

Leadership as a construct is not new. In fact, concerns with leadership and its effective practice go back thousands of years. Grint (2011) suggests that the starting point for leadership is the beginning of recorded history, and that leadership as a construct probably emerged once humanity reached a sufficient size to form into societies or communal units. The implication is that leadership has been around as long as there have been societies, although the exact role and importance attached to the leader has surely varied throughout history. Grint (2011) also provides a cautionary note when examining older sources, reminding us that history is often written by the political and or military victors and therefore often only contains their perspective. Additionally, prior to the Renaissance, there may be a dearth of counterpoint information; for

example, Grint (2011) notes that there is a relatively large body of work regarding the political and military activities of Julius Caesar; however, there is very little information about the slave uprising led by Spartacus. Finally, most of what we know about leadership from ancient times comes largely from the fields of politics and the military. In these areas, the written record is largely of societies that were literate, but many ancient societies operated on oral traditions, and we may have little or no written accounts of exactly how they lived and how their leaders conducted themselves. The following section will provide a broad overview of the history of leadership as a construct, starting with eighth century B.C. Greek society as contrasted against fourth century B.C. China, and then jumping forward to the Renaissance before then finally moving into contemporary times. The intent is not to cover all possible views of leadership, but rather to highlight a few key pieces of literature that are reflective of historical attitudes of leadership; specifically, the *Iliad* and the *Odyssey* by Homer, the *Art of War* by Sun Tzu, and *The Prince* by Machiavelli. Finally, the section will conclude by examining some contemporary anecdotal and heuristic approaches to leadership that one might find on his or her local library bookshelf.

Ancient and Renaissance Views

An excellent overview of ancient Greece's concept of leadership is provided by Sarachek (1968) through his analysis of Homer's *Iliad* and the *Odyssey*, as he noted four key leadership characteristics that are revealed through the characters. First, in King Agamemnon, we see that leaders are supposed to be fair-minded and just, not issuing arbitrary commands. Second, leaders are to seek wisdom from those who are capable of giving it; this is seen through the character of Nestor. The third characteristic is that of being shrewd or wily; the character of Odysseus embraces this quality. Finally, a leader is a man of action, as portrayed through the

character Achilles. Homer saw the individual as imbued with different characteristics by nature, as was the general view in Greek society of his day (Sarachek, 1968); essentially, leadership was a gift from the gods to specific individuals. The Homeric view of leadership was therefore a trait-centric, or a great man theory of leadership (Northouse, 2015).

Jumping forward approximately 400 years to fourth century B.C. China, the *Art of War* by Sun Tzu departs from the Homeric view of leadership as traits being endowed by nature; rather, Sun Tzu takes a more prescriptive approach to leadership (Grint, 2011). As the title of the book indicates, the *Art of War* deals with warfare; however, many of the leadership concepts can be applied to other areas of life. For example, the first passage reads “military action is important to the nation as the ground of death and life, the path of survival and destruction, so it is imperative to examine it” (Tzu, ca 350 B.C./2003, p. 40). The prescriptive nature of this passage is seen in its last seven words: “so it is imperative to examine it” (Tzu, ca 350 B.C./2003, p. 40). Here we see Sun Tzu telling military commanders, or for that matter anyone, to take time to examine a situation; he is prescriptive and thus by implication suggests that leadership is an acquired skill. Neither the writings of Homer or Sun Tzu should be thought of as representative of the entirety of the ancient world’s views towards leadership. However, the contrast between Homer’s *Iliad* and the *Odyssey* and Sun Tzu the *Art of War* does point to a key, and enduring, question when considering the views of leadership: is leadership a trait that is inherent in a select few individuals, or is leadership a skill that can be learned by anyone willing to put forth the effort?

A third and final historical view of leadership is provided by Machiavelli in his book *The Prince*. Written in 1513 but not published until five years after Machiavelli’s death in 1527 (Machiavelli, 1532/2003), *The Prince* has had a lasting impact on the field of leadership, and the

name Machiavelli or Machiavellianism has become synonymous with an ends justifying the means approach to leadership. In *The Prince*, Machiavelli writes in a descriptive manner about the political leadership landscape of Florence and the Italian states as they existed in the late 1400s to early 1500s (Grint, 2011). Unlike the virtue-based writings of the *Iliad* and *Odyssey* or the practical, skills-centric approach in the *Art of War*, *The Prince* offers what could be viewed as a largely anecdotal account of leadership and political posturing. For example, in examining about “New Principalities that are acquired by others’ arms and fortune,” Machiavelli (1532/2003) writes:

Cesare Borgia, called Duke of Valentino by the vulgar, acquired his state through the fortune of his father and lost it through the same, notwithstanding the fact that he made use of every deed and did all those things that should be done by a prudent and virtuous man to put his roots in the state that the arms and fortune of others had given him (pp. 26-27).

Here we see the descriptive nature of Machiavelli as he is not stating what a “good” leader should do or what virtues a “good” leader must embody, but rather what he had seen in operation. Grint (2011) also notes that Machiavelli recounts how Cesare Borgia could be brutal, through use of assassination, but how his use of violence maintained his rule, uniting the northern Principalities and provided some measure of overall stability to the region. Thus, Machiavelli illuminates what worked, to some greater or lesser extent, not necessarily what rules or virtues optimal leadership might have. What is interesting about these older views of leadership is they have not fallen completely out of vogue. While leadership is now more generally thought of as a learnable skill (Allen & Middlebrooks, 2013; Allen, Miguel, & Martin 2014; Hartman, Allen, & Miguel, 2015) certain traits are now generally associated with leadership, such as sociability and being more

lively (Nahavandi, 2015). Further, describing leadership as it is actually being practiced, whether it is considered good or bad, as Machiavelli did, still occurs today, and has some benefit as it is rooted in what is being used in terms of actual practice.

Contemporary Anecdotal and Heuristic Views

Moving forward to contemporary times, one can find numerous books related to leadership on their local library or bookstore shelves, and many of these books could be generally categorized as anecdotal views on leadership because they are not necessarily based on any specific leadership theory or empirical research. A second category of book is the heuristic-based approach to leadership. Heuristics, or as they are more commonly referred to, “rules-of-thumb” approaches, refer to the use of a simplified set of rules that aid in decision making in cases where some amount of information bearing on the problem is either not known or cannot be obtained in a reasonable amount of time (Gigerenzer & Gaissmaier, 2011). However, in this usage, the author of a heuristic book on leadership will search among historical and or contemporary leadership figures or figures of notable accomplishment, seeking thematic elements that apparently gave rise to their success and will create a heuristic-like rule of leadership from those thematic elements. At face value, this may appear like the opening stages of grounded theory research (Creswell, 2013); however, typically a book of this nature is written for mass appeal, not social science research, and the themes are not generated with the same level of rigor as in academic research. An example of a heuristic-based leadership book would be John Maxwell’s (2002) *Leadership 101*. The book is organized around 10 thematic chapters, with each chapter containing multiple examples supporting the chapter’s theme. Chapter 2, for example, specifically mentions former English Prime Minister Benjamin Disraeli, former presidents Jimmy Carter and Theodore Roosevelt, and former Heavyweight Boxing Champion

Joe Frazier (Maxwell, 2002).

Returning to anecdotal leadership books, they could be further sub-categorized as either historical or contemporary in nature. Historical books would be those that attempt to describe the leadership of a historical figure: *Robert E. Lee on Leadership* (Crocker, 2000) or *Lincoln on Leadership* (Phillips, 1992) are examples of historical-based anecdotal leadership books. The cautionary note mentioned above (Grint, 2011), regarding the limits of history, should be kept in mind regarding Lee and Lincoln. Although both Lincoln and Lee are, relatively speaking, recent historical figures, the pedestrian view of these two men tends to be one that is highly idealized, the prototypical general -- Robert Lee, and the great statesman -- Abraham Lincoln, with little or no thought given to their weaknesses and shortcomings. Using an anecdotal perspective, Crocker (2000) provides a series of historical vignettes, each concluding with "Lee's Lessons" that provide a varying number of lessons that have been extracted from the preceding vignette. Phillips' (1992) *Lincoln on Leadership* follows a remarkably similar style of presenting some historical background regarding aspects of Lincoln's presidency during the Civil War and then extracting "Lincoln Principles" at the conclusion of the chapter. Part of the allure of the historical-based anecdotal leadership book is that the writer can draw upon the real-world situations, in the cases of the two Civil War leaders, and selectively edit historical background to provide a vehicle through which the leadership principle or lesson can be communicated in a non-academic style and thus make the book more readable to a general audience. However, the downfall of these historical-oriented leadership books is that they provide the reader with a hodgepodge of tips and ideas that are not necessarily thematically or theoretically related. The reader is presented with what might be referred to as a toolbox approach, where the tips or ideas are new tools given to the reader; however, the reader is often left to determine if and, if so, how

a tip or idea would apply to his or her situation. In short, the difficulty is generalizing the principle or lesson beyond the context in which it was presented.

Contemporary leadership books generally differ somewhat from the historical anecdotal leadership books in that they are typically autobiographical in nature, and are often written by a successful businessperson or sports figure. Jack Welch *Winning* (2005) is an example of a contemporary anecdotal leadership-oriented book based on the career of Jack Welch, former CEO of General Electric. While the book contains only one chapter specifically focused on leadership, chapter 5, the overall implication of the book is, follow these rules and you will become a successful businessperson, and by extension a successful business leader. However, just as with the historical-oriented leadership books, the contemporary books are usually based on a single individual and that individual's interpretation of how his or her own actions led to success. Further, unlike historical-oriented leadership books, the contemporary leadership book is set in the present time and neither the author nor the reader must contend with historical-based contextual and situational factors. However, little or no effort may be made to connect any of the espoused principles to any particular theory of leadership or unifying principle, although the book most likely will be thematically arranged around certain topics, as is the case with *Winning* (Welch, 2005). Heuristic based, historical, and contemporary anecdotal books on leadership may be interesting to read, and in fact their readability may be one of their strong suits. However, their typical focus on the actions of a single individual and general lack of any research-based theoretical underpinnings call into question the ability to generalize their recommendations to other individuals or to other situations. Having said this, it is not to imply that heuristic or anecdotal based leadership books have no value; rather, that any guidance found in these books must be taken cautiously with the understanding that it generally comes from one person's point

of view and his or her specific situation; what worked for that person may not necessarily work for you.

Current State of Leadership Studies: Research and Practice

Although varying definitions of *leader* or the elements of leadership exist, a few widely agreed-upon characteristics have emerged over the years. First, leadership is a social or group phenomenon. Second, leaders influence a group, moving them towards a goal or completion of a specific action. Finally, the presence of the leader within a group presupposes some form of a hierarchical relationship, although the nature of that relationship may be more or less formalized (Nahavandi, 2015).

Since the 1970s, there has been a shift away from many of the traditional hierarchical-positional views of leadership (Northouse, 2015). Earlier forms of leadership focused on traits, behaviors, or a transactional type of leadership model; for example, the leader might use monetary incentives to motivate (reward) desired behavior or penalize someone for minor rule infractions (Nahavandi, 2015). However, the newer views of leadership consider psychological and social aspects and have moved away from a purely hierarchical and behaviorist approach. These newer leadership models and theories go by several names, including charismatic leadership, transformational leadership, authentic leadership, servant leadership, and emotionally intelligent leadership (Nahavandi, 2015).

Charismatic Leadership

Charismatic leadership, as the name implies, is built around a leader who is inspiring; charismatic leaders typically also evoke a strong emotional response from their followers (Nahavandi, 2015). Followers of a charismatic leader may think of their leader as larger than life. Characteristics of charismatic leaders are: high self-confidence, strong convictions about

ideas, high degrees of enthusiasm and energy, strong and expressive communication using both verbal and non-verbal methods, and active awareness and management of their images (Nahavandi, 2015). Further, strong charisma may create loyal and obedient followers, but it may inhibit feedback and initiative. Additionally, followers of charismatic leaders may be reluctant to criticize, deviate, or disagree with their leader and rationalize away information that contradicts their leader's plans (Yukl, 1999). However, by itself, charisma is probably not enough to be effective as a leadership style and few business leaders view charisma as a necessary leadership quality (Conger, 1999). Further, Conger also noted that in operation, most organizations' bosses are hired or ascend to positions of leadership where a group of followers is already existent. Therefore, the followers really do not have a choice to follow the leader, nor are they necessarily involved in the selection process; the leader's charisma, or lack of it, is a non-factor (Conger, 1999). This contrasts with religious or political leaders who may specifically build a following because of their charismatic qualities. Classic examples of charismatic leaders include Fidel Castro, and Adolf Hitler (Nahavandi, 2015) and more positive examples include Martin Luther King Jr. and Mahatma Gandhi (Northouse, 2016). What makes charismatic leadership work is the extremely strong bond with the leader. Followers tend to exhibit similar characteristics: Followers tend to form emotionally intense bonds with the leaders and hold those leaders in high esteem. They also tend to exhibit the following characteristics: high devotion, confidence, identification with the leader, high performance expectations, and unquestioning obedience (Nahavandi, 2015). If these characteristics seem like the makings of a cult leader, they in fact may be. Tourish (2011), a cult leadership researcher, suggests five ingredients that are necessary for a cult leader to arise, and the first is charismatic leadership; additionally, the cult leader would also exhibit a highly compelling vision, intellectual stimulation to support the

vision, individual consideration that assists in making the follower feel special to the leader, and the promotion of a common monolithic cultic culture. This is not to suggest that all leaders who are charismatic are wannabe cult leaders; rather, that charismatic leadership is a key ingredient to cult leadership. Thus the conversation turns to what style of leadership might include elements of charisma but where charisma itself is not the focal point of the leadership style; that style of leadership is transformational leadership.

Transformational Leadership

Transformational leadership, as advanced by Bernard Bass, postulated that transformational leaders exhibit four characteristics: charisma or idealized influence, inspiration, intellectual stimulation, and individualized consideration (Bass, 1990). A hallmark of transformational leadership is getting the followers to transcend self-interest for the interest(s) of the organization (Northouse, 2016). It has been noted that in practice, many leaders use a wide range of leadership behaviors to include a transactional approach of contingent rewards, including both rewards and punishments as they deem necessary based on the situation (Bass, 1990; Bass & Steidlmeier, 1999). The ultimate goal of transformational leadership is organizational change. The transformational leader would use the elements of charisma and inspiration to overcome individual resistance to change; the leader would then employ intellectual stimulation as a means of empowerment for the followers and to help generate new ideas. Next, the leader would use individualized consideration to foster and foment motivation and encourage followers (Nahavandi, 2015). The use of the element of individual consideration closely parallels the concept of the individual dyadic relationship between the leader and the follower that is seen in the LMX theory (Nahavandi, 2015) and women seem to favor a transformational approach to leadership (Northouse, 2016; Rosenbush & Townsend, 2004) as it

embodies a more personalized approach to leadership.

A critical distinction between transformational leadership and charismatic leadership is the idea that a transformational leader must be authentic, meaning that the leader must have some moral underpinnings. In the words of Bass and Steidlmeier (1999), “Rather, leadership provides a moral compass and, over the long term, both personal development and the common good are best served by a moral compass that reads true” (p. 193). Additionally, unlike charismatic leadership, the followers of a transformational leader are not required to embrace, unwaveringly, the ideology of their leader. Given the rate of change in the world today, it may be detrimental for any organization to embrace too closely the ideology of their leader, lest they risk becoming ossified in their thinking and unable to react to changes in the world around them (Conger, 1999). The inclusion of the concept of authenticity and the need for a moral compass in the transformational leader raises the question of what an authentic leader is, and discussed next is the theory of authentic leadership. As presented in the section below, we see that transformational leadership and authentic leadership share many common elements and the distinction between the two, on a practical day-to-day level, may be difficult to distinguish.

Authentic Leadership

Authentic leadership, at its core, is built upon the concept of the leader who is self-aware of his or her own value system (Nahavandi, 2015). Additionally, Lloyd-Walker and Walker (2011) noted that “authentic leaders are clear about their own values and moral perspectives, knowledge and strengths and are equally aware of these attributes within others” (p. 386). Gardner, Avolio, Luthans, May, and Walumbwa (2005) suggest that authenticity in leadership is not just the leader being self-aware of his or her values, but also that authenticity must extend beyond the leader to include authentic relationships with his or her followers. According to

Gardner et al. (2005), self-awareness and self-regulation are the key components to authentic leadership. No one is completely authentic or inauthentic; they only operate in degrees of authenticity with the goal of becoming as authentic a leader as possible. Additionally, Avolio and Gardner (2005) suggest that an authentic leader is not free from personal bias, but rather that they are aware of their personal biases and, when making decisions, attempt to balance their biases when weighing options.

