# AN EXAMINATION OF MENTORING RELATIONSHIPS AND LEADERSHIP CAPACITY IN RESIDENT ASSISTANTS

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#### ABSTRACT

#### Michael D. Coomes, Advisor

The purpose of this study was to examine mentoring relationships and resident assistants' (RA) leadership capacities. In addition, the type of mentor of the RAs, and the gender match and race match of the mentor-protégé pairs was investigated. This study provides insight into the profile of resident assistants as well as findings related to mentoring outcomes on the Social Change Model constructs of socially responsible leadership, and leadership efficacy. I utilized the Multi-Institutional Study of Leadership 2009 data. A sample of 6,006 resident assistants (RAs) was analyzed using an adapted version of Astin's (1991, 1993) Inputs-Environments-Outcomes (I-E-O) college impact model as the conceptual framework and the Social Change Model of Leadership as the theoretical framework.

Independent samples *t*-tests, analysis of variance, and regression were used to analyze data on leadership capacity and mentoring outcomes (personal development and leadership empowerment). Leadership capacity findings suggested a mentored RA demonstrates significantly higher leadership capacity than a non-mentored RA. The type of mentor is not a predictor of socially responsible leadership; student affairs professionals are positive predictors of leadership efficacy in comparison to other student mentors. Gender match and race match mentor-protégé pairings results on leadership capacity did not yield significant results. Regression findings suggest gender match and race match mentor-protégé pairs did not differ from cross-gender and cross-race mentor-protégé pairs on leadership capacity.

These findings fill gaps between research and practice and provide incentives for stakeholders of collegiate environments to mentor resident assistants. More specifically, these findings provide residence life and housing administrators with evidence-based research that mentored RAs demonstrate higher leadership capacities and possess the potential to become transformational change agents in college and beyond.

I dedicate this research to the amazingly talented, caring, supportive, and brilliant Susan R. Komives who showed me the value of bringing my juxtaposed practitioner and scholarly selves to the table with pride and confidence.

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"Lots of people want to ride with you in the limo, but what you want is someone who will take the bus with you when the limo breaks down" ~ Oprah Winfrey

Anyone who knows me is aware I am a fan of Oprah Winfrey, Parker Palmer, and Jim Collins because they use positivity with strategy to advance themselves and others. I also argue we all ascribe to the notion that leaders are made, not born. The journey of life is amazing in and of itself. The journey one commits to when entering doctoral study is unlike any I have undertaken before. The successful completion of a dissertation is not an effort achieved alone. I have many contributors who have supported, mentored, guided, listened, and edited along the way. As Collins would argue, on this journey we all need to be headed in the same direction, in the right seat on the bus—just in case the limo breaks down. That being said, I would like to thank my academic and personal supporters. Without each of you, the path to my journey may have led astray.

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Mentors and apprentices are partners in an ancient human dance, and one of teaching's great rewards is the daily chance it gives us to get back on the dance floor. It is the dance of the spiraling generations, in which the old empower the young with their experience and the young empower the old with new life, reweaving the fabric of the human community as they touch and turn. ~ Parker J. Palmer

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"For, in the end, it is impossible to have a great life unless it is a meaningful life. And it is very difficult to have a meaningful life without meaningful work." ~Jim Collins

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#### CHAPTER I. INTRODUCTION

The Multi-Institutional Study of Leadership is an international research database that contains national information on the role of higher education in developing leadership capacities focusing on environmental conditions that foster leadership development (J. Dugan, personal communication, October 21, 2010). The study provides a platform for participating institutions to provide both evidence-based practice and contribute to the understanding of college student leadership development. More than 250 institutions and over 300,000 college students have participated in this study. I focused my research on a sub-group, resident assistant and utilized mentoring relationships as an environmental predictor on socially responsible leadership and leadership efficacy. In this chapter the statement of the problem, purpose of the study, research questions, general definitions of key terms, and significance of this study. In order to provide context, general definitions of key terms and concepts are included. Additionally, two important concepts will be introduced and defined: leadership and socially responsible leadership. Finally, the three research questions are presented.

#### **Statement of the Problem**

Leadership educators have asked students the question "Was Hitler a leader"? There are arguments for and against Hitler as a leader. Burns' (1978) book *Leadership* stated once Hitler gained power and he crushed the opposition, he became a tyrant; Burns vehemently argued that a leader is the polar opposite of a tyrant. Based on Burns' book, Rost adopted a postindustrial view of leadership. According to Rost (1993) there is no universal definition of leadership that is clear, concise, understood by both scholars and practitioners, researchable, practically relevant, and persuasive. However, he attempted to define leadership as "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (Rost, 1993, p. 102). Rost's definition of leadership has four essential elements: the relationship is based on influence, leaders and followers are in this relationship, leaders and followers intend to make real changes, and leaders and followers develop mutual purposes. Rost's elements focus on working with others to evoke change. The theoretical framework for this study also focuses on change.

The Social Change Model of Leadership is the theoretical framework for this study. In the model, leadership is defined as "a purposeful, collaborative, values-based process that results in positive social change" (Dugan & Komives, 2011a, p. 526). Socially responsible leadership is developed when individual values (consciousness of self, congruence, commitment), group values (collaboration, common purpose, controversy with civility), and societal values (citizenship) collectively form an eighth value (change) for the common good (Dugan, 2006b).

For decades, leadership scholars and practitioners have put forth time, effort, and energy to equip student leaders with the abilities to make positive, purposeful social change for the common good (Komives & Dugan, 2011a). The ultimate educational outcome of the Social Change Model of leadership is positive, purposeful *change*. Most leadership studies have focused on leadership capacity, self-efficacy, learning, attitudes and intentions with little emphasis on a more integrative or holistic approach (e.g., examining a college student's leader identity, leadership capacity, and confidence levels simultaneously) with increased attention to student development (Dugan & Komives, 2011b). More than 200 research studies over the past century have examined the effectiveness of leadership interventions at the collegiate level (Dugan & Komives, 2011b). In order to cultivate the capacities of student leaders, it is necessary to have an understanding of leadership theories and practices and the ability to incorporate both. Yet, few studies are grounded in evidence-based practice and research; rather, leadership

educators have become reliant on best practices and/or intuition when designing leadership interventions (Dugan, Bohle, Gebhardt, Hofert, Wilk, & Cooney, 2011). This type of program development can result in questioning the effectiveness of leadership interventions and their perceived impact on student leaders.

Resident assistants (RAs) can be identified as student leaders due to the nature of their job demands as outlined in Chapter II. In addition to the skills (e.g., crisis management, effective communication, planning social and educational programs) associated with the role, RAs also typically possess influence and hold a certain level of power or authority within their residential communities. In essence, the skills needed to obtain and maintain the RA position afford these paraprofessionals leadership opportunities and experiences. These leadership opportunities allow RAs to perform tasks utilizing their skills to gain leadership experiences directly linked to their continued employment. Leadership is developed through training and experiential on-the-job learning. This training is typically conducted by full-time resident directors (RDs) who oversee paraprofessional staffs and the maintenance/security of residence halls. Some RAs may identify their RDs as their mentors. However, little is known about resident assistants and their mentors due to a very limited number of empirical studies on the topic.

