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Factors Influencing Leadership Efficacy for Traditional-Aged
Sophomore Male College Students

by

Jeromy A. Koffler

A dissertation submitted in partial fulfillment of the requirements of the degree of

Doctor of Education
in
Organizational Leadership

University of Portland
School of Education

2017

**Factors Influencing Leadership Efficacy
for Traditional-Aged Sophomore Male College Students**

by

Jeremy A. Koffler

This dissertation is completed as a partial requirement for the Doctor of Education (EdD) degree at the University of Portland in Portland, Oregon.

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Abstract

College student retention remains a prevalent topic in higher education as demographics change and the need to manage enrollment increases. Evidence suggests that women are outperforming men in college environments, and there are enrollment pipeline leaks in the sophomore year when many sophomores experience a slump in satisfaction and performance. This study examined experiential and environmental factors that predict leadership efficacy in traditional-aged sophomore male college students using data from the 2015 Multi-Institutional Study of Leadership. Descriptive statistics revealed percentages of sophomore male participation in a number of MSL-identified campus experiences, clubs and organizations, and leadership development activities. Sophomore males tended to be more involved in sports-related and outdoor adventure activities, but less engaged with community service related activities than sophomore females.

Leadership efficacy scores were compared between those sophomore males who were involved in particular activities and those who were not. Sophomore males who performed community service, addressed concerns within the community, or worked with others to make the community a better place showed greater differences in leadership efficacy, with large Cohen's *d* effect sizes ranging from .89 to .91. There were also similar large effect sizes ranging between .85 to 1.01 for those sophomore males who engaged in a variety of leadership development activities and those who did not.

Leadership efficacy mean scores were also calculated for class and gender subgroups for comparison, and a two-way ANOVA was used to determine if there were any differences. While statistically significant differences were found between the groups, the effect sizes were small, and there did not appear to be evidence supporting the sophomore slump within the sophomore male sample.

Finally, leadership efficacy correlated moderately ($r=.57$) with consciousness of self, providing some evidence for how provoking a sense of altruism can be a productive pathway for bolstering confidence in leadership.

This study adds to the literature on gender differences in higher education and the sophomore slump. The research provides clues to ways in which student affairs educators can design experiences and environments that can enhance leadership efficacy for sophomore males. This study also highlights the importance of institutional commitment to supporting leadership development activities as a tool for retention.

Keywords: sophomore, male, college, slump, leadership, efficacy, Multi-Institutional Study of Leadership, gender, retention, consciousness of self

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Dedication

To student affairs practitioners who work hard every day to make a difference in the lives of college students.

Table of Contents

Title Page	i
Approval Sheet	ii
Abstract	iii
Acknowledgments	v
Dedication	vii
Table of Contents	viii
List of Tables	xi
List of Figuresxiii
Chapter 1: Introduction	1
College Student Retention	1
Gender Differences	2
Sophomore Slump	3
Leadership Development	4
Overview of the Study	6
Purpose Statement	6
Significance of the Study	8
Summary	8

Chapter 2: Review of Literature and Theoretical and Conceptual Framework	11
Identity Theory	12
Involvement and Engagement Theories	16
Leadership Models	24
Social Change Model of Leadership	26
Leadership Efficacy and Leadership Confidence	29
Sophomore Experience	36
The Multi-Institutional Study of Leadership (MSL)	39
Research Gaps and the Appropriateness of This MSL Study	42
Summary	44
 Chapter 3: Methodology	 46
Rationale for Methodology	47
Research Design and Variables	48
Instrument Validity and Reliability	51
Participants and Procedures	52
Data Analysis	55
Summary	55
 Chapter 4: Results	 57
Preparation of Data for Analysis	57
Research Question 1	58
Research Question 2	64

Research Question 368
Research Question 473
Research Question 574
Research Question 677
Summary78
Chapter 5: Discussion	79
Leadership Efficacy: A Driver for Change	79
Sophomore Male Engagement	79
Gender Differences	81
Sophomore Slump	82
Leadership Development Pipeline	83
Environmental Predictors for Leadership Efficacy	85
Pre-College Predictors	85
The Call to Serve	86
Conditions for Identity Transformation	87
Implications	91
Limitations	93
Areas of Future Research	95
Conclusion	95
References	98
Appendix A: Data Analysis Procedures	117

List of Tables

Table 1.1 List of Key Terms	10
Table 2.1 The Eight Capacities within the Social Change Model	27
Table 3.1 2015 MSL National Sample by Institution Size	53
Table 3.2 2015 MSL National Sample by Institution Carnegie Classification	54
Table 3.3 2015 MSL National Sample by Institution Geographic Region	54
Table 4.1 2015 MSL Data Set Delimited	58
Table 4.2 Percentages of Involvement in MSL-Identified Campus Experiences by Class and Gender	59
Table 4.3 Percentages of Involvement in MSL-Identified Campus Organizations by Class and Gender	60
Table 4.4 Percentages of Involvement in MSL-Identified Campus Leadership Activities by Class and Gender	64
Table 4.5 Overall Leadership Efficacy Outcome Mean Scores and Standard Deviations by Class and Gender Subgroups	65
Table 4.6 Distribution of Sophomore Male Leadership Efficacy Mean Scores	67
Table 4.7 Sophomore Male Leadership Efficacy Mean Scores by Participation in MSL-Identified Campus Experiences	70
Table 4.8 Sophomore Male Leadership Efficacy Mean Scores by Participation in MSL-Identified Campus Organizations	72

Table 4.9 Sophomore Male Leadership Efficacy Mean Scores by Participation in MSL-Identified Campus Leadership Experiences	74
Table 4.10 Sophomore Male Leadership Efficacy Mean Scores by MSL-Identified Pre-College Leadership Characteristics	76
Table 4.11 Sophomore Male Leadership Efficacy Mean Scores by MSL-Identified Pre-College Experiences	76
Table 4.12 Sophomore Male Pearson Correlations between Leadership Efficacy and Key MSL Constructs	77

List of Figures

Figure 2.1 Overview of Theoretical and Conceptual Framework	11
Figure 2.2 Social Change Model of Leadership	28
Figure 4.1 Leadership Efficacy Interaction between Class and Gender	66

Chapter 1: Introduction

College Student Retention

College degrees are valuable. Compared to those without degrees, college graduates earn more considerably more over their lifetime, have a wider range of career opportunities, experience lower unemployment rates, have better health, more successful marriages, and greater civic participation (Rose, 2013). Despite a growing undergraduate population, at least half of all college students in the United States will leave college without obtaining a degree. Only 54.4% of all undergraduates enrolled full-time at four-year institutions graduate in six years and the graduation rate drops to 45% for part-time students (NCES, 2014).

One of the most widely researched topics in American higher education over the past 40 years is the concept of college student retention (Berger, Ramirez, & Lyons, 2012). Much time and effort is dedicated to the search to learn why some students stay and others leave (Tinto, 2012). The answers to those questions are significant to educators, policy makers, and influential stakeholders throughout the education profession because of the collective impact of those individual decisions. A decision to leave college impacts the student, the institution, and the society (Habley, Bloom, & Robbins, 2012).

Retention ultimately is about success or failure (Braxton, Hirschy, & McClendon, 2004; Habley et al., 2012; Seidman, 2012; Tinto, 2012). When a student earns a degree everyone benefits from that success. When a student fails to complete their attempted degree, there are costs, and there is enough blame to go around for

everyone involved. As the demographics of the United States change, the supply of students to American colleges and universities shift, and the need to manage enrollments increases (Berger et al., 2012). Thus, institutions of higher education are investing time, energy, and money in understanding their students, specifically their unique characteristics, needs, behaviors, and learning capacities. They are dedicating more and more resources to intervention programs and services to prevent students from falling behind or leaving (Tinto, 2012).

Gender Differences

While there are a number of enrollment pipeline leaks in higher education that can be explored, a variety of college student gender studies have identified and explained how males and females differ in educational settings, and many conclude that a gender gap has emerged in higher education (Sax, 2008). “More women are going to college today than they did a decade ago and the percentage of men attending college is decreasing relative to women” (Adebayo, 2008, p. 232). Some authors are even arguing that American private colleges have quietly begun to practice affirmative action for men, lowering admission standards to prevent an even more dramatic gender imbalance (Malveaux, 2005; Rosin, 2012). Regardless of these assertions, men and women do behave and develop differently in college environments once enrolled (Kezar & Moriarty, 2000). Women are more likely than men to seek support, guidance, and feedback from faculty and gain self-confidence and well-being in the process (Sax, 2009).

For example, in a study of how leadership efficacy mitigates basic need satisfaction and motivation to lead others, Cho, Harrist, Steele, and Murn (2015) found that male students scored higher in measures of motivation to lead and leadership efficacy when there were extrinsic rewards offered for their participation; whereas female students were more motivated and confident in their leadership when they were intrinsically inclined to be involved. Schaller (2010) reported the selection of majors continues to be influenced by gender. While sophomore women were influenced by specific career paths (education, health, humanities) and long range goals to become a certain type of professional, sophomore men were more prone to meander among majors unless it is business. Schaller (2010) also found that men seemed to be under tremendous pressure to be successful and that this pressure affects their selection of majors and career plans, and subsequently, attrition rates.

Sophomore Slump

Confounding matters is the *sophomore slump*. It is generally accepted that colleges and universities define sophomores as second year students (Gahagan, 2009; Gahagan & Hunter, 2008; Hunter et al., 2010; Schreiner & Pattengale, 2000; Tobolowsky & Cox, 2007). Researchers have attempted to describe the phenomenon called the *sophomore slump*, where sophomore students become disengaged academically and express general dissatisfaction with their overall college experience (Fox, 2014; Gahagan, 2009; Lemons & Richmond, 1987; Lindholm, 2010; Sanchez-Leguinel, 2008; Schreiner & Pattengale, 2000). Difficult to define, Kennedy and Upcraft (2010) describe the sophomore slump as a unique, generally negative

academic experience characterized by a decline in academic performance and a number of problems mashed together: identity crisis, developmental confusion, lack of motivation, and unhealthy relationship issues which contribute to an overall dissatisfaction with the college experience. When students, particularly the males, are feeling adrift between the strong institutional supports they received during their first year of college and the disciplinary focus of their junior and seniors years, they can become unmotivated and disengaged (Kennedy & Upcraft, 2010). Kennedy and Upcraft (2010) also assert that while sophomores are slumping, they may face a number of interpersonal conflicts with their peers as they become dissatisfied with their experience. One significant way that college administrators are attempting to build more positive interpersonal relationships and address unsatisfactory attrition rates is to engage students in leadership opportunities (Kezar & Moriarty, 2000).

Leadership Development

Leadership matters as it moves people to respond to challenges and change. According to Kouzes and Posner (2014), “Leadership is important in every sector, every school, every community, and in every country” (p. xvii). Student leadership has become an increasingly important and desirable outcome for colleges and universities (Astin, 2000; Guthrie & Osteen, 2012; Komives, Dugan, Owen, Slack, & Wagner, 2011). “Pleas for leadership have become frequent and repeated,” said Kezar, Carducci, and Contreras-McGavin (2006, p. ix). Many institutions of higher education assert in their mission statements that their purpose is to build student leadership skills and capacities, to increase responsible civic participation, and to

create life-long learners (Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001); however, the specifics for how leadership programs should be designed are not clear (Osteen & Coburn, 2012) and “inattention to leadership efficacy can lead to developmental thresholds in which students fail to continue growth” (Dugan, 2012, p. 93). As a result, many undergraduate college students do not have the confidence to identify as leaders, let alone the confidence to engage in substantive leadership roles in their communities. They have a lower leadership efficacy than expected or desired.

Although there is substantive research on different leadership models and frameworks (Kezar et al., 2006), desirable leadership qualities and capacities (Guthrie & Osteen, 2012; Sashkin & Sashkin, 2003), the diversity of leadership styles (Goleman, 2011), and how different contexts and paradigms affect leader decision-making (Komives, Lucas, & McMahon, 2013), what is not well known is what environmental and experiential factors predict leadership efficacy, particularly for sophomore males. If higher education institutions could begin to address with clarity the individual and institutional factors influencing leader efficacy, “the ability to enhance leadership development and the preparation of civically engaged citizens would increase dramatically” (Dugan, 2015, p. 9).

Increasing retention rates can be a complex endeavor for college educators. Habley et al., (2012) concluded that one of the key interpersonal factors that lead to persistence in college is confidence, which “is a natural outcome that occurs at the confluence of cognitive skills and interpersonal abilities” (p. 394). When students, particularly sophomore males, have greater leadership efficacy, they are more likely to

build positive relationships with their peers, to work well in teams, to set realistic goals, and to have the confidence to address challenges they face. Students with confidence have the ability to assess their strengths and weaknesses, to make improvements for future learning, and thus have the capacity to learn more (Goos & Hughes, 2010).

Overview of the Study

This study will add to the scholarship addressing the sophomore slump by learning more about sophomore males and analyzing their engagement with the college environment, specifically with leadership experiences. Using the 2015 Multi-Institutional Study of Leadership (MSL), this study will explore ways in which colleges and universities can bolster sophomore male leadership efficacy by examining how it is different from other subgroups and by identifying what experiences and characteristics predict higher leadership efficacy mean scores.

Purpose Statement

The purpose of this quantitative study is to investigate which environmental factors predict leader efficacy amongst traditional-aged undergraduate sophomore males and to discover if a significant relationship exists among consciousness of self, leader capacities, and efficacy. The specific research questions are:

1. How are traditional-aged sophomore males participating and engaging within the life of the campus, including specific types of MSL-identified experiences (e.g., campus jobs, community service, living on campus, student clubs and organizations, intercollegiate athletics, formal leadership

development programs, faith-sharing, mentoring relationships, socio-cultural conversations, academic research) and what is the extent of their involvement?

2. Do sophomore male leadership efficacy mean scores differ from other subsets of male and female students (e.g. freshman male, junior male, senior male, freshman female, sophomore female, junior female, and senior female)?
3. Does sophomore male involvement in particular MSL-identified campus environments (e.g., living on campus, campus jobs, off-campus organizations, academic departments, identity-based student organizations, ROTC programs, etc.) predict significant differences in leadership efficacy?
4. Does sophomore male involvement in MSL-identified campus leadership experiences (e.g., enrolling in a leadership certificate program, serving in a leadership position on campus, participating in community service, etc.) predict significant differences in leadership efficacy?
5. What particular MSL-identified pre-college student characteristics predict significant differences in sophomore male leadership efficacy?
6. Are there significant relationships for sophomore males between the MSL constructs of consciousness of self and leadership efficacy and the leadership capacities of motivation to lead, resiliency, hope, and social-perspective-taking?

Significance of the Study

This research will focus attention on traditional-aged sophomore male college students, a population that has received little attention from academic researchers (Hunter et al., 2010; Tobolowsky & Cox, 2007). Sophomore males can provide unique challenges for student affairs professionals who are attempting to help them learn and grow (Schreiner & Pattengale, 2000; Tobolowsky & Cox, 2007). To respond to the slumping sophomores, college educators examine the different environmental and conditional effects of college on different populations (Pascarella & Terenzini, 2005) and attempt to increase satisfaction and engagement by encouraging students to develop a psycho-social sense of purpose (Hunter et al., 2010; Schreiner & Pattengale, 2000; Tobolowsky & Cox, 2007). This study examines how sophomore males are involved and if there are particular factors that promote leadership efficacy. This information would assist student affairs professionals in proactively designing campus environments and practical experiences that can help sophomore male students not only persist to degree completion, but also self-identify as leaders and build confidence to act as leaders. These educational frameworks can be “especially important for helping sophomores make meaning of their college experience” (Hunter et al., 2010, p. 206).

Summary

In this chapter, the topic of leadership efficacy in college students and why it matters was introduced, the purpose of the research and primary research questions were defined, and the significance of the study was described. In order to address

national calls for leadership at the undergraduate level, an investigation into what environmental factors predict leadership efficacy is warranted. As sophomore males are identified as a sub-group where leadership efficacy may be low and as there is relatively little research on sophomore males, this is an appropriate sub-group for the study. In the next chapter, the theoretical and conceptual framework for the study will be outlined and the relevant literature on the construct of leadership efficacy, identity development, and involvement and engagement theories as they pertain to college-aged students will be examined. Chapter 3 will outline the specific quantitative methods for the study, the rationale for the proposed methodology used to address the educational research questions, including the research design that informed the research questions and hypotheses, use of a specific research instrument, population and sample, and data analysis strategies and procedures. The results of the quantitative tests for each research question will be discussed in chapter 4, and the importance, implications, and limitations of the study will be discussed in chapter 5. Table 1.1 outlines and defines key terms that will be used in the study.

Table 1.1.