At this point, it may appear that authentic leadership is an offshoot of authentic transformational leadership (Bass & Steidlmeier, 1999); however, Gardner, Cogliser, Davis, and Dickens (2011) noted that authenticity in leadership was seen in research literature as early as the 1960s, although it has been only within about the last 10 years that authentic leadership has gained prominence as a topic of scholarly inquiry. Authentic leadership, or the idea of authenticity, appears as a central concept in many of the relational forms of leadership, such as charismatic, transformational, and even servant leadership (Nahavandi, 2015). However, there is no generally agreed-upon definition of authentic leadership (Gardner et al., 2011) and according to Northouse (2016), authentic leadership is still in somewhat of a formative phase. Further complicating the construct of authentic leadership is that in Avolio and Gardner's (2005) list of 29 components of authentic leadership, there is significant construct overlap with components of transformational, charismatic, and servant leadership theories. A final note on authentic leadership is that it appears to have some level of universality. The authentic leader questionnaire (ALQ) developed by Walumbwa, Avolio, Gardner, Wernsing, and Peterson (2008) was tested on three different continents and the basic structural factors of the ALQ held up among Chinese, United States, and Kenyan populations, which suggests a certain robustness of the construct of authentic leadership and that it does not appear to be confined to the United

States. This last point is important because Walumbwa et al. (2008) noted that 98% of the leadership theories originate in the U.S. and, by extension, there is some concern that they may reflect constructs of leadership that are unique to the U.S. and are not necessarily applicable worldwide.

Servant Leadership

Servant leadership; the name sounds like an oxymoron, the leader who is also a servant. The concept of servant leadership originated with Robert K. Greenleaf, who was inspired by Hermann Hesse's 1956 novel *Journey to the East*. In the novel, a servant assisted a group of travelers, and when he becomes separated from the group, they are unable to function; the servant had become a sort of de facto leader (Northouse, 2016). What distinguishes servant leadership from transformational, charismatic, and authentic leadership is the overt focus on the followers and their development (Amah, 2015), and servant leaders appear as the antithesis of the authoritative leader (Lynch & Friedman, 2013). However, servant, transformational, charismatic, and authentic leadership all espouse a general positive outlook and follower development in some form (Beck, 2014). Additionally, the servant leader has a long-term focus on follower development and it is this follower-first focus that distinguishes servant leadership from transformational leadership (Burton & Peachey, 2013). Another distinguishing aspect of servant leadership is that servant leaders are thought to have a distinct servant-oriented personality characterized by four attributes: A calling, humility, empathy, and agape or selfless love that collectively manifest as altruistic behavior (Sun, 2013). However, the focus on serving is also a potential shortcoming of servant leadership, as there is a potential for the servant leader to focus too much on the needs of the followers and less on the needs of the organization, whereas transformational leaders have a main focus on the organization (Lynch & Friedman,

2013). Servant leadership is also a relatively new area in the field of leadership studies and as such has not been as extensively empirically researched (Beck, 2014; Nahavandi 2015; Sun, 2013). Sun (2013) notes that “studies on leadership which focus on identifying different styles of leadership are characterized by descriptive chaos” (p. 545) and this sense of chaos may be further heightened by the fact that servant leadership along with transformational, charismatic, and authentic leadership all have a high degree of construct overlap (Avolio & Gardner, 2005; Liden, Wayne, Zhao, & Henderson, 2008; Sun, 2013).

Emotionally Intelligent Leadership: Another Recent Theory

One of the more recent leadership theories to emerge is that of emotionally intelligent leadership (EIL). First proposed by Feldman (1999), EIL is based on the concept of emotional intelligence, popularized by Goleman, and can generally be described as the ability to sense emotions in others as well as oneself, and adjust one’s temperament and actions accordingly (Allen et al., 2012). EIL thus combines emotional intelligence with leadership to produce a theory of leadership and leadership development that is a “combination of cognitive processes, personality traits, behaviors, and competencies that interact with one another and predict critical outcomes in leadership situations” (Allen et al., 2012, p. 183). Therefore, another one of the more recent leadership theories continues the emphasis on the relationship between the leaders and the followers and a movement away from the focus being primarily on the leader.

Final Thoughts on the Recent Theories

The de-emphasis on the positional leader has also resulted in a shift to one that advances a common good or common group goal (Stone-Johnson, 2014). This shift to the basis of advancing common goals has also meant that leaders must now have greater personal contact with those that they lead. Leaders are now expected to empower their followers and may be

looked at more as providers of vision, resources, and encouragement (Linden et al., 2008).

Although the encouragement of followers is generally seen as a positive change, some suggest that there may be a dark side to a servant type leadership approach that overemphasizes the individual and may lead to a failure to achieve organizational goals (Lynch & Friedman, 2013).

The view on these positive approaches to leadership suggests that all of these newer forms of leadership share some common threads that include advancing a vision, emotionally connecting with followers, and inspiring followers to reach their personal best (Avolio & Gardner, 2005; Nahavandi, 2015). Further, Beck (2014) and Gardner et al. (2011) suggest that authentic leadership may be the genesis for all positive leadership theories, noting the overlap in the constructs of authentic leadership, servant leadership, and transformational leadership. Essentially, an authentic leader is someone who is in touch with his or her own emotions, feelings, and values, and applies those as an integrated part of his or her leadership style (Gardner et al., 2011).

The shift away from the positional leadership style has three specific implications for positive leadership development, particularly for high school and college-age students. First, the movement away from the traditional role of the positional leader, such as a team captain, now means that more opportunities exist for students to develop leadership skills (Dugan et al., 2015). This is not to suggest that leadership development was not occurring for those members of the team who were not in a leadership position; simply that now recognition is being made that meaningful participation may be an early developmental tool for leadership. Second, coaches, advisors, and mentors can now start looking at their teams, clubs, and organizations and seek new ways to develop students who are not currently occupying traditional leadership roles. For example, they may seek to include specific leadership training for all members of their

organization into their activities, or rotate leadership positions, because experience alone may not be sufficient to foster leadership development for students (Day, 2010; Massey et al., 2013).

Third, the shift from a positional leader to one that is more relational-based (Allen et al., 2012) increases the potential for individuals who are not as extroverted to move into leadership roles. Some scholars have noted that those students who are more extroverted and particularly those who may have held leadership roles prior to entering college tended to seek out leadership opportunities (Wielkiewicz, et al., 2012). Two critical points emerge: first, that leadership is not a monolithic construct and is multidimensional in nature. Second, it appears to be crucial that leadership development programs, particularly at the high school and college levels, should adjust to account for a wider range of personalities and an expansion of the concept of leadership into nontraditional and nonhierarchical roles.

Leadership is a social science-born construct and, therefore, it is impossible to nail down precisely and with mathematical certainty what leadership is or might be. Further, leadership does not happen solely in the classroom or in a laboratory; leadership happens in the real world. Finally, three issues plague the study of leadership, as is the case with most social sciences; first, leadership is difficult to define. Second, leadership is difficult to measure or assess. For example, *Leadership Resources* 7th edition (1999) lists over 60 different leadership assessment instruments. Third, leadership is difficult to study because the researcher needs to determine which model or theory is more effective than another due to the complexity of human behavior, especially within relational, social, and organizational contexts. However, as with all social sciences, a balance must be struck between theory, research, and practice; to be useful, information must be practitioner-focused but informed by theory and research. Three elements appear to emerge from the recent research on leadership and appear at work regardless of the

exact theory or style of leadership employed. First, leadership involves a relationship between the leader and his or her followers. Second, authenticity of the leader plays a role in the leader-follower relationship; is the leader seen as genuine or two-faced? Third, empowerment of the followers, in some form, is necessary for the leader and organization to be effective.

Theoretical Framework

The proposed study will use the model of Leadership Identity Development (LID) first developed by Komives et al. (2005) and refined by Komives et al. (2009). Recognizing that leadership does not spontaneously generate but rather is developed over a period of time, Komives et al. (2005) sought to develop a model that would explain the process that young individuals go through as they develop leadership identities and eventually emerge into leadership roles. Focusing on college-age students, Komives et al. (2005) used a grounded theory approach and identified a six-stage model consisting of: first) awareness, exploration and engagement, leader identified, leadership; second) exploration and engagement; third) leader identification; fourth) leadership differentiation; fifth) generativity; sixth) integration and synthesis (Komives et al., 2005).

Students move progressively through the six stages via the interaction of four categorical dimensions: developing self, group influences, a changing view of self with others, and a broadening view of leadership. Further driving the leadership identity progress are four developmental influences: *adult influences*, *peer influences*, *meaningful involvement*, and *reflective learning* (Komives et al., 2005). Komives et al. (2005) noted that the developmental influences change in nature as the leadership identity of the student progresses through the stages. For example, adult influences initially start as simple encouragement and confidence building of young students, both in the home (Hartman & Harris, 1992) and in educational

institutions. Similar developmental factors were noted by Murphy and Johnson (2011), which included parenting style and early learning experiences. Next, leadership development progresses to adults recognizing some leadership potential in students and possibly suggesting that they become more engaged in a variety of activities. Additionally, the developmental influence of *meaningful involvement* changes over time from simply being involved in an activity to always giving one's personal best in that activity to doing one's best and encouraging their peers to also do their best.

Although focused on working adults, the "model of role identity shift" proposed by Maurer and London (2015) comports with the LID model. In their model of role identity shift, an individual contributor shifts to a leadership role based, in part, on the encouragement from the organization to do so. In comparison then, Maurer and London's (2015) *organizational encouragement* roughly correlates to *adult influences* in the LID model. Therefore, organizations can either encourage or discourage a shift to a leadership identity through the policies and practices they adopt (Maurer & London, 2015). However, the authors noted that motivation plays a major role in an individual shifting to a leadership identity--whether that motivation is internal or external--but that truly effective leaders lead out of an internal motivation to do so (Maurer & London, 2015).

Additionally, this study will draw upon the concept of deliberate practice (DP) (Ericsson et al., 1993; Ericsson 2014a; Ericsson 2014b; Ericsson & Pool, 2016). DP is generally described as effort directed at a specific task with the aim of improving performance on that task (Ericsson et al., 1993). Additionally, DP is typically seen in highly-developed fields. A highly-developed field is identified by four elements; first, it always has some objective way to measure performance; second, it is competitive in nature; third, it is generally well-established and has a

body of relevant skills that have been developed over a period of time; and fourth, it has performers or former performers who act as coaches or teachers. Examples of highly-developed fields include chess, music, and competitive sports (Ericsson & Pool, 2016). Although Ericsson's discussion of DP is typically aimed at highly-developed fields, he does acknowledge that the principles of DP can be used in less developed fields. Ericsson suggests that when someone is attempting to develop skill in a non-highly-developed field, where there may be few or no coaches and objective standards of performance, the individual finds someone who is objectively better in whatever are the target skills to be improved, and deciphers what underlies their superior performance, and if possible even asks the individual how he or she achieves a superior performance (Ericsson & Pool, 2016). In this context, Ericsson refers to DP as purposeful practice; however, DP and purposeful practice both have the same four elements: defined and specific goals, a focus on improvement, the involvement of feedback (typically from a coach or teacher), and training activities that move the practitioner out of his or her comfort zone (Ericsson & Pool, 2016). Ericsson states that there are four steps to building expertise. The first is an initial interest in something "what he refers to as "play practice" (Ericsson & Pool, 2016, pp. 186-187); this is not so much formal practice, but is more like playing and developing an interest in some domain. Also during this first stage, motivation may be more external, such as praise from a parent or older sibling. The second stage is "becoming serious"; it is at this point that formal training begins, and generally the practitioner develops a more intrinsic motivation for the domain. It is also in this stage that formal training begins. This is consistent with Komives et al. (2009) stage three development in the LID model, which also notes a motivational shift from external to internal. This third stage is the "commitment stage," where the practitioner, now having developed skills, seeks out the top teachers or coaches and

opportunities to excel. Finally, the fourth stage is referred to as “pathbreaking,” which is where the practitioner is now adding to the field or domain, setting new skill levels and records.

Typically, people who reach this level become well-known to those in the field or in some cases, household names such as Einstein, van Gogh, Beethoven, and Michael Jordan (Ericsson & Pool, 20016). The question that naturally flows out of this discussion is, exactly how much time does it take for someone to reach a high level of expertise? Ericsson’s research suggests that approximately 10 years of DP are generally necessary to reach high levels of expertise (Ericsson et al., 1993; Ericsson & Pool, 2016). A phrase that is sometimes used in conjunction with this idea of 10 years of DP is the “10,000-hour rule.” According to Ericsson, in his 2008 book *Outliers*, which draws partly upon Ericsson’s work, Malcolm Gladwell originally coined the phrase “10,000-hour rule”; however, Ericsson stated that he never used that phrase in any of his research and surmised that Gladwell extrapolated this number from Ericsson’s study of violin students at the Berlin Music Academy (Ericsson & Pool, 2016). Ericsson only stated that 10 years of DP is generally necessary to reach a high level of expertise (Ericsson et al., 1993) and specifically in the case of the violin students at the Berlin Academy, the students assessed as the best performers had averaged 7,410 hours of DP by age 18 and had been studying the violin for at least 10 years (Ericsson & Pool, 20016). Coyle (2009) also noted similar time frames for the development of expert talent. Further, he noted that talent hotbeds, areas that produce a large number of high level performers, typically center on a master instructor or coach, one who is usually advanced in years and has an extensive repertoire of coaching techniques that they can customize seemingly on-the-fly to the needs of the specific individual being coached.

Additionally, Coyle (2009) noted that talent hotbeds were driven more by the coaching or the instructor and the attitude of the students. Further, most of the coaches did not have elaborate

training facilities; in fact, many were quite Spartan. Collectively, these findings suggest that DP and attitude are the drivers of developing expertise. The role innate talent or IQ plays in the development of expertise remains to be determined. People who are expert performers may have an innate talent for a particular field and they might excel regardless of the amount of practice they put into their fields.

While not completely discounting the mediating effects that innate talent or IQ might play, Ericsson noted that DP is still a requirement to develop that talent. Therefore, it seems that the old coaching adage “hard work beats talent when talent does not work hard” appears apt. Additionally, Ericsson (2014b) even suggests that what is described as talent in young children may actually be the early fruits of an above-average IQ coupled with practice. Having a higher IQ appears to assist performance at the beginning level of a given domain, but does not appear to play a role at more advanced levels (Ericsson, 2014b; Ericsson & Pool, 2016). Wolfgang Amadeus Mozart is typically pointed to as the archetypal, musical child prodigy. However, upon closer inspection, we see that much of Mozart’s prodigal talent was in fact the result of DP. Shenk (2011) noted that Mozart was born into a musical family; his father, Leopold, was an assistant music director for the district of Salzburg, and had gained some notoriety for his publication of a violin instructional book. Mozart also had a sister who was four and a half years older than him, and was herself quite an accomplished musician (Shenk, 2011). Born into this musical family, young Mozart was the beneficiary of a unique set of circumstances that led to his engagement in DP at a very young age. His older sister afforded him an opportunity to engage in play practice (Ericsson & Pool, 2016) and his father provided structured lessons (Shenk, 2011). Additionally, young Mozart’s abilities were impressive for his age, but not when compared to adult musicians of the same time period (Shenk, 2011). The rise of Wolfgang Amadeus Mozart

as a musician and composer of historical importance appears to be more the result of DP and less the result of some sort of innate talent or musical precocity.

The back story of Wolfgang Amadeus Mozart also points to the fact that while DP is necessary to develop expertise, there may be a number of exogenous forces at work that shape who has access to DP. Gladwell (2008) noted that age cutoff dates for organized sports typically favor those who were born within three months of the cutoff date. Gladwell also noted that those participants who are relatively older due to their birthday proximity to the eligibility date gain an advantage that starts at the entry level leagues and follows them throughout their careers (Gladwell, 2008). When children first begin competing in organized sports leagues, the relatively older children have a slight advantage in terms of physical size, dexterity, and ability to follow the coach's directions. These minor, but not inconsequential, differences lead to the relatively older players being disproportionately selected over their relatively younger peers for traveling teams and all-star teams which afford them additional opportunities for DP and better coaching, which in turn lead to them developing their expertise faster (Gladwell, 2008). Dhuey and Lipscomb (2008) also noted this relative age phenomenon in their study of high school student leaders, finding that those who were relatively older in their class had between a 4-11% higher likelihood of holding a formal leadership positions, and that relative age was a significant predictor of a student self-identifying as a leader. The relative age effect seemed to begin in early elementary school and followed the children throughout their K-12 schooling (Dhuey & Lipscomb, 2008). Consequently, the concept of DP can be extended to leadership, as it can be viewed as a skill domain, which allows one to postulate that DP of leadership skills or leadership antecedents (Beck, 2014) should increase an individual's propensity to lead. Thus, practice should play an integral role in leadership development.