The most recent study was Komives' (1991) examining resident assistants involved in mentoring relationships. This research focused on RAs who identified their supervisors as mentors. Komives also explored whether the gender match of the mentor (RD) and protégé (RA) pairings were significant; no significance was found. In the twenty two years since this study, there has not been an investigation on mentor-protégé pairings to determine if those findings still ring true. Dugan (2011) found mentoring relationships (faculty, student affairs, and peer) were significant predictors of positive leadership outcomes. Dugan did not discover how the mentoring interactions directly influence leadership development, but he did conclude mentoring by faculty was a significant predictor of educational outcomes and leadership capacity.

What is unclear from the research is what it is about these interactions that directly influence leadership development. Further research is needed to unpack the specific types of interactions that are important. (Dugan, 2011, p. 73)

A grounded theory investigation was conducted by Komives, Longerbeam, Mainella, and Osteen (2006) exploring how leadership identities develop. This study yielded a six-stage developmental process. The integrative approach to examining leadership identity through qualitative means unveiled rich, personal experiences from student leaders at a single institution. Since the study did not compare students' leadership identity development across or between institutions, conducting a multi-institutional study on leadership development had the potential to offer significant contributions to the leadership scholarship.

Dugan (2011) outlined twenty key empirical studies from 1993-2010 that focused on student leadership development. None of the twenty studies focused on students' involvement in mentoring relationships and the outcome of leadership efficacy or leadership capacities. Most of the research in the 1990s was limited to general effects. According to Pascarella, (2006) the absence of statistically significant general effects in an overall sample can hide potential significant effects in sub-samples of those same students. An examination of mentoring relationships and leadership capacities in a sub-sample resident assistants could unveil statistically significant findings that general effects may not. Pascarella (2006) and Dugan (2011) identified gaps in literature that demonstrate a need for a more contemporary, integrative approach to explore leadership capacity and leadership efficacy within an identified sub-sample.

Finally, studies have been conducted on mentoring relationships, but none have included demographics of the mentor-protégé pairings that directly explore mentoring outcomes and leadership capacity in resident assistants.

#### **Purpose of the Study**

The purpose of this study was to examine how resident assistants' leadership capacities (socially responsible leadership and leadership efficacy) were influenced by being involved in mentoring relationships (e.g., mentoring for personal development and/or mentoring for leadership empowerment). Leadership capacity includes students' leadership behaviors and their efficacy to enact those behaviors. Leadership capacity is operationalized in this study as socially responsible leadership and leadership efficacy. I sought to explore the most significant type of mentors (e.g., faculty member, student affairs professional, employer, or other student) resident assistants identified. I examined if there was a link between the mentoring relationship and most significant type of mentor and the resident assistants' leadership capacity. I also investigated whether the race and/or gender of the mentor-protégé match was significant.

#### Significance of the Study

The Multi-Institutional Study of Leadership (MSL) was designed to develop an understanding of the influences of higher education with respect to "shaping socially responsible leadership capacity and other leadership related outcomes (e.g., efficacy, cognitive skills, resiliency)" ("Current Multi-Institutional Study of Leadership Information," n.d, para. 1). The study provides a platform for participating institutions to learn about evidence-based practices and contribute to the understanding of college student leadership development. Contrary to the Komvies et al. (2006) study, a multi-institutional approach on leadership development has the potential to offer significant contributions to leadership scholarship. The MSL examined the collegiate environment's influence on educational outcomes. Mentoring relationships were one of the educational experiences that could be isolated and examined. At present, there is a gap in the literature on environmental influences and educational outcomes of students participating in mentoring relationships (Swap, Leonard, Shields, & Abrams, 2001). Studies have been conducted on mentoring relationships, but none have included demographics of the mentor-protégé pairings as they relate to mentoring outcomes and leadership capacity. Examining the demographics of the mentor and protégés included the type of mentor and race and gender match as they relate to leadership capacity (socially responsible leadership and leadership efficacy). I proposed the exploration of mentoring relationships and leadership capacities of a sub-group, resident assistants. My argument was that the examination of a sub-group could disclose statistically significant findings that general effects of a larger sample may not (Pascarella, 2006).

Resident assistants were an important group to study. Chapter II provides more context associated with the roles and responsibilities of resident assistants. As a sub-group, resident assistants have relatively similar roles or job functions regardless of institutional type or size Upcraft and Pilato (1982). In addition, the time and efforts their supervisors and other student affairs professionals devote to their leadership development, interpersonal growth, and jobrelated competencies provide justification why they are a sub-group worthy of study. This was also a highly engaged and visible group of student leaders who may have sought mentorship from a variety of institutional stakeholders (e.g., faculty, student affairs, employers, other students) and those relationships warranted further exploration as they related to RAs' leadership capacities. They are one of the most influential groups of student leaders on most college campuses because they live with, support, and retain students through meaningful interactions on a daily basis (Winston & Fitch, 1993). Stakeholders in higher education often acknowledge matriculation, retention and graduation of students as a priority; students who aid in the aforementioned are valuable and how they are developed and mentored is worthy of study. Those who serve as mentors to resident assistants may foster their skill sets thereby indirectly positively impacting the collegiate experiences of on-campus residents and retaining students. Empirical studies have been conducted on mentoring relationships, but none including demographics of the mentor-protégé pairings that directly explore mentoring outcomes and leadership capacity in resident assistants.

This study sought to examine the mentor-protégé relationships of paraprofessionals (resident assistants) and mentoring outcomes (personal development and leadership empowerment) on leadership capacity (socially responsible leadership, leadership efficacy). The Multi-Institutional Study of Leadership's theoretical framework is the Social Change Model of Leadership discussed at length in Chapter II. The conceptual framework and design of the study is based on Astin's Input-Environment-Outcome (I-E-O) model, which is outlined in detail in Chapter III. The Multi-Institutional Study of Leadership features a cross-sectional design requiring student participants to reflect on pre-college or high school experiences and respond to a set of questions to capture input data. The cross-sectional design also requires students to answer questions about their during-college experiences and respond to another set of questions to capture environmental data. The within-college effects and conditional analyses of resident assistants are key in this study. The conceptual framework allows researchers to control for precollege characteristics and experiences or input data (I) when examining the collegiate environment's (E) impact on educational outcomes (O). This study is significant because it offers unique contributions to leadership scholarship through examining mentoring outcomes and demographics of mentor-protégé pairings on resident assistants' leadership capacities. The theoretical and conceptual frameworks in addition to the survey discussed at length in Chapter III capture the collegiate environment's influence on educational outcomes. The overarching research question is: When accounting for control measures and collegiate mentor-protégé demographics, do mentored resident assistants exhibit significantly higher leadership capacities than non-mentored counterparts?

#### **Research Questions**

- Do resident assistants who participate in mentoring relationships exhibit significantly higher leadership capacities than resident assistants who do not, after accounting for control measures such as pre-college activities, race, gender, sexual orientation, and grade point average?
- 2. Is there a significant relationship between type of mentor and resident assistant leadership capacity, after accounting for the aforementioned control measures?
- 3. Does the relationship between mentoring relationships and leadership capacity differ based on the race and gender match of the mentor-protégé pairing, after accounting for the aforementioned control measures?