List of Key Terms

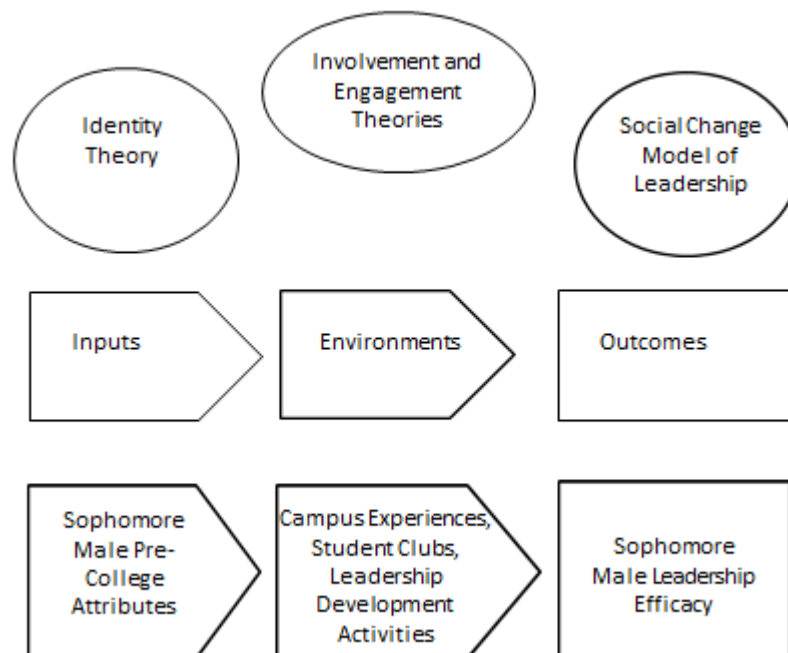
Term	Definition
Campus Climate*	The degree to which members of the campus community feel connected and appreciated, measured by sense of belonging and sense of supportive environment
Confidence	Perception of competence
Consciousness of Self*	Being self-aware of the beliefs, values, attitudes, and emotions that motivate action
Hope*	Capacity to generate and initiate action toward and sustain necessary motivation for accomplishing goals
Leader Efficacy*	Internal beliefs in the likelihood of being successful in leadership
Leadership	Intentional process of inviting others to join together to address vital needs and goals within their relationships and communities
Motivation to Lead*	Likelihood that a person will pursue or participate in leadership positions or processes regardless of capacity
Resiliency*	Characteristics that enable persistence and the ability to positively cope with stress
Social Change Behaviors*	Activities devoted to making a difference for the common good
Social Perspective-Taking*	Ability to take another person's point of view and infer thoughts and feelings
Sophomore Slump	Period of time, during the second year of college, in which students become disengaged academically and dissatisfied with their overall college experience
Traditional-Aged	Students, 18-22 years of age, who transition to college directly after graduating from high school
Transformation	Change in attitudes, beliefs, or behaviors that results in change in identity; learning has been described as transformative

Note. *defined by 2015 MSL Report, Dugan (2015)

Chapter 2: Review of Literature and Theoretical and Conceptual Framework

The purpose of this chapter is to synthesize a review of the pertinent literature and to establish a relevant theoretical and conceptual framework for the study. As this research investigates the factors that influence leadership efficacy and the transformation for college student sophomore males to confidently identifying as leaders, Figure 2.1 graphically represents an overview of how the theoretical and conceptual frameworks that guide the study codify that process of change.

Figure 2.1. *Overview of Theoretical and Conceptual Framework*



In order to explore the Multi-Institutional Study of Leadership's construct of Leadership Efficacy, it is important to first examine Identity Theory and various involvement and engagement theories as they pertain to college-aged students. It will

next be important to review leadership models and describe why the Social Change Model of Leadership is most applicable and how it pertains to the Astin's Input-Environment-Output (I-E-O) conceptual framework of this study. The literature on the chosen subpopulation of traditional-aged sophomore will also be discussed, outlining existing empirical research on behaviors and educational environments that promote leadership development. Finally, the Multi-Institutional Study of Leadership (MSL), the instrument that will be used in this research, will be examined in detail.

Identity Theory

To understand how undergraduate college students' self-concept adapts and changes and how they take on a new identity as a leader in a group, it is important to examine both psychological and sociological perspectives on identity development. To guide educational practice, Reisser and Chickering (1993) developed **Seven Vectors** for the identity development of college students: developing competence, managing emotions, moving through autonomy to independence, developing mature interpersonal relationships, establishment of identity, developing purpose, and developing integrity. Their model was built upon the idea that college students are challenged to grow and develop throughout their college experience in a variety of environments and interactions that promote learning. Their socially constructed identity development theory can be framed as a series of stages or interrelated developmental tasks that students advance through at different rates. Although the stages build upon each other, students may or may not move through them sequentially. Development within each of the seven vectors involves cycles of

differentiation and integration as students must see the various individual parts of the whole as well as be able to put the parts back together again into the whole (Abes & Jones, 2013). Thus, the identity formation model fundamentally describes how students develop a sense of self.

The self is defined as an organized set of mental processes that forms a consciousness of one's own being and develops when the mind interacts with the environment (Stets & Burke, 2009). Stets and Burke (2009) explained the relationship between the individual and the society within their **Identity Theory**. Symbolic interaction brings order to the chaotic world. By interacting, individuals establish identity. Identity is a set of meanings comprised of roles, memberships, and personal characteristics (Stryker & Burke, 2000) that act as an agent (Stets & Burke, 2009). Different identities within a person engage in different transactions with others that essentially make the social system work. Language and symbols give meaning and form social consensus and a shared worldview.

Within their Identity Theory, Stets and Burke (2009) also define personal identities, social identities, and roles and role identities. Personal identities are unique entities that comprise an individual's own idiosyncratic attributes, qualities and characteristics. Roles are sets of expectations that guide attitudes, behavior, and goals. Role can be as general as college student or Oregonian or more specific as in Treasurer for the University of Portland's chapter of the American Society of Civil Engineers. Social identities are roles based upon membership in certain groups where some differentiation among group members exists, but the group generally conforms

to a certain prototypical set of attitudes, attributes, behaviors, characteristics, or goals. Role identities are a set of internalized meanings that relate partly to self and partly to social position. Role identities can be normative or counter normative and often apply to categories in the society or organization that the person occupies.

While Stryker and Burke (2000) and Stets and Burke (2009) both focus on linkages between identities and social structures, Stets and Burke (2009) also focus on a process of internal verification. Self-esteem requires such verification and is comprised of three components: efficacy, self-worth, and self-authenticity. Efficacy is a sense of competency and increases with verification of role identities. Self-worth is sense of being found worthy or valuable and increases with verification of group or social identities. Self-authenticity is sense of one's true self and increases with verification of personal identities.

Abes and Jones (2013) further described how a personal sense of self forms out of social interaction and is socially constructed. The self works to organize and orient within social groups. Memberships and roles help define meaning in different social experiences. Meaning making is vital to social identity (Evans, Forney, Guido, Patton, & Renn, 2010). Reflexivity is a central aspect of the self; when students receive feedback about their ideas, behavior, and performance in different roles, they are able to reflect upon themselves in order differentiate and integrate different self-concepts. This feedback is essential to growth and development of personal, social, and role identity and the formation of communities of practice where leaders can emerge.

Communities of practice are social contexts where leadership is developed and work gets accomplished (Wenger, 1998). Communities of practice are defined by three significant characteristics: mutual engagement, joint enterprise, and shared repertoire. What defines a community is participation. Interaction is required and complementary contributions create relationships. Participants are included and mutually engage in what matters. Group coherence requires negotiation and work. There may or may not be harmony within the group. Because of this, the group cannot be homogenous to flourish. Within communities of practice there is an exchange of opinions, ideas, and information. There is a differentiation of status, yet each individual can find a unique place or role within the group.

As a result of a collective process a joint enterprise is established and defined by group participants. This joint enterprise is not just a common goal, but a mutual accountability that focuses energy within a specific context. There is a mixture of submission and assertion to the group from different individuals and agreements are continually negotiated as individuals respond to conditions that affect the whole. Thus, the joint enterprise is hard to define, always evolving, and open to interpretation.

The process of mutual engagement and the creation of a joint enterprise generate a shared repertoire. The group creates resources for negotiating meaning such as words or acronyms, symbols or gestures, ways of doing or routines, stories, tools, actions, concepts, etc. The shared repertoire is dynamic and inherently ambiguous as the history of mutual engagement is different for each participant and unpredictable. Thus, group members must constantly resolve mismatched

interpretations of their shared resources and meanings. This is important because, “membership in a community of practice translates into an identity as a form of competence” (Wenger, 1998, p. 153).

Involvement and Engagement Theories

As theories of identity help position and shape the concepts of identity, roles, and social structures such as communities of practice, it is important to understand the particular college environment for this study. In American higher education, students are investing substantial time, energy and resources in hopes of not only getting a good job when they complete their degree, but of transforming into a new, educated person. As we know intuitively, education isn't very predictable. Martin (2007) asserted, “The radical transformations that come through education are not necessarily the outcomes of schooling and cannot be equated with simple increases in learning” (p. 6). Any process of teaching and learning cannot ignore the “*aha*” or “*light bulb*” moment discovery, and these moments can come in a variety of forms both inside and outside of the classroom. Students can be taken by surprise to a discovery of a new talent or relationship or have an emotional or passionate response to certain content and find motivation to explore a topic further. Students can also recognize truth through making connections on an issue across disciplines or group contexts.

Education is not a type of human engineering, but educators “arrange the environment so that the inherent capacities of their student can develop” (Martin, 2007, p. 7). There is a broad field of study dedicated to examining how college students develop their human potential (Evans et al., 2010). Research has examined

psychosocial identity formation and development, cognitive-structural development or ways of knowing, reflective judgment, moral reasoning, typology theories, and experiential and change theories as they apply to the traditional college student group, ages 18-22. In addition, gender studies have identified and explained how males' and females' performance differs in educational settings (Sax, 2008).

In a results-oriented climate where standards and accountability are at the forefront of discussions regarding the performance of higher education, much energy has been invested into the improvement of student persistence, retention, and completion rates. The statistics show striking gender differences in performance. Women have made dramatic gains in the past 50 years in higher education, exceeding males in enrollments, retention rates and graduation rates (Astin & Oseguera, 2012; Habley et al., 2012; Sax, 2008). While men are performing at a deficit level, their self-perception does not reflect this fact as they have measurably more confidence in themselves than their female counterparts. Women underestimate their abilities and performance, while males overestimate their abilities and performance (Shipman & Kay, 2014). The gender gap extends to political and social attitudes. For example, "men are more likely than women to believe that racial discrimination is no longer a major problem in America, a finding consistent with their lower overall commitment to promoting racial understanding" (Sax, 2008, p. 47).

Traditionally, college-aged women are more engaged in their learning outside of the classroom and make fewer poor choices when it comes to their behavior in college environments. Meanwhile, male students are falling behind academically, less

engaged in leadership and service opportunities outside of the classroom, and consistently making poorer choices when it comes to time management, alcohol, drug use, and sexual behavior. One significant concern is how men continue to misunderstand masculinity and perpetuate certain gender-stereotyped patterns of behavior in rituals of drinking, hazing, and other behaviors found and celebrated in the 1978 film *National Lampoon's Animal House* (Cross, 2008). Male forms of entertainment often championed by popular culture revolve around sports, machines, and weapons. Much of this male-oriented entertainment also continues to promote a misogynistic, sexist view of our culture, where women are viewed as sex objects to be owned, won, or used and discarded. This perpetuates what **Connell's Hegemonic Masculinity** (Connell & Messerschmidt, 2005) identifies as practices that guarantee the dominant social position of men over women. The adjective hegemonic refers to the cultural dynamics to which a social group claims and sustains power in the social hierarchy. Conceptually, hegemonic masculinity represents a middle-class, white, heterosexual, culturally idealized form of manhood concerned with wealth, status, and power. The ideals of manhood espoused by the dominant masculinity shape behavior and suggest a number of characteristics that men are encouraged to internalize, including courage, toughness (often leading to aggression and violence), stoicism or emotional restraint, competitiveness, risk-taking, adventure and thrill-seeking, achievement, and ultimately success on a variety of levels (Connell & Messerschmidt, 2005). Connell and Messerschmidt (2005) argue these characteristics contribute to a

form of hyper-masculinity that prevents change, represses learning, and constrains emotional growth.

Within the profession of student affairs, it is difficult for practitioners to contribute to improving male student academic and social performance when students are stopping out or dropping out altogether. With the large amount of time, attention, and resources dedicated to the college selection process, one might think that students, with parental guidance and support, will intentionally select the “*right*” institution for them. Yet, retention is still a prevailing issue in higher education today (Braxton, 2000; Habley et al., 2012; Hagedorn, 2012; Milem & Berger, 1997; Mortenson, 2012; Seidman, 2012; Tinto, 2012; Webster & Showers, 2011).

Consequently, across the nation, many colleges and universities have formed retention task forces or other committees similarly focused on exploring the data on student persistence. **Tinto’s Interactionalist Theory of Departure** (Tinto, 1993) identifies three major sources of student departure: academic difficulties, the inability of individuals to resolve their educational and occupational goals, and their failure to become or remain incorporated in the intellectual and social life of the institution. Tinto's retention model states that, to persist, students need to be firmly integrated into formal and informal academic systems and formal and informal social systems (Tinto, 1993).

For Tinto, formal academic systems refer to a student’s overall academic performance, selection of major and related courses of study, accessing tutoring resources, research project, class presentations, etc. Informal academic systems would

include a variety of loosely defined faculty/staff interactions such as visiting a professor during his or her office hours, discussing with professors internship or practicum opportunities, participating in study groups or online course management platforms such as Moodle or Blackboard. According to Tinto, formal social systems would include college-sponsored extracurricular activities such as student government, recognized clubs or campus organizations as well as residence hall activities, campus ministry retreats, service learning immersions, intramurals and outdoor pursuits programs. Informal social systems might include time spent in peer groups socializing and participating in a variety of activities not sponsored by the university. For example, a group of friends decide to take a day trip together to the beach or go into the city for dinner and a comedy show. Revisions to Tinto's Theory of Departure (Braxton et al., 2004) have included the impact of organizational characteristics and environmental attributes upon interactions, the impact of student preparedness and ethnic diversity, and more clear definitions of factors that constitute social integration.

Because formal and informal social systems impact persistence and performance for men, this study will examine more closely various cultural and environmental factors that influence males decisions to engage and contribute to the community through leadership activities. If male students are more likely to depart when they are not socially integrated, it is important to examine how students are best integrated through a variety of formal and informal opportunities and activities such as peer interest groups, orientation programs, residence hall communities, student clubs

and organizations, experiential learning or immersion programs, spirit activities, and sports.

Astin's Student Involvement Theory (Astin, 1999) explains how student involvement in extracurricular and co-curricular activities has a positive correlation with retention and academic success. Astin (1993) uses an **Input-Environment-Output (I-E-O) model** which follows a natural progression of a student through the college experience (Fincher, 2008) and serves as a conceptual framework for the study. Students, with a wide variety of pre-existing opportunities, experiences, attributes, identities, memberships, and conditions are the input. These pre-college differences can have a significant impact on how a particular student engages with the environment and sets the unique stage for the college experience. In fact, the model was created upon the premise that outcomes cannot be measured or interpreted until the effects of pre-existing conditions have first been controlled (Lim, 2015). For example, pre-existing knowledge such as SAT scores or high school G.P.A. or demographics such as parental income or gender may be contributing to measured outcomes. The environment consists of all of the involving factors and experiential components that impact the student experience. Astin (1993) describes “environmental variables might also be referred to as treatments, means, or educational experiences, practices, programs, or interventions” (p. 18). A changed student is the output or outcome that educators attempt to measure as a result of involvement with the environment. Thus, using the I-E-O model allows researchers to explore the predictions of environmental variables on desired outcomes (Lim, 2015).

To describe the core concepts of his theory, Astin created five basic assumptions about involvement. First, he argues that involvement requires an investment of psychological and physical energy. Students need to set aside time and dedicate effort to be involved. Second, involvement is continuous while the amount of energy invested may vary. Involvement refers to behavior, or what the student does, rather than the student's thoughts or feelings. Patterns of starting and stopping or ricocheting between opportunities without actually sticking with any of them can thwart involvement. Third, aspects of involvement can be measured qualitatively or quantitatively as they are behavioral. This measurement can be in the form of units of attendance to positions held to work performed. It can be about how many times a student did something to the degree of seriousness for which they approached it. Next, what a student gains developmentally from involvement is directly proportional to the extent to which they are involved. As involvement increases, so does learning. Lastly, academic performance is positively correlated with involvement. The more students are involved outside the classroom, and the more engaged they are with their institution, the better they perform inside the classroom.

Out of Astin's research came the concept of "involving colleges." Kuh (1991) defined involving colleges as institutions that actively and intentionally impact the culture of their campus through the implementation of strategies for maximizing involvement. Colleges identified as involving or engaging colleges by Kuh and his colleagues are seen as positive benchmarks for identifying and utilizing best practices that increase retention rates (Kuh, Kinzie, Schuh, & Whitt, 2005).

Thus, involvement in peer social groups and extracurricular activities is a pathway for students to integrate socially and perform better academically. Using **Vygotsky's Sociocultural Learning Theory** (Hausfather, 1996) and Identity Theory (Stets & Burke, 2009), educators more clearly see a larger context: learning itself is not an individual process, but fundamentally a social and cultural process achieved through social interactions and activities. When learners participate in group activities and internalize the effects of working together, they learn more about themselves and acquire new strategies and knowledge of the world and their culture. They also can form what Wenger (1998) called communities of practice. Within this sociocultural context, Vygotsky and other researchers that followed examined the relationship between learning and development (Smidt, 2009). They suggested learning is distinct from development, but not separate. In an interdependent way, learning awakens a variety of internal development processes that are only operable in environments where there is interaction with peers.