The LID model is particularly well-suited for the proposed study because it was based on a relational nonhierarchical model of leadership (Komives et al., 2009) and was specifically developed from observations of college students; therefore, the model is well-suited for the target audience. The key stage of development, as noted by Komives et al. (2009), appears at stage three. During stage three, the student becomes more independent from adult leaders and mentors. Wielkiewicz et al. (2012) also found that as students advanced their understanding of leadership, they too became more independent and able to operate independent of adult assistance. Although the model was based on college students and their experiences prior to entering college, it does not appear to be age-based and does not specifically address development beyond the college years (Komives et al., 2009).

In an effort to address the paucity of research on leadership development prior to college, Murphy and Johnson (2011) proposed a model of leadership development that is life-span-based and begins in early childhood. Murphy and Johnson (2011) noted that very little research has been devoted to understanding what they call “the seeds of leadership” (p. 459), which they believe starts much earlier in childhood. Murphy and Johnson postulated that early developmental factors include three categories: *early influences*, which include genetics, gender, and temperament; *parenting style*, which includes such things as whether the parent was an authoritative, authoritarian, or neglectful, in the attachment focus; and *early learning experiences*, which include education, sports, and practice (Murphy & Johnson, 2011). Also of interest is that social relationships play a large role particularly in younger children as they develop their leadership abilities. Children influence and are influenced by peers, develop relationships with teachers, and learn general social competency and social skills that allow them to form relationships that will be the basis for later leadership (Murphy & Johnson, 2011).

Additionally, it is noteworthy that Hartman and Harris (1992) also found parenting style to be influential in developing children's approach to leadership, a finding that supports the scholarship advanced by Murphy and Johnson (2011).

Although this proposed study will use the LID theory (Komives et al., 2009), the early developmental factors postulated by Murphy and Johnson (2011) also comport with Komives et al. (2009) in terms of adult and peer influences, and therefore add possible additional explanatory power to the findings of this current study. The developmental influence of meaningful involvement (Komives et al., 2005) parallels the category of early learning experiences (Murphy & Johnson, 2011), working in a mutually supporting manner to help explain why students who have participated in a greater number of high school extra or co-curricular activities may (or may not) exhibit higher leadership skills as measured by the S-LPI.

Related Literature: Student Leadership Development

The existing literature on student leadership development reveals four common threads: development effects of positional leadership; the effect of gender on leadership; the determination that leadership can and needs to be taught; and the role that athletics and experiential learning play in leadership development.

The first element that many leadership studies have focused on is formal leadership positions that students have held and outcomes of those positions, as measured by various survey instruments in terms of increased leadership skills or attitudes (Burton & Peachey, 2013; Wielkiewicz et al., 2012). For example, using the S-LPI as a theoretical frame, Grandzol, Perlis, and Driana (2010) also noted heightened leadership development in those students who were team captains of intercollegiate varsity sports. Additionally, most of the studies are snapshots in time and are not longitudinal in nature (Hancock et al., 2012); therefore, it becomes challenging

to assess any cumulative effect from the various activities in which students participate and their influence on leadership development. In one longitudinal study conducted by Reichard et al. (2011), the researchers found that high levels of extraversion at age 17 had a significant positive correlation with the emergence of workplace leadership at age 29. The authors suggest that extroverted youths may be placed in positions of leadership whereas their more introverted peers are not, thus allowing them an opportunity to develop leadership skills, which is consistent with the findings of Murphy and Johnson (2011) and Wielkiewicz et al. (2012). Additionally, one study examined leadership development using an *ex post facto* design (Birkenbolz & Schumacher, 1994) using a five factor model of leadership that consists of: administrative, achievement, community, empathy, and problem solving as the dimensions of leadership. However, Birkenbolz and Schumacher's research considered only the aggregate number of leadership activities in which the students participated both at the high school and college levels, and they assessed a five-year cohort of students after graduation. The study did not consider amount of participation, only categories of participation in both high school and college, did not disaggregate the two, and measured the students' perceived leadership ability against their categorical participation. Therefore, given this situation, it would be impossible to assess the interaction or influence that high school developmental activities may have had on subsequent college activities. However, Birkenbolz and Schumacher (1994) did find that those students who had formal leadership positions in high school or college reported significantly higher leadership scores on their surveys. Other researchers have looked at the effect college level intramural sports activities have on leadership, using the social change model and looking at leadership development using four domains: leadership capacity, leadership efficacy, social perspective-taking, and resilience (Dugan et al., 2015). The findings indicated that being in a positional role

increased only leadership self-efficacy. However, we see again that the study only examined one year of participation and did not take into account the levels of leadership development that a student brought into the activity. The common thread among these studies (Dugan et al., 2015; Grandzol et al., 2010; Hancock et al., 2012; Wielkiewicz et al., 2012) is that students who had been in formal leadership positions typically did show some degree of enhanced leadership development, although it must be kept in mind that the studies used differing definitions and measures of leadership.

A second common element among the literature is gender-based differences in the approach to leadership. Several studies have noted gender-based differences between how males and females approach leadership roles (Beck, 2014; Cho et al., 2015; Wielkiewicz et al., 2012). Cho et al. (2015) examined students' motivation to lead as a need satisfaction and leadership self-efficacy, noting that males typically took a more calculative role in approaching leadership, i.e., they look at the cost-benefit between being in a leadership role and perceived extrinsic rewards that they might receive from that leadership role. However, female college students seemed to prefer a more systemic and participative form of thinking when related to leadership, whereas male students tended to prefer a hierarchical form of thinking (Wielkiewicz et al., 2012). Further, Beck (2014) noted that females tended to have a more altruistic view towards leadership and Kidder (2002) reported that females tend to exhibit greater levels of altruistic behavior, especially in female-dominated occupations such as nursing, and suggested that role expectation may play a part in influencing female altruistic behavior.

Gender-based cultural norms may also influence how developing female leaders think about leadership roles. Manyibe and Otiso (2013) noted that U.S. college students who were raised in continental Africa tend to have a very gender-specific view of roles, with men and

women trained differently for gender-specific leadership roles. Gender-based differences in leadership have also been noted by Hartman and Harris (1992) and Murphy and Johnson (2011). The literature appears fairly clear that gender-based differences exist between how males and females approach leadership. It could be that genetic or biological differences and societal expectations create an environment where females prefer a less authoritative and overall more collaborative or relational approach to leadership. However, it should be noted that Posner (2012), in a large-scale study of more than 77,000 participants using the S-LPI scale, did not find gender-based differences, noting, “this finding is at odds with other studies, using different measurement instruments, which have found differences based upon such factors as ethnicity and gender” (Posner, 2012, p. 232). Northouse (2016), perhaps, provides the most authoritative and thoughtful summaries of the role gender plays in leadership in his well-researched and widely-used leadership text. Northouse noted that women tend to use a more democratic or participative approach, also noting that women tend to favor a transformational approach, whereas men tend to use a more transactional approach. This finding was also supported by Rosenbusch and Townsend (2004) in their study involving college students. Northouse (2016) also noted that women appear most effective as leaders when they are in positions that are thought of as less masculinized, such as social services or education, and are seen as less effective in masculinized roles, such as in the military. Other gender differences noted by Northouse include evidence that women tend not to self-promote as much as men, tend to assume less formal leadership roles, and are less likely to use the term “leader.” Further, men tend to ask directly for what they want, whereas women tend not to do so, and if women do self-promote, asking for raises or promotions, they risk appearing “bossy” and less socially attractive (Northouse, 2016).

A third common element in the literature is that leadership is teachable (Allen &

Middlebrooks, 2013; Allen et al., 2014; Hartman et al., 2015) and that students need to be specifically trained or educated in leadership theory and practice--simply being in a leadership role or participating in a variety of activities may not be enough to drive leadership development (Massey et al., 2013). Different leadership development programs may have different focal points or areas of emphasis. Leadership development programs, particularly in colleges, have a difficult time even deciding what to teach and how to teach it (Hartman et al., 2015). The authors noted that “in reality, leadership education is often a scattered hodge-podge of topics” (Hartman et al., 2015, p. 456). Additionally, Allen et al. (2014) noted, “The topic is leadership development which, in and of itself, is challenging to define” (p. 27). Finally, there exists no uniformly agreed upon definition of leadership development (Allen et al., 2014). Therefore, it may be difficult to assess leadership development from different programs as their foci may vary widely, along with any assessment instruments.

The literature does seem to confirm that what students value in programs may differ from what leaders or instructors emphasize in the program. Eva and Sendjaya (2013) noted significant differences between what students and youth development program leaders found important. These differences revolved around the importance of concepts such as authenticity, values, ethics, and responsibility. The authors also noted that one of the challenges with teaching ethics in leadership developmental programs may rest in the colleges’ emphasis on academic achievement and the inclusion of more easily definable and objective topics (Eva & Sendjaya, 2013).

One potentially valuable activity is peer mentoring, where older students, typically college upper-class students, mentor underclass students, or college students mentor high school students (Clark & Seider, 2014; Eva & Sendjaya, 2013). In both Clark & Seider (2014) and Eva

& Sendjaya (2013), the younger students found mentoring a particularly valuable experience. Here again, one sees the LID model (Komives et al., 2005) in action through the developmental importance of peer influences. These findings cohere with the present study in that participation in high school extra and co-curricular activities tends to include structured mentoring, which is the developmental influence of the LID model of adult influences. Additionally, extra and co-curricular activities also incorporate the developmental influences of peer influences and meaningful involvement.

In their study of students involved in both a leadership training program and a follow-up experiential learning phase, Massey et al. (2013) found that students responded positively to classroom-based leadership instruction, which is consistent with Brungardt and Crawford (1996), who also noted positive increases in leadership ability and confidence after students had taken leadership courses. However, Massey et al. (2013) noted that during the follow-on experiential phase, where the students acted as on-campus orientation leaders, leadership development appeared to stall. The researchers surmised that during the experiential phase, there was no reflection on the actions of the student leaders or intentional linkage back to the leadership lessons taught in the classroom. This lack of intentional linkage of actions with theory was attributed as the cause for the lack of continued leadership development (Massey et al., 2013).

These findings are also consistent with the LID model that posits reflective learning as a critical developmental influence for developing a leader identity (Komives et al., 2005). Massey et al. (2013) seem to confirm the idea that just participation in activities may not be enough to develop leadership as a sort of byproduct, but rather that leadership training combined with meaningful experiences produces leadership development. Additionally, the findings are also consistent with the Know, See, Plan, and Do model of leadership development that asserts that

experiences must be linked to theoretical knowledge of leadership (Allen et al., 2014).

A final point on the malleable nature of leadership skills is found in a study related to giftedness and leadership. Ogurlu and Emir (2014) examined gifted and non-gifted upper primary school children using a pretest-posttest design. Students were divided into two groups: gifted and non-gifted. After 15 hours of leadership development training, the researchers found no significant difference between the leadership scores for the gifted and non-gifted students. These findings are consistent with Muammar (2015) in that leadership does not appear to be significantly influenced by giftedness and reinforces the idea that leadership is a teachable skill. In the study by Muammar (2015), he compared leadership skills between gifted and non-gifted college students. No significant difference was found between the overall leadership scores for gifted and non-gifted students. However, gifted students did score higher on a subscale for planning skills. The author surmised that the difference in planning skills may be due to more effective time management and goal orientation of the gifted students in the sample; however, the finding of no significant overall difference in leadership scores points to the concept of leadership as being teachable. What seems clear is that leadership (a) can be taught, (b) includes a wide variety of topics taught when used in leadership development education, (c) seems to be most effectively developed when experiential activities are paired with mentoring and direct instruction on leadership theories and concepts, and (d) does not require giftedness in terms of intellectual ability (Allen et al., 2014; Eva & Sendjaya, 2013; Hartman et al., 2015; Massey et al., 2013; Muammar, 2015).

A fourth common element related to the present study is the role that athletics seem to play as an experiential vehicle, particularly for younger students, adolescents, and college-age students, for leadership development. Experiential learning through collegiate-level participation

in recreational sports seems to be a promising avenue for the development of leadership skills in college students (Dugan et al., 2015). A study by Dugan, Truman, and Torrez (2015) noted that faculty mentoring had the greatest overall impact on all four leadership domains assessed in the study: leadership capacity, leadership efficacy, social perspective-taking, and resilience (p. 46). Additionally, positional leadership did not necessarily increase overall leadership skills--only an increase in self-efficacy, which contradicts other studies that found formal leadership roles do enhance leadership capacity (Hancock et al., 2012; Wielkiewicz, et al., 2012). It may be that in recreational sports, the positional role of leader is viewed as less important by all participants and therefore, may not be, due to contextual reasons, as powerful a vehicle for the development of leadership in students. Further, it was noted that mentoring by faculty advisors (Eva & Sendjaya, 2013; Massey et al., 2013) also increased student understanding of leadership and is consistent with the findings of Dugan et al. (2015). These findings all are nested within the LID model in terms of developmental influences of adults (Komives et al., 2005). Additionally, Clark and Seider (2014) found peer-based mentoring to be effective in developing leadership, particularly leadership capacity, character development, and social perspective taking. These findings also support Komives et al. (2005) regarding the developmental influences of peers. In relation to the present study, these findings suggest that when recreational sports are conducted in concert with mentoring from faculty advisors, a synergistic effect occurs where activities combined with coaching develop leadership skills.

Another study relating to college-level athletics (Burton & Peachey, 2013) stressed the servant leadership role that NCAA intercollegiate athletics may be able to play. They noted the contrast in leadership style between transformational leadership, which uses organizational objectives as the mechanism to influence followers, and servanthood or servant leadership,

which focuses on the development of the followers. They noted that servanthood is rooted in all major religious traditions, including Buddhism, Christianity, Hinduism, Islam, and Judaism. Additionally, nonreligious philosophies, some of which may be practiced in religious-like manners, such as Siddha yoga and Taoism, also contain concepts of servanthood—a conclusion consistent with Lynch and Friedman (2013). Therefore, Burton and Peachey (2013) suggest that athletic directors should model servant leadership in support of developing the student-athlete. Again, one sees the role of adult influences from the LID model on developing leadership in college-age students.

In looking at college athletics, one area that does clearly seem to have an influence on leadership development is a student being in the role of a team captain. Grandzol et al. (2010) found that being in the formal leadership role of team captain in fact did increase, or was the source of an increase, in the leadership practices as measured by the S-LPI. However, they did not find any differences between freshmen and seniors on any of the leadership practices on the S-LPI, suggesting that years of membership did not make a difference. The authors noted that “even though captains in the study were not formally trained in the leadership practices, the experience itself likely fostered the change in scores” (Grandzol et al., 2010, pp. 414-415). Finally, unlike other studies (Hartman & Harris, 1992; Manyibe & Otiso, 2013; Murphy & Johnson, 2011), gender played no significant role in differences in leadership as measured by the S-LPI. The lack of gender differences may be due to attitudinal and leadership homogeneity of students capable of playing sports at the intercollegiate level (Grandzol et al., 2010).

Focusing on high school level athletics, a critical point can be the relationship among peers and is highlighted by an anecdotal case of negative peer influences. Blanton, Sturges, and Gould (2014) observed a student who, in her freshman year of high school, was brought up to the

varsity team because of her superior playing abilities. She attempted to take on a leadership role by providing some constructive criticism and was immediately shut down by the upperclass varsity players. Critical to the LID model of leader identity development are positive peer influences (Komives et al., 2005). This player, who went on to have an outstanding high school career and even to play at the college level, was known as being very reticent throughout her high school career, only contributing to the team in terms of her playing abilities but never voicing an opinion or taking an active leadership role (Blanton, Sturges, & Gould, 2014). In this case, negative peer influences appear to have truncated this student's leadership development. This example highlights how peers can influence each other and the critical role adults play in mentoring young, emergent leaders. Consistent with the LID model, adults must provide positive influences and foster an encouraging environment for young leaders to develop. This finding is also supported by Hancock et al. (2012), who noted the critical role that parental support played in fostering positive leadership development of children involved in high school extracurricular activities at the high school level.