#### **Definitions of Key Terms**

In order to provide context and common understanding of terminology and concepts related to the study, it was necessary to define terms, concepts, and key words. Many of these definitions appear as an important variables in the research questions. Other key terms have multiple definitions; therefore I offered more specific definitions related to my epistemological perspective, relevance to my research, and definitions conveyed to the study's participants through the survey instrument. In this section, I more broadly defined some key terms. In Chapter III, I discussed how these terms directly align with the instrument, scales, and variables of interest used in my study.

**Leaders.** According to Matusak (1997) leaders are individuals who have passion, make a difference, and impact an organization or community.

**Leadership Capacity.** Leadership capacity includes leadership behaviors and the leaders' efficacy to enact those behaviors.

Leadership Efficacy. According to Hannah, Avolio, Luthans, and Harms (2008), "leadership efficacy is a specific form of efficacy associated with the level of confidence in the knowledge, skills, and abilities associated with leading others" (p. 669); it is a collaborative process not to be confused with leader efficacy, an individualized process. Consistent with Hannah et al.'s definition, for the purposes of this study, leadership efficacy is an individual's internal belief in their ability to enact leadership (Dugan, 2011).

**Mentor.** According to Johnson (2007), mentors "promote socialization, learning, career advancement, psychological adjustment, and preparation for leadership" (p. 4). Mentors come from an array of roles in higher education including faculty members, student affairs educators, employers, and peers (Campbell, Smith, Dugan, & Komives, 2012; Parks, 2000).

Mentoring Relationships. According to Kram (1985), mentoring relationships include relational support (psychosocial) and vocational socialization (career mentoring).
Mentorship. Mentorship in its most recent interpretation emerged in the 1980s and is "characterized by reciprocal learning and focused on goal attainment and personal growth" (Campbell et al., 2012, p. 597). More recently Parks (2000) defined mentorship

as an "intentional, mutually demanding, and meaningful relationship between two individuals, a young adult and an older, wiser figure who assists the younger person in learning the ways of life" (p. 127).

**Resident Assistant.** The resident assistant is a paraprofessional position held by a student who is selected, trained, supervised, and evaluated on tasks and responsibilities related to promoting the personal development of one's peers and maintaining a supportive and educational residential environment (Winston & Fitch, 1993). **Socially Responsible Leadership (SRL).** SRL is directly tied to the constructs and purposes of the Social Change Model of leadership (SCM). SRL is developed when individual values (consciousness of self, congruence, commitment), group values (collaboration, common purpose, controversy with civility), and societal level (citizenship) collectively form an eighth value (change for the common good) (Dugan, 2006b).

#### Summary

This chapter provided an introduction to the topic of mentoring relationships, socially responsible leadership, leadership efficacy, and mentoring outcomes in resident assistants. This chapter also provided general definitions of key terms. Gaps in literature and justifications to pursue within-college effects and conditional analyses of resident assistants as a sub-sample were also identified. Chapter II provides a relevant review of the literature. Included in the review of literature is a discussion on the evolution of leadership theory, mentor-protégé relationships, the role and responsibilities of the resident assistant, and research that has been conducted using the Social Change Model. More study-specific definitions, information about scales within the Multi-Institutional Study of Leadership, and information related to the variables of interest will

be provided in Chapter III. The findings are reported in Chapter IV. Finally, the discussion, implications, and future research are presented in Chapter V.

#### CHAPTER II. REVIEW OF THE LITERATURE

This chapter provides a review of the literature that is related to the study. Included in the review of literature are discussion of the evolution of leadership theory, socially responsible leadership, mentoring theory, and the role of the resident assistant. The intent of this chapter is to synthesize literature related to the topic, theoretical framework, and variables in the research questions to further substantiate the need for this research to be conducted.

#### **The Evolution of Leadership**

The definition of leadership and perception of leaders has evolved over time. "As a body of literature, leadership theory is complex, socially constructed, and consistently evolving" (Dugan, 2011, p. 36). Influenced by research and practice, leadership educators adopted a postindustrial paradigm that shifted how leadership is currently defined and viewed. This postindustrial conceptualization is prevalent in contemporary leadership theories. Contemporary leadership theoretical perspectives associated with postindustrial paradigms have constructivist nonlinear views that deconstruct power and position and give voice to historically marginalized students (Dugan & Komives, 2011a). Postindustrial or emergent paradigms recognize the complexity of leadership and place an emphasis on social justice and ethics (Dugan, 2011; Heifetz, 1994; Komives, Wagner, 2009; Preskill & Brookfield, 2009; Wheatley, 1994). Acknowledgement of those complexities led to theories with systems-based approaches taking into consideration organizational culture and the capacity of the organization and its members to respond and adapt to change (Allen & Cherry, 2000; Dugan & Komives, 2011a; Heifetz, 1994; Schein, 1991; Senge, 1994; Uhl-Bien, Marion, & McKelvey, 2007; Wheatley, 1994). Table 1 is a summary of the evolution of leadership approaches discussed in this chapter.

#### Table 1

Approach	Time Period	Leadership Seen As
Great Man	Mid-1800s-Early 1900s	Endowed
Trait	1900-1929	Power
Behavioral	1930s 1940s 1950s 1960s	Influence Directing Effective Behavior
Situational/Contingency	1970s	Relational
Reciprocal	1980s	Transformational
Chaos/Systems	1990-Present	Complex

#### Summary of the Evolution of Leadership Approaches

*Note*: Adapted from Northouse, P. G. (2010). *Leadership: Theory and practice* (5<sup>th</sup> ed.). Thousand Oaks, CA: Sage.

Through a postindustrial lens, leadership is viewed as an ongoing process, not a final product. However, to understand how leadership has arrived at its postindustrial state, it is necessary to examine how leadership has evolved.

The study of leadership can be traced back to Aristotle (Northouse, 2010). However, the study of leadership and how leaders are viewed has changed significantly since that time. An awareness of the philosophical evolution of leadership is necessary to understand major epistemological frames; leadership theory has evolved from a positivist paradigm of universal truths and single, right ways to lead to a naturalistic socially-constructed view (Dugan & Komives, 2011a). "The evolution of leadership theory reflects a complex movement from leader-centric, management-oriented, and individual achievement-focused approaches to those characterized by social responsibility, developmental concern, and process orientations" (Dugan,

2011, p. 53). This movement distinguishes the differences in industrial and postindustrial theoretical paradigms (Rost, 1993) discussed below.

Based on Burns' (1978) book *Leadership*, Rost analyzed materials from 1900-1990 and found over 200 definitions for leadership that provide a history of the evolution of leadership. Rost (1993) identified two views of leadership, the industrial and postindustrial. Industrial leadership theories are leader-centric, prescribed, and emphasize productivity; their time period ranged from the mid-1800s to the late 1970s. Postindustrial leadership is relationship-centric and focused on the influences and ongoing interactions between leaders and followers at all stages (Rost, 1993); postindustrial leadership emerged in the late 1970s.

In order to better understand the evolution of leader and leadership development, it is necessary to begin with the Great Man approach. In the mid-1800s until the early 1900s, leadership was based on Darwinistic principles; this view became known as the Great Man approach. As the name suggests, only men were endowed with the ability to lead. From 1900-1929 leaders were viewed as powerful and leadership was defined as "the ability to impress the will of the leaders on those led and induce obedience, respect, loyalty, and cooperation" (Moore, 1927, p. 124).