If learning is a social process and development is interdependent upon it, then learning can be best maximized when students become more involved and engaged. This is what involving colleges do best. It is important to note that what students become involved and engaged with matters, and perceptions can impact outcomes. For instance, what students perceive their peers to be doing can overshadow what is actually happening behaviorally within the campus population. Involving colleges and universities aspire to retain students by engaging them in the social life of the campus (Kuh, 1991). Educators then work to arrange the social environment, with special

attention paid with respect to gender differences, for students to easily connect with their peers, knowing that this will positively impact their learning.

While these student involvement and engagement theories offer a solid framework for college student success, and Astin's I-E-O conceptual framework provides pathways for research, questions remain about the specific environmental factors that promote and positively influence that success and subsequent leadership behaviors. For instance, males seem to learn better in learner-centered environments where there are fewer constraints on space (e.g., the layout of a typical college classroom) and using tools other than books and paper (Kellom & Groth, 2010). Males also seem to learn better when they have more control over content, sequence and pace of their learning, and this learning appears to be effective without the loss of learner satisfaction (Heidelberg, 2008).

Leadership Models

A significant way that colleges and universities promote involvement and engagement and identity development is through student leadership instruction (Komives et al., 2011). Leadership activities are known to stimulate developmental outcomes (Cress et al., 2001). Kouzes and Posner (2014) contend that leadership development is self-development, while Sashkin and Sashkin (2003) assert that leadership development is also character development. Due to the desirable merits of leadership development, over the years a variety of leadership development models have emerged (Kezar et al., 2006; Komives et al., 2011; Komives et al., 2013):

- Charismatic or Great Man

- Situational or Life Cycle
- Servant
- Transformational/Transformative
- Transactional
- Relational
- Distributed
- Team Leadership.

While there is some noticeable overlap amongst the various leadership models, for the purposes of this study, the relational model has the best application. This model conceptualizes the roles of leaders and followers in a new way. Leadership is an outcome of people working together to accomplish positive change (Komives et al., 2013). Leaders are no longer seen only from a hierarchical paradigm. Where conventional leaders may consolidate power and influence, relational leaders work to flatten hierarchies, distribute power, and collaborate to accomplish their goals. Followers are no longer viewed as those who are merely compliant with the directions of leaders but are reconsidered as competent co-creators and are empowered to practice leadership. Consequently, followers are redefined as colleagues, collaborators, associates, and partners, each with unique strengths and perspectives to bring to the group.

Social Change Model of Leadership

The **Social Change Model of Leadership** was developed by Helen and Alexander Astin and members of the Higher Education Leadership Institute at UCLA (Astin, Astin, & Higher Education Research Institute, 1996) through a grant from the Eisenhower Leadership Development program of the US Department of Education. Since its development the Social Change Model of Leadership has become one of the most widely used leadership models on college campuses (Beazley, 2013). This relational model combines transformational change and character development. It is based upon the notion that developing leadership stimulates transformational and exponential growth for students to become change agents (Astin, 2000) where collaborative relationships lead to collective action (Astin et al., 1996). The researchers began their work with six key assumptions:

- 1) Leadership is concerned with affecting change on behalf of others and society;
- 2) Leadership is collaborative;
- 3) Leadership is a process rather than a position;
- 4) Leadership should be value-based;
- 5) All students (not just those who hold formal leadership positions) are potential leaders; and,
- 6) Service is a powerful vehicle for developing students' leadership skills.

The specific leadership development values or constructs identified in the Social Change Model of Leadership Development as listed in Table 2.1 are often referred to

as the Seven C's: consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, and citizenship (Gerhardt, 2008).

Because it is the value "hub" which gives meaning and purpose to the other seven, change is sometimes identified as the Eighth C.

Table 2.1

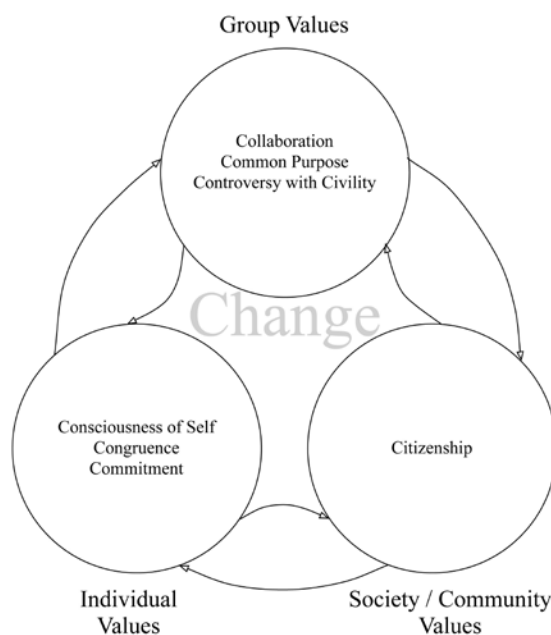
The Eight Capacities Within the Social Change Model.

Capacity	Description
Consciousness of Self	One's awareness of the beliefs, values, attitudes, and emotions that motivate action
Congruence	One's ability to think, feel, and behave with consistency.
Commitment	The psychic energy that motivates one to serve, even during challenging times
Collaboration	The capacity to work with others in a group effort.
Common Purpose	The capacity to construct shared aims and values with others.
Controversy with Civility	One's ability to recognize that differences in viewpoint are inevitable, and then to navigate respectful solutions to those differences.
Citizenship	The capacity to become responsibly connected to one's community.
Change	The capacity for positive impact on a group and the larger society.

Note: Adapted from *Higher Education Research Institute (1996)*.

The model's two primary goals are to facilitate positive social change and to assist students in their leadership self-knowledge and competence (Chowdhry, 2011; Gerhardt, 2008). The model as depicted in Figure 2.2 focuses on leadership as a collaborative process that promotes social change and considers three non-hierarchical perspectives of leadership (Bonnet, 2008): the individual comprised of the constructs of consciousness of self, congruence, and commitment; the group comprised of the constructs of collaboration, common purpose, and controversy with civility; and the society or community represented by the construct of citizenship (Astin et al., 1996).

Figure 2.2. *Social Change Model of Leadership* (Dugan, 2015)



Beazley (2013) asserts, “As a result of the increasing amount of research conducted with this model as the theoretical framework, scholars and practitioners have a better understanding of college student leadership, but there remain questions

related to how students develop the leadership capacities described in the Seven C's" (p. 32). Hogendorp (2012) summarizes the advantages and limitations of using the Social Change Model of Leadership as a theoretical framework. The advantages are the model's applicability to the higher education, ability to address diverse developmental needs of college students, recognition that both curricular and co-curricular programs provide opportunities for leadership development, promotion of a process for change, and the ability for educators to make clear and tangible connections between theory and practice. Another advantage is that the model is inclusive of all students. It assumes that everyone can exercise leadership regardless of position or role. Limitations are that students, particularly those from different cultures, might find the values of the model idealistic or incongruent with their own values and implies that everyone shares the same beliefs on what constitutes a social good. There is also an implicit understanding that change is necessary and positive. Despite these limitations, Caza and Rosch (2014) found that the Social Change Model of Leadership has been used effectively in examining the differences in leadership capacities between men and women (Dugan, 2006a; Dugan, Komives, & Segar, 2008) and in assessing what types of environments influence leadership capacities and practice (Dugan & Komives, 2010; Dugan et al., 2011).

Leadership Efficacy and Leadership Confidence

Student affairs professionals within higher education are charged with helping students develop and grow in ways that support the content-specific learning that is occurring inside the classroom, particularly in the key predictors of leadership

effectiveness: hope, resiliency, optimism, strengths ownership, and efficacy (Wisner, 2011). Leadership efficacy refers to a students' confidence in their capacity to lead (Dugan, Garland, Jacoby, & Gasiorski, 2008). One of the most common ways of accomplishing this task is to provide students with opportunities to experience and practice leadership through group projects and extracurricular activities. Komives et al. (2013) describe how leadership capacities can be learned and developed through activities that allow students to practice and build their skills.

In order to maximize leadership learning opportunities, it is important for student affairs professionals to be intentional in structuring the opportunities they offer. Cress et al. (2001) outline developmental outcomes for college students involved in leadership activities including understanding of self, ability to plan and implement programs, commitment to civic responsibility, and interest in developing the leadership of others. Involvement in leadership positively impacts personal growth, specifically increasing civic responsibility, leadership skills, multicultural awareness, knowledge of theories of leadership, and a deeper understanding of personal and societal values. In *Leadership Reconsidered*, Astin (2000) discusses that today's college students have the power to lead, and when they do exercise this power, they play an essential role in building a better society. Additionally, Astin (2000) pronounces that through the process of strengthening student leadership qualities (such as leadership efficacy), student affairs professionals stimulate never-ending transformational growth.

Because of the transformational and exponential benefits gained from college students participating in leadership activities, a number of different types of leadership development programs have emerged. In fact, researchers have been seeking a common leadership language (English & Anderson, 2005) and examining the effectiveness of different programmatic designs for over 30 years (Ritter & Brown, 1986). One of the most prevalent leadership traits is the concept of confidence (Chemers, 1997), and a common objective for many leadership development programs is the concept of increasing student leader confidence in their abilities to achieve their personal and organizational goals. According to Chemers (1997), “theorists describe a highly confident demeanor as typical of outstanding leaders” (p. 153), and such confidence may imply competence if followers infer that the confidence is evidence of mission-driven knowledge and ability.

While for Klemp (1988) confidence was more closely related to courage, the ability to stand up for one’s own beliefs, a different point of view is more prevalent today. Through examining the relationship between followers and top managers in leadership positions, Kottke, Pelletier, and Agars (2013) defined the construct of confidence through the eyes of followers and in relation to perceptions of change initiatives. If an organization is prepared for change, and its employees believe that the organization has the capacity to change, they will be confident in the direction they are receiving from their leaders. Therefore, confidence is now defined as a perception of competence which breeds certainty, trust, and reliance. Sashkin and Sashkin (2003) discussed transformational leaders and how confidence is contagious. Good leader

confidence empowers followers to increase their own competencies, become leaders themselves, and rise above performance expectations.

To increase competence and other qualities of leadership, student affairs professionals strive to enhance students' capacities for leadership (Dugan & Komives, 2010). For Dugan and Komives (2010) and Goos and Hughes (2010), one of the most significant influences on capacity is confidence, the ability to learn or master new practices. Those who have more confidence have the capacity to learn more; those who are not confident are self-restricted in their abilities to learn. Fullan (2011) discussed how personal, professional, and organizational change requires a high level of self-confidence and that true confidence requires a sense of humility. Change leaders are learners who have the capacity to master new skills and practices and are not afraid of confronting unknown situations or complex problems. In fact, change leaders may even be excited to lead in unfamiliar circumstances (Fullan, 2011).

Shertzer and Schuh (2004) measured college student perceptions of leadership to find both empowering and constraining beliefs from involvement in leadership activities. Students who were both engaged and disengaged with leadership activities were studied. Those who served in formal leadership roles generally regarded leadership to be something done by individuals such as themselves who had positions of power and influence and who possessed a set of particular leadership qualities that made the positional leaders most suitable for the job. Those serving in leadership roles received more encouragement from educators and had greater access to opportunities, whereas the disengaged students demonstrated a lack of motivation and

consequently had fewer opportunities to lead. The disengaged students seemed to aspire less for positional leadership roles and shared how they thought introverted leaders could contribute in other ways. Confidence and other qualities such as charisma and internal motivation were identified as key factors in the success of positional and engaged leaders.

As the construct of confidence can be described as a psychological trait, Wisner (2011), using a hierarchical multiple regression model, examined a particular set of psychological strengths as predictors of effective leadership: hope, efficacy, optimism, resiliency and strengths ownership. Wisner (2011) defined the combination of predictors as psychological capital and found through regression that of these five predictors the one most closely related to effective leadership was the psychological concept of hope. Students with high levels of hope appear more self-aware, have clearer values, and confidently exhibit behaviors that are aligned with those values. Wisner (2011) recommended strengthening hope by facilitating opportunities for students to identify hope, enhance hope, bond with others who had similar sense of hope, and to remind them of hope. Efficacy and optimism were significant predictors of leadership effectiveness while resiliency and strengths ownership were not. Wisner (2011) described efficacy as “central to the exercise of human agency” (p. 358). Leaders with high leadership efficacy do not shy away from challenges. They set higher goals and have the belief they will accomplish those goals. Leaders need a higher level of confidence to inspire others to act. They also appear to choose to encourage the development of efficacy as they praise good work and recognize

publicly the accomplishments of others. The result is contagious as members of the group increase their belief that the group's goals can be accomplished. Despite these positive findings, Wisner (2011) also found that being male was a significant negative predictor of leadership effectiveness, recommending that goal-directed thoughts and behaviors are pathways to promote psychological strengths.

A variety of other strategies to increase student confidence in their leadership abilities have been studied. Arsenault (2011) conducted a case study on student leadership teams showing increases in confidence with those who participated and that student working alone with lower self-confidence had a crippling effect on performance. Spiro (2012) explored how early successes could improve student achievement and found evidence that when students experienced positive results their confidence levels increased. Furtado and Anderson (2012) studied pre-service teachers and found that personal reflection activities increased knowledge and confidence. At Texas Women's University, Dunlap and Hansen-Thomas (2011) also studied pre-service teachers and examined the process of practicing different instructional skills, determining that this active repetition, coupled with constructive feedback, increased their leadership and confidence. Fullan (2011) supported this concept of practice leads to improvement and took it further, asserting that good practice also drives theory development that can lead to innovation.

In higher education, student affairs professionals often partner with faculty to develop courses with experiential components. For example, Sorensen, Traynor, and Janke (2009) documented a pharmacy course of leadership and leading change, using

mixed didactic, experiential, and self-directed methods that increased both student knowledge and self-confidence. This study highlighted the use of a Strengths-Based instrument. Service learning opportunities have been shown to be effective in elevating student confidence. In a mixed-method study at University of Connecticut, Pierce, Havens, Poehlitz, and Ferris (2012) evaluated community nutrition service-learning programs and positive changes were found in self-reported leadership and cultural competence. One-day challenge courses have shown to be effective as well. At East Carolina University, a study by Flood, Gardner, and Cooper (2009) showed student confidence in their abilities increased, particularly in the women of the group. Through a close examination of sections of a University of Michigan MBA leadership course Toronto (2013) observed transformations in behaviors and analyzed the content of papers submitted by students, finding that when students were able to get out of their comfort zones, they built self-confidence. Toronto compiled frequency tables of change themes and discovered that an important factor in this increase in confidence was student self-reflections on questions about approaches taken to personal challenges.

At the University of Queensland, Goos and Hughes (2010) measured confidence levels in a course coordinator's ability to perform certain assessment responsibilities. They used a mapping activity and found that when participants were more experienced with the responsibilities, their confidence levels were significantly higher. Confidence levels were lower when participants were less experienced, felt more constrained in methods, and when time was limited. So, while moving subjects

out of their comfort zones may be an effective educational strategy, there may be diminishing returns to this approach, particularly when the leadership tasks involve the factors studied by Goos and Hughes: the ability to make judgements that are consistent and transparent, locating resources, developing communication plans, and providing useful feedback to others.

Kellom and Groth (2010) describe healthy and effective practices for engaging college men. Taking an interdisciplinary approach they discover that the relationship between male faith development and choices for what they wanted to do with their lives should be looked at through multiple lens: theological, psychological, sociological and gender theory. They found that in order to promote vocational discernment activities, colleges and universities needed to find ways to focus on relationship (who they are with, why they chose them, how they are treating them), and less on the particular activity (what they are doing). This allows the structure of the activity to include components that enhance relational development and to increase interpersonal vulnerability, affirmation for positive interactions, and reflection upon behaviors. Kellom and Groth (2010) assert that asking college men to delve deeper into their peer to peer relationships, contributes positively to their sense of worth and overall health.

Sophomore Experience

One noticeable characteristic of the discussion about sophomores in higher education is the persistent call for more research of their unique experience (Hunter et al., 2010; Schaller, 2010; Schreiner & Pattengale, 2000; Tobolowsky & Cox, 2007).

Schreiner (2010) describes the research on sophomore as sparse, despite the interest in addressing sophomore slump. Hunter et al. (2010) assert that retention is the primary driver for why colleges need to pay more attention to the sophomore experience. There is evidence to suggest an enrollment pipeline leak during the sophomore year (Tobolowsky & Cox, 2007). “For those who intend to complete a four-year degree, at least as many students leave after the second year as do the first year,” (Schaller, 2010, p. 16).

The transition to sophomore year can be challenging because the structures of academic support in place for first-year students on many campuses are not extended to sophomores as the focus and attention shifts to the new incoming class. Sophomores appear to not be as clear intellectually about the direction of their educational pursuits and may lose satisfaction in their efforts. Researchers describe these characteristics as contributing to the sophomore slump (Kennedy & Upcraft, 2010).