Summary

What is Known

Current trends in leadership are moving away from a hierarchical view of the leader (Nahavandi, 2015) and toward an emerging emphasis on leadership that is transformational, servant-based, and authentic in nature (Nahavandi, 2015). These positive-based leadership theories also have a large degree of construct overlap (Avolio & Gardner, 2005; Nahavandi, 2015). Additionally, the move away from the positional leader has given birth to the idea of the leader who advances common goals (Stone-Johnson, 2014). This conceptual shift in leadership opens up new possibilities to develop leadership skills and abilities in people who do not occupy

formal hierarchal leadership roles. For high school and college-age students, this means that they may no longer need to occupy formal leadership positions such as team captain, club president, or class officer to develop their leadership skills. Just as importantly, teachers, advisors, and mentors need to seek out opportunities to develop leadership capacities in all students.

Additionally, four thematic elements were found throughout the literature. First, despite the shift away from hierarchical forms of leadership, formal leadership roles do help students develop their leadership skills and abilities. Several studies (Burton & Peachey, 2013; Grandzol et al., 2010; Wielkiewicz et al., 2012) have found that when students are put in leadership positions, the act of being a leader helps develop the student's leadership skills. This supports the difference some have suggested between interpersonal influence and leadership and more formal organizational leadership (Bolman & Deal, 2013). Second, there appear to be gender-based differences in how males and females approach leadership. Males tend to be driven to leadership more by extrinsic rewards, whereas females are more intrinsically motivated towards leadership (Cho et al., 2015). Further, females generally take a more altruistic approach to leadership (Beck, 2014; Kidder, 2002). Finally, culturally-based gender roles or stereotypes also help form leadership roles and may explain much of the difference between men and women in terms of leadership preferences and behaviors (Manyibe & Otiso, 2013; Murphy & Johnson, 2011; Nahavandi, 2015; Northouse, 2016).

Third, leadership training, at least in an academic setting, increases leadership capabilities. However, leadership development appears most effective when academic study of leadership is combined with meaningful experiences (Allen & Middlebrooks, 2013; Allen et al., 2014; Brungardt & Crawford, 1996; Hartman et al., 2015; Massey et al., 2013). Additionally,

studies have shown (Muammar, 2015; Ogurlu & Emir, 2014) that leadership skills are teachable and that giftedness, or high cognitive ability, is not a prerequisite to develop leadership skills.

Fourth, athletics appear as a strong vehicle for developing leadership skills (Hancock et al., 2012; Wielkiewicz et al., 2012), especially for those individuals in formal leadership roles such as team captains. However, even students in recreational sports with less emphasis on positional roles increased their leadership skills through participation which was driven in part by faculty mentoring (Dugan et al., 2015). A final meta-theme that emerged from the literature is that in just about every study conducted, the researchers mentioned the importance of positive interaction with both peers and adult mentors in fostering and fomenting leadership development.

What is Not Known -- The Gap

What is less clear from the literature is the extent to which participation in multiple activities in high school predispose, or pre-develop, high school students in their leadership capabilities. One study (Wielkiewicz et al., 2012) did consider number of activities in high school; however, the instrument used assessed leadership attitudes and beliefs rather than assessing leadership behaviors, which is the focus of the present study. Another study (Hancock et al., 2012) also considered participation; however, participation was defined as participation in any extracurricular activity and students were further categorized as either a participant or leader. Furthermore, the study's authors acknowledged that only the current school year was used in determining participation in extracurricular events. Therefore, any longitudinal effect gained from repeated participation in multiple events was not captured (Hancock et al., 2012). Finally, the most salient and conspicuous unknown in any leadership study is what, exactly, contributes to or "causes" effective leadership to happen. The complexity of human behavior, especially

when considered in the context of personality differences, interpersonal relationships, social influences, and organizational or institutional responsibilities, make leadership, perhaps, the thorniest and most elusive of any social science phenomenon in determining predictive success and explanatory power of outcomes.

CHAPTER THREE: METHODS

Overview

This chapter opens with a statement of the study's design type and the reasoning for its selection, followed by the two research questions and associated hypotheses. Next is a review of the participants and setting for the study, followed by the instrumentation (in this case, the Student Leadership Practices Inventory (S-LPI)), and the administrative and data collection procedures related to this instrument. Finally, the chapter concludes with a discussion of the data analysis method.

Design

This study used a quantitative, non-control group, causal-comparative design. The design is causal-comparative because it speculates about the causes of differences in participants' S-LPI scores by comparing distinct (hypothesized) categorical causes, which are (a) the level of high school subject participation in categorically different activities and (b) the gender of the participant (Gall et al., 2007). Moreover, the causal-comparative design sought to explain an outcome using an existing group of students and inferred current behavior from past characteristics in a post-hoc or *ex post facto* reasoning pattern. The independent variables were gender (male-female) and participation levels in high-school-sponsored activities measured as participation in four categories of increasingly greater levels of participation. The categories were labeled as low, moderate, high, or very high levels of participation in high school-sponsored extra or co-curricular activities, and were determined using a quartile range calculation from the data collected. Participation in an activity was defined as one season or one academic school year, depending on the nature of the activity. For example, one season of

participation in high school football would count as one occurrence of participation in that event; if the student participated in the same event for two seasons, it would count as having participated twice. The actual number of participation occurrences that fall into a given category were determined from the raw data (total occurrences of participation) reported by the participants and as established by the quartile ranges. The logic for this approach was twofold. First, it allowed the categories to reflect the reality of the data collected and did not presuppose any specific categorical participation ranges. Second, to date, no research literature exists to suggest what a maximum total number of participation occurrences might be to begin establishing categorical ranges. Typically, prior research has investigated either domain participation of similarly-grouped activities, e.g. academic or leadership, arts, clubs, or sports (Knifsend & Graham, 2012), or by using participation only in selected years, such as sophomore and senior years and excluding the freshmen and junior years (Marsh, 1992). Further, these studies did not address leadership, but rather examined academic or post-secondary outcomes. Additionally, a second measure for participation was the estimated average number of hours of total activity participation per week. The reason for this was to capture volume of participation as both the number of activities and hours actually spent participating in those activities. The dependent variable was the participants' scores on the S-LPI.

Research Questions

RQ1: Does a difference in college freshmen leadership skills (as measured by the S-LPI) exist based on level of school sponsored extracurricular or co-curricular activities during high school (grouped as low, moderate, high, or very high levels and composed of both volume of participation and average hours of participation)?

RQ2: Does a difference in leadership skills (as measured on the S-LPI) exist between

male and female college freshmen who participated in low, moderate, high, or very high levels of school-sponsored extracurricular or co-curricular activities during high school (volume of participation and average hours of participation) and their scores on the S-LPI?

Hypotheses

The null hypotheses for this study are:

H₀1: There is no significant difference among college freshmen leadership skills (based on participant S-LPI scores) between those who participated in low, moderate, high, or very high levels of school sponsored extracurricular or co-curricular activities during high school.

H₀2: There is no significant difference between male and female college freshmen leadership skills (based on their S-LPI scores), between those who participated in low, moderate, high, or very high levels of school sponsored extracurricular or co-curricular activities during high school.

Participants and Setting

The participants for this study were the fall 2016 incoming freshmen class at University A. University A is a mid-size Catholic University in the Great Lakes region of the United States. Published University A undergraduate statistics indicate the freshmen population for the fall of 2016 was approximately 715 students. A cluster sample was drawn from among the randomly-assigned freshmen communications classes, which are required for all incoming freshmen. The communication classes is split between fall and spring semesters for the purposes of the freshmen class. The spring communication class offered 20 sections with an enrollment of approximately 17 students per class. The maximum potential sample was 343 students, and a sample of 201 total surveys were collected. After data screening, 182 surveys were usable for analysis. According to Gall et al. (2007), 182 participants exceeded the minimum of 144

required for a medium effect size with a statistical power of .7 at the .05 alpha level for an analysis of variance (ANOVA) with four groups (p. 145). University A is approximately 83% white, with gender split 51% male and 49% female. The socioeconomic status (SES) for the University is predominantly middle to upper-middle class. Due to the low presence of minority students at University A, ethnicity or minority status was not included as a variable for this study. The participants from the usable surveys in this study were 98 male and 84 female students ($N=182$). The participants' age was generally assumed to be between 18 to 19 years old, corresponding with the age of a traditional college freshman who had graduated from high school in the spring of 2016.

Instrumentation

The instrument used for this study was the Student Leadership Practices Inventory (S-LPI) (Kouzes & Posner, 2013). The S-LPI is an outgrowth from Kouzes and Posner's *The Leadership Challenge*, first published in 1987, and the Leadership Practices Inventory (LPI), which was originally aimed at working adults (Kouzes & Posner, 2012). Construct validity was established during the development of the initial Leadership Practices Inventory (LPI). A questionnaire of 37 open-ended questions, which describe when a leader had been at his or her personal best, was used and coded into five categories: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart (Kouzes & Posner, 1988). Initially piloted by 120 adult MBA students, the subsequent adjustments to the survey were conducted using samples of more than 2,000 managers and subordinates to include participants from Australia, England, and Germany (Kouzes & Posner, 1988, p. 486).

Based on case study methodology for identifying student leader behaviors, the S-LPI was pilot tested with 23 student leaders from a small, private, suburban college with minor

adjustments to five of the 30 questions so that they were more relevant to college students (Posner, 2012). The S-LPI has been specifically re-worded and tested for use with college students and the language of some of the questions modified to fit the reality of college life versus that of a working adult (Posner, 2004; Posner, 2012). The inventory assesses student leadership behaviors based on the same five sub-scales of the LPI, with six questions each, for a total of 30 questions. The sub-scales are: model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. The respondent rates each of the six questions per sub-scale using a five-point Likert scale corresponding with how often the person engages in that behavior (1- rarely or seldom, 2 - once in a while, 3 - sometimes, 4 - often, 5- very frequently). Scores for each sub-scale range between six and 30; the higher the score, the more frequently that person engages in that leadership behavior (Posner, 2012). The sub-scale scores could be added together to yield a composite score ranging between 30 and 150; however, the instrument was not designed to yield a composite score. Permission to use the S-LPI was received from the developers and a copy is available in appendix D. See appendix B for a copy of the S-LPI.

There are two versions of the S-LPI, the self-form and an observer form, which is completed by someone who knows the student (Posner, 2004). For purposes of this study, the self-form was used. According to Posner (2012), between 2007 and 2010, 77,387 self-versions of the S-LPI and 60,177 observer versions were completed. Cronbach's alpha coefficients for the 5 sub-scales are as follows: model the way = .69, inspire a shared vision = .78, challenge the process = .73, enable others to act = .69, encourage the heart = .80 (Posner, 2012). Some specific examples of where the S-LPI have been used include Patterson's (2012) study of student organizational leadership; Grandzol, Perlis, & Draina's (2010) study of leadership with

collegiate varsity team captains; and Posner's (2009) research about learning tactics of college students and their relationship to leadership.

The S-LPI is available in both electronic and paper-based formats and typically takes 10 to 15 minutes to complete. The survey is commercially available and has specific provisions for academic research use. The paper-based self-assessment version cost is \$6.00 and comes with permission to reproduce as many copies as needed for the research. The instrument can be hand scored, but electronic scoring software is available for a cost of \$45 and was purchased and used to score the S-LPI survey forms.

Procedures

Institutional Review Board (IRB) approval from both University A and Liberty University was received in January 2017. Participants for the study were solicited from the spring 2017 Introduction to Communication classes. The researcher canvassed all spring 2017 Introduction to Communications professors at the beginning of the semester, with assistance from the chair of the Communications department, asking for their assistance with this study; specifically, the researcher requested access to the students for approximately 15 minutes of class time. Seventeen of the 20 sections agreed to participate. The S-LPI was not pilot studied because the instrument is well-established with acceptable reliability and validity. Additionally, the goal was to have each classroom instructor use a script to administer the S-LPI to minimize *reactivity*, the researcher's presence influencing the students' responses (Warner, 2013). However, classroom instructors asked that the researcher administer the survey. Further, no additional assistance was required and no assistant was used.

The survey is paper-and-pencil-based and was presented to freshmen students at the beginning or end of their communications class, based on the wishes of the classroom instructor.

The survey was administered within the first seven weeks of the spring semester. Students were asked to complete the S-LPI survey and an accompanying demographic questionnaire (appendix A) asking for gender, total number of school sponsored extra or co-curricular activities in which they participated, and estimated average number of hours weekly. Students were informed that their participation was voluntary and they must be at least 18 years old to participate.

Administration Procedures

The researcher contacted individual instructors, via email, from the Introduction to Communications classes and established the specific dates and times to administer the survey to the students. The researcher followed a script, explaining that the survey was voluntary and that only those students who were 18 years or older, and classified as freshmen, may participate. See appendix C for a copy of the script. Students were also provided with a consent form, see appendix E, and informed that no personally identifiable data would be collected. Additionally, a demographic questionnaire was included that asked for their gender, total number of high school sponsored extra or co-curricular activities in which they participated, and estimated average hours per week they participated in those activities. The questionnaire asked the same two questions regarding volume and average hours of participation during the fall of their freshmen year of college. The researcher had immediate control of the surveys upon the students' completion.

Data Collection

A roster was made to track the days and times for each class section that agreed to participate. Individual surveys were numbered 1 through 201 with the demographic questionnaire stapled to each survey and linked by the survey number in case the two became separated. Upon receiving the completed surveys, the researcher immediately reviewed them for

completeness of demographic (categorical variables) information, and that data was entered into an Excel spreadsheet. Next, the S-LPI responses were entered into the scoring software to generate the scores for the five sub-scales, which were also input into the same Excel spreadsheet, creating a master data file. Upon completion of the surveys, each was reviewed for completeness and a second file created specifically for export into the SPSS statistical analysis software. Physical security was maintained by keeping the completed paper-based S-LPI surveys and demographic questionnaire at the researcher's residence. Data security was accomplished using the 3-2-1 method of data redundancy. Three copies of the data were maintained on two different media types--original paper surveys and Excel file--both of which were maintained in researcher's home. A backup copy of the Excel file was stored on a flash drive and on the researcher's laptop with the flash drive maintained on the researcher to avoid having all copies at the same location at all times. SPSS files were backed up in a similar manner, except all files were electronic in nature.

Data Analysis

Prior to any data analysis, the data were screened for completeness and extreme scores. All but six S-LPI survey forms were complete on all 30 items. The six that were not had the score of "1" imputed by the researcher using deductive imputation (Brick & Klaton, 1996) for the following reasons: First, the S-LPI instructions state that students should enter a score of "1" if they feel that a question does not apply to them. It is reasonable to assume that the students may not have read the directions closely and simply skipped the question. If the student truly overlooked the question, a score of "1" would not inflate his or her sub-scale score. Second, the S-LPI scoring software requires a score between one and five to be entered in order to generate the sub-scale score; without a permitted number entry, no sub-scale scores are computed.

Further, several students entered a numerical range for average hours, e.g. 10-15; in these cases, the median of the range was input into the Excel spreadsheet.

All surveys and demographic questionnaires were reviewed on the Excel spreadsheet for completeness; 12 surveys were removed because no gender was indicated. Additionally, on three surveys, students listed activities not providing a participation number, and these surveys were removed. Next, a visual review was conducted to screen for impossible or highly unlikely scores (Warner, 2013), and two were found: One indicated 175 activities, while the other indicated an average of 100 hours a week spent on extra and co-curricular activities; these surveys were also removed. In all cases, the original paper surveys were reviewed to confirm the data prior to removal of the survey. In total, 17 surveys were removed prior to importation to SPSS ($N=184$). Finally, box-and-whisker plots (Figure 1) were created using SPSS to identify any other potential outlier scores. Based on the boxplots for *activity volume* and *activity hours*, several outlier scores were identified, and one extreme outlier survey, indicating 64 activities, was also removed from the data set, as this score seemed improbable. The other outliers for both *activity volume* and *activity hours* appeared possible and were retained in the data set.