In the 1930s, trait-based theories emerged which posited that individuals were or were not endowed with characteristics that determined whether or not they would be a leader. Leadership, through the trait-based lens, emphasized the leader's ability to influence followers as opposed to dominate them as the Great Man theory suggested (Bass, 1990; Dugan, 2011; Komives, Lucas, & McMahon, 2007; Northouse, 2010). In the 1940s, leadership was defined behaviorally; leaders directed groups through the art of persuasion. Behavioral theories espoused that leadership was not about who a leader *is*, but what a leader *did* (Dugan, 2011). This is important to note, as this provides a bridge in the evolution of leadership theory from leader-centric (industrial) to a more relational (postindustrial) view. The 1950s and 1960s were a time of harmony in leadership history when two behavioral theories—group effectiveness and shared goals between leaders and followers emerged. Leadership was viewed as "acts by persons which influence other persons in a shared direction" (Seeman, 1960, p. 53). In the 1970s, leadership theory focused on accomplishing organizational goals (Rost, 1993) and leadership was defined as a reciprocal process to realize mutual goals of both leaders and followers (Burns, 1978). Around this time, behavioral theories were deemed overly simplistic because the environment's influence was not taken into consideration. This realization gave rise to situational contingency theories. "Situational theories highlight the environment as the greatest influence on leadership effectiveness and suggest that different situations require different sets of behaviors and types of leadership" (Dugan & Komives, 2011a, p. 39). Situational theories are rooted in the leader's ability to rapidly and accurately assess group or situational needs based on the level of support and level of task orientation (Dugan & Komives, 2011a; Northouse, 2010) and the situation dictates who will emerge as the leader (Komives et al., 2007).

Burns introduced transformational leadership (originally called transforming), which is concerned with how certain leaders inspire followers to achieve remarkable accomplishments (Northouse, 2010). Burns (1978) defined leadership as "the reciprocal process of mobilizing by persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict, in order to realize goals independently or mutually held by both leaders and followers" (p. 425). Burns argued positional or assigned leaders should develop capacity in followers and empower them to become leaders (Dugan & Komives, 2011a).

Matusak (1997) argued leaders are individuals who have passion, make a difference, and impact an organization or community; she also equated leadership with good citizenship. Continuing along the leadership timeline, the 1970s and 1980s gave rise to Robert Greenleaf's (1970, 1977) servant leadership philosophy. "A servant-leader is servant first. It begins with the natural feeling that one wants to serve. Then conscious choice brings one to lead" (Greenleaf, 1970, p. 7). Matusak, referenced earlier, discussed leadership of the regular or ordinary person who profoundly impacts their communities by stating leadership is a relational process that "is making something happen—it is leaving a mark" (p. 6). This exemplifies an important shift in *who* can lead and invalidates the notion that leaders are born; rather, they are created and cultivated. "Leadership can be learned by any of us, no matter our age, circumstances, or the challenges we face" (Bennis & Goldsmith, 2010, p. 1). No longer must one be endowed to possess the ability to lead. A variety of individuals have the potential to be effective leaders.

The period of the 1990s to the present introduced Chaos or Systems Thinking. These terms refer to how we understand organizations and change in a complex, dynamic world. Based on the work of Burns (1978), Kouzes and Posner (1987, 2007) identified five exemplary practices of transformational leaders. These leadership practices include:

- Model the Way: This practice includes role modeling, setting expectations, and achieving shared goals.
- Inspire a Shared Vision: This practice includes the capacity to envision, communicate, and recruit others (i.e., organizations, individuals) support for future endeavors.
- Challenge the Process: This practice includes a willingness to change the status quo through risk taking and learning from mistakes.

- 4. Enable Others to Act: This practice includes the ability to engage and empower others through mutual investment and collaboration.
- 5. Encourage the Heart: This practice includes the capacity to identify and celebrate individual and group accomplishments.

This model has recently been utilized extensively and provides common language for those who have been introduced to the five exemplary leadership practices to understand each person's contribution in an organization. Although Kouzes and Posner's leadership practices can cultivate leadership capacities, it can be perceived as leader-centric if used exclusively (Dugan & Komives, 2011a).

The relational leadership model was developed by Komives, Lucas, and McMahon (1998, 2007) for college students and builds on postindustrial models of leadership emphasizing relationships (Dugan & Komives, 2011a). This model serves as the foundation of leadership identity development and also supports students' leadership capacity development. See Figure 1 for an illustration of the relational leadership model. "Relational leadership is purposeful, inclusive, empowering, ethical, and about process" (Komives et al., 2007, p. 113). Inclusive means understanding and appreciating the varied views, perspectives, styles, and approaches of diverse people. Empowering includes having a sense of ownership and allowing all participants in an environment to fully engage with a sense of voice. The ethical component of relational leadership emphasizes that values and standards guide leadership; those values and standards should be ethical and moral. At the center of the three core components is purpose; relational leadership is purposeful and results in the creation of positive change. The process component of the model (the foundation) is ongoing. To promote sustainability of a group, process includes recruitment and retention of members and accounts for intentional interactions with others and collaboration to accomplish change related to the group's mission and vision.

Figure 1

The Relational Leadership Model



*Source:* Komives, S. R., Lucas, N., & McMahon, T. R. (2007). *Exploring leadership: For college leaders who want to make a difference* (2<sup>nd</sup> ed.). San Francisco, CA: Jossey-Bass.

Institutions of higher education are ideal settings to provide opportunities for leadership education. "Higher education plays a major part in shaping the quality of leadership in modern America's society" (Astin & Astin, 2000, p. 1). Historically, higher education's role in the production of citizen leaders through students' leadership development has been less intentional and more of an educational byproduct (Dugan, Kodoma, & Gebhardt, 2012). Leadership development, including socially responsible leadership and leadership efficacy are variables contributing to the research questions; both concepts are presented below and further operationalized in Chapter III.
# **Leadership Definitions**

Although leadership has been studied and researched, it can be argued there is no universally accepted definition that is clear, concise, understood by both scholars and practitioners, researchable, practically relevant, and persuasive (Rost, 1993). According to Bass and Stogdill (1990) there are as many definitions of leadership as there are people who have studied leadership. Dugan and Komives (2011a) presented four broad categories of leadership. Those categories include:

- No definition: This does not mean there are not associated behaviors or operationalized insights into leadership; simply that there is not a definitional parameter or theoretical anchor with which leadership can be framed.
- Positional definition: Some studies define leadership by the position or role one has attained (e.g., president of student government). This tends to be a leader-centric view that can be associated with industrial models of leadership, explained in greater detail below.
- Capacity: Leadership capacity is grounded in theoretical context (e.g., socially responsible leadership); it examines students' knowledge, skills and behaviors associated with leadership (Day, Harrison, & Halpin, 2008; Dugan, 2011; Hannah, et al., 2008).
- 4. Efficacy: Bandura (1997) defined efficacy as the internal belief one has in her/his capabilities to successfully execute challenging tasks in a particular situation.