While much of the existing research focuses on the selection of an academic major field of study and career development (Hunter et al., 2010; Schaller, 2010), a review of the literature reveals there is also empirical research that indicates that out-of-classroom experiences positively influence student success (Kennedy & Upcraft, 2010; Pascarella & Terenzini, 2005). Schreiner (2010) studied sophomores at 26 institutions with her 2007 Sophomore Experiences Survey. Two thousand eight hundred fifty-six college sophomores participated in the study. Among Schreiner’s major findings was the sophomores’ satisfaction with their overall college experience

being the strongest predictor of their intent to reenroll for their junior year and to persist to graduation, followed by their perception that their college education was a worthwhile investment. Students who had higher levels of peer to peer interaction through involvement in campus activities were more likely to report higher levels of satisfaction with their overall college experience. Students who were engaged in their campus experience (participated in clubs, service projects, campus programming, etc.) perceived the sophomore year was better than the first year. Schreiner (2010) also found that engaged learning was a significant predictor of success. Schreiner advocates that colleges focus on sophomore advising and connecting present and future identities, “to help them connect their interests, values, and life goals to a future self” (p. 61). Building a sense of purpose for sophomores and increasing sophomore satisfaction in the college experience is achieved through selective involvement. So, it is not enough just to be involved. It is critical for sophomores to choose what type of involvement will connect them in meaningful ways to their peers, the institution, and their future aspirations.

Hunter et al. (2010) argued that student affairs professionals and academic advisors have a significant role to play in attending to the needs of these students. Sophomores may be discerning whether or not to continue to pursue their major field of study, and if they are unable to feel confident in their decisions, they may stop out or drop out entirely. A significant pathway to connecting students to their peers and their aspirations is through leadership development activities (Komives et al., 2013; Kouzes & Posner, 2010; Kouzes & Posner, 2014).

The Multi-Institutional Study of Leadership (MSL)

The Multi-Institutional Study of Leadership (MSL) instrument was designed by principle investigators Dr. John Dugan of Loyola University Chicago and Dr. Susan Komives of University of Maryland to study higher education's influences on leadership-related outcomes (Dugan, 2006a; Dugan, 2006b; Dugan et al., 2008). The research project has been conducted nationally in 2006, 2009, 2010, 2011, 2012, and 2015, and the instrument was derived from a revised version of the Socially Responsible Leadership Scale (Tyree, 1998). More than 150 institutions have participated. The project is currently run full-time by Dr. Dugan.

The MSL was also developed in attempt to operationalize the Social Change Model of Leadership (H. S. Astin et al., 1996) through dissertation research by Tyree (1998) at the University of Maryland under the supervision of Dr. Susan Komives. Tyree used specific steps for scale development (DeVellis, 1991). First, the phenomenon of Socially Responsible Leadership was explored. Eight latent variables or constructs were developed, and a pool of 291 individual terms was generated around the model to test the strength of each construct. The constructs explored were the Eight C's of the Social Change Model of Leadership: Consciousness of Self, Congruence, Commitment, Common Purpose, Collaboration, Controversy with Civility, Citizenship, and Change. The first seven constructs were theorized to be individual components of leadership that interact around the hub or eighth construct, change, which gives the conceptual model meaning and purpose. The terms within each were divided based upon the domains of Bloom's Taxonomy, cognitive, emotive,

and psychomotor (Adams, 2015), and then were used to develop items that would potentially be used on the instrument.

Three phases of data collection were utilized to test the validity of the constructs and to identify the strongest items for each. A rater exercise was performed to focus on content validity. Groups of experts in racial identity and cognitive development and students sorted the original 291 items into each of the eight constructs they believed it measured. Items that were clear, concise, and socially desirable were retained. Those items that were ambiguous or determined to have more than one meaning were discarded. Items were also reviewed to ensure they did not include colloquialisms, expressions, or jargon that could limit the meaning of the terms to a selection population or specific time span. Each item was also reviewed to balance for polarity to ensure that it would not bias the respondent in a positive or negative way. To eliminate cultural bias, items were written using language inclusive of multiple populations. Frequency distributions were calculated, producing 202 ordinal measurement items for which there was a high level of agreement.

Next, a pilot instrument was developed and given to 101 University of Maryland students. Likert scales were determined to be more useful than Guttman or Thurstone scales because Likert scales are used more commonly, higher reliability, and the ability to conduct statistical analyses. The length of the instrument was intentionally longer than most surveys to justify the expectation of higher reliability. To provide enough options to spread out student responses without losing the ability to discriminate between each option, a five point continuum was chosen for many of

the questions. This same instrument was given to cluster samples of 101 anonymous University of Maryland students twice, four weeks apart, to explore test-retest reliability of the instrument. Both sets of data were evaluated for internal consistency reliability using Cronbach's Alphas and construct validity using confirmatory factor analysis and the degree to which items inter-correlated with each other. These tests produced 104 items that supported the validity and reliability of the instrument.

For the final study, a larger sample was necessary. A random sample of University of Maryland students completed and returned the 104 item instrument. The response rate was 342 of 675 or 50.1%. The sample was determined through Chi Square tests to represent the population. Chronbach's Alpha tests of internal-consistency reliability produced results that 7 of the 8 constructs are likely to continually yield accurate outcomes (.77-.92). The Cronbach's Alpha for the eighth construct, Controversy with Civility was only minimally acceptable (.69), suggesting that further exploration may be warranted (Tyree, 1998). Using factor analysis and correlational analysis, there was strong support for the construct validity of the instrument. Additionally, the sum of the scores for all of the items for a single construct was correlated with each item individually to produce a correlation coefficient. All of the correlations were significant at the $p < .01$ level and r values ranged from .36 to .72 for Consciousness of Self, from .42 to .74 for Congruence, from .36 to .71 for Commitment, from .42 to .68 for Collaboration, from .28 to .70 for Common Purpose, from .27 to .56 for Controversy with Civility, from .58 to .77 for Citizenship, and from .37 to .67 for Change.

Thus, despite the limitations of having developed the instrument from a previously existing theoretical model and only testing students at one University, the final instrument was determined to be valuable for future research. Turrentine (2001) confirms that college student self-reported data on leadership topics to be generally accurate. The MSL's development also conforms to the necessary rigors of self-reported data (Umbach, 2005). Continued tests are conducted by MSL instrument administrators every three years upon the completion of each administration on a national level: 2006, 2009, 2012, and 2015. For example, following the 2012 study, the construct of Common Purpose was eliminated from the model because further confirmatory factor analysis indicated that Common Purpose did not measure a construct unique from Collaboration, and an adjusted instrument was used in 2015.

Research Gaps in Existing Literature and Appropriateness of this MSL Study

The MSL is comprised of over 400 variables, scales, and composite measures representing college student participant demographic and pre-college experiences, experiences during college, and leadership-related outcome measures. Many institutions also added custom questions. Since the instrument was developed by Tyree (1998) based upon a guidebook on the Social Change Model (H. S. Astin et al., 1996), a large amount of scholarship has already been produced. From my literature review, there have been 34 dissertations, 4 masters theses, 18 peer reviewed journal articles, and a book (Stenta & McFadden, 2015) written using the MSL as the primary research instrument to date. Journal articles have spanned a variety of respected publications focused on research and scholarship in higher education.

The MSL provides a list of inputs, environments, and outcomes used in the study congruent with Astin's I-E-O conceptual framework (Astin, 1993). The demographic and classification variables are age, gender, military status, sexual orientation, ethnic/racial background, current living arrangements, ability/disability, US citizen generational status, socio-economic status, college GPA, academic major, religious affiliation, transfer status, full or part-time enrollment, class year, and political views. The pre-college experiences surveyed are high school involvement, involvement in community organizations, and pre-college leadership training. The pre-tests or bridges surveyed are each of the socially responsible leadership scales, cognitive skills, leadership efficacy, spirituality, social-perspective taking, capacity for social change behaviors, collective racial esteem, resiliency, and hope. Next the MSL lists a number of campus experiences (environments) that are used by the instrument as measures of involvement and interaction: breadth and depth of campus organization involvement, nature of community service involvement, participation in recreational sports, academic engagement experiences, amount of on or off-campus work experience, leadership training participation, positional leadership frequency, active members frequency, engagement in socio-cultural discussions with peers, social change behavior frequency, mentoring, and institution size. Finally, the 2015 MSL instrument contains the following outcome measures: consciousness of self, congruence, commitment, collaboration, controversy with civility, citizenship, Omnibus SRLS score, leadership efficacy, motivation to lead, growth in cognitive complexity, resiliency, hope, collective racial esteem, spirituality and meaning-

making, social perspective-taking, social change behavior frequency, and an open ended question, What does leadership mean to you? While Tyree (1998) cited that the construct of controversy with civility needed further research, reliability was found consistent across all of the scales in 2006, 2009, and 2012, and so it was determined to no longer be problematic (Dugan, 2015).

Upon review, the major research gaps pertain to age (particularly non-traditional aged students), residence students, SES, religion, GPA, academic major, academic status (transfer, full or part time), academic engagement programs other than studies abroad (e.g. internships), work experience, high school involvement and pre-college leadership training. However, there are modest gaps in class. There does not appear to be anything specific to the MSL written about traditional-aged sophomores, and this is my personal area of interest.

Summary

The theoretical framework of this study of student leadership development connects three theoretical perspectives or lens: 1) Identity Theory (Stets & Burke, 2009) which is derived from Vygotsky's Socio-Cultural Learning Theory (Hausfather, 1996) and advances the work on vectors of identity development by higher education sociologists Reisser and Chickering (1993); 2) Tinto's Interactionist Theory of Departure (Tinto, 1993; Tinto, 2007; Tinto, 2012) and Astin's Theory of Student Involvement (Astin, 1993; Astin, 1999; Astin, 2000; Astin & Oseguera, 2012) that intersect and are relevant to the college environment; and 3) the Social Change Model of Leadership (Astin et al., 1996; Dugan et al., 2008; Kezar et al., 2006; Komives et

al., 2013) which was designed to better understand leadership development and promote social change.

This chapter discussed the MSL construct of leadership efficacy and its relationship to leadership confidence, exploring the relevant empirical studies on these subjects. The MSL is an instrument developed using Astin's I-E-O conceptual framework. There is little overall research on sophomores regardless of gender, and while there are studies that have been conducted on the MSL outcome variable of leadership efficacy, there is a clear gap in the body of work using the MSL on sophomore males.

In the next chapter, the methodology of the study will be outlined, including the rationale and design for the proposed methods, the sample population, and the specific quantitative analyses which will be used in the study to address each of the research questions and hypotheses.

Chapter 3: Methodology

This chapter outlines the rationale for the methodology used to address the research questions, including the research design that informed the specific research questions, the use of the 2015 Multi-Institutional Study of Leadership (MSL) as a research instrument, population and sample, and data analysis strategies.

Colleges and universities are called to respond to the leadership needs of corporate, non-profit, and government sectors by preparing students to take on leadership roles within our diverse and complex society (Kezar et al., 2006; Kouzes & Posner, 2014). Meanwhile, colleges and universities are struggling to successfully help students complete their degrees (Habley et al., 2012; Seidman, 2012). Given financial constraints, colleges need to invest wisely in programs and services that create and sustain positive outcomes (Avolio, Avey, & Quisenberry, 2010).

This investment is particularly important because there are a number of gender gaps in persistence to graduation, academic performance, and notable differences in the ways in which male and female students experience college (Adebayo, 2008; Sax, 2009), with males completing degree programs at much lower rates. A confounding problem is the sophomore slump, a complex developmental period where second year students feel less satisfaction with their academic experience (Fox, 2014; Sanchez-Leguelinel, 2008; Wang & Kennedy-Phillips, 2013). If the sophomore slump is not addressed effectively, students may become less engaged with their college experience and decide to drop out before completing their desired degrees. These issues could be addressed by examining the factors that predict and bolster leader efficacy within the

sophomore male population. This context supports the purpose of this research and the rationale for the methodology.

Rationale for Methodology

In order to investigate leadership efficacy for sophomore males and identify significant factors that can be generalized and replicated by student affairs practitioners, a large data set with a considerable number of variables was desired. In education and other social sciences, the acquisition of such variables is most efficiently collected through survey research (Muijs, 2011). Quantitative analyses are also often used for verifying theoretical models (Creswell, 2009). As this study is based on a viable theoretical framework, a quantitative study was appropriate and justified.

Thus, the research questions of this study were investigated by conducting a non-experimental study, quantitatively analyzing a cross-section of the national MSL data set (Ary, Jacobs, & Sorensen, 2010). Astin's I-E-O conceptual framework (Astin, 1993) provides opportunity to measure behaviors quantitatively within a variety of different college environments and experiences. Constructed using the I-E-O conceptual framework, the Multi-Institutional Study of Leadership (MSL) surveys gathers data from thousands of college students at hundreds of institutions at least every three years and generates a data set that can be compared by gender, age, and numerous other factors. Thus, the MSL was an appropriate and productive tool for these measurements (Dugan et al., 2008; Dugan & Komives, 2010). The phenomenon studied by using the MSL is student self-perceptions of their identities as leaders as

well as their attitudes pertaining to social change. Demographic information regarding pre-college experiences and knowledge, and participation data was also collected for analysis and comparison.

Research Design and Variables

In a quantitative study design, the first determination is whether there is an intervention that caused a change (Morrell & Carroll, 2010). Because this non-experimental study was based upon pre-existing survey data gathered regarding student self-perception, there was not one particular intervention that will be measured, but instead, analyses of student self-reported data at one moment in time on their participation in different college environments and dimensions of their college experience. To learn more about sophomore males and their leadership efficacy, the study's design was to examine frequency counts; to compare descriptive statistics, particularly mean scores of different variables; to investigate correlational relationships; and to perform an ANOVA of different factors.

Therefore, this study involved utilizing different statistical tests to test the null hypothesis related to each of the research questions (Muijs, 2011). For example, one null hypothesis was that there are no differences for sophomore males among environmental or pre-college variables and their effect on the mean leadership efficacy score. The specific research questions are:

1. How are traditional-aged sophomore male students participating and engaging within the life of the campus, including specific types of MSL-identified experiences, and what is the extent of their involvement?

2. Do sophomore male leadership efficacy mean scores differ from other subsets of male and female students?
3. Does sophomore male involvement in particular MSL-identified campus environments predict significant differences in leadership efficacy?
4. Does sophomore male involvement in MSL-identified campus leadership experiences predict significant differences in leadership efficacy?
5. What particular MSL-identified pre-college student characteristics predict significant differences in sophomore male leadership efficacy?
6. Are there significant relationships for sophomore males between the MSL constructs of consciousness of self and leadership efficacy and the leadership capacities of motivation to lead, resiliency, hope, and social-perspective-taking?

Descriptive statistics and were used to compare mean scores between surveyed sub-populations: freshman males, freshman females, sophomore males, sophomore females, junior males, junior females, senior males, and senior females. To determine statistical significance, probability was examined with alpha level established at $\alpha=.05$. Because the national sample is a large data set, it was also useful and pragmatic to examine the practical significance level or effect size, by using Cohen's *d* (Muijs, 2011). Within the sophomore male samples, comparisons were made between those respondents who participate frequently in a variety of leadership development activities and those who do not. Significant differences found in leadership efficacy mean scores and standard deviations were analyzed by using Cohen's *d* to determine if

there was a practical difference. A two-way analysis of variance (ANOVA) was used to compare class and gender groups (freshman males, freshman females, sophomore males, sophomore females, junior males, junior females, senior males, senior females) as predictors of leadership efficacy.

For the purposes of this study, in addition to class and gender, the independent variables pertained to those environments that reflect the out-of-classroom experiences as opposed to the in-classroom academic experience such as participation in a formal leadership program, involvement in community service, internship experiences, serving in a positional role within a campus club or organization, mentoring relationships, and socio-cultural conversations with peers. The primary dependent or outcome variable analyzed was the MSL construct of leadership efficacy which is defined by social psychologists as an internal belief in one's ability to successfully engage in leadership and to exercise human agency as a leader (Bandura, 1977; Bandura, 1995).

A 39 item quasi-pre-test within the MSL, included four questions related to leadership efficacy, asking the respondents to reflect back upon their confidence levels prior to their enrollment in college. These four questions mirror the questions that make up the leadership efficacy construct:

Looking back to before you started college, how confident were you that you would be successful in college at the following:

1. Leading others
2. Organizing a group's tasks to accomplish a goal

3. Taking initiative to improve something
4. Working with a team on a group project

These questions were evaluated to determine the relationships between leadership efficacy, another MSL construct, consciousness of self, and leadership capacities including motivation to lead, resiliency, hope, and social-perspective-taking were explored.

Instrument Validity and Reliability

The 104 questions on the MSL were designed with a “four-point composite measure created using factor analytic techniques” (Kodama & Dugan, 2013, p. 188), using a continuum from *not at all confident* (1) to *very confident* (4). Items asked participants to rate the extent they would be confident in doing a number of tasks related to leadership such as the following: organizing tasks around a group’s goal, taking initiative to improve something, leading others, working with a team on a group project.

In addressing the merits of the instrument, Dugan and Komives (2010) critically discussed the use of student self-reported data and the specific conditions for which this type of survey data may be used appropriately: rigorous methodological standards, ease of participant use, ability for participants to comprehend questions, to perceive and understand the value of the study, and clarity of response options. The authors of the MSL asserted, “This study was consistent with these considerations; given the primary outcome measure underwent previous field-testing in a variety of studies as well as two pilot studies prior to data collection for this research” (p. 529).

Although utilizing hierarchical linear modeling (HLM) may not be most appropriate to consider the nestedness of students within particular institutions, Kodama and Dugan (2013) asserted that “prior research using linear modeling with this data set found that institutional-level effects were marginal and within the appropriate range for use of regression techniques” (p. 189). Cronbach’s alpha levels computed for each measured construct ranged from .89 to .91 demonstrating further evidence of internal consistency of the MSL. Continued validation tests are conducted by MSL instrument administrators every three years upon the completion of each administration on a national level: 2006, 2009, 2012, and 2015. For example, following the 2012 study, the construct of Common Purpose was eliminated from the model and an adjusted instrument was used in 2015.