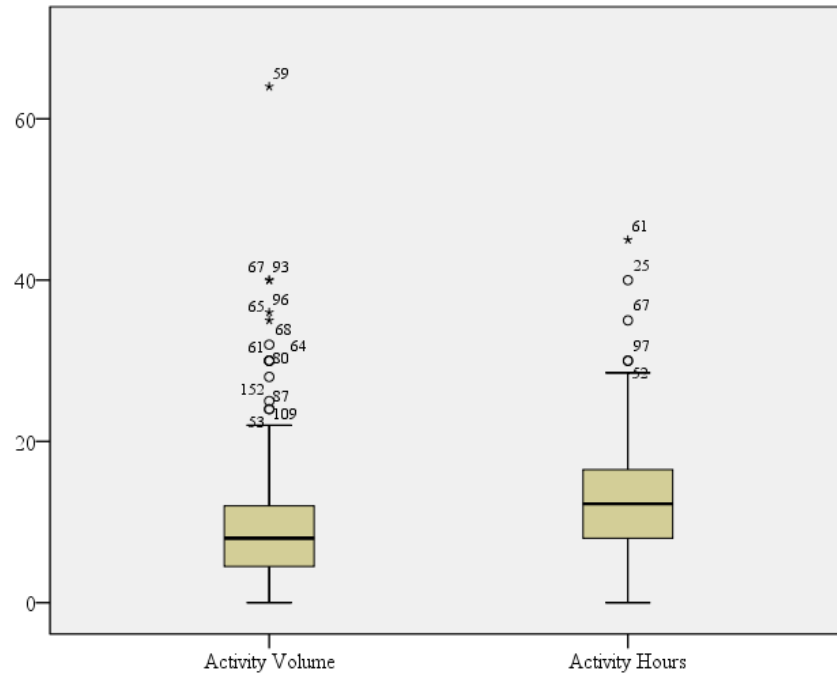


Figure 1. Boxplots of outliers

Boxplots for the five sub-scales of the S-LPI (Figure 2) revealed one survey with four of the five sub-scale scores below the 25th percentile, so this survey was removed. Two additional surveys, each having one sub-scale score below the 25th percentile, were identified but retained in the data set. Based on the boxplot analysis, the total number of usable surveys was reduced by two, resulting in $N=182$.

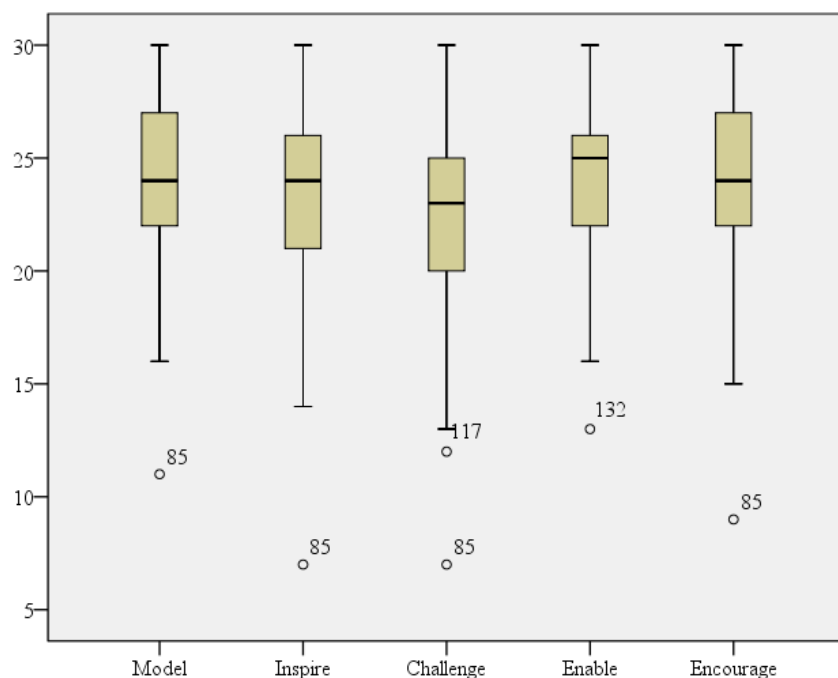


Figure 2. Boxplots for the five sub-scales of the S-LPI

At this point, raw scores for activity participation and average hours were converted into quartile-based scores labeled as low = 1, moderate = 2, high = 3, or very high = 4. Table 1 lists the participation ranges by volume of participation and hours of participation.

Table 1

Participation Ranges by Volume of Participation and Hours of Participation

	Activity Range (Volume)	Activity Range (Hours)
1 Quartile	0-5	0-8
2 Quartile	6-8	9-12
3 Quartile	9-12	13-16
4 Quartile	13-40	17-45

A two-way ANOVA was used to test the H_{01} and H_{02} . The two-way ANOVA was appropriate for H_{01} and H_{02} because there were two categorical variables, (a) gender (with two levels) and (b) participation (with four levels, based on volume). An ANOVA was calculated a

second time based on hours for H_02 . For both analyses, there was one dependent variable: scores on the 5 sub-scales of the S-LPI (Gall et al., 2007). Assumption tests were conducted and post hoc tests were also conducted on those variables where significance level (p) for this study $p < .05$ were found. The two-way ANOVA is a robust test and unless there are serious violations of assumption of normality or the homogeneity of variance, the test should still be tenable (Field, 2013; Warner, 2013). Statistics reported include: Mean (M), standard deviation (SD), number (N), degrees of freedom (df), observed F value (F), significance level (p) for this study $p < .05$, and effect size. Effect size was calculated using the partial eta squared statistic (Warner, 2013) and reported based on Cohen's d rule of thumb $.20 =$ small, $.50 =$ medium, $.80 =$ large (Howell, 2011, p. 390). Based on the results of the ANOVA, post hoc testing was conducted using the Tukey HSD test, as it is a generally robust test.

CHAPTER FOUR: FINDINGS

Overview

This chapter begins with a review of the research questions and hypotheses and then presents the descriptive statistics, organized in table form. Next, assumption testing is addressed to include the Kolmogorov-Smirnov test, histograms depicting normality, and Levene's test. Finally, the chapter concludes with a review of the results for null hypotheses one and two, both under the conditions of volume of participation and hours of participation.

Research Questions

RQ1: Does a difference in college freshmen leadership skills (as measured by the S-LPI) exist based on level of school sponsored extracurricular or co-curricular activities during high school (grouped as low, moderate, high, or very high levels and composed of both volume of participation and average hours of participation)?

RQ2: Does a difference in leadership skills (as measured on the S-LPI) exist between male and female college freshmen who participated in low, moderate, high, or very high levels of school-sponsored extracurricular or co-curricular activities during high school (volume of participation and average hours of participation) and their scores on the S-LPI?

Null Hypotheses

H₀1: There is no significant difference among college freshmen leadership skills (based on participant S-LPI scores), between those who participated in low, moderate, high, or very high levels of school sponsored extracurricular or co-curricular activities during high school.

H₀2: There is no significant difference between male and female college freshmen leadership skills (based on their S-LPI scores), between those who participated in low, moderate,

high, or very high levels of school sponsored extracurricular or co-curricular activities during high school.

Descriptive Statistics

Because the S-LPI has five sub-scales, each hypothesis was investigated using an individual analysis of variance (ANOVA) for each sub-scale. Additionally, both hypotheses were explored under two conditions: activity based on volume of participation, and hours of participation. To assist the reader, this section will then present the descriptive data by hypothesis, by participation volume, and then by hours of participation. Gender coding is as follows: male = 1, female = 2.

Descriptive Statistics Null Hypothesis One and Two: Participation Based on Volume

Due to the number of tests (five for participation volume), descriptive statistics are reported below in table form for ease of viewing. See tables 2 through 6.

Table 2

Subscale Model the Way Descriptive Statistics for Participation Volume by Gender

Descriptive Statistics				
Dependent Variable: Model				
gender	Act volume	Mean	Std. Deviation	N
1	1	23.32	3.669	38
	2	23.70	2.509	27
	3	24.67	3.498	18
	4	25.13	2.615	15
	Total	23.95	3.231	98
2	1	23.35	3.358	26
	2	25.00	2.646	17
	3	25.43	2.848	14
	4	25.33	2.512	27
	Total	24.67	2.967	84
Total	1	23.33	3.519	64
	2	24.20	2.611	44

	3	25.00	3.203	32
	4	25.26	2.519	42
	Total	24.28	3.124	182

Table 3

Subscale Inspire Descriptive Statistics for Participation Volume by Gender

Descriptive Statistics
Dependent Variable: Inspire

gender	Act volume	Mean	Std. Deviation	N
1	1	22.84	3.158	38
	2	23.48	2.751	27
	3	24.33	4.472	18
	4	23.40	4.154	15
	Total	23.38	3.480	98
2	1	21.58	3.501	26
	2	24.47	3.393	17
	3	24.57	3.081	14
	4	25.07	3.304	27
	Total	23.79	3.617	84
Total	1	22.33	3.334	64
	2	23.86	3.016	44
	3	24.44	3.868	32
	4	24.48	3.671	42
	Total	23.57	3.540	182

Table 4

Subscale Challenge Descriptive Statistics for Participation Volume by Gender

Descriptive Statistics
Dependent Variable: Challenge

gender	Act volume	Mean	Std. Deviation	N
1	1	22.26	3.134	38
	2	22.59	2.912	27
	3	24.11	3.513	18
	4	22.80	3.468	15
	Total	22.78	3.219	98
2	1	21.54	3.658	26
	2	22.53	2.809	17
	3	21.79	3.847	14
	4	23.89	3.896	27

	Total	22.54	3.691	84
Total	1	21.97	3.347	64
	2	22.57	2.840	44
	3	23.09	3.788	32
	4	23.50	3.743	42
	Total	22.66	3.437	182

Table 5

Subscale Enable Descriptive Statistics for Participation Volume by Gender

Descriptive Statistics
Dependent Variable: Enable

gender	Act volume	Mean	Std. Deviation	N
1	1	23.82	3.571	38
	2	24.37	2.078	27
	3	24.33	2.910	18
	4	24.20	2.426	15
	Total	24.12	2.901	98
2	1	24.08	2.827	26
	2	24.41	3.318	17
	3	24.93	3.222	14
	4	25.56	2.439	27
	Total	24.76	2.898	84
Total	1	23.92	3.267	64
	2	24.39	2.590	44
	3	24.59	3.015	32
	4	25.07	2.493	42
	Total	24.42	2.910	182

Table 6

Subscale Encourage Descriptive Statistics for Participation Volume by Gender

Descriptive Statistics
Dependent Variable: Encourage

gender	Act volume	Mean	Std. Deviation	N
1	1	23.32	3.305	38
	2	24.44	2.439	27
	3	24.44	3.382	18
	4	23.73	3.453	15
	Total	23.90	3.125	98
2	1	23.35	3.730	26

	2	24.06	2.249	17
	3	27.00	3.258	14
	4	25.89	3.142	27
	Total	24.92	3.447	84
Total	1	23.33	3.455	64
	2	24.30	2.348	44
	3	25.56	3.519	32
	4	25.12	3.380	42
	Total	24.37	3.308	182

Descriptive Statistics Null Hypothesis One and Two: Participation Based on Hours

Due to the number of tests, five for participation hours, descriptive statistics are reported below in table form for ease of viewing. See tables 7 through 11.

Table 7

Subscale Model the Way Descriptive Statistics for Hours of Participation

Descriptive Statistics				
Dependent Variable: Model				
gender	Activity Hours	Mean	Std. Deviation	N
1	1	23.32	2.673	25
	2	23.54	3.882	28
	3	24.23	3.050	26
	4	25.00	3.018	19
	Total	23.95	3.231	98
2	1	24.12	3.140	25
	2	24.23	2.891	13
	3	25.20	2.693	25
	4	24.95	3.170	21
	Total	24.67	2.967	84
Total	1	23.72	2.914	50
	2	23.76	3.576	41
	3	24.71	2.893	51
	4	24.98	3.059	40
	Total	24.28	3.124	182

Table 8

Subscale Inspire Descriptive Statistics for Hours of Participation

Descriptive Statistics
Dependent Variable: Inspire

gender	Activity Hours	Mean	Std. Deviation	N
1	1	22.88	3.018	25
	2	23.25	4.169	28
	3	23.35	3.532	26
	4	24.26	2.922	19
	Total	23.38	3.480	98
2	1	23.20	3.253	25
	2	22.54	2.570	13
	3	24.60	4.262	25
	4	24.29	3.649	21
	Total	23.79	3.617	84
Total	1	23.04	3.110	50
	2	23.02	3.718	41
	3	23.96	3.919	51
	4	24.28	3.282	40
	Total	23.57	3.540	182

Table 9

Subscale Challenge Descriptive Statistics for Hours of Participation

Descriptive Statistics
Dependent Variable: Challenge

gender	Activity Hours	Mean	Std. Deviation	N
1	1	22.44	2.740	25
	2	22.71	3.770	28
	3	22.58	3.139	26
	4	23.58	3.150	19
	Total	22.78	3.219	98
2	1	22.44	3.305	25
	2	20.69	3.449	13
	3	23.12	3.855	25
	4	23.10	3.936	21
	Total	22.54	3.691	84
Total	1	22.44	3.004	50
	2	22.07	3.751	41
	3	22.84	3.484	51
	4	23.33	3.547	40

Total	22.66	3.437	182
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Table 10

Subscale Enable Descriptive Statistics for Hours of Participation

Descriptive Statistics
Dependent Variable: **Enable**

gender	Activity Hours	Mean	Std. Deviation	N
1	1	23.68	3.473	25
	2	24.18	3.139	28
	3	24.04	2.408	26
	4	24.74	2.400	19
	Total	24.12	2.901	98
2	1	24.16	2.838	25
	2	24.77	2.315	13
	3	24.92	3.278	25
	4	25.29	2.883	21
	Total	24.76	2.898	84
Total	1	23.92	3.148	50
	2	24.37	2.888	41
	3	24.47	2.873	51
	4	25.03	2.646	40
	Total	24.42	2.910	182

Table 11

Subscale Encourage Descriptive Statistics for Hours of Participation

Descriptive Statistics
Dependent Variable: **Encourage**

gender	Activity Hours	Mean	Std. Deviation	N
1	1	23.80	2.887	25
	2	23.39	3.392	28
	3	24.19	2.772	26
	4	24.37	3.578	19
	Total	23.90	3.125	98
2	1	24.60	2.630	25
	2	24.46	3.152	13
	3	25.44	3.720	25
	4	24.95	4.225	21

	Total	24.92	3.447	84
Total	1	24.20	2.763	50
	2	23.73	3.317	41
	3	24.80	3.299	51
	4	24.68	3.892	40
	Total	24.37	3.308	182

Results

Assumption Tests

Prior to conducting the two-way ANOVA, the following assumption tests were conducted: A quantitative and interval-level dependent variable; independence; normality; and homogeneity of variance. The dependent variable was quantitative and interval, and independence of observations was established. The assumption of normality was not met for both males and females on the *Enable* and *Encourage* sub-scales of the S-LPI (using Kolmogorov-Smirnov, $p \geq .05$). See Table 12. However, Field (2013) notes that “in large samples, they [tests for normality] can be significant even for small and unimportant effects” (p. 184). Further, visual inspection of the histograms (Figures 3-7) indicated a generally normal distribution of scores, and the violations of the Kolmogorov-Smirnov test notwithstanding, the data were assessed tenable based on visual inspection, the robustness of the statistical test against violations of assumptions, and concerns about prioritizing and privileging quantitative calculations of assumption tests as singularly authoritative (Field, 2013).