There is an important distinction to be made between researching capacity and efficacy. Efficacy can expand or limit choices with respect to engaging or not engaging in a challenging task or leadership experience (Dugan & Komives, 2011b; Hannah et al., 2008). Leadership selfefficacy also influences one's efforts and persistence; those with low self-efficacy tend to avoid extra effort and commitment because most people tend to avoid tasks they do not believe they can accomplish (Denzine & Anderson, 1999). Therefore, research on leadership capacity is centered on examining "students' enacted leadership belief, style, and approach" (Dugan, 2011, p. 61) as opposed to their beliefs in their leader or leadership capabilities. "Efficacy is a primary predictor of capacity and moderates whether or not an individual enacts leadership behaviors" (Dugan, et al., 2012, p. 175). Leadership behaviors can be either transactional or transformational in nature. According to Bass (1985) transactional leaders "mostly consider how to marginally improve and maintain the quantity and quality of performance" (p. 27) whereas transformational leaders help others meet their potentials as valued members of the organization. In other words, transactional leaders are more focused on tasks and achieving organizational goals and transactional leaders are more focused on relationship-building within the organization. Kezar, Carducci, and Contreras-McGavin (2006) articulated that effective leaders use goal setting and relationship-building while relying on transformational and transactional qualities. In the study of leadership capacity and leader efficacy in college students there is one broadly utilized model that leadership educators rely heavily on, the Social Change Model of leadership. As mentioned in Chapter I, this model is the theoretical framework for the Multi-Institutional Study of Leadership and discussed at length below and further operationalized in Chapter III.

# **Socially Responsible Leadership**

The Social Change Model of leadership was developed by Alexander and Helen Astin's group of national leadership scholars and educators from the Higher Education Research Institute (HERI) at the University of California, Los Angeles (UCLA). Funded by an Eisenhower grant,

the SCM grew from Astin and Leland's 1991 work (as cited in Skendall, 2012) and is based on Burns (1978) and Rost (1993). "The Model is based on several assumptions that reflect ideas in the postindustrial paradigms of leadership" (Tyree, 1998, p. 19). The intent of this group was to reshape how leadership was taught and understood by college students. The model provides a framework for individuals and groups to engage in leadership and learn from one another to enact change through a non-hierarchical model rooted in a postindustrial framework (HERI, 1996, Komives et al., 2007; Skendall, 2012).

Starting in 1996, the SCM was widely distributed to the higher education community (Astin & Astin, 2000; Cilente, 2009; HERI, 1996). The SCM is a representation of leadership as a process as opposed to a position; it promotes values of "equity, social justice, self-knowledge, personal empowerment, collaboration, citizenship, and service" (HERI, 1996, p. 18). The SCM has two core principles and underscores personal and interpersonal dimensions of leadership (HERI, 1996; Tyree, 1998). First, it is predicated on increasing students' levels of self-knowledge and capacity to collaborate with others. Second, leadership is tied to societal responsibility and demonstrated by creating positive change for the common good (Dugan & Komives, 2011a; HERI, 1996). The SCM has six assumptions:

- 1. Leadership is socially responsible and impacts change on behalf of others.
- 2. Leadership is collaborative.
- 3. Leadership is a process, not a position.
- 4. Leadership is inclusive and accessible to all people.
- 5. Leadership is values-based.

6. Community involvement/service is a powerful vehicle for leadership.

(Cilente, 2009; HERI, 1996; Skendall, 2012; Tyree, 1998).

The Social Change Model has three interrelated perspectives—the individual, the group,

and society/community; see Figure 2 for a schematic illustration.

# Figure 2

The Social Change Model of Leadership Development



Source: Dugan, J. P. & Komives, S. R. (2011a). Contemporary leadership theories. In S. R. Komives, J. P. Dugan, J. E. Owen, C. Slack, W. Wagner, & Associates (Eds.), The handbook for student leadership development (2nd ed., pp. 35-58). San Francisco, CA: Jossey-Bass.

These SCM values interact dynamically across the three domains. "Use of the Model will cause people to evaluate their individual values as well as incorporate related group values in their interaction with others (Tyree, 1998, pp. 19-20). There are seven critical values each beginning with the letter "C" (i.e., consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, and citizenship) which contribute to an eighth value, change. These values are sometimes called the "Seven C's" or the "Seven C's for Change" and can be found in Table 2 (Cilente, 2009; HERI, 1996; Wagner, 2007).

#### Table 2

#### Value Definition Consciousness of Self Awareness of the beliefs, values, attitudes, and emotions that motivate one to take action. Congruence Thinking, feeling, and behaving with consistency, genuineness, authenticity, and honesty towards others; actions are consistent with most deeply-held beliefs and convictions. The psychic energy that motivates the individual to serve and that drives Commitment the collective effort; implies passion, intensity, and duration, and is directed toward both the group activity as well as its intended outcomes. Collaboration To work with others in a common effort; constitutes the cornerstone value of the group leadership effort because it empowers self and others through trust. Common Purpose To work with shared aims and values; facilitates the group's ability to engage in collective analysis of issues at hand and the task to be undertaken. Controversy with Civility Recognizes two fundamental realities of any creative group effort: differences in viewpoint are inevitable, and that such differences must be aired openly, but with civility. Civility implies respect for others, a willingness to hear each other's views, and the exercise of restraint in criticizing the views and actions of others. Citizenship The process whereby an individual and the collaborative group become responsibly connected to the community and the society through the leadership development activity. To be a good citizen is to work for positive change on the behalf of others and the community. Change The ability to adapt to environments and situations that are constantly evolving, while maintaining the core functions of the group.

# Value Definitions for the Social Change Model of Leadership Development

*Note*: Adapted from Campbell, C. M., Smith, M., Dugan, J. P., & Komives, S. R. (2012). Mentors and college student leadership outcomes: The importance of position and process. *The Review of Higher Education, 35*, 595-625.

The values are not prescriptive in nature and there is no designated starting or ending point because development is ongoing; growth in one value increases the capacity for growth in other values (Cilente, 2009). The values incorporated in the SCM do not exist independently (Tyree, 1998). The values and definitions in the SCM measure educational outcomes in college students by focusing on group values and interdependent relationships while remaining process-oriented (Dugan, 2006b). The authors of the Social Change Model wrote:

A leader is not necessarily a person who holds some formal position of leadership or who is perceived as a leader by others. Rather, we regard a leader as one who is able to effect positive **change** for the betterment of others, the community, and society. All people, in other words, are potential leaders. Moreover, the **process** of leadership cannot be described simply in terms of the behavior of an individual; rather, leadership involves collaborative relationships that lead to collective action grounded in the shared values of people who work together to effect positive change. (HERI, 1996, p. 16, emphasis in original).