Participants and Procedures

To make inferences from samples taken by the MSL, permission and the data in SPSS format was acquired from MSL administrators in October 2016 for a fee of \$500. An initial proposal submitted in August 2016 was denied. MSL administrators did not approve the acquisition of the entire data set. A revised proposal limiting the request to only the variables that would be studied was approved.

The MSL is disseminated internationally, but for the purposes of this study, a national sample was used, where participating institutions within the United States worked with their respective IRB to satisfy requirements for quality and safe human subject research such as the acquisition of informed consent and assurance of the anonymity of the data. All student participants in the national sample opted-in to the

study. Data collection was conducted entirely on-line between January 2015 and April 2015. The national sample was standardized at the 95% confidence interval with a +/- 3% margin of error (Dugan, 2015). In other words, the alpha level was set $\alpha=.05$.

Ninety-seven colleges and universities participated in the MSL in 2015.

Tables 3.1, 3.2, and 3.3 provide a breakdown of these institutions by size, Carnegie classification, and geographic region.

Table 3.1

2015 MSL National Sample by Institution Size

Institution Size	<i>n</i>	Percentage of Total
1,000-4,999 FTE undergraduates	17	17.5%
5,000-9,999 FTE undergraduates	21	21.6%
10,000-19,999 FTE undergraduates	20	20.6%
20,000 FTE undergraduates and above	35	36.1%
Did not report	4	4.1%

Note: FTE=full time equivalent.

Table 3.2

2015 MSL National Sample by Institution Carnegie Classification

Carnegie Classification	<i>n</i>	Percentage of Total
Associates	3	3.1%
Baccalaureate	10	10.3%
Master's	38	39.2%
Doctoral/Research	5	5.2%
High Research	13	13.4%
Very High Research	24	24.7%
Did not report	4	4.1%

Table 3.3

2015 MSL National Sample by Institution Geographic Region

Geographic Region	<i>n</i>	Percentage of Total
Town	8	8.2%
Suburb	20	20.6%
City	65	67.0%
Did not report	4	4.1%

Institutions that had fewer than 4,000 students provided all of the data collected. Institutions with more than 4,000 students provided a random sample of

data collected from 4,000 students. The total number of college students surveyed nationally was 311,678. Eighty-eight of these institutions were included in a national benchmark. Schools that did not provide a sample or were from Canada, Mexico, and Australia were not included. There were also a number of participants that did not complete either the consent form or the survey itself, so these instances were excluded from the national sample. From this national sample which will be the relevant cases for this study, the MSL collected completed surveys from 77,489 students and partial surveys from 19,099 students. Including partial surveys, the overall response rate was 31%. Less than half (44.3%) of the institutions who participated in the 2015 also participated in 2012. Over half (56.7%) of the participating schools were public; and less than half (39.2%) were private. About one quarter (26.8%) of the participating schools were affiliated with religious institutions.

Data Analysis

The 2015 MSL data were evaluated in this study by using IBM SPSS Statistics, Version 20, for a number of statistical techniques and procedures, including frequencies, descriptive statistics, correlations, and ANOVA. The data was delimited to create an appropriate sample for the tests and comparisons. Item by item analysis strategies aligned with each of the six research questions are listed in Appendix A.

Summary

In this chapter, the form and shape of the study were described. The proposed methodology of conducting a non-experimental study using the 2015 MSL was selected primarily on the basis of the MSL's use of Astin's I-E-O conceptual

framework. The research design of the quantitative study and both the independent and dependent variables was described and how each statistical test would be performed. These statistical tests are connected to specific, generally accepted data analysis strategies. As the MSL is a reliable and valid instrument used internationally and has been modified over time, it was selected. The range of participants was described in depth as well as the limitations to using large data sets.

The next chapter will document the specific results of this quantitative study for each research question including frequencies by class and gender, descriptive statistics related to sophomore male engagement, and correlations between variables and leadership efficacy.

Chapter 4: Results

This study examines how sophomore males are engaged in their college experience and how this engagement is different from different cross sections by class and gender of the college population. The study's aim is to determine which factors predict leadership efficacy in the sophomore male population and to determine if there are any significant relationships between leadership efficacy and other key MSL constructs for sophomore males. This chapter reports the descriptive statistics regarding the national 2015 MSL data set used in the study, and the results of statistical tests applicable for each research question.

Preparation of Data for Analysis

In order to make appropriate comparisons, certain decisions were made to delimit the 2015 MSL data. As the experiences of non-traditional aged students are different from traditional aged students, all responses given by students over the age of 25 were removed from the data set. Similarly, the experiences of transfer students are different from those students who have been enrolled continuously. Thus, the data set was restricted to only those who responded that they had begun their college experience at their current institution. As part-time students are by definition not fully engaged in their college experience, those students who indicated they were not enrolled full time were removed from the study. Table 4.1 shows the final subset of 2015 MSL data that was analyzed after these three delimiters were applied. The result of this preparation was that data from 55,385 students was used in the study. Thirty-five percent of the participants were male. Sophomores comprised 23.9% of the total

population. Table 4.1 reports the total number of surveys included in the data set by class and gender. Nearly twice the number of females as males responded to the survey. Sophomore male responses comprised 8.5% of the overall data set.

Table 4.1

2015 MSL Data Set Delimited

Class	Male	Female	Total
Freshman	5,787	10,674	16,461
Sophomore	4,694	8,526	13,220
Junior	4,276	8,066	12,342
Senior	4,741	8,621	13,362
Total	19,498	35,887	55,385

Research Question 1

How are traditional-aged sophomore male students participating and engaging within the life of the campus, including specific types of MSL-identified experiences, and what is the extent of their involvement? Tables 4.2, 4.3, and 4.4 breakdown the percentages of student involvement by class and gender over a variety of campus experiences, campus organizations, and leadership training experiences surveyed by the 2015 MSL.

Table 4.2

Percentages of Involvement in MSL-Identified Campus Experiences by Class and Gender

Involvement Category	FreF	FreM	SopF	SopM	JunF	JunM	SenF	SenM	Overall	OvF	OvM
Lived on campus	87.1	87.2	69.6	66.4	43.0	43.2	29.4	29.1	59.0	59.2	58.4
Work off campus	16.0	11.2	24.2	17.9	31.6	23.6	39.2	29.0	24.5	27.0	19.9
Work on campus	21.0	17.0	37.3	31.2	43.1	36.5	42.8	38.5	33.3	35.1	29.9
Engage in Community Service	44.8	34.8	48.9	39.6	52.2	39.3	48.1	36.6	44.4	48.2	37.4
Study Abroad	3.2	4.3	12.3	8.2	30.1	18.9	34.8	24.1	17.0	19.0	13.3
Practicum, internship, field experience	11.8	11.6	32.1	30.9	56.6	49.0	75.8	69.7	40.9	42.1	38.6
Learning community	23.3	20.5	25.4	22.3	28.2	23.3	28.2	23.3	24.9	26.3	22.3
Living-learning program	16.1	14.5	17.7	15.8	17.1	13.9	17.1	13.1	16.1	17.0	14.3
Research with a faculty member	6.5	8.9	12.1	13.3	21.0	20.9	27.0	27.4	16.4	16.0	17.1
Often performed community service	13.4	8.3	20.1	12.8	25.5	14.3	27.3	15.7	18.0	21.1	12.5
Often acted to benefit common good	15.1	13.0	20.3	15.7	22.6	17.7	26.2	19.1	19.1	20.7	16.2
Often communicated with campus or community leadership about a pressing concern	5.2	4.8	9.1	8.9	11.0	10.2	12.0	11.3	8.9	9.1	8.5
Often took action in the community to address a social problem	4.4	4.0	7.2	6.4	9.6	6.8	11.0	7.6	7.2	7.8	6.1
Often worked with others to make the campus community a better place	9.3	7.2	16.3	13.5	20.7	15.3	16.6	18.8	15.4	16.7	12.8
Often acted to raise awareness about a campus, community, or global problem	7.1	4.9	8.9	6.4	17.5	10.7	19.1	12.0	12.1	13.8	8.9
Often took part in a protest rally, march, or demonstration	2.1	2.2	3.4	3.1	4.4	3.0	4.9	3.1	3.3	3.6	2.8
Often worked with others to address social inequality	5.5	4.2	9.4	6.2	10.9	7.3	13.4	7.1	8.3	9.5	6.0
Been an actively involved member in an off campus community or work-based organization	5.4	4.8	7.6	6.7	8.7	7.7	10.4	9.0	7.5	7.9	6.9

A comparison of the percentages of college student engagement in Table 4.2 reveals that whether work was on or off campus sophomore males were employed at lower rates than sophomore females. Sophomore males were slightly more prone to move off campus than sophomore females, but lived on campus at higher rates than the overall college average. Sophomore males engaged slightly more than sophomore females in research with faculty members; however, sophomore males took slightly less advantage of study abroad opportunities, practicums, learning communities, and living-learning communities.

Sophomore males reported to be less engaged in campus experiences that involve social change behaviors or community service. In fact only 12.8% of sophomore males reported to participate in community service, compared to 20.1% of sophomore females. Similarly, sophomore males acted less to raise awareness and worked less to address social inequality and make the campus a better place than their sophomore female peers.

Table 4.3

Percentages of Involvement in MSL-Identified Campus Organizations by Class and Gender

Involvement Category	FreF	FreM	SopF	SopM	JunF	JunM	SenF	SenM	Overall	OvF	OvM
Been an active member in college organizations	80.4	76.4	86.8	84.7	91.1	87.6	91.2	89.7	85.8	86.8	84.0
Organization that addresses a social or environmental problem	49.4	43.2	61.1	55.1	67.8	60.4	70.2	62.8	58.9	61.3	54.6
Organization that addresses the concerns of a specific community	42.3	38.3	53.3	48.3	59.1	53.1	61.9	54.8	51.5	53.4	48.0

Involvement Category	FreF	FreM	SopF	SopM	JunF	JunM	SenF	SenM	Overall	OvF	OvM
Academic, departmental, or professional	26.5	28.3	36.7	36.7	44.8	43.1	47.0	45.9	37.9	38.0	37.9
Arts, theater, or music	17.1	15.8	19.0	15.6	18.5	16.8	19.4	17.1	17.7	18.4	16.3
Campus wide programming	12.7	10.3	18.2	13.7	20.1	16.5	21.2	16.8	16.4	17.7	14.1
Identity-based or multicultural	15.9	10.2	19.0	12.6	19.7	13.0	20.4	13.3	16.3	18.6	12.1
International interest	14.3	11.7	18.2	14.7	20.0	15.9	20.9	16.4	16.8	18.1	14.5
Honor societies	10.4	9.3	20.0	15.6	29.1	21.6	35.1	27.3	21.1	22.8	17.9
Media	7.9	8.6	10.5	10.8	11.4	12.4	12.3	13.3	10.6	10.3	11.1
Military	1.5	6.5	1.4	5.7	1.7	7.4	1.3	6.7	3.3	1.5	6.5
New student transitions	8.2	6.8	12.9	10.9	16.3	12.2	16.9	14.1	12.4	13.2	10.8
Resident assistants	3.9	5.0	5.0	6.5	6.6	8.0	6.7	8.2	5.9	5.4	6.8
Peer helpers	8.7	8.4	16.8	14.9	22.6	17.5	25.0	22.2	16.8	17.7	15.3
Advocacy	5.4	4.1	9.0	6.3	10.6	7.0	12.1	7.4	8.0	9.0	6.1
Political	4.8	7.5	6.0	10.1	7.8	11.4	7.3	10.9	7.6	6.4	9.8
Religious	26.9	22.5	25.0	25.3	25.2	26.5	27.2	24.2	26.4	27.6	24.1
Service	24.3	14.1	31.9	20.5	35.3	22.3	36.0	23.7	27.3	31.4	19.8
Multicultural social fraternities and sororities	3.5	4.7	4.2	4.8	4.9	5.6	5.9	5.7	4.8	4.6	5.1
Social fraternities and sororities	14.7	13.8	18.0	18.2	20.2	19.6	19.1	19.4	17.7	17.8	17.5
Intercollegiate or varsity sports	14.7	22.0	16.0	21.7	16.6	24.1	17.1	23.4	18.4	16.0	22.7
Recreational	23.1	35.3	23.3	37.2	24.9	37.1	24.8	36.5	28.4	24.0	36.5
Social or special interest	21.5	19.6	23.9	21.2	25.6	23.1	25.0	24.0	23.1	23.8	21.8
Student governance	7.3	8.7	10.8	12.9	13.3	13.5	12.7	15.1	11.3	10.8	12.3
Instructor led group fitness or exercise class	50.6	19.7	58.9	25.0	65.9	30.6	70.2	34.8	48.9	60.7	27.0
Intramural sports	24.5	51.0	30.9	58.8	36.9	63.8	38.7	66.2	31.8	32.2	60.4
Open recreation	71.0	82.1	72.9	84.4	76.2	85.8	76.4	86.8	77.7	73.9	84.6
Outdoor adventure activities	42.8	47.8	45.0	52.4	48.3	54.0	46.8	54.4	47.8	45.5	51.9
Sports clubs	18.8	29.5	29.0	31.7	20.1	31.6	19.9	31.7	23.5	17.4	31.0

As revealed in Table 4.3, sophomore men reported participating in academic, service-related, and social interest clubs and organizations at lower rates than sophomore females in nearly all of this subset of categories surveyed by the 2015 MSL. Sophomore males did participate slightly more in student groups related to media, military, and political interests and reported they more frequently held leadership positions in residence halls than sophomore females.

The largest noticeable difference between sophomore females and sophomore males by percentages was that sophomore males were more inclined to compete, participating at much higher rates in sports-related activities, particularly recreational clubs, sports clubs, intramurals, and open recreation. Categories of campus experiences where sophomore male students were more engaged than sophomore female students:

- Intramural sports +27.9%
- Recreational +13.9
- Open recreation +11.5%
- Outdoor adventure activities +7.4%
- Intercollegiate or varsity sports +5.7%
- Military detachments +4.3%
- Political clubs and organizations +4.1%

Similarly, sophomore males participated in higher percentages in sports-related clubs and activities than the overall average of all college students. Outdoor adventure

activities also appeared to be a draw for sophomore males as over half (52.4%) reported to be participating in outdoor programs, which was higher than the overall average (47.8%) and their sophomore female counterparts (45.0%).

When compared with sophomore females, sophomore males were less inclined to perform community service or work with others on social change projects than their sophomore female peers or the average of all college students. Categories of campus experiences or student organizations where sophomore females were more engaged than sophomore males:

- Service clubs and organizations +11.4%
- Engage in community service +9.3%
- Often performed community service +7.3%
- Identity-based or multicultural clubs and organizations +6.4%
- Organization that addresses a social or environmental problem +6.0%
- Organization that addresses the concerns of a specific community +5.0%
- Often acted to benefit the common good +4.6%

Table 4.4 shows that sophomore males took leadership positions in clubs and organizations at slightly higher rates than sophomore females, despite the fact they were participating less overall. Sophomore males participated in leadership courses, leadership certificate programs, leadership majors and minors, and outdoor adventure leadership programs at slightly higher rates than the overall college student average.

Table 4.4

Percentages of Involvement in MSL-Identified Campus Leadership Activities by Class and Gender

Involvement Category	FreF	FreM	SopF	SopM	JunF	JunM	SenF	SenM	Overall	OvF	OvM
Held a leadership position in a campus organization	22.3	26.9	48.1	49.8	62.3	61.9	67.8	68.2	49.0	48.3	50.1
Leadership conference	7.9	10.0	17.4	19.5	24.7	26.0	27.7	28.7	19.3	18.7	20.4
Leadership retreat	6.9	7.7	14.4	15.9	20.9	20.4	23.2	23.2	15.9	15.8	16.2
Leadership lecture or workshop series	10.9	11.8	22.0	22.3	28.9	27.9	32.4	31.5	22.7	22.7	22.7
Positional leadership training	5.9	8.0	6.4	8.0	14.0	14.0	26.1	26.5	17.7	17.3	18.5
Leadership course	8.1	10.8	15.3	18.6	19.2	24.1	23.0	26.3	17.1	15.9	19.3
Short-term immersion	6.0	5.0	9.9	9.7	13.9	12.6	16.6	14.7	10.5	10.6	10.1
Emerging or new leaders program	5.0	6.1	9.2	10.7	12.0	13.8	12.3	14.4	9.9	9.3	10.9
Living-learning leadership program	3.5	4.7	6.3	8.1	7.6	9.6	8.1	8.8	6.7	6.2	7.6
Peer leadership educator team	2.9	4.2	7.7	9.3	11.0	11.4	11.6	12.8	8.4	7.9	9.1
Outdoor adventure leadership program	2.1	3.5	3.6	6.1	4.3	6.6	4.8	7.5	4.4	3.6	5.8
Women's leadership program	2.2	1.8	4.6	2.6	7.3	2.6	7.8	3.1	4.3	5.3	2.5
Multicultural leadership program	2.1	3.1	4.8	5.6	6.4	6.6	7.0	7.8	5.1	4.9	5.6
Leadership certificate program	3.6	4.0	6.4	7.6	8.9	9.0	8.7	8.8	6.8	6.7	7.1
Leadership capstone experience	1.0	1.7	2.0	3.1	3.1	3.3	6.1	6.4	3.1	2.4	3.5
Leadership minor	1.8	2.2	2.6	4.2	3.4	4.6	3.2	3.9	3.0	2.7	3.6
Leadership major	0.8	1.4	1.4	2.4	2.2	2.2	2.2	2.3	1.7	1.6	2.0

Research Question 2

Do sophomore male leadership efficacy mean scores differ from other subsets of male and female students? When comparing leadership efficacy scores by class and gender, a general progression is revealed: as students progress toward their degree,

their leadership efficacy mean scores increase, ranging from 2.97 to 3.27. Table 4.5 shows how male students as a group report they are slightly more confident than their female counterparts until senior year. During the senior year, the female leadership efficacy mean score overtakes the male leadership efficacy mean score, creating an interaction between the class and gender variables.