Table 12

Tests of Normality

	gender	Tests of Normality			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Model	1	.083	98	.096	.978	98	.104

	2	.094	84	.066	.973	84	.071
Inspire	1	.089	98	.051	.979	98	.121
	2	.081	84	.200*	.972	84	.066
Challenge	1	.087	98	.068	.975	98	.057
	2	.085	84	.197	.981	84	.235
Enable	1	.157	98	.000	.954	98	.002
	2	.116	84	.007	.970	84	.049
Encourage	1	.115	98	.003	.972	98	.036
	2	.144	84	.000	.949	84	.002

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

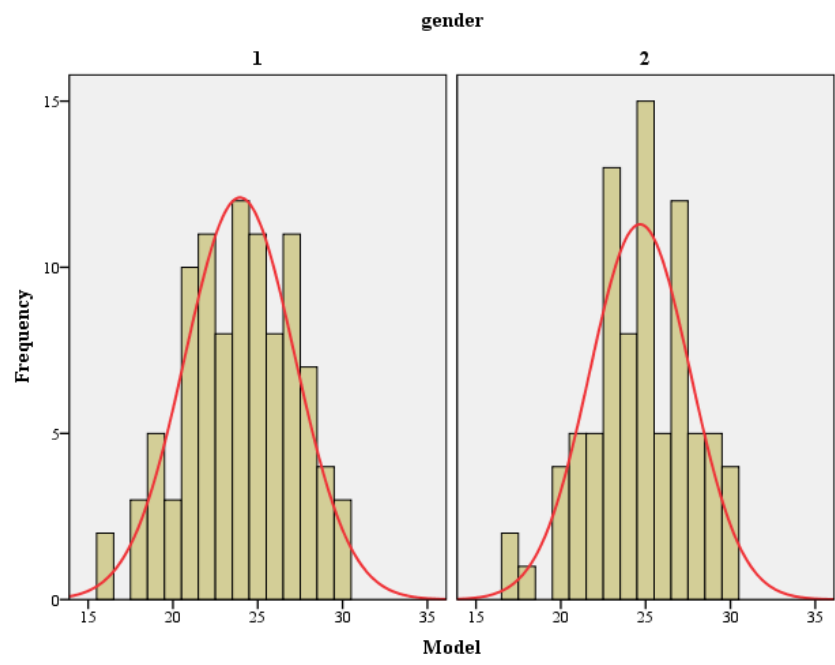


Figure 3. Histogram of frequency by gender for “model the way” sub-scale

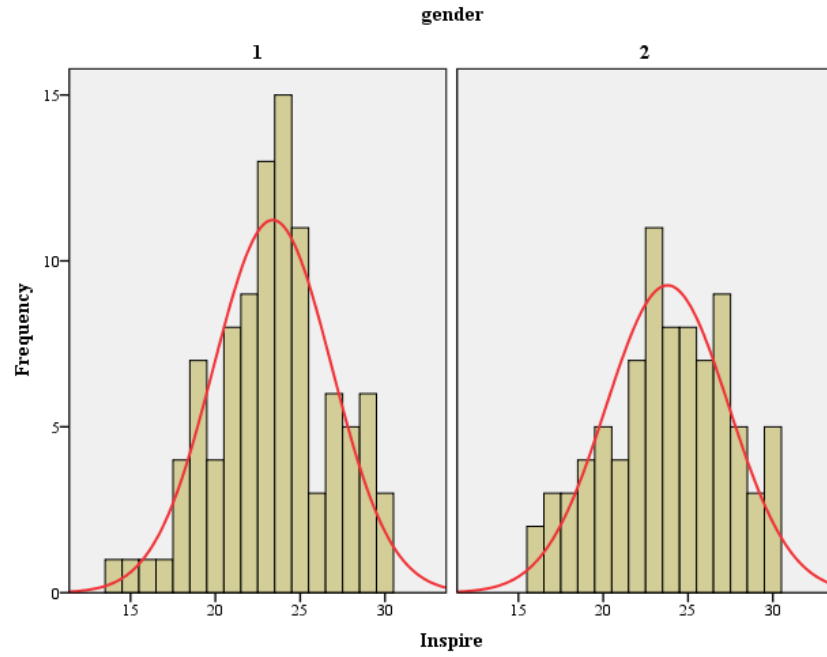


Figure 4. Histogram of frequency by gender for “inspire” sub-scale

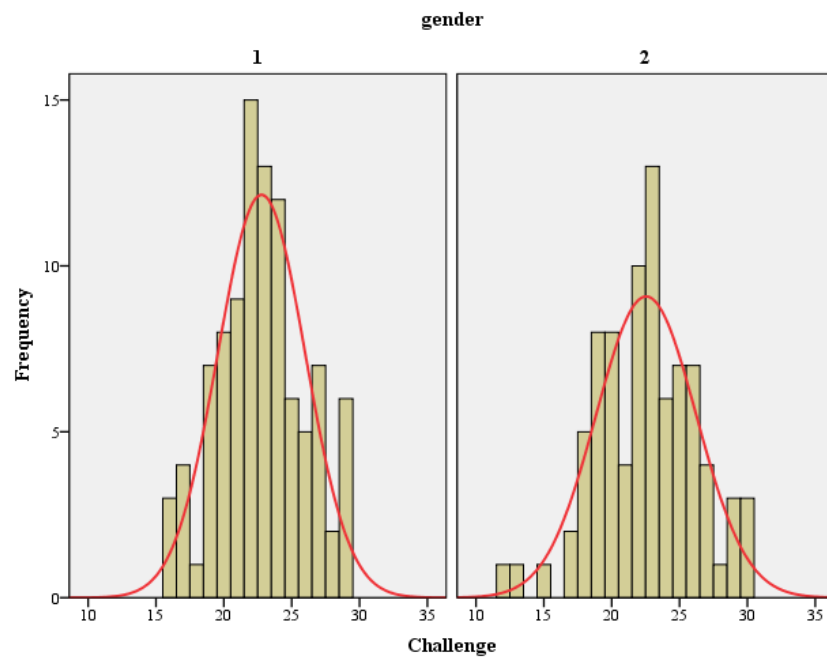


Figure 5. Histogram of frequency by gender for “challenge” sub-scale

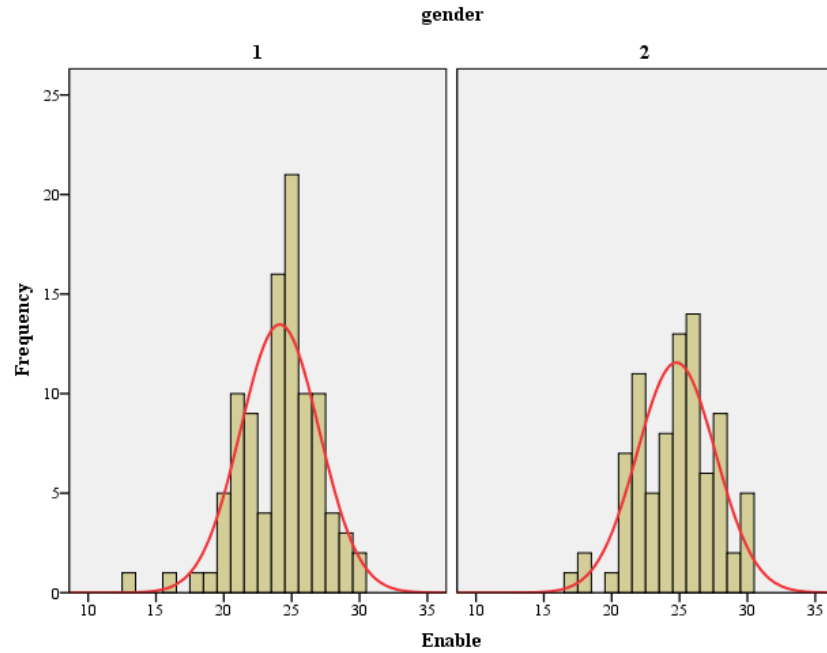


Figure 6. Histogram of frequency by gender for “enable” sub-scale

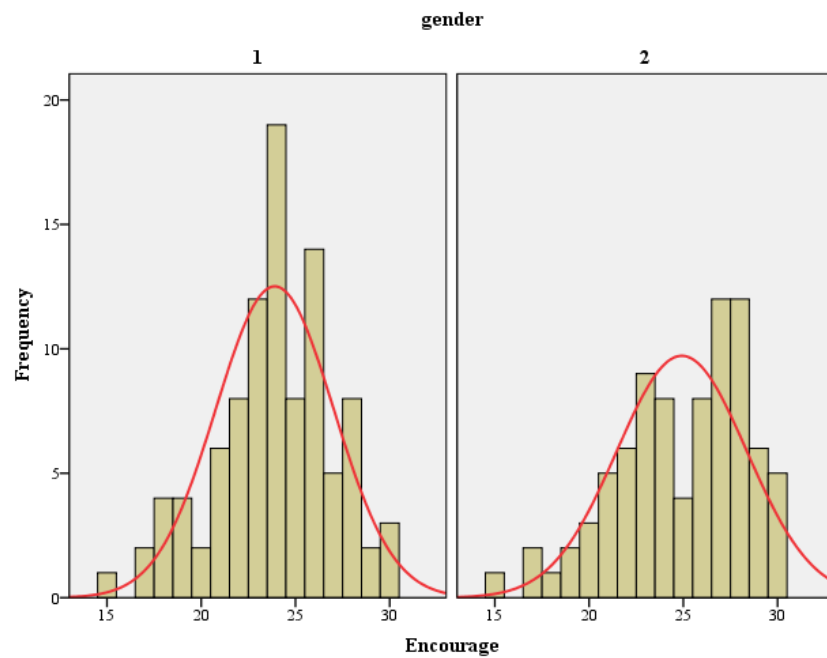


Figure 7. Histogram of frequency by gender for “encourage” sub-scale

Finally, homogeneity of variances was tenable based on Levene's test for equality of variance, $p \geq .05$ for all sub-scales by participation volume and by participation hours. See table 13.

Table 13

Levene's Test for Homogeneity of Variance based on Subscale

Levene's Test for Homogeneity of Variance	
By Volume of Participation	
Model	$F(7, 174) = 1.407, p=.205$
Inspire	$F(7, 174) = 1.121, p=.352$
Challenge	$F(7, 174) = 0.770, p=.613$
Enable	$F(7, 174) = 1.015, p=.422$
Encourage	$F(7, 174) = 0.892, p=.514$
By Hours of Participation	
Model	$F(7, 174) = 1.071, p=.384$
Inspire	$F(7, 174) = 1.501, p=.170$
Challenge	$F(7, 174) = 0.904, p=.505$
Enable	$F(7, 174) = 0.900, p=.508$
Encourage	$F(7, 174) = 1.556, p=.151$

Null Hypothesis One

A two-way ANOVA was conducted to evaluate the null hypothesis:

There is no significant difference among college freshmen ($N = 182$) leadership skills based on participant S-LPI scores (dependent variable with five sub-scales: Model, inspire, challenge, enable, encourage) who participated in low, moderate, high, or very high levels of school sponsored extracurricular or co-curricular activities during high school.

The independent variable level of *participation based on volume* included four groups: Low (0-5 activities, $n = 64$), medium (6-8 activities, $n = 44$), high (9-12 activities, $n = 32$), and very high (13-40 activities, $n = 42$). The results of the 2 x 4 ANOVA indicated no interaction effects for any of the five sub-scales. However, simple main effects for volume of participation were noted for the three following sub-scales: Model, $F(7, 174) = 3.891, p = .010$; inspire, $F(7, 174) =$

4.589, $p = .004$; and encourage, $F(7, 174) = 4.385$, $p = .005$. See tables 14-16.

Figures 8-10, estimated marginal mean plots, illustrate the differences between the levels of participation and S-LPI sub-scale scores for model, inspire, and encourage. However, the volume of participation's effect sizes reported as partial eta square ($\eta^2 = .063$ (model); partial $\eta^2 = .073$ (inspire); partial $\eta^2 = .070$ (encourage)) all indicate a very small effect size based on Cohen's d (Howell, 2011). Post hoc analyses to evaluate multiple comparison differences across group means was conducted using the Tukey HSD test. The test indicated that participation volume influenced significant differences between the very high participation group (group 4) $p < .05$, $p = .009$ and the low participation group (group 1) for the sub-scale model. Significant differences emerged between the very high (group 4) and high (group 3), $p < .05$, $p = .010$ and $p = .026$ respectively, and the low participation (group 1) for the sub-scale inspire. Further, significant differences emerged between the very high (group 4) and high group (group 3), $p < .05$, $p = .025$ and $p = .007$ respectively, and the low participation group (group 1) for the sub-scale encourage, see tables 17-19. Based on these results, there is statistically significant evidence to reject the null hypothesis and conclude that a difference exists among college freshmen's modeling, inspiring, and encouraging leadership behaviors, based on their *volume of participation* in school-sponsored extracurricular or co-curricular activities during high school.

Table 14

Between-Subjects Effects for Model the Way Sub-Scale

Tests of Between-Subjects Effects

Dependent Variable: **Model**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	137.822 ^a	7	19.689	2.103	.046	.078
Intercept	98096.300	1	98096.300	10478.787	.000	.984
gender	13.384	1	13.384	1.430	.233	.008

ActVol	109.283	3	36.428	3.891	.010	.063
gender * ActVol	11.426	3	3.809	.407	.748	.007
Error	1628.887	174	9.361			
Total	109061.000	182				
Corrected Total	1766.709	181				

a. R Squared = .078 (Adjusted R Squared = .041)

Table 15

Between-Subjects Effects for Inspire Sub-Scale

Tests of Between-Subjects Effects

Dependent Variable: **Inspire**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	223.454 ^a	7	31.922	2.716	.011	.098
Intercept	92007.847	1	92007.847	7827.564	.000	.978
gender	6.840	1	6.840	.582	.447	.003
ActVol	161.804	3	53.935	4.589	.004	.073
gender * ActVol	60.600	3	20.200	1.719	.165	.029
Error	2045.255	174	11.754			
Total	103343.000	182				
Corrected Total	2268.709	181				

a. R Squared = .098 (Adjusted R Squared = .062)

Table 16

Between-Subjects Effects for Encourage Sub-Scale

Tests of Between-Subjects Effects

Dependent Variable: **Encourage**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	236.588 ^a	7	33.798	3.373	.002	.119
Intercept	98401.274	1	98401.274	9818.980	.000	.983
gender	48.485	1	48.485	4.838	.029	.027
ActVol	131.833	3	43.944	4.385	.005	.070
gender * ActVol	65.636	3	21.879	2.183	.092	.036
Error	1743.747	174	10.022			
Total	110053.000	182				

Corrected Total	1980.335	181			
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a. R Squared = .119 (Adjusted R Squared = .084)