The practical application of the Social Change Model on college campuses complements the use of the model as a framework in scholarly research (Bonous-Hammarth, 2001; Dugan, 2006a, 2006b; Dugan & Komives, 2011a; Dugan, Morosini, & Beazley, 2011; Dugan & Yurman, 2011; Ewing, Bruce, & Ricketts, 2009; Kezar, Carducci, & Contreras-McGavin, 2006; Komives, 2011; Dugan & Komives, 2011a; Komives, et al., 2007; Ricketts, Bruce, & Ewing, 2008; Skendall, 2012). The SCM draws upon three areas of literature: student involvement, peer interaction/socialization, and leadership development (Dugan, 2006a, Dugan, 2006b). "Only recently have scholars settled on the Social Change Model as a definitional approach critical to the study of leadership as a core outcome of college" (Dugan & Komives, 2011a). Empirical research was conducted connecting leadership to a leadership development model examining college students (Komives et al., 2007). Further, the Social Change Model has been designated as a key collegiate outcome by national student affairs organizations. To be clear, the Social Change Model's constructs and outcome variable or the "Seven C's" are used to by researchers to measure students' socially responsible leadership.

Many studies also have been conducted using socially responsible leadership (the constructs of the Social Change Model) measured by the Socially Responsible Leadership Scale (SRLS). In the late 1990s and early 2000s the SRLS was used at single institutions. Dugan (2006b) analyzed the relationship between student involvement and socially responsible leadership across multiple institutions. This 2006 Multi-Institutional Study of Leadership utilized a modified version of the SRLS to measure socially responsible leadership (Dugan & Komives, 2010; Skendall, 2012). Dugan's 2006b findings were that involvement (e.g., student participation in organizations, formal leadership programs, community service, holding leadership positions) contributed significantly to six of the eight Social Change Model constructs (Dugan, 2006b). The 2009 Multi-Institutional Study of Leadership also used a modified version of the SRLS to measure socially responsible leadership also used a modified version of the SRLS to measure socially responsible leadership also be used to further substantiate Dugan's 2006b socially responsible leadership findings.

The Multi-Institutional Study of Leadership (MSL) focused on understanding the influences of higher education with respect to "shaping socially responsible leadership capacity and other leadership-related outcomes (e.g., efficacy, cognitive skills, resiliency)" ("Current Multi-Institutional Study of Leadership Information," n.d, para. 1). "The Multi-Institutional Study of Leadership is an international research database that examines the role of higher education in developing leadership capacities focusing on specific environmental conditions fostering leadership development" (J. Dugan, personal communication, October 21, 2010). The original SRLS developed by Tyree (1998) measured leadership capacity through eight independent scales, each measuring individual (consciousness of self, congruence, commitment),

group (collaboration, common purpose, controversy with civility), society (citizenship), or outcome (change) constructs of the Social Change Model of leadership. Refer to Table 2, referenced earlier in this chapter, for each value and corresponding definition. The SRLS, discussed at length in Chapter III, is the theoretical foundation for the MSL.

The MSL data has been used by Dugan and his research team as well as external researchers. Dugan (2006b) conducted a descriptive study utilizing the SRLS to measure college students' leadership development for MSL data. Dugan examined leadership styles of college men and women using the SCM as the conceptual framework to determine if there were differences between men and women across the eight core values of the model. He found both men and women scored relatively high on the SRLS, indicating college students may relate more with postindustrial leadership values associated with the SCM than industrial models. Overall findings were that both men and women scored lowest on the same three constructs which were controversy with civility, citizenship, and change.

Dugan, Komives, and Segar (2008) examined college student capacity for socially responsible leadership using key demographics (race, gender, and sexual orientation) as independent variables. Descriptive statistics were used to measure socially responsible leadership. A multivariate analysis of variance (MANOVA) was conducted for each independent variable across the student leadership outcomes (SRL). Collectively, respondents scored higher across individual values as opposed to group or societal values. The highest value was commitment; the lowest values were controversy with civility and change.

When considering race, Dugan et al. (2008) also found Black students' leadership stressed collectivism or group values. This is consistent with other studies on underrepresented populations who experience oppression and lack power in society; they are often forced to develop collaborative leadership styles to advance (Dugan et al., 2008). Asian Pacific American students' scores were significantly lower across all scales. It was anticipated by the researchers that group values may have been higher when bearing in mind cultural influences; this was not the case.

When gender was the input variable, Dugan et al. (2008) reported that women scored higher on all SCM constructs except controversy with civility and the outcome variable, change. Women also demonstrated lower efficacy and aspirations related to leadership. These findings revealed a gap in women's capacities and their self-efficacies for leadership. The researchers suggested this warrants further exploration. Finally, when sexual orientation was the input variable, Dugan et al. found no significant differences in Lesbian, Bisexual and Gay (LBG) students' capacity for SRL in comparison with their heterosexual peers. They stated if sexual orientation were considered with other variables, the findings may have been different; this is another identified gap in research that warrants further study.

Based on this review, there is a need to contribute more to the literature related to key demographics including gender and race when examining socially responsible leadership and leadership efficacy, in particular when using the MSL data. Dugan and Komives (2010) conducted hierarchical multiple regressions to explore the influences of higher education on socially responsible leadership. They found that socio-cultural conversations among peers, faculty mentoring, and participation in community service were key influences in concert with leadership efficacy on college students' capacities for SRL.

As a well-respected model, few offer critiques of the SCM's limitations. However, there are two identified limitations associated with the Social Change Model that Dugan & Komives (2011a) identified that deserve further consideration. First, the model emphasizes social

responsibility and collaboration, but does not explicitly devote a value to cultural competence. The model may benefit from explicitly incorporating an eighth "C" the Societal/Community circle called "Cultural Competence" that continues to promote positive, purposeful social change. Dugan stated this concept is implicitly present across the model.

If social justice is truly a critical component of leadership development, if leadership is the learnable capacity scholars suggest it is, and if higher education intends to fulfill its societal commitment to prepare the next generation of citizen leaders, then the gap in understanding the influences of race on leadership development needs to be diminished"

(Dugan et al., 2012, p. 186). However, the exclusion of a value devoted to cultural competence may send an unintended message that cultural competence is not important enough to have its own "C" or that it is valued less than the other values. Second, the SCM does not explore the varied external influences on organizations and group contexts (e.g., financial constraints, lack of support from advisors or administrators) that shape how leadership is exhibited and practiced (Dugan & Komives, 2011b).

Finally, as mentioned earlier, the SCM has become the definitional approach to leadership by scholars for the development of student leaders. The SCM measures educational outcomes based on its values and purpose—change. Socially responsible leadership is the collection of the individual, group, and societal values and change. An examination of educational outcomes within the collegiate environment is essential for leadership educators to determine the collegiate environment's influence on students' leadership capacities. In addition to leadership capacity, there is a need to also explore the SCM's outcome variable (change) and to invest in college students' capacities as emerging transformational change agents. After graduating, these former students have the potential to be transformational change agents by strategically creating positive, purposeful, and sustainable change. Mentoring outcomes are another variable contributing to the research questions. Mentoring theory is presented below and further operationalized in Chapter III.

## **Mentoring Theory**

The word mentor can be traced back to Homer's myth of Odysseus. Odysseus was the king of Ithaca who left his son, Telemachus in the care of Mentor, who guided and educated him for ten years while his father was at war with the Trojans (Campbell et al., 2012; Swap, Leonard, Shields, & Abrams, 2001). Those who have studied mentoring have argued in order to understand the nature and impact of mentoring relationships, it is necessary to examine its evolution (Kram, 1985).