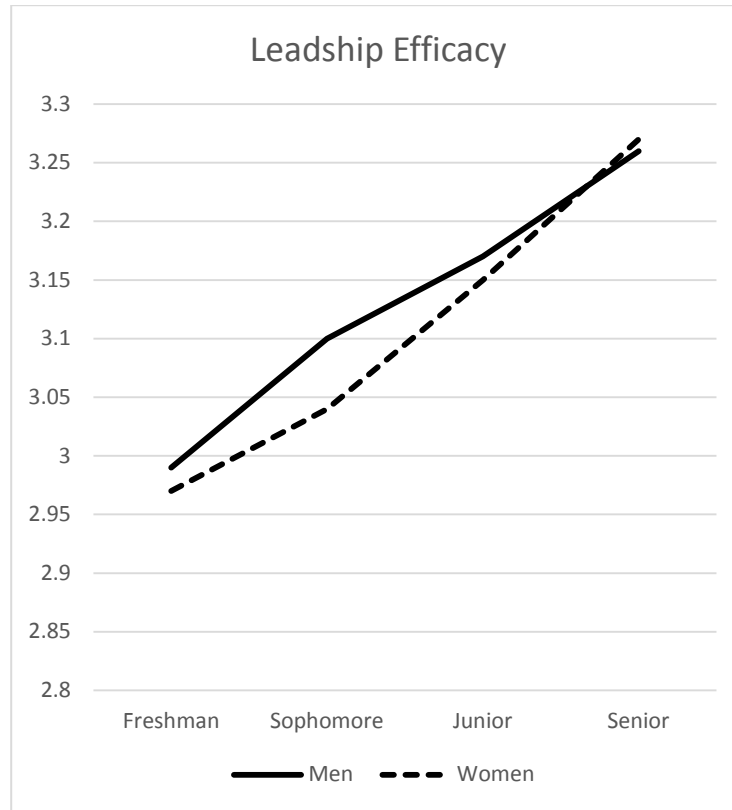
Table 4.5

Overall Leadership Efficacy Outcome Mean Scores and Standard Deviations by Class and Gender sub-groups

Student Group	<i>n</i>	<i>M</i>	<i>SD</i>
Freshman Females	10,672	2.97	.67
Freshman Males	5,784	2.99	.66
Sophomore Females	8,518	3.04	.66
Sophomore Males	4,688	3.10	.66
Junior Females	8,057	3.15	.63
Junior Males	4,270	3.17	.64
Senior Females	8,615	3.27	.61
Senior Males	4,738	3.26	.61
Overall	55,342	3.11	.66

The interaction effect is further illustrated in Figure 4.1. Sophomore male leadership efficacy does not appear to be slumping as the curve projects slightly higher during the sophomore year.

Figure 4.1

Leadership Efficacy Interaction between Class and Gender

Using the *t*-test for independent samples, a statistically significant difference was found between sophomore males and sophomore females ($t=4.86$, $df=13204$, $p<0.01$); however, a practical difference was small, Cohen's $d=.06$.

A two-way ANOVA was run to see if there were any significant differences between class and gender impacting the dependent variable leadership efficacy. The comparison produced similar results to the *t*-test for independent samples: a statistically significant difference was found among all of the groups ($p<.0.01$), with

modest predictive value (adjusted r squared=.029) and a weak effect size (partial eta squared=.029). So, while there is a difference, the practical difference is small.

Table 4.6

Distribution of Sophomore Male Leadership Efficacy Scores

Leadership Efficacy Score	n
1.00	27
1.25	28
1.50	44
1.75	66
2.00	255
2.25	251
2.50	368
2.75	428
3.00	1121
3.25	483
3.50	427
3.75	366
4.00	824

Note: N=4688.

Table 4.6 shows that the overall distribution of leadership efficacy for sophomore males appears bimodal. A similar distribution was found with each of the other subgroups. The major mode is an average of 3 on the 4 point scale for the sum of the four questions that make up the efficacy score. It is plausible that the majority

of respondents rated themselves “*confident*” on each of the four questions. The minor mode is an average of 4 on the 4 point scale, indicating that a number of students selected “*very confident*” on each of the four sub-questions. These common responses impacted the appearance of the normal curve.

Research Question 3

Does sophomore male involvement in particular MSL-identified campus environments predict significant differences in leadership efficacy? Do these environments possess any common conditions or characteristics? In order to explore the impact of particular campus environments or experiences on sophomore male leadership efficacy, it is important to understand how the leadership efficacy score differs between those students who have been a member of the campus environment or participated at different levels in the campus experience. Tables 4.7 and 4.8 breakdown the leadership efficacy scores by sophomore male involvement responses. Because of the large data set, a statistically significance difference was found ($p < .001$) for each item between those students who had the experience and those who did not. Next, differences in scores were calculated between those students had never participated and those who had participated. Cohen’s d effect sizes were calculated by comparing the difference between the mean scores and standard deviation scores of the two groups.

The results indicate that as participation increases, so does the leadership efficacy mean score for every category surveyed by the MSL. Active engagement increases leadership efficacy. The largest increases included holding a leadership

position (.61), working with others to make the campus a better place (.60), communicating with campus or community leadership about a pressing concern (.55), and performing community service (.54). Whereas, living on campus, working on or off campus, studying abroad, and participating in a living-learning program produced minimal differences in leadership efficacy.

Strong effect sizes were found for sophomore males who reported they held a leadership position (.98), worked with others to make the campus a better place (.91), communicated with campus or community leadership about a pressing concern (.91), acted to raise awareness about a campus, community, or global problem (.89), took action in the community to address a social problem (.83), and performed community service (.82).

Table 4.7

Sophomore Male Leadership Efficacy Mean Scores by Participation in MSL-Identified Campus Experiences

Involvement Category	Never/No	SD	Often/Yes	SD	Δ	Cohen's <i>d</i>
Live on campus	3.07	.66	3.11	.66	.04	.06
Work off campus	3.08	.66	3.18	.63	.10	.15
Work on campus	3.06	.67	3.18	.63	.12	.18
Engage in Community Service	3.00	.68	3.24	.60	.24	.37
Study Abroad	3.09	.66	3.15	.61	.06	.09
Practicum, internship, field experience	3.05	.67	3.21	.61	.16	.25
Learning community	3.08	.69	3.17	.62	.09	.14
Living-learning program	3.09	.66	3.14	.64	.05	.08
Research with a faculty member	3.08	.66	3.19	.61	.11	.17
Performed community service	2.85	.74	3.39	.56	.54	.82
Acted to benefit common good	2.86	.74	3.36	.58	.50	.75
Communicated with campus or community leadership about a pressing concern	2.96	.69	3.51	.51	.55	.91
Took action in the community to address a social problem	2.99	.69	3.49	.52	.50	.83
Worked with others to make the campus community a better place	2.88	.72	3.48	.53	.60	.91
Acted to raise awareness about a campus, community, or global problem	2.96	.69	3.49	.51	.53	.89
Took part in a protest rally, march, or demonstration	3.05	.67	3.47	.52	.42	.70
Worked with others to address social inequality	3.03	.68	3.48	.51	.45	.78
Been an actively involved member in an off campus community or work-based organization	3.02	.68	3.46	.56	.44	.77

Note: $p < .001$

Of the types of involvement related to student clubs and organization, moderate effect sizes were found in participation in student governance, outdoor adventure programs, and intramurals. There were either weak or small effect sizes for sophomore males who reported they lived on campus or in a living-learning program, studied abroad, or participated in identity-based or multicultural programs, or arts, theater or music programs. Participation in arts, theater, and music programs actually produced a slightly negative effect on leadership efficacy as those students who had participated had a lower mean score than those who had not participated.

Table 4.8

Sophomore Male Leadership Efficacy Mean Scores by Participation in MSL-Identified Campus Organizations

Involvement Category	Never/ No	SD	Often/ Yes	SD	Δ	Cohen's <i>d</i>
Organization that addresses a social or environmental problem	2.97	.70	3.41	.56	.44	.69
Organization that addresses the concerns of a specific community	2.98	.69	3.44	.54	.46	.74
Been an active member in college organizations	2.88	.73	3.21	.54	.33	.51
Held a leadership position in a college organization	2.92	.69	3.53	.48	.61	.98
Academic, departmental, or professional	3.04	.67	3.20	.62	.16	.25
Arts, theater, or music	3.10	.66	3.08	.65	-.02	-.03
Campus wide programming	3.07	.66	3.28	.62	.21	.33
Identity-based or multicultural	3.09	.66	3.13	.68	.04	.06
International interest	3.08	.66	3.16	.66	.06	.12
Honor societies	3.08	.66	3.19	.66	.11	.17
Media	3.08	.66	3.18	.63	.10	.15
Military	3.08	.66	3.33	.65	.25	.38
New student transitions	3.07	.66	3.26	.60	.19	.30
Resident assistants	3.09	.66	3.22	.62	.13	.20
Peer helpers	3.07	.66	3.26	.61	.19	.30
Advocacy	3.09	.66	3.24	.63	.15	.23
Political	3.08	.66	3.23	.61	.15	.24
Religious	3.07	.67	3.18	.63	.11	.17
Service	3.06	.67	3.25	.61	.19	.30
Multicultural social fraternities and sororities	3.09	.66	3.17	.68	.08	.12
Social fraternities and sororities	3.06	.67	3.23	.61	.17	.27
Intercollegiate or varsity sports	3.07	.66	3.17	.63	.10	.15
Recreational	3.05	.68	3.16	.62	.11	.17
Social or special interest	3.08	.66	3.13	.65	.05	.08
Student governance	3.06	.66	3.35	.59	.29	.46
Instructor led group fitness or exercise class	3.07	.67	3.29	.58	.22	.35
Intramural sports	3.00	.70	3.31	.60	.31	.48
Open recreation	2.91	.76	3.22	.61	.31	.45
Outdoor adventure activities	3.03	.70	3.38	.57	.35	.55
Sports clubs	3.08	.67	3.26	.59	.18	.29

Note: $p < .001$

Research Question 4

Does sophomore male involvement in MSL-identified campus leadership experiences predict significant differences in leadership efficacy? As with the results in research question three, a similar procedure was used to differentiate the leadership efficacy scores for sophomore males by those who had participated and those who had not participated in different leadership experiences. Difference scores and Cohen's *d* effect sizes were once again calculated. Table 4.9 reveals leadership efficacy increased for sophomore males as engagement increased, suggesting that more continuous or substantial involvement had more impact. The most significant change (.56) and largest effect size (1.01) was found with sophomore males who had been members of peer leadership education teams. Participation in position leadership training, leadership retreats, leadership conferences, leadership workshop series, and emerging leadership programs produced similar gains in leadership efficacy. Majoring in leadership and completing a leadership capstone projects had the smallest changes and the weakest effects amongst all of the categories.

Table 4.9

Sophomore Male Leadership Efficacy Mean Scores by Participation in MSL-Identified Campus Leadership Experiences

Involvement Category	Never/No	SD	Often/Yes	SD	Δ	Cohen's <i>d</i>
Any college leadership experience	2.99	.67	3.31	.58	.32	.51
Leadership conference	3.03	.67	3.52	.47	.49	.85
Leadership retreat	3.05	.67	3.58	.47	.53	.92
Leadership lecture or workshop series	3.02	.67	3.56	.49	.54	.92
Positional leadership training	3.03	.67	3.57	.46	.54	.94
Leadership course	3.04	.67	3.50	.51	.46	.77
Short-term immersion	3.07	.67	3.54	.44	.47	.83
Emerging or new leaders program	3.07	.67	3.56	.44	.49	.86
Living-learning leadership program	3.07	.66	3.48	.51	.41	.70
Peer leadership education team	3.07	.66	3.63	.42	.56	1.01
Outdoor adventure leadership program	3.08	.66	3.49	.61	.41	.65
Women's leadership program	3.09	.66	3.62	.50	.53	.91
Multicultural leadership program	3.08	.66	3.57	.52	.49	.82
Leadership certificate program	3.08	.66	3.30	.60	.22	.35
Leadership capstone experience	3.09	.66	3.29	.62	.20	.31
Leadership minor	3.08	.66	3.36	.57	.28	.45
Leadership major	3.09	.66	3.22	.67	.13	.20

Note: $p < .001$

Research Question 5

What particular MSL-identified pre-college student characteristics predict significant differences in sophomore male leadership efficacy? Astin's I-E-O

conceptual model calls for researchers to acknowledge that students come to college with different sets of experiences and characteristics and to examine input variables to learn if there are any pre-college impacts on educational outcomes (Astin, 1993; Lim, 2015). In order to determine if there are any pre-college characteristics that impact sophomore male leadership efficacy, it is important to examine the questions that make up the leadership efficacy scale as well as a variety of pre-college experiences and analyze mean scores, change scores, and effect sizes.

A statistically significance difference ($p < .01$) was found between the sophomore male quasi-pre-test mean score for pre-college leadership efficacy ($m = 2.89$, $SD = .70$) and sophomore male leadership efficacy ($m = 3.10$, $SD = .66$). Tables 4.10 and 4.11 indicate that pre-college leadership efficacy and leadership experience do have a significant effect on sophomore male leadership efficacy. As outlined in Table 4.10, those students who self-reported lower scores for each of the questions that comprised the leadership efficacy outcome composite in high school differed greatly from those who had self-reported higher scores. The differences in mean leadership efficacy scores from “*not confident*” to “*very confident*” resulted in a range of 1.10 to 1.19. According to Sawilowsky (2009), the effect sizes for these differences, ranging from 1.65-1.87, are described as very large to huge. Participating in leadership training in high school also had a strong effect size (1.05). Large effects were found between students who had taken positions within the community (.90), worked for social change (.86) and had taken leadership positions within clubs (.77). The smallest effect was participating in organized sports (.35).

Table 4.10

Sophomore Male Leadership Efficacy Mean Scores by MSL-Identified Pre-College Leadership Characteristics

Pre-College Characteristic Category	Not confident	SD	Very confident	SD	Δ	Cohen's <i>d</i>
Leading others	2.37	.74	3.56	.51	1.19	1.87
Organizing a group's tasks to accomplish a goal	2.38	.77	3.56	.52	1.18	1.80
Taking initiative to improve something	2.41	.77	3.51	.54	1.10	1.65
Working with a team on a group project	2.36	.76	3.49	.54	1.13	1.71

Note: $p < .001$

Table 4.11

Sophomore Male Leadership Efficacy Mean Scores by MSL-Identified Pre-College Experiences

Involvement Category	Never	SD	Very Often	SD	Δ	Cohen's <i>d</i>
Student clubs and organizations	2.96	.71	3.26	.63	.30	.45
Organized sports	2.97	.71	3.20	.62	.23	.35
Leadership positions within clubs, organizations, or organized sports	2.83	.72	3.34	.59	.51	.77
Performed community service	2.88	.72	3.32	.62	.44	.65
Participated in community or work-related organizations	2.93	.71	3.34	.60	.41	.62
Took leadership positions in community or work-related organizations	2.96	.69	3.52	.54	.56	.90
Worked with others for change to address societal problems	3.01	.68	3.53	.52	.52	.86
Participated in training or education that developed leadership skills	2.84	.72	3.51	.55	.67	1.05

Note: $p < .001$

Research Question 6

Are there significant relationships for sophomore males between the MSL constructs of consciousness of self and leadership efficacy and the leadership capacities of motivation to lead, resiliency, hope, and social-perspective-taking? When examining the relationship between two variables, researchers use a Pearson's r correlation coefficient (Muijs, 2011). Muijs (2011) stated that correlations $<+/- .1$ are considered weak or small, $<+/- .3$ are considered modest, $<+/- .5$ are considered moderate, $<+/- .8$ are considered strong, and $\geq +/- .8$ are considered very strong. Positive relationships were found between leadership efficacy and each of the pertinent variables outlined in Table 4.12.

Table 4.12

Sophomore Male Pearson Correlations between Leadership Efficacy and Key MSL Constructs

MSL Constructs	Leadership Efficacy
Consciousness of Self	.57
Hope (Agency)	.54
Hope (Pathways)	.49
Social Perspective-Taking	.30
Motivation to Lead	.53
Resilience	.55

Note. n=4688, p<.001

A moderate relationship was found between leadership efficacy and consciousness of self (.57). Moderate relationships were also found between leadership efficacy and resilience (.55), hope pathways (.49), hope agency (.54), and motivation to lead (.53). A modest relationship was found between leadership efficacy and social perspective-taking (.30).