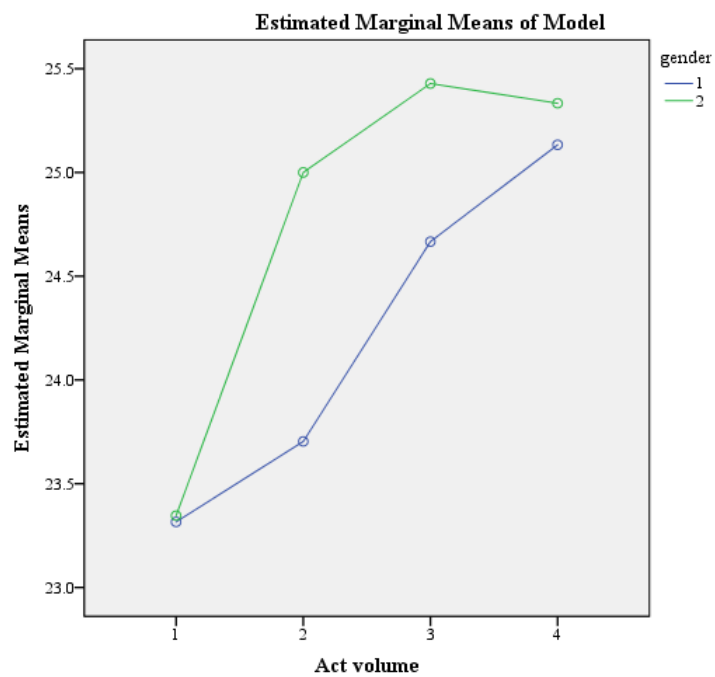


Figure 8. Estimated marginal mean plot for “model the way” sub-scale

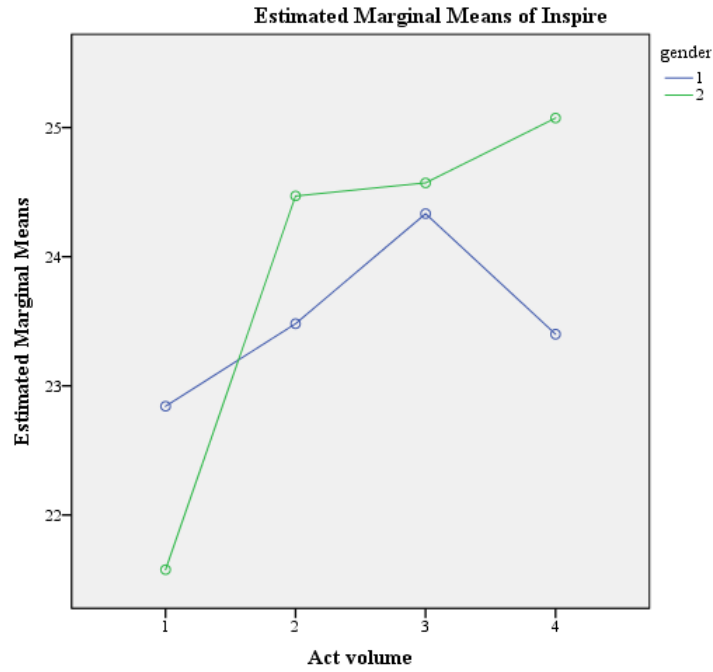


Figure 9. Estimated marginal mean plot for “inspire” sub-scale

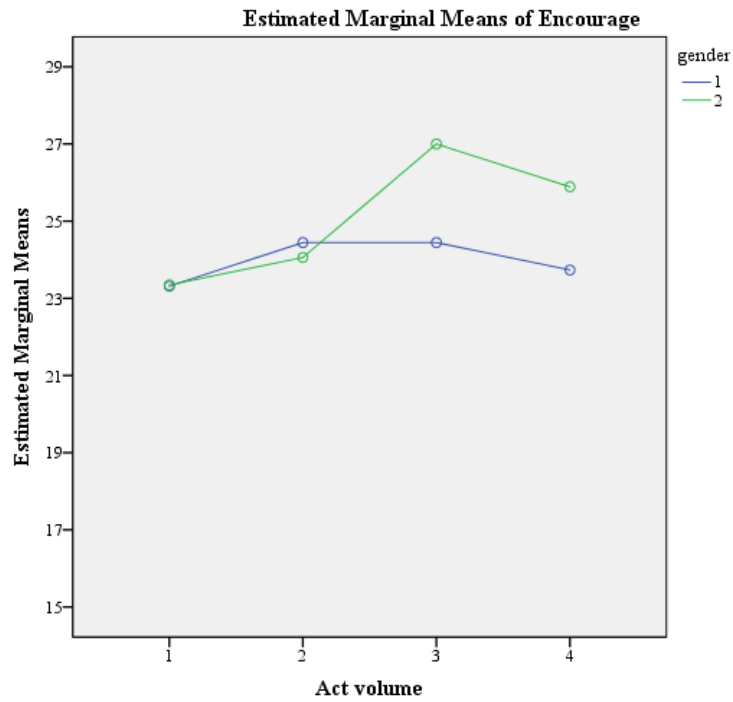


Figure 10. Estimated marginal mean plot for “encourage” sub-scale

Table 17
 Multiple Comparisons for Model the Way Sub-Scale

Multiple Comparisons

Dependent Variable: **Model**

Tukey HSD

(I) Act volume	(J) Act volume	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.88	.599	.462	-2.43	.68
	3	-1.67	.662	.060	-3.39	.05
	4	-1.93*	.608	.009	-3.51	-.36
2	1	.88	.599	.462	-.68	2.43
	3	-.80	.711	.678	-2.64	1.05
	4	-1.06	.660	.380	-2.77	.65
3	1	1.67	.662	.060	-.05	3.39
	2	.80	.711	.678	-1.05	2.64
	4	-.26	.718	.983	-2.12	1.60
4	1	1.93*	.608	.009	.36	3.51
	2	1.06	.660	.380	-.65	2.77
	3	.26	.718	.983	-1.60	2.12

Based on observed means.

The error term is Mean Square(Error) = 9.361.

*. The mean difference is significant at the .05 level.

Table 18

Multiple Comparisons for Inspire Sub-Scale

Multiple Comparisons

Dependent Variable: **Inspire**

Tukey HSD

(I) Act volume	(J) Act volume	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-1.54	.671	.105	-3.28	.21
	3	-2.11*	.742	.026	-4.03	-.18
	4	-2.15*	.681	.010	-3.91	-.38
2	1	1.54	.671	.105	-.21	3.28
	3	-.57	.797	.889	-2.64	1.49
	4	-.61	.740	.841	-2.53	1.31
3	1	2.11*	.742	.026	.18	4.03
	2	.57	.797	.889	-1.49	2.64
	4	-.04	.804	1.000	-2.13	2.05
4	1	2.15*	.681	.010	.38	3.91

2	.61	.740	.841	-1.31	2.53
3	.04	.804	1.000	-2.05	2.13

Based on observed means.

The error term is Mean Square(Error) = 11.754.

*. The mean difference is significant at the .05 level.

Table 19

Multiple Comparisons for Encourage Sub-Scale

Multiple Comparisons

Dependent Variable: **Encourage**

Tukey HSD

(I) Act volume	(J) Act volume	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.97	.620	.404	-2.58	.64
	3	-2.23*	.685	.007	-4.01	-.46
	4	-1.79*	.629	.025	-3.42	-.16
2	1	.97	.620	.404	-.64	2.58
	3	-1.27	.735	.315	-3.17	.64
	4	-.82	.683	.624	-2.60	.95
3	1	2.23*	.685	.007	.46	4.01
	2	1.27	.735	.315	-.64	3.17
	4	.44	.743	.933	-1.48	2.37
4	1	1.79*	.629	.025	.16	3.42
	2	.82	.683	.624	-.95	2.60
	3	-.44	.743	.933	-2.37	1.48

Based on observed means.

The error term is Mean Square(Error) = 10.022.

*. The mean difference is significant at the .05 level.

A second two-way ANOVA was conducted to evaluate the same null hypothesis (one):

There was no significant difference among college freshmen ($N = 182$) leadership skills based on participant S-LPI scores (dependent variable with five sub-scales: Model, inspire, challenge, enable, encourage) who participated in low, moderate, high, or very high levels of school sponsored extracurricular or co-curricular activities during high school. However, the independent variable, level of participation, **based on hours**, was used and included four groups:

Low (0-8 hours, $n = 50$), medium (9-12 hours, $n = 41$), high (13-16 hours, $n = 51$), and very high (17-45 hours, $n = 40$). The ANOVA statistic was not significant for any of the five sub-scales $p < .05$. Based on these results, there was no evidence to reject the null hypothesis and conclude that a difference exists among college freshmen's modeling, inspiring, challenging, enabling, and encouraging leadership behaviors, **based on their hours** of participation in school-sponsored extracurricular or co-curricular activities during high school.

Null Hypothesis Two

A two-way ANOVA was conducted to evaluate the null hypothesis: There is no significant difference between male ($n = 98$) and female ($n = 84$) college freshmen leadership skills based on participant S-LPI scores (dependent variable with five sub-scales: Model, inspire, challenge, enable, encourage) who participated in low, moderate, high, or very high levels of school sponsored extracurricular or co-curricular activities during high school. This hypothesis was effectively answered using the same ANOVA used in the first hypothesis and only reports the differences based on gender. The independent variable, level of **participation based on volume**, included four groups: Low (0-5 activities, $n = 64$), medium (6-8 activities, $n = 44$), high (9-12 activities, $n = 32$), and very high (13-40 activities, $n = 42$). The results of the 2 x 4 ANOVA indicated no interaction effects for any of the five sub-scales. However, a simple main effect for gender was noted for only the sub-scale encourage, $F(7, 174) = 4.838$ $p = .029$ (table 20).

Figure 11, estimated marginal mean plots, illustrates the mean differences between the levels of participation and S-LPI sub-scale scores for encourage and suggests an interaction; however, the significance ($p = .092$) does not exceed the alpha of $< .05$. Further, gender's effect on the encourage sub-scale reported as partial $\eta^2 = .027$ indicates a very small effect size based

on Cohen's d (Howell, 2011). Post hoc analyses to evaluate multiple comparison differences across group means was conducted using the Tukey HSD test. The test indicated significant differences between the very high (group 4) and high (group 3), $p < .05$, $p = .007$ and $p = .025$ respectively, and the low participation (group 1) for the sub-scale encourage, based on participation, but because gender is a dichotomous variable, it was not included in the post hoc testing (table 21). Based on these results, there is statistically significant evidence to reject the null hypothesis and conclude that a difference exists between male and female college freshmen, based on their *volume of participation*, only for their encouraging leadership behaviors.

Table 20

*Between-Subject Effects for Encourage Sub-Scale***Tests of Between-Subjects Effects**Dependent Variable: **Encourage**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	236.588 ^a	7	33.798	3.373	.002	.119
Intercept	98401.274	1	98401.274	9818.980	.000	.983
gender	48.485	1	48.485	4.838	.029	.027
ActVol	131.833	3	43.944	4.385	.005	.070
gender * ActVol	65.636	3	21.879	2.183	.092	.036
Error	1743.747	174	10.022			
Total	110053.000	182				
Corrected Total	1980.335	181				

a. R Squared = .119 (Adjusted R Squared = .084)

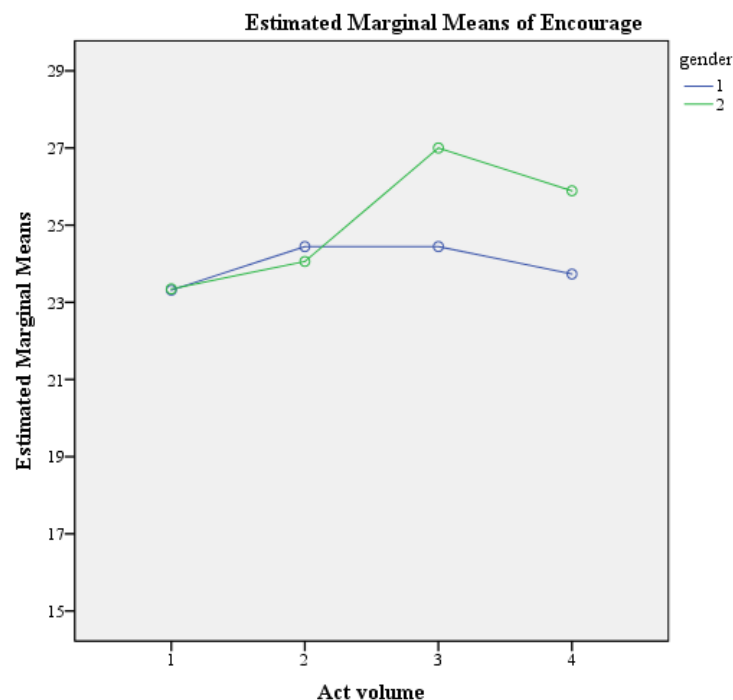


Figure 11. Estimated marginal mean plot for “encourage” sub-scale

Table 21

Multiple Comparisons for Encourage Sub-Scale

Multiple Comparisons

Dependent Variable: **Encourage**

Tukey HSD

(I) Act volume	(J) Act volume	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	-.97	.620	.404	-2.58	.64
	3	-2.23*	.685	.007	-4.01	-.46
	4	-1.79*	.629	.025	-3.42	-.16
2	1	.97	.620	.404	-.64	2.58
	3	-1.27	.735	.315	-3.17	.64
	4	-.82	.683	.624	-2.60	.95
3	1	2.23*	.685	.007	.46	4.01
	2	1.27	.735	.315	-.64	3.17
	4	.44	.743	.933	-1.48	2.37
4	1	1.79*	.629	.025	.16	3.42
	2	.82	.683	.624	-.95	2.60

3	-.44	.743	.933	-2.37	1.48
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Based on observed means.

The error term is Mean Square(Error) = 10.022.

*. The mean difference is significant at the .05 level.

A second two-way ANOVA was conducted to evaluate the same null hypothesis (two): There was no significant difference between male ($n = 98$) and female ($n = 84$) college freshmen leadership skills based on participant S-LPI scores (dependent variable with five sub-scales: Model, inspire, challenge, enable, encourage) who participated in low, moderate, high, or very high levels of school sponsored extracurricular or co-curricular activities during high school. However, the independent variable, level of participation **based on hours**, was used and included four groups: Low (0-8 hours, $n = 50$), medium (9-12 hours, $n = 41$), high (13-16 hours, $n = 51$), and very high (17-45 hours, $n = 40$). The ANOVA statistic was not significant for any of the five sub-scales $p < .05$. Based on these results, there was no evidence to reject the null hypothesis and conclude that a difference exists between male and female college freshmen's modeling, inspiring, challenging, enabling, and encouraging leadership behaviors, based on their **hours of participation** in school sponsored extracurricular or co-curricular activities during high school.

CHAPTER FIVE: CONCLUSIONS

Overview

Chapter five opens with a discussion of the findings, by hypotheses, noting significant findings on three of the sub-scales, based on volume but not hours of participation, and that males and females differed only on one sub-scale. The topic then turns to implications, which are three in number, and then to limitations, which also number three. Finally, four specific recommendations for future study are presented.

Discussion

The purpose of this study was to determine if a difference existed among the leadership behaviors of college freshmen. High school students are often encouraged to become involved in extra or co-curricular activities to gain a wide breadth of experience; consequently, implied is the idea that leadership skills may be gained as a sort of byproduct of participation. Further, involvement in extracurricular activities does cohere with the following developmental influences of the LID model: adult influences, peer influences, meaningful involvement, and reflective learning (Komives et al., 2005) and the concept of deliberate practice (Ericsson et al., 1993; Ericsson 2014a; Ericsson 2014b; Ericsson & Pool, 2016). However, Extejt and Smith (2009) caution that extracurricular athletics are not intended to develop leadership skills, although leadership ability may be developed. Therefore, this logic can be generally extended to other extracurricular activities in that leadership ability may not be an intentional part of the extracurricular activity; thus, any leadership development that may occur is likely to be a coincidental result rather than an intentional outcome.

The first hypothesis in the present study was tested to determine whether or not there was

a significant difference between the leadership skills of college freshmen (based on participant S-LPI scores) based on those who participated in low, moderate, high, or very high levels of school sponsored extracurricular or co-curricular activities during high school. Participation was assessed both by volume of participation and hours of participation. Results from the ANOVA indicated that a weak positive difference of leadership behaviors did exist between college freshmen for three of the five sub-scales of the S-LPI--specifically, model, inspire, and encourage--when assessed by volume of participation but not by hours of participation. However, statistical significance was only found between the very high participation group and the low participation group for the sub-scale model, and the very high and high groups and the low participation group for the sub-scales inspire and encourage. Additionally, all effect sizes were small, accounting for only 6.3% to 7.3% of the variance in scores based on levels of participation; however, this effect may have a meaningful contribution to leadership development, especially in the nascent stages of leadership development. These findings suggest a threshold effect maybe have been in operation, where differences were only seen once a minimum level of participation volume was reached. Further, there were no statistically significant differences found between any of the participation levels based on hours of participation. Intuitively, one would expect that as the volume of participation increases, so too would the number of hours participating in those activities. Table 22 lists the volume of participation and the corresponding number of hours, but an inspection of the activity and volume ANOVAs groups' sizes show great variation, indicating that they do not covary, and that it is not necessarily the same people in each group.

Table 22

Volume of Participation and Corresponding Number of Hours

	Activity Range (Volume)	Activity Range (Hours)
1 Quartile	0-5	0-8
2 Quartile	6-8	9-12
3 Quartile	9-12	13-16
4 Quartile	13-40	17-45

What was not captured by the study was the diversity of extracurricular activity types by volume. For example, a student who participated in four seasons of football and four seasons of track would have counted participation in eight activities, but only two types of activities, and both of those activities are sports. Therefore, because only the very high and high participation categories showed statistically significant differences, this may reflect an underlying (but not captured) diversity across activity types only seen once participation volume reached some critical threshold. This supports the idea that the reflective learning influence of the LID model (Komives et al., 2005) may not have been present at a lower level of participation because as Extejt and Smith (2009) noted, extra and co-curricular activities are not necessarily intended to develop leadership abilities and, thus, may only have been operative for those students who engaged in a diversity of activity types, such that some activities might have included an intentional leadership element.

McNeal (1998) noted that students who participate in extracurricular activities are more likely to do so in high school if they had also been involved to some extent during middle school or junior high school. This is consistent with the concept of cumulative advantage (Merton, 1968) that can exert itself early in students' lives and follow them throughout their school careers (Dhuey & Lipscomb, 2008). Additionally, those students from higher SES households tend to perform better academically in high school, participate in extracurricular activities at higher rates (Covay & Carbonaro, 2010; Humbert et al., 2006; Sui-Chu & Willms, 1996), and attend and

persist in college at rates that exceed those of their lower SES peers (Goldrick-Rab, 2006; Hossler & Stage, 1992; Walpole, 2003). Therefore, because University A has a relatively high number of middle to upper-middle SES household students, it is likely that some self-selectivity was in operation within the freshmen class as a whole and their choice to attend the university. The freshmen who attended University A are likely to have been high achievers and highly active in a variety of high school extra and co-curricular activities, thus statistically significant differences were only seen for those with very high volumetric levels of extracurricular or co-curricular participation. These findings are also consistent with the concept of deliberate practice (Ericsson et al., 1993; Ericsson 2014a; Ericsson 2014b; Ericsson & Pool, 2016) but that deliberate practice of leadership behaviors was not necessarily occurring at lower levels of activity because they were not an explicit part of the activity.