In the 18<sup>th</sup> and 19<sup>th</sup> centuries mentoring was used to describe young men's socialization into the military or a trade (Woodd, 1997). This socialization often consisted of the apprentice learning by observing the expert. Social learning theory states behavior is learned from the environment through observing (Bandura, 1997). Engaging in mentoring exchanges through observing and eventually doing the work contributed to the need for apprenticeships and training sessions where young men practiced and perfected their skills. This process was intended to help them in turn become the expert and mentor the next generation. The career-focus in mentoring relationships became the concentration of mentoring research in the 1980s. However, the more contemporary study of mentoring can be traced to the 1970s.

Research on mentoring was pioneered by Daniel Levinson. Levinson, Darrow, Klein, Levinson, and McKee (1978) studied men in their early and middle career stages. Their findings indicated the presence of a mentor was the most important relationship in their psychosocial development (Levinson et al., 1978). Levinson et al.'s *The Seasons of a Man's Life* devoted an entire chapter to mentoring.

The mentor relationship is one of the most complex, and developmentally important, a man can have in early adulthood...No word currently in use is adequate to convey the nature of the relationship we have in mind here...Mentoring is defined not in terms of formal roles, but in terms of the character of the relationship and functions it serves.

(Levinson et al., 1978, pp. 97-98)

They argued the functions of a mentor were to act as a teacher, serve as a sponsor, socialize men in a new occupation, and provide counsel. However, Levinson et al. deemed facilitation of the realization of the Dream as the most crucial function of a mentor. In order to foster realization of the Dream the mentor served a role as both parent and peer by believing in and giving his blessing to the protégé.

Levinson and Levinson expanded their research on mentoring to include women. In 1996 they published a follow up to their 1978 work. This new work centered on women's growth and development appropriately titled *The Seasons of a Woman's Life*. Facilitating the Dream was still considered the most crucial function of a mentor.

A true mentor fosters the young adult's development by nourishing the youthful Dream and giving it her or his blessing, believing in the young woman, helping her to define her newly emerging adult self in its newly discovered adult world, and creating a space in which she can move toward a reasonably satisfactory life structure that contains the Dream. (Levinson & Levinson, 1996, p. 239) The nouns mentor and mentee identify participants, whereas the verb *to mentor* identifies the evolution of the mentoring relationship and the ways the relationship can be cultivated and hindered by both mentor and protégé. According to Stanley and Lincoln (2005):

There are many synonyms for the word "mentor": coach, guide, role model, peer advisor, and sponsor...The plethora of terms would suggest that we know something about this role, but most of the research on mentoring has been conducted in business and industry rather than in education. (p. 44)

The mentoring literature has focused primarily on mentoring functions, cultivating mentor-protégé relationships, and the desired behaviors of mentors (Swap et al., 2001). Mentors as teachers, educators, or managers have been charged with building the skill sets of their protégés. Over time and through research, it has been discovered that the mentoring process provides both socialization (shared experiences or culture) and internalization (learning by doing) through a more formalized learning lens (Swap et al., 2001). This view of mentoring process takes into account that there are many types of mentors (faculty, career, student affairs, senior faculty, peer) and protégés (students, junior faculty, organizational members, employees, peers) who engage in formal and informal capacities with both task and relationship outcomes. Mentoring, when described as a developmental relationship, offers a broader interpretation of who mentors and who can serve as a protégé (Campbell et al., 2012; Kram, 1988).

Little research has been conducted on gender composition and mentorship type on mentoring effectiveness (Allen, Day, & Lentz, 2005). In 1995, Kalbfleisch and Keyton presented a framework on same-sex women mentorships and found mentor-protégé relationships possessed similarities to women friendships including emotional intimacy and relational outcomes (equality and receptivity); they reasoned women approach relationships and mentoring

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differently from men, so a female-based model of mentoring was necessary to understand gender differences in mentoring (Young, Cady, & Foxon, 2006). The focus of their research was on same-sex mentoring relationships and mentor attraction. They found gender similarity and interpersonal skills were factors that were relevant for protégés pairs directly related to their perceptions of and satisfaction with their mentors. Although important, they did not explore gender or cross-sex issues nor did they address theoretical and/or psychological reasoning behind differences in the mentoring process (Young et al., 2006). More recent literature has found men and women are mentored at equivalent rates and mentor functions are consistent across sex; functions of cross-sex and same-sex mentorships have been deemed equally successful (Johnson, 2007).

Phillips (1977) and Missirian (1982) studied women managers by delineating mentoring into phases to determine the effect of the relationship on the protégé. Both of these studies relied on the retrospective accounts of women managers from the early stages of their careers as protégés; the recollections of and benefits for the mentors were not investigated. Phillips and Missirian learned what occurs in same-sex mentor-protégé relationships, but did not identify what advances the relationship from one phase to the next (Kram, 1983). Roche (1979) conducted a study on 1,250 top male executives listed in the *Wall Street Journal*. It was discovered that two thirds of these executives had important early career mentors; those who were mentored (64%) reported higher salaries, were promoted earlier, had better career plans, and higher levels of career satisfaction. In Roche's study, he defined a mentor as a person who takes personal interest in a protégé's career through guidance or sponsorship. He learned that employees who were protégés benefitted from the positive direct effects of engaging in a mentoring relationship and that mentoring enhances job success. Kram (1983, 1985) has conducted extensive research on mentoring that persists to present day. She found there are two mentoring functions (career and psychosocial); career functions enhance career development (e.g., coaching, providing challenging assignments) and psychosocial functions promote effectiveness and competence (e.g., role modeling, counseling). In summary, Levinson et al.'s work emphasized the mentoring relationship, including the exchange between mentor and protégé to achieve the Dream and Kram's work identified the relational aspects of mentoring relationships in career development and psychosocial functions. More recent literature has been conducted examining the functions and desired behaviors associated with mentoring.

Mentoring relationships do not occur in a vacuum; they are influenced by intergroup power relationships and can be very complex (Ragins, 1997). "Competent mentors are sensitive to issues of sex, gender socialization, and sexual orientation but they avoid assuming that these factors alone predict important mentoring needs, relational styles, or professional concerns" (Johnson, 2007, p. 165). Potential protégés may express a preference for a mentor of the same race or ethnicity; however, research indicates cross-race mentorships can be as helpful, valuable, and satisfying as same-race mentorships. "Diversified mentoring relationships are composed of mentors and protégés who differ on one or more group memberships associated with power in organizations...diversified mentoring relationships are not intrinsically better or worse than homogenous relationships; each has costs and benefits..." (Ragins, 1997, p. 489). Ensher and Murphy (1997) conducted a study consisting of 104 summer interns and their staff mentors examining race and gender and the quality of the mentoring relationships. They attempted to address existing gaps in mentoring literature; including lack of empirical research on formal mentoring relationships, insufficient data on mentoring issues related to women and people of color, little evidence on how to best match protégés with mentors, and little research on the

degree of agreement in perceptions of mentors-mentees of the mentorship process (Ensher & Murphy, 1997). They found gender similarity was not as important as originally hypothesized but race similarity was quite salient, particularly with men.