Summary

In this chapter, the methods used to prepare the 2015 MSL data for analysis were detailed as decisions were made to further delimit the 2015 MSL sample. Next descriptive statistics were calculated for relevant categories for sophomore male participation in a variety of MSL-identified campus experiences including clubs, organizations, and leadership development activities. Leadership efficacy mean scores were calculated and compared to other class and gender subsets. Finally, a number of statistical tests were performed for each research question and the results were reported.

In chapter 5, the results reported in this chapter will be discussed and a number of implications for student affairs educators will be explored. The limitations of the study will be addressed and areas for further study will be suggested.

Chapter 5: Discussion

Leadership Efficacy: A Driver for Change

In an effort to improve college student retention and respond to national calls for leadership, student affairs professionals seek best practices to develop student leaders (Kezar et al., 2006; Komives et al., 2011; Roberts, 2007). While some student affairs professionals focus on building competencies and capacities (Dugan & Komives, 2010; Dugan et al., 2011), many are beginning to recognize that while students may be competent and capable to accomplish leadership tasks (Owen, 2012), they will not be effective as leaders if they do not see themselves as leaders (Caza & Rosch, 2014; Cho et al., 2015; Dweck, 2006; Kodama & Dugan, 2013; Leone, 2015). Thus, the work to enhance leadership efficacy, the belief that one can lead, becomes an important focus for educators (Cho et al., 2015; Early, 2014; Fincher, 2008; Stajkovic, 2006; Wilson, 2009). This study examined predictors for leadership efficacy within the traditional-aged sophomore male college population. In this chapter, the results of the study using the 2015 Multi-Institutional Study of Leadership (MSL), limitations of the study, implications for student affairs, and areas of future research will be discussed.

Sophomore Male Engagement

In order to predict sophomore male leadership efficacy effectively, it is important to understand how actively sophomore males are engaging within their respective campus cultures and to what extent they are experiencing leadership. Approximately two-thirds of traditional-aged sophomore males reported they lived on

campus. Presumably, this rate is due to the fact that many colleges participating in the population sample have two-year residency requirements. About one-third of sophomore males reported they worked on campus and only about one-fifth reported they worked off campus. Generally, sophomore males, as a population of college students, may have sufficient time to engage in extracurricular, co-curricular, and leadership development activities and live in closer proximity to such activities than juniors and seniors who move off campus at higher rates. Therefore, sophomore males are more accessible to student affairs educators than samples of upper class students.

Sophomore males appear to actively engage in sports, in outdoor physical activities, and in groups that have intellectual and spiritual components. These types of experiences could be good opportunities for student affairs practitioners to infuse leadership concepts and to establish mentoring relationships. A significant draw for sophomore male participation as shown in Table 4.3 was open recreation (84.4%), intramural sports (58.8%), and outdoor adventure activities (52.4%). A large percentage of sophomore males reported they were involved with student-run clubs and organizations (84.7%). Of the different types of organizations, sophomores most frequently were involved with recreational groups (37.2%), academic or departmental groups (36.7%), and religious groups (25.3%).

Because this study compared the rates of sophomore involvement to the involvement rates of other class and gender subgroups, a closer examination reveals that while sophomore males are engaging in a variety of extracurricular and co-

curricular activities, they were less engaged in performing community service or in service-related organizations (Tables 4.2 and 4.3). In fact, only freshman males reported less engagement in each of these categories.

Sophomore males are engaging at similar rates in leadership development activities compared to the overall college students in the sample. They are enrolling in leadership major programs of study, leadership courses, and leadership certificate programs at slightly higher rates, but these differences show small effect sizes. Educators can capitalize on sophomore male interest in leadership development by recruiting them into existing programs and finding ways to work with sophomore males on the development of new activities, perhaps related to outdoor adventure activities or sports.

Gender differences. The results of this study add to a growing body of research (Adebayo, 2008; Case, 2010; Sax, 2008; Sax, 2009; Zafar, 2013) that highlights gender differences in experiences of the college environment. In fact, a pattern of engagement emerged between the men and the woman in the study. These differences were apparent regardless of year in school. When compared, sophomore males were less inclined to perform community service or work with others on social change projects than their sophomore female peers or the average of all college students; while sophomore males were more engaged in sports-related activities. While the sophomore males were generally more drawn to recreation and sports, sophomore females were generally more interested in serving the community.

Considering that students who participated in community service related activities demonstrated greater and more practically significant difference in leadership efficacy, this appears to be a promising method of engagement for increasing sophomore male leadership efficacy. This finding implies that student affairs practitioners should consider ways to strengthen altruistic behaviors in the sophomore male population. Educators could consider more frequent invitations to service activities and ways to imbed direct service into to existing activities, to have sophomore males more actively participate in activities that benefit others.

Sophomore slump. A number of researchers have described how the sophomore slump provides academic and social challenges for educators (Fox, 2014; Gahagan & Hunter, 2008; Hunter et al., 2010; Milsom, 2015; Pierre, 2014; Sanchez-Leguelinel, 2008; Schaller, 2010), impacting retention rates and overall engagement with the college environment. This barrier is relevant to student affairs educators who are aiming to assist sophomore males in the development of their leadership identity. Gahagan and Hunter (2008) discussed how colleges and universities were paying more attention to developing leadership and extracurricular activities targeting sophomores specifically to build class unity and to increase participation. However, this study did not find evidence to support that the sophomore slump is related to engagement with extracurricular, co-curricular, or leadership development activities. Participation rates in these experiences generally increased between the freshman year and sophomore year, and then continued on a similar trajectory, increasing again between the

sophomore year and the junior year. Evidence could not be found of a decline in engagement with sophomores.

Leadership development pipeline. This research confirms the assertion by Wang and Kennedy-Phillips (2013) that “when addressing sophomore involvement, the issue of institutional commitment is of particular importance” (p. 546). On college campuses across the United States, overall student participation in leadership development activities has room for growth. While nearly half of all college students are assuming leadership positions in clubs and other peer organizations at some point in their college career, less than 20% are participating in leadership development activities such as conferences, workshops, trainings, retreats, or similar programs that could help them learn key concepts, examine their own leadership behaviors, and get constructive feedback on how to improve. For the sophomore male sample, participation rates in leadership development activities are not substantially different from the overall average for all college students. Sophomore males are participating at the same or slightly higher rates than sophomore females. While this difference shows small practical significance, this finding may suggest that sophomore males may be attracted to leadership development involvement opportunities and that colleges and universities could capitalize on this interest to increase participation and engagement.

Investing in formal pathways to increase student experiences and in developing their leadership skills and capacities is a tangible way that colleges can positively impact leadership efficacy. As Table 4.8 demonstrates, more engagement in

leadership development activities does make a positive impact in leadership efficacy. Leadership efficacy increased for sophomore males at each level of involvement, suggesting that the more continuous or substantial the involvement, the more impact the activity has on helping students see themselves as leaders. This finding aligns with Astin's Involvement Theory as Astin (1993) discussed how stops or breaks in involvement reduce commitment and thwart involvement. Astin argued that involvement required an investment of psychological and physical energy, where students must set aside time and dedicate effort to be involved. According to Astin, as involvement increases, so does learning, and if the activity is leadership development, the potential for leadership efficacy increases.

Increasing the number of opportunities for students to participate in sustainable leadership development activities would require at most institutions an investment of resources in coordination and staffing. With leaders from business, government, and industry showing substantial interest in leadership development, colleges may see leadership programs as opportunities for development and charitable giving.

The most significant difference in leadership efficacy (.56) and largest effect size (1.01) was found between sophomore males who had been members of peer leader education teams and those who had not. With proper orientation and training during the first year of college, sophomore males could get valuable leadership experience helping their peers. If colleges are to expand sophomore peer education teams, the overall number of leadership development opportunities would need to

increase freshman year or upon enrollment. The sooner students are engaged, the greater the potential for change in their leadership efficacy.

Environmental Predictors of Leadership Efficacy

This study's aim was uncover what environmental and experiential predictors exist for leadership efficacy. No differences were found between sophomore students who lived on and off campus in their reports of ability to be confident in leadership. Participation in sports also showed little difference for sophomore males. Similarly, formal academic programs did not make a notable difference in leadership efficacy, but co-curricular experiential learning through leadership programs, workshops, retreat, and other similar developmental experiences resulted in a measurable impact on leadership efficacy. These experiences may provide students with opportunities to develop a necessary sense of agency (Stewart & Darwent, 2015), the sense they can be effective in leading others.

Pre-college experience. The results show that pre-college experience with leadership makes a difference. Pre-college leadership efficacy carries over into college. Those students who came to college with a leadership *mindset*, scored higher in leadership efficacy. Sophomore male students that reported they felt confident leading others, working with a team on group projects, organizing tasks to accomplish a goal, or taking initiative to improve something while in high school, retained that confidence as college sophomores. The leadership efficacy mean scores for this group were 1.10 to 1.19 points higher than those sophomore male students who reported they did not feel that confident accomplishing those tasks and the practical significance of

those differences were found to be substantial, with a Cohen's d range from 1.65 to 1.87. Leadership efficacy did not slump or regress and this finding would seem to verify Sashkin and Sashkin's (2003) assertion that confident leaders continue to build confidence.

The results of this study (Table 4.9) demonstrate that successfully involving sophomore males in leadership development experiences in college is an effective predictor for enhancing leadership efficacy. Table 4.10 and Table 4.11 show that the need for involvement in leadership development activities is more pronounced for those sophomore male students who did not take advantage of leadership experiences in high school. Sophomore males who had taken advantage of leadership and involvement opportunities in high school scored significantly higher in leadership efficacy. The practical difference, measured by Cohen's d , was substantial for those who held leadership positions (.90), attended leadership trainings (1.05), or participated in opportunities to work for change (.86) in high school. These results indicate that improving leadership efficacy will require more effort for those students who did not take advantage of leadership experiences in high school.

The call to serve. Serving the community builds leadership efficacy. Jones and Franco (2010) argued that “faculty, administrators, advisors, and student development professionals who are committed to sophomore student success and retention would do well to consider either adopting a formal sophomore-year program or integrating service-learning opportunities during the sophomore year” (p. 162). This study provides evidence to support this argument. The impact can be more

pronounced if the involvement is continuous (Astin, 1993) and substantial.

Sophomore male students who never had been involved with working with others to make the campus community a better place had a leadership efficacy mean score of 2.88. The mean score rose to 3.48 for sophomore males who had often acted to improve their campus community (Cohen's $d=0.91$).

A primary way to learn leadership is through experiential learning which involves reflective observation (Guthrie & Jones, 2012). Community service, as a form of experiential learning, presents a successful pathway for student affairs professionals to connect sophomore males to something they value, opening up healthy feedback loops through their relationships with their peers. "When coupled with structured reflection, service-learning provides opportunities for self-authorship and meaning-making," (Jones & Franco, 2010, p. 162). As a moderate relationship was found between leadership efficacy and consciousness of self (.57), educators can potentially bolster the effectiveness of their leadership development activities in increasing leadership efficacy by intentionally embedding or integrating a service component to the experience and then inviting participants to reflect about what they have learned and what impact they made through their involvement.

Conditions for Identity Transformation

Becoming a leader is a process of internal self-discovery (Kouzes & Posner, 2010). When sophomore males better understand themselves, what they believe in, what difference they want to make in the world, their confidence grows, and this confidence increases the likelihood of the accomplishment tasks associated with

making that difference. Stewart and Darwent (2015) stated, “Students who are aware of, and can think about, their thinking are likely to be actively engaged in their learning, use more effective learning approaches and so attain greater success” (p. 44). This metacognition, the ability to observe and reflect upon their own thought processes, helps to guide and shape future action. It is difficult to fully commit to something that is not important to you. As practitioners get better at predicting sophomore male involvement patterns, work can be done to capitalize on that involvement. Student affairs educators can influence commitment by helping students to clarify their values. Then, even more importantly, student affairs educators can work to help students align their values and interests with leadership opportunities or tasks available to them within the college environment.

Student affairs educators aim to construct environments for students to persist and to maximize their learning and growth outside the classroom. This study provides some insights on how these environments can be shaped to increase leadership efficacy for sophomore males. For instance, sophomore males appear drawn to sport-related and outdoor adventure activities which only appear to elevate their collective leadership efficacy in a small effects. While peer mentorship and community service activities appear to elevate leadership efficacy. Finding those intersections of interest and altruism may be a new pathway for developing and enhancing leadership efficacy.

Colleges should also pay more attention freshman year to engage those males who did not have prior leadership training and experience as those sophomore males who had leadership training in high school had already developed a more sustainable

sense of leadership efficacy. As found in Table 4.11, the mean score for leadership difference between those who did not have prior experience (2.84) and those who did (3.51) was .67 and the effect size was large (Cohen's $d=1.05$).

The results of this study indicate that the MSL constructs of consciousness of self and leadership efficacy are positively correlated. The moderate relationship of leadership efficacy with consciousness of self ($r=.57$) may provide some evidence to support Komives et al. (2013) assertion that college student confidence in leadership increases when they are more reflective and incorporate the feedback of their peers. However, there was only a modest relationship found between leadership efficacy and social perspective taking ($r=.30$), so there may be less impact for this age group from the mental exercise of seeing the impact of their leadership from the point of view of their followers.

This research confirms Stewart and Darwent's (2015) assertion that "self-efficacy is fundamentally a belief that individuals hold about their capabilities in different areas. Such a belief can be changed" (p. 50). As found in Table 4.9, leadership efficacy increased for sophomore males at each level of participation in a wide variety of leadership development activities. Sashkin and Sashkin (2003) argued that "the way we learn confidence is by acting and succeeding. That is, we see evidence of our own success" (p. 89). Educators can create shared experiences that begin with identity development and values clarification. These experiences can provide the foundation for the discernment of projects and activities that serve the community. Student affairs professionals, faculty, and peers can reinforce a sense of

confidence by recognizing the successful achievement of leadership goals. Stewart and Darwent (2015) describe a potential compounding effect for these efforts, “Students with greater belief in their abilities, and with greater confidence in themselves, are likely to initiate more things, apply additional effort and persevere in the face of difficulty” (p.49).

Similar to Stewart and Darwent (2015), Abes and Jones (2013) stated, “There is no fixed personal sense of self,” but then added, “Individuals experience their sense of self as an act of unending creation” (p. 210). As sophomore males begin to become less satisfied academically during the sophomore year and show signs they are slumping, colleges and universities should help them focus more on how they can individually contribute to the community as a way of helping them to establish and develop of a sense of purpose that can help define their long-term vocational goals (Wang & Kennedy-Phillips, 2013).

Identity Theory declared that identity formation is tied to social interaction. Identity is a set of meanings comprised of roles, memberships, and personal characteristics (Stryker & Burke, 2000) that act as an agent (Stets & Burke, 2009). An individual’s identity as a leader comes from assuming the role of a leader within peer groups. Students accustomed to taking on leadership roles have already begun to incorporate those roles as part of their identity. Efficacy is a sense of competency and increases with verification of role identities (Stets & Burke, 2009). Similarly, Habley et al. (2012) discuss efficacy as an outcome expectation. Student with leadership efficacy expect to be leaders and to engage in leadership tasks. As found in Table

4.10, sophomore male students who were not confident in organizing a group's tasks had a leadership efficacy mean score of 2.38. The leadership efficacy mean score increased to 3.56 for those who were confident in organizing a group's tasks and this mean score difference (1.18) had a large practical effect (Cohen's $d=1.80$). Similar results were found with the ability to lead others. Those who did not feel confident in leading others had a substantially lower mean score (2.37) than those who did (3.56) and the effect size was large (Cohen's $d=1.87$)

Implications

This study adds to the growing research on the sophomore experience, particularly within the traditional-aged male population. The study set out to explore factors that impact leadership efficacy. Results of the study point to several implications for practice.

- 1) Colleges and universities should increase attention to the sophomore male experience. Sophomore males appear to be available to be more engaged in leadership development activities as two-thirds of all sophomore males live on campus and less than half are employed. Sophomore males also appear to be as interested in leadership activities as their peers and are participating more often than sophomore females in leadership conferences, retreats and courses. Wang and Kennedy-Phillips (2013) go so far as to suggest the creation of a coordinator position for the second year to promote involvement and to design positive co-curricular experiences.

- 2) As Table 4.9 demonstrates, leadership development activities and experiences predict sophomore male leadership efficacy. Peer leadership teams, positional leadership training, leadership workshop series, and leadership retreats appear to have the greatest predictive value for sophomore males. Colleges and universities need to increase their capacities for leadership development activities and find ways to engage sophomore males as continuously as possible.
- 3) The sophomore slump does not appear to be correlated to leadership efficacy or engagement in leadership development activities for sophomore males. Figure 4.1 displays how the trajectory for leadership efficacy for sophomore males did not decrease and was slightly greater than sophomore females although the practical difference was small (Cohen's $d=.06$). When sophomores males had experience in leadership in high school, then retained leadership efficacy, suggesting that leadership efficacy does not slump, dissolve, or dissipate. Sophomore males who were confident in leading others in high school reported greater leadership efficacy ($M=3.56$, $SD=.51$) than those who did not ($M=2.37$, $SD=.74$) than this difference was very large (Cohen's $d=1.87$).
- 4) While sophomore males engage nearly 10% less in community service activities than sophomore females and 5% less than the average of all colleges students, provoking a sense of altruism may be an effective way to invite sophomore males to see themselves as leaders. Those sophomore

males who reported they often performed community service had greater leadership efficacy ($M=3.39$, $SD=.56$) than those who never performed community service ($M=2.85$, $SD=.74$) and effect size was moderate to large (Cohen's $d=.82$). Similar results are found on Table 4.7 for sophomore males who communicated with campus or community leadership about a pressing concern, who took action in the community to address a social problem, who worked with others to make the campus community a better place, and who acted to raise awareness about a campus, community, or global problem. Student affairs educators should find ways to incorporate values clarification exercises that can align and connect sophomore males with their leadership interests, vocational goals, and local community service opportunities.