Compared to other studies that used the S-LPI, the rank order of the S-LPI sub-scale means for this study closely parallel those of Grandzol et al. (2010), who found that the highest mean was for the encourage sub-scale, followed in order by enable, model, inspire, and challenge. Patterson (2012) also noticed a similar pattern, with the highest rank in his study as enable, followed by encourage, model, challenge, and inspire. In the present study, the order from highest mean to lowest was: enable, encourage, model, inspire, and challenge. Only the order of the first two sub-scale scores was switched when compared to Patterson (2012). Additionally, Posner (2012) noted in his study--which included high school, college, and graduate students ($N= 4,322$)--that the rank order of the S-LPI sub-scales was: enable, act, model, inspire, and challenge for the White/Caucasian demographic group of students, a finding that closely mirrors this study's demographics. This close parallel with other studies using the S-LPI (Grandzol et al., 2010; Patterson, 2012; Posner, 2012; Posner, Crawford, & Denniston-

Stewart, 2015) suggests some measure of consistency across college freshmen as a whole, possibly due to the way the constructs of the sub-scales operate in practice for high school and college students. On an intuitive level, this makes sense; for example, high school and college students are not generally in a position to “challenge the process.” Therefore, it is not counterintuitive to expect that the challenge sub-scale might have one of the lowest mean scores across studies, as it reflects a behavior few high school or college students may actually be able to put into practice. Posner et al. (2015) also found that after controlling for age, gender, living arrangements, and geographic origin, the only factor that had a significant effect on college students’ S-LPI scores over a three-year span (freshmen to junior years) was program of study. This finding suggests that a student’s program of study may influence leadership development due to specific deliberate leadership developmental elements of the program. Taken as a whole, the present study and the others mentioned suggest a consistency among college freshmen and their leadership behaviors, and that participation in a variety of activities does assist in developing leadership behaviors; nonetheless, the intentionality of leadership development needs to be considered in any program or activity for real development to happen.

The second hypothesis was to determine whether or not there was a significant difference between the leadership skills of college freshmen male and female students (based on their S-LPI scores), who participated in low, moderate, high, or very high levels of school sponsored extracurricular or co-curricular activities during high school. The ANOVA indicated that female students had a statistically significant difference, based on volume of participation, only in their encourage sub-scale on the S-LPI; however, the effect size was very small, accounting for only 2.9% of the total variance. Additionally, no interaction effect was evident between female and male students on any of the S-LPI sub-scale scores. This finding is consistent with Grandzol et

al. (2010), who also discovered that females exhibit statistically significant differences from males on the encourage and enable sub-scales, and Posner (2012), who also revealed that females exhibit a higher mean score on the encourage sub-scale than males. However, in his study of Canadian college students, Posner (2015) found that females scored significantly higher than males on the model, inspire, enable, and encourage sub-scales. Further, there were no statistically significant differences found between males and females for any of the participation levels based on hours of participation.

Implications

There are several implications from this study. First, volume of participation, or simply being involved, seems to have an influence on leadership development by potentially setting the stage for further development. While the empirical findings of this study support a weak positive relationship between participation and an increase in three of the five leadership behaviors, as measured on the S-LPI, the present study did not control for any prior leadership positions the student may have held. Additionally, it is reasonable to believe that the students in the very high and high participation groups likely held a leadership role(s) at some point during their high school career. Previous studies have demonstrated that holding a leadership position is positively linked to leadership development (Dugan et al., 2015; Grandzol et al., 2010; Hancock et al., 2012; Patterson, 2012; Wielkiewicz et al., 2012). However, students do not typically walk into an organization and immediately into a leadership role. Therefore, participation might be the first step on the road to leadership development. Getting high school students involved in activities, regardless of their type, begins a process that can lead to leadership development, whether it is through holding formal position(s) or simply being in a program where leadership is emphasized.

Second, the level of intentionality of leadership development within an activity or program is critical. As mentioned in the first point, leadership development has been positively linked to students holding formal leadership roles within organizations. However, there are only a limited number of leadership positions within any organization. Unless a program or activity has a deliberate leadership development outcome (Massey et al., 2013), it is likely that only those students in leadership positions will reap the benefit of leadership development, and the other participants may not. Therefore, it is recommended that adults who are in charge of various high school extra and co-curricular activities determine whether or not leadership elements can be deliberately taught as a part of that program, and whenever possible incorporate leadership development as an aspect of that activity.

Third, the study suggests that there may be a diversity threshold, which is a point where participation in a variety of activities is required to gain exposure to leadership development. Not all activities are designed or intended for leadership development. For example, a high school music program would not typically have leadership as an intentional developmental goal. However, students in a music program certainly could gain self-confidence through musical performance, and self-confidence is a component of leadership. In this sense, a student would be practicing an antecedent behavior (Beck, 2014) of leadership through participation in the music program. In this example, leadership is a secondary benefit of participation; students are developing antecedent behaviors and skills necessary for more formalized leadership development later on in life. Therefore, it is recommended that high school students not only have a volume of participation in activities, but that those activities are of different types and not concentrated solely in a single domain such as athletics, academics, or the fine arts, but rather, a mixture of activities across those domains.

Limitations

There are several limitations noted in this study, specifically, the study's design type, the nature of survey-based inquiry, and the population from which the sample was drawn. First, the inherent nature of the causal-comparative, non-control group design is far weaker than an experimental or quasi-experimental design, or even a causal-comparative design in which a control group is used (Gall et al., 2007). Therefore, because the data were measured in an *ex post facto* manner, rather than manipulated, as would be the case in a control group-based design, results from this study should be used tentatively to draw conclusions and make inferences.

Second, the study used a survey as the assessment instrument. Podsakoff, MacKenzie, Lee, and Podsakoff (2003) noted that survey-based research is subject to some specific inherent biases, three of which potentially affect this study: Consistency motif, social desirability bias, and transient mood states. Consistency motif asserts that survey respondents may attempt to maintain a consistency between their attitudes and thoughts, and attempt to respond in ways that maintain what they believe to be a consistent response set across questions. Thus, it is reasonable to assume that students will also tend to present what they believe to be a consistency among their responses. Social desirability bias asserts that respondents may attempt to present themselves in a manner perceived as putting themselves in the best possible light, their true thoughts notwithstanding (Podsakoff et al., 2003). Additionally, Donaldson and Grant-Vallone (2002) noted that social desirability bias is a particularly prevalent issue in self-report research in organizations because survey takers may believe that there is always a chance, however small, that a superior, in this case the instructor, might have access to their responses. Given that this study used the self-report version of the S-LPI, it is almost a certainty that some social desirability bias is present. Finally, transient mood state bias asserts that changes in the

contextual environment influence the mood state of the respondent (Podsakoff et al., 2003). Therefore, because students completed the survey at different times of the day and on different days of the week, it is likely their moods differed. For example, the classes surveyed ranged from early morning through afternoon and included one evening class. Additionally, the researcher was permitted access to individual classes at both the beginning and end of class time. Therefore, it is quite reasonable to assume that some transient mood state bias was operative because issues of timing could not be controlled.

The third limitation is related to the population and sample used in this study. The population of University A is composed largely of middle to upper-middle class SES students, approximately 48% of whom attended private high schools. Several studies (Covay & Carbonaro, 2010; Humbert et al., 2006; Sui-Chu & Willms, 1996) have found a linkage between parental SES and student involvement in a variety of school activities, with children from higher SES households being more involved. Therefore, it is reasonable to assume that many of the University A students, having come from higher SES households, were encouraged to and did in fact participate in extra and/or co-curricular activities at levels exceeding those of the general population of high school students; thus, this population is somewhat atypical.

The limitations of this study highlight the need for caution in generalizing these findings to other groups of college freshmen. However, it seems reasonable to assume that college freshmen with similar extra and co-curricular participation characteristics may exhibit behaviors consistent with those of this study. The findings of this study may best generalize to similar type institutions: Private Catholic colleges and universities, followed by smaller private universities. However, generalization to a wider scope of college freshmen may be tenuous, which leads to recommendations for others to research these ideas and constructs with different samples and

populations.

Recommendations for Future Research

The following five ideas are recommended for further study of leadership behavior. First, a comparison study should be conducted that assesses volumetric participation utilizing a college or university with differing demographic characteristics. Second, others should design a study utilizing a controlled variable for prior leadership experience to determine the effect of volume of participation relative to differences in leadership behaviors. Third, a longitudinal study capturing students' S-LPI scores in 9th grade and then in 12th grade would significantly add to the literature. Given the dearth of studies on pre-college leadership, this type of study may be particularly interesting in determining the effectiveness of specific high school extra and co-curricular activities on leadership development. Fourth, a study to capture the diversity of activity types and assess the effects of variety in activity types on leadership development. Given the scarcity of leadership assessment tools for high school and college-age students, the S-LPI is recommended, as it has been used extensively with this population and plenty of studies are available for comparison purposes. Finally, researchers should strive to develop multi-variable designs that employ mediation and moderation analysis so that more precise predictions and statements of direct causality can be made with respect to the often nebulous and high-inference constructs of leadership and leadership development.

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APPENDIX A Demographics Questionnaire

Survey Link Number: _____ the number links this questionnaire to the attached survey in case they become separated.

Gender (biological sex): Male / Female (circle one)

Please answer the following regarding your participation in extracurricular and co-curricular activities. Extracurricular activities typically include varsity or junior varsity sports. Co-curricular activities typically include activities like Marching Band and clubs, some of which may include activities outside of school hours, but where you also receive a grade (e.g. Robotics club with robotic competitions). Please remember not all co-curricular activities issue grades. Count your participation based on the number of seasons, typically for sports, or academic years, typically for clubs, that you participated. For example, a student who participated for two seasons in track and one academic year on the debate team would count participation in three activities.

Number of extracurricular or co-curricular activities you participated in during high school (grades 9-12): _____

Estimated average number of hours per week you participated in extracurricular or co-curricular activities during high school (grades 9-12): _____

During the fall semester at JCU (2016) did you partake in any on-campus clubs, sports, or other organizations? If so. How many _____ and what was the estimated average number of hours per week you participated in those activities _____.

You must be **18 years or older**. If you agree to participate simply complete this form and the attached Student Leadership Practices Inventory, your consent will be implied by completing and returning these forms.

APPENDIX B Student Leadership Practices Inventory

For a copy of the Student Leadership Practices Inventory (S-LPI) please see the Student Leadership Challenge website <http://www.studentleadershipchallenge.com/Assessments.aspx>

APPENDIX C Script for Administration of the Survey

I am conducting a research study investigating student leadership behaviors. If you agree to participate in this study, please understand that your participation is voluntary. The study involves the Student Practices Leadership Inventory and a demographic questionnaire. The inventory assesses student leadership behaviors based on five sub-scales with six questions each for a total of 30 questions. For each question you will respond using a five-point scale corresponding to how often you engage in that behavior (1- rarely or seldom, 2 - once in a while, 3 - sometimes, 4 - often, 5- very frequently). Scores for each sub-scale range between six and 30, the higher the score the more frequently you engage in that leadership behavior. All the information you provide will be strictly confidential and no personally identifiable information will be collected. The survey link number will only be used to match the demographic questionnaire to the survey in case the two become separated. No information that can be used to identify you is being collected or will be used in the final report.

You must be **18 years or older to participate**. If you agree to participate, please complete the demographic questionnaire and survey. Your consent is implied by completion of these documents.

APPENDIX D Permission Letter for Use of S-LPI

January 8, 2017

Kevin Wallace

Dear Mr. Wallace:

Thank you for your request to use the LPI®: Leadership Practices Inventory® in your dissertation. This letter grants you permission to use either the print or electronic LPI [Self/Observer/Self and Observer] instrument[s] in your research. You may *reproduce* the instrument in printed form at no charge beyond the discounted one-time cost of purchasing a copy; however, you may not distribute any photocopies except for specific research purposes. If you prefer to use the electronic distribution of the LPI you will need to separately contact Joshua Carter ([wiley.com](mailto:jcarter@wiley.com)) directly for further details regarding product access and payment. Please be sure to review the product information resources before reaching out with pricing questions.

Permission to use either the written or electronic versions is contingent upon the following:

- (1) The LPI may be used only for research purposes and may not be sold or used in conjunction with any compensated activities;
- (2) Copyright in the LPI, and all derivative works based on the LPI, is retained by James M. Kouzes and Barry Z. Posner. The following copyright statement must be included on all reproduced copies of the instrument(s); "Copyright © 2013 James M. Kouzes and Barry Z. Posner. Published by John Wiley & Sons, Inc. All rights reserved. Used with permission";
- (3) One (1) **electronic** copy of your dissertation and one (1) copy of all papers, reports, articles, and the like which make use of the LPI data must be sent **promptly** to my attention at the address below; and,
- (4) We have the right to include the results of your research in publication, promotion, distribution and sale of the LPI and all related products.

Permission is limited to the rights granted in this letter and does not include the right to grant others permission to reproduce the instrument(s) except for versions made by nonprofit organizations for visually or physically handicapped persons. No additions or changes may be made without our prior written consent. You understand that your use of the LPI shall in no way place the LPI in the public domain or in any way compromise our copyright in the LPI. This license is nontransferable. We reserve the right to revoke this permission at any time, effective upon written notice to you, in the event we conclude, in our reasonable judgment, that your use of the LPI is compromising our proprietary rights in the LPI.

Best wishes for every success with your research project.
Cordially,

E. Peterson
Permissions Editor

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APPENDIX E Student Consent Form

The Liberty University Institutional Review Board has approved this document for use from 1/25/2017 to --
Protocol # 2758.012517

CONSENT FORM

The Leadership Behaviors of College Freshmen
Kevin Wallace
Liberty University
School of Education

You are invited to be in a research study of the leadership behavior of college freshmen and how they are influenced by participation in extra and co-curricular activities. You were selected as a possible participant because you are a college freshman. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

Kevin Wallace, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to see if there is a difference in college freshmen leadership skills based on level of school sponsored extra-curricular or co-curricular activities during high school, and whether a difference in leadership skills exists between males and females.

Procedures: If you agree to be in this study, I would ask you to do the following things:

1. You must be at least 18 years old to participate.
2. You will be asked to fill out a demographic questionnaire consisting of five (5) questions: your biological sex, number of extra or co-curricular activities you participated in during high school, the estimated total time per week you spent in those activities, the number of extra or co-curricular activities you participated in during fall of 2016 at JCU, if any, and finally the estimated total time per week you spent in those activities (fall of 2016). The estimated time to complete this is 3-4 minutes and your information will remain anonymous.
3. Finally, you will be asked to complete the Student Leadership Practices Inventory (S-LPI) a 30 question paper and pencil leadership survey. Your demographic questionnaire will then be attached to your S-LPI. The estimated time to complete the S-LPI is 15 minutes, and because no personally identifiable data is being collected, your anonymity is assured.

Risks and Benefits of being in the Study: The risks involved in this study are minimal, no more than you would encounter in everyday life.

There are no direct benefits to participating in this study. However, it is hoped that leadership educators will gain additional insight into the role that participation in extracurricular activities plays in developing leadership skills in high school and early college age students.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. In any sort of report, I might publish,

I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records.

We may share the data we collect from you for use in future research studies or with other researchers; if we share the data that we collect about you, we will remove any information that could identify you before we share it.

- The researcher will maintain the original demographic questionnaires and S-LPI survey forms only until they are scored and the data entered into an MS Excel spreadsheet. Once the data is recorded the paper forms will be destroyed using a crosscut shredder and then the cuttings will be burned.
- All recorded data will be stored on a flash-drive in a password protected file. Data will be deleted after three years.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or John Carroll University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting each survey without affecting those relationships.

Contacts and Questions: The researcher conducting this study is Kevin Wallace. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at 000-000-0000/ @liberty.edu. You may also contact the researcher's faculty advisor, Dr. Jeffery Savage, at @liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Green Hall 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

The Liberty University Institutional Review Board has approved this document for use from 1/25/2017 to --
Protocol # 2758.012517

We may share the data we collect from you for use in future research studies or with other researchers; if we share the data that we collect about you, we will remove any information that could identify you before we share it.

The researcher will maintain the original demographic questionnaires and S-LPI survey forms only until they are scored and the data entered into an MS Excel spreadsheet. Once the data is recorded the paper forms will be destroyed using a crosscut shredder and then the cuttings will be burned.

All recorded data will be stored on a flash-drive in a password protected file. Data will be deleted after three years.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or John Carroll University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting each survey without affecting those relationships.

Contacts and Questions: The researcher conducting this study is Kevin Wallace. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at 000-000-0000/ @liberty.edu. You may also contact the researcher's faculty advisor, Dr. Jeffery Savage, at @liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Green Hall 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)