Ragins (1997) identified that group differences have effects on mentoring relationships, however, research on race and mentoring relationships has not yielded consistent findings because confounding variables have not been used as measures of control. In mentoring relationships conflict and dysfunction can arise. Johnson (2007) referred to this as *the dark side of mentoring*, where group memberships, rank, power, sex, influence, etc. may contribute to a mutually unbeneficial pairing. "A valued mentor is one always willing not only to give, but also to receive from their mentees and others" (Omary, 2008, p. 13). Regardless of the context, in mentoring relationships there is an opportunity for mutual exchange and benefit for both mentor and protégé.

Research on mentoring is presented in a very different light than its origins (Odysseus); mentoring relationships have evolved from paternalistic, one-way prescriptive directives to learning-centered, communicative mutually beneficial exchanges. As mentioned earlier, mentor and protégé are roles or titles; mentorship is the process by which mentor and protégé engage and learn from one another. Complexities associated with the mentor-protégé relationship have also been examined including sex, race, rank, power, and influence. Taking dimensions of identity into account when researching mentorship is an area where more research needs to be conducted. With regard to the MSL, there has only been one article published examining mentoring. Campbell et al. (2012) examined mentoring outcomes and type of mentor on socially responsible leadership capacity. The authors utilized all respondents who identified that they participated in a mentoring relationship. However, the researchers did not examine key demographics (race and gender) of mentor-protégé pairing. As mentioned in Chapter I, resident assistants are in paraprofessional roles. Resident assistants represent the final concept; in order to better understand this paraprofessional role, the history and the evolution of the resident assistant is discussed at length in the next section.

# The Resident Assistant (RA)

The use of student staff in higher education housing dates back to Colonial colleges (Winston & Fitch, 1993). The "dormitories" of these colleges differed from the English residence halls. The English residence halls were well kept and the faculty were quite friendly with the students. In contrast, the Colonial dormitory conditions were miserable and the American faculty assumed a parental, authoritative role. Behavior problems stemming from a group of young men living together in close quarters with little area to socialize, required American colonial faculty to assume "custodial care" and serve in an in loco parentis role to maintain acceptable conduct (Winston, Ullom, & Werring, 1984).

According to Winston et al. (1984) residence hall administrators were most likely the first student affairs professionals to employ students as paraprofessionals.

A paraprofessional is defined as a student who is selected, trained, and supervised in assuming responsibilities and performing tasks that are intended to (1) directly promote the individual personal development of his or her peers, (2) foster the creation and maintenance of environments that stimulate and support residents' personal and educational development, and/or (3) perform tasks that ensure the maintenance of secure, clean, healthy, psychologically safe, and esthetically pleasing living accommodations". (Winston & Fitch, 1993, p. 317)

As the field of student affairs became more established, a more holistic and less punitive approach was employed by practitioners when working with students (Blimling & Miltenberger, 1984). This holistic approach required more full-time and graduate staff members with knowledge of student development to oversee the administrative, maintenance, and safety of the halls. As residence life emerged as a functional area, the need for paraprofessionals living on the floor with the students while serving as a resource for academic and nonacademic resources became essential. More advanced paraprofessional staff members have assisted professional staff by increasing their effectiveness in working with students, freeing professionals' time to address bigger concerns, and fostering academic and student affairs interactions through educational programs (Ender, 1984; Kennedy, 2009).

Resident assistants (RAs) have been employed in housing units on a volunteer basis. They have also been informally elected by members of the community or hired by the institution (Kennedy, 2009). In exchange for their service, they were provided on-campus housing and/or a board/meal plan (Blimling & Miltenberger, 1984; Winston & Fitch, 1993). The RA lives on the floor essentially living where they work.

The RA position can vary depending on the institutional type, student demographics, the goals of the department, and requirements of the supervisor. The roles and duties student paraprofessionals assume in housing are related directly to the goals of the program. Until the 1950s they were often called Proctors, reflecting their role as rule enforcers; from the 1960s and beyond, these paraprofessionals were called resident assistants (Winston et al., 1984). RAs were considered paraprofessional because they did not receive formal professional training, yet they performed responsibilities similar to professional staff (Delworth, Sherwood, & Casaburri, 1974; Kennedy, 2009).

There is no universal resident assistant job description. However, Upcraft and Pilato (1982) identified six main roles and responsibilities resident assistants have including: providing personal assistance; overseeing groups; facilitating programming for social, educational, and recreational purposes; informing and referring students to appropriate resources; upholding institutional policies; and maintaining a safe environment conducive to studying and sleeping. Winston et al. (1984) identified seven roles: role model, peer helper, information and referral agent, socializer, leader, clerical worker, and conflict mediator. More recently, Wilson and Hirschy (2003) identified six RA roles including: student, administrator, role model, teacher, counselor, and policy enforcer. These overarching roles and responsibilities have not changed dramatically over the years. What has changed is how the work is done.

According to Kennedy (2009) RAs must not only succeed academically while working a 24 hour a day job; they must also serve as role models through positive study behavior while helping their residents with their academic concerns. The resident assistant role has evolved to require students to serve as peer mentors, including providing academic support. "The RA position is one of the most comprehensive roles in the student affairs division...This job is one of the most difficult student positions to hold and to perform well" (Blimling, 2010, p. 18). Due to the nature of the position, RAs must have the capacity to be both friend and policy upholder. Policy enforcement can be challenging for some RAs (Wilson & Hirschy, 2003). It is also crucial for RAs to both effectively manage their own lives while assisting others with managing theirs. "The RA fills a unique role as a teacher and a leader that few students are privileged to experience. No other group of students receives the training, assistance, and attention...to grow, to learn, and to experience responsibility..." (Blimling, 2010, p. 6).

Resident assistants are often first responders in crisis and emergency situations in addition to serving as information resources. RAs often have more contact with their residents than most student affairs professionals (Jaeger & Caison, 2006) and faculty members (Winston & Anchors, 1993). Therefore, certain skill sets must be cultivated in paraprofessionals who serve in the resident assistant role because their actions and behaviors have significant impact on the residents' overall development (Blimling, 2010; Winston et al., 1984). RAs are closely watched as they perform their duties and interact with members of the floor community (Winston & Fitch, 1993).

According to Blimling and Miltenberger (1984), residence hall staff should have basic skills in conceptual application (cultivating student development), counseling (helping), basic information (knowledge of resources), administration (for organization and time management), teaching (peer education through programming and role modeling), leadership (influencing and motivating others), crisis management (evaluation and action), and human relations (positive relationship building). The competing demands and dynamic roles RAs fulfill make it difficult to articulate if the "perfect" RA exists and what that person would look and act like (Kennedy, 2009; Powell, Plyler, Dickson, & McClellan, 1969).

RAs have high levels of responsibility, receive intentional (and often ongoing) training, meet consistently with their supervisors and peers, and engage in experiential skill building. As a group that exists on most campuses with roles that have remained consistent for over sixty years, there is a need to examine RAs and their leadership capacity and efficacy. Finally, as mentioned in the previous section, there has been only one published article (Campbell et al., 2012) examining mentoring outcomes and type of mentor utilizing the entire MSL 2009 data set. In Chapter I a problem statement was identified; studies have been conducted on mentoring relationships, but none have included the demographics of the mentor-protégé pairings that directly explore mentoring outcomes and leadership capacity in resident assistants. To address this problem, this study's purpose was to examine how resident assistants' leadership capacities (socially responsible leadership and leadership efficacy) were influenced