- 5) Sophomore males are drawn to outdoor and sports-related activities: 84.4% participate in open recreation, 58.8% participate in intramural sports, 52.4% in outdoor adventure activities, and 31.7% in sports clubs. While participating in these activities had a modest to moderate effect on leadership efficacy (Cohen's d ranges from .29 to .55), college educators could consider designing leadership development programs around these interests.

Limitations

This study had some inherent limitations. The MSL instrument was developed from a previously existing theoretical model, and the data are self-reported. While

generally accepted in educational research, results may be biased as students may anticipate the social desirability of particular results (Salkind, 2010). For example, students might rate themselves higher or lower on certain scales if they believe that the institution may receive benefit from having a higher or lower mean score. Because the survey was developed with rigorous procedures testing for reliability and validity when the study was devised, using the self-reported data is viewed as appropriate.

Because this survey collects data at a moment in time, it does not explain any long term effects or outcomes (Hogendorp, 2012). The results are only generalizable to the population of the sample. Although the sample included a national cross-section of students, there was an inherent overrepresentation of white students and a marginalization of those students who identify as gender fluid or transgender (Hogendorp, 2012). Further examination of marginalized and underrepresented populations is warranted.

With such a large data set, there was a risk for finding many statistically significant relationships and small effect sizes. Dugan, the primary administrator of the study argues that “leadership, by nature, is a fuzzy and multi-faceted concept that is difficult to measure, and so even small effect sizes may provide beneficial insights into an otherwise under-studied, atheoretical knowledge base” (Dugan, 2015, p. 6). For example, the effect sizes for sophomore males participating in leadership certificate programs (Cohen’s $d=.35$) and leadership majors (Cohen’s $d=.31$) were modest, but may still point to valuable development activities that can make a positive impact on leadership efficacy.

Areas for Further Research

This research builds upon the work of Cho et al. (2015); Dugan et al. (2011); Dugan (2011); Kodama & Dugan (2013); Kodama (2015); Leone (2015); and Wisner (2011) on leadership efficacy and provides the foundation for several future studies. An attempt could be made to replicate this work within the non-traditional, transfer, and part-time populations delimited in this study. The leadership efficacy of marginalized and underrepresented populations of sophomore males could be compared to identify differences. There should be additional work to find if there are differences in sophomore male leadership efficacy between institution types.

This study examined the relationship between consciousness of self and leadership efficacy, but also found that hope and resilience are positively correlated. A study could be conducted to learn more about the predictors of other leadership capacities assessed by the MSL.

In this study, sophomores who studied leadership efficacy more formally by majoring in the subject saw only small practical difference in leadership efficacy (Cohen's $d=.20$). More research could be conducted on why formal academic programs were not as effective as the more experiential co-curricular programs in increasing leadership efficacy.

Conclusion

Educators see an important role for leadership development activities in accomplishing their missions and retaining college students (Cress et. al, 2001) and retention is a primary driver for explorations into the sophomore experience. This

study of traditional-aged sophomore males provides clues for educators on how to design environments and experiences that foster their involvement, build peer relationships, and can lead to greater persistence rates at a time when male enrollments are decreasing. In this way, leadership development activities can serve not only programs that stimulate learning, but as prevention and intervention tools for managing male enrollments. Leadership development activities can address two of the three prongs of Tinto's Theory of Departure: the ability to resolve educational and occupational goals and the ability to remain incorporated in the academic and social life of the institution.

Wisner (2011) stated that efficacy is central to the exercise of human agency. Therefore, leadership efficacy can be a powerful driver for social integration and for change. The Social Change Model of Leadership provides a roadmap for student affairs educators interested in stimulating transformational change and character development in student leaders. Leadership is a collaborative, values-based process concerned with affecting positive change. For traditional-aged sophomore male students to become change agents, they must develop and verify their role identities (Stets & Burke, 2009) as leaders. The findings of this study offer pathways to student affairs educators to design leadership development activities that promote leadership efficacy.

While the sophomore year presents a number of challenges, community service is a predictor for sophomore male leadership efficacy and can help them find their purpose sooner (Schaller, 2010). This important discovery of meaning-making as

described by Hunter et al. (2010) can release stress and pressure by increasing satisfaction with the college experience and by creating more clear connections to vocational and career aspirations.

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Appendix A

Data Analysis Procedures

The data analysis procedures for each research question are described as follows for ease of replication. IBM SPSS Statistics, Version 20, was used to perform the statistical tests.

Research Question 1

How are traditional-aged students, particularly sophomore males, participating and engaging within the life of the campus, including specific types of experiences and what is the extent of their involvement?

Step 1. Restrict 2015 MSL Data set using SPSS filter, select cases.

1. Delimit by DEM6.1, age, eliminating non-traditional students
2. Delimit by DEM1, transfer status, eliminating transfer students.
3. Delimit by DEM2, enrollment status, eliminating part-time students.

Step 2. Build frequency table, using DEM3.1 (Class) and DEM7.1 (Gender) to create 11 different columns:

1. Freshman Males
2. Freshman Females
3. Sophomore Males
4. Sophomore Females
5. Junior Males
6. Junior Females
7. Senior Males

8. Senior Females
9. Overall
10. Overall Male
11. Overall Female

Step 3. Complete frequency table using crosstabs calculating ordinal data and mean scores where appropriate for each of the eight subgroups for each of these MSL environmental and involvement categories:

1. ENV1a, hours worked per week off campus
2. ENV2a, hours worked per week on campus
3. ENV3, engage in community service
4. ENV4a, study abroad
5. ENV4b, practicum, internship, field experience, co-op experience, clinical experience
6. ENV4c, learning community
7. ENV4d, living-learning program
8. ENV4e, research with a faculty member
9. ENV5a, performed community service
10. ENV5b, acted to benefit the common good or protect the environment
11. ENV5e, communicated with the campus or community leaders about a specific concern
12. ENV5f, took action in the community to address a social or environmental problem

13. ENV5g, worked with others to make the campus community a better place
14. ENV5h, acted to raise awareness about a campus, community, or global problem
15. ENV5i, took part in a protest, rally, march, or demonstration
16. ENV5j, worked with others to address a social inequality
17. ENV6c, been an involved member in an off campus community or work-based organization
18. ENV12.1, on campus vs. off campus housing

Step 4. Complete frequency table using crosstabs calculating ordinal data and mean scores where appropriate for each of the eight subgroups for each of these MSL campus organization and involvement categories:

1. ENV5c, been actively involved with an organization that addresses a social or environmental problem
2. ENV5d, been actively involved with an organization that addresses the concerns of a specific community
3. ENV6a, been an involved member in college organizations
4. ENV6b, held a leadership position in a college organization
5. ENV7a, academic/departmental/professional
6. ENV7b, arts/theater/music
7. ENV7c, campus-wide programming
8. ENV7d, identity-based/multicultural organizations

9. ENV7e, international interest
10. ENV7f, honor societies
11. ENV7g, media
12. ENV7h, military
13. ENV7i, new student transitions
14. ENV7j, resident assistants
15. ENV7k, peer helpers
16. ENV7l, advocacy
17. ENV7m, political
18. ENV7n, religious
19. ENV7o, service
20. ENV7p, multicultural social fraternities and sororities
21. ENV7q, social fraternities or sororities
22. ENV7r, sports-intercollegiate or varsity
23. ENV7u, recreational
24. ENV7v, social/special interest
25. ENV7w, student governance
26. REC1, instructor-led group fitness or exercise class
27. REC2, intramural sports
28. REC3, open recreation
29. REC4, outdoor adventure activities and/or trips
30. REC5, sports clubs

Step 5. Complete frequency table using crosstabs calculating ordinal data and mean scores where appropriate for each of the eight subgroups for each of these MSL leadership development activities categories:

1. ENV10a, leadership conference
2. ENV10b, leadership retreat
3. ENV10c, leadership lecture/workshop series
4. ENV10d, positional leader training
5. ENV10e, leadership course
6. ENV10f, short-term immersion
7. ENV10g, emerging or new leaders program
8. ENV10h, living-learning leadership program
9. ENV10i, peer leadership education program
10. ENV10j, outdoor adventure leadership program
11. ENV10k, women's leadership program
12. ENV10l, multicultural leadership program
13. ENV10m, leadership certificate program
14. ENV10n, leadership capstone experience
15. ENV10o, leadership minor
16. ENV10p, leadership major

Step 6. Compare frequency percentage results of Steps 3-5 for sophomore males and other subgroups to find differences.

Research Question 2

Does sophomore male leadership efficacy differ from other subsets of male and female students?

Step 1. Restrict 2015 MSL Data set using SPSS filter, select cases.

1. Delimit by DEM6.1, age, eliminating non-traditional students
2. Delimit by DEM1, transfer status, eliminating transfer students.
3. Delimit by DEM2, enrollment status, eliminating part-time students.

Step 2. Build tables, using DEM3.1 (Class) and DEM7.1 (Gender) to create eight different columns:

1. Freshman Males
2. Freshman Females
3. Sophomore Males
4. Sophomore Females
5. Junior Males
6. Junior Females
7. Senior Males
8. Senior Females

Step 3. Calculate OUTEFF, leadership efficacy mean score and standard deviation, for each sub-group.

Step 4. Compare means, run independent samples *t*-test between sophomore males and sophomore females.

Step 5. Run ANOVA on dependent variable, OUTEFF, between sophomore males and each of the other seven sub-groups to learn if there are statistical differences.

Research Question 3

What particular campus environments predict sophomore male leadership efficacy significantly? Do these environments possess any common conditions or characteristics?

Step 1. Restrict 2015 MSL Data set using SPSS filter, select cases.

1. Delimit by DEM6.1, age, eliminating non-traditional students
2. Delimit by DEM1, transfer status, eliminating transfer students.
3. Delimit by DEM2, enrollment status, eliminating part-time students.

Step 2. Isolate sophomore males, using DEM3.1 (Class) and DEM7.1 (Gender).

Step. 3. Calculate sophomore male variables with OUTEFF, leadership efficacy by distribution of responses, ranging from never/no to often/yes.

1. ENV1a, hours worked per week off campus
2. ENV2a, hours worked per week on campus
3. ENV3, engage in community service
4. ENV4a, study abroad
5. ENV4b, practicum, internship, field experience, co-op experience, clinical experience
6. ENV4c, learning community

7. ENV4d, living-learning program
8. ENV4e, research with a faculty member
9. ENV5a, performed community service
10. ENV5b, acted to benefit the common good or protect the environment
11. ENV5c, been actively involved with an organization that addresses a social or environmental problem
12. ENV5d, been actively involved with an organization that addresses the concerns of a specific community
13. ENV5e, communicated with the campus or community leaders about a specific concern
14. ENV5f, took action in the community to address a social or environmental problem
15. ENV5g, worked with others to make the campus community a better place
16. ENV5h, acted to raise awareness about a campus, community, or global problem
17. ENV5i, took part in a protest, rally, march, or demonstration
18. ENV5j, worked with others to address a social inequality
19. ENV6a, been an involved member in college organizations
20. ENV6b, held a leadership position in a college organization
21. ENV6c, been an involved member in an off campus community or work-based organization

22. ENV7a, academic/departmental/professional
23. ENV7b, arts/theater/music
24. ENV7c, campus-wide programming
25. ENV7d, identity-based/multicultural organizations
26. ENV7e, international interest
27. ENV7f, honor societies
28. ENV7g, media
29. ENV7h, military
30. ENV7i, new student transitions
31. ENV7j, resident assistants
32. ENV7k, peer helpers
33. ENV7l, advocacy
34. ENV7m, political
35. ENV7n, religious
36. ENV7o, service
37. ENV7p, multicultural social fraternities and sororities
38. ENV7q, social fraternities or sororities
39. ENV7r, sports-intercollegiate or varsity
40. ENV7u, recreational
41. ENV7v, social/special interest
42. ENV7w, student governance
43. ENV12.1, on campus vs. off campus housing

44. REC1, instructor-led group fitness or exercise class

45. REC2, intramural sports

46. REC3, open recreation

47. REC4, outdoor adventure activities and/or trips

48. REC5, sports clubs

Step 4. Determine change scores between sophomore male responses that range from never/no to often/yes by determining the leadership efficacy mean score for each group and subtracting to find the difference.

Step 5. Calculate mean scores and standard deviations for each group.

Step 6. If statistical significance is found, examine for practical significance by calculating Cohen's *d*.

Research Question 4

What particular leadership experiences predict sophomore male leadership efficacy significantly?

Step 1. Restrict 2015 MSL Data set using SPSS filter, select cases.

1. Delimit by DEM6.1, age, eliminating non-traditional students
2. Delimit by DEM1, transfer status, eliminating transfer students.
3. Delimit by DEM2, enrollment status, eliminating part-time students.

Step 2. Isolate sophomore males, using DEM3.1 (Class) and DEM7.1 (Gender).

Step 3. Calculate sophomore male variables with OUTEFF, leadership efficacy by distribution of responses, ranging from never/no to often/yes.

1. ENV10a, leadership conference
2. ENV10b, leadership retreat
3. ENV10c, leadership lecture/workshop series
4. ENV10d, positional leader training
5. ENV10e, leadership course
6. ENV10f, short-term immersion
7. ENV10g, emerging or new leaders program
8. ENV10h, living-learning leadership program
9. ENV10i, peer leadership education program
10. ENV10j, outdoor adventure leadership program
11. ENV10k, women's leadership program
12. ENV10l, multicultural leadership program
13. ENV10m, leadership certificate program
14. ENV10n, leadership capstone experience
15. ENV10o, leadership minor
16. ENV10p, leadership major

Step 4. Determine change scores between sophomore male responses that range from never/no to often/yes by determining the leadership efficacy mean score for each group and subtracting to find the difference.

Step 5. Calculate mean scores and standard deviations for each group.

Step 6. If statistical significance is found, examine for practical significance by calculating Cohen's *d*.

Research Question 5

What particular student characteristics increase sophomore male leadership efficacy significantly?

Step 1. Restrict 2015 MSL Data set using SPSS filter, select cases.

1. Delimit by DEM6.1, age, eliminating non-traditional students
2. Delimit by DEM1, transfer status, eliminating transfer students.
3. Delimit by DEM2, enrollment status, eliminating part-time students.

Step 2. Isolate sophomore males, using DEM3.1 (Class) and DEM7.1 (Gender).

Step 3. Calculate sophomore male variables with OUTEFF, leadership efficacy by distribution of responses, ranging from never/no to often/yes.

1. PREEFF, leadership efficacy
2. PRE2a, leading others
3. PRE2b, organizing a group's tasks to accomplish a goal
4. PRE2c, taking initiative to improve something
5. PRE2d, working with a team on a group project
6. PRE3a, student clubs and organizations
7. PRE3b, organized sports
8. PRE3c, leadership positions in student clubs, groups, or sports
9. PRE4a, performed community service
10. PRE4c, participated in community or work-related organizations

11. PRE4d, took leadership positions in community organizations or work-related groups
12. PRE4f, worked with others for change to address societal problems
13. PRE4g, participating in training or education that developed leadership skills

Step 4. Determine change scores between sophomore male responses that range from never/no to often/yes by determining the leadership efficacy mean score for each group and subtracting to find the difference.

Step 5. Calculate mean scores and standard deviations for each group.

Step 6. If statistical significance is found, examine for practical significance by calculating Cohen's *d*.

Research Question 6

Are there significant relationships for sophomore males between the MSL constructs of consciousness of self and leadership efficacy and the leadership capacities of motivation to lead, resiliency, hope, and social-perspective-taking?

Step 1. Restrict 2015 MSL Data set using SPSS filter, select cases.

1. Delimit by DEM6.1, age, eliminating non-traditional students
2. Delimit by DEM1, transfer status, eliminating transfer students.
3. Delimit by DEM2, enrollment status, eliminating part-time students.

Step 2. Isolate sophomore males, using DEM3.1 (Class) and DEM7.1 (Gender).

Step 3. Correlate sophomore male pre-college variables with OUTEFF, leadership efficacy, by calculating Pearson's correlation coefficient. Examine for statistical significance and practical significance.

1. PREEFF, leadership efficacy
2. PRE2a, leading others
3. PRE2b, organizing a group's tasks to accomplish a goal
4. PRE2c, taking initiative to improve something
5. PRE2d, working with a team on a group project
6. PRE3a, student clubs and organizations
7. PRE3b, organized sports
8. PRE3c, leadership positions in student clubs, groups, or sports
9. PRE4a, performed community service
10. PRE4c, participated in community or work-related organizations
11. PRE4d, took leadership positions in community organizations or work-related groups
12. PRE4f, worked with others for change to address societal problems
13. PRE4g, participating in training or education that developed leadership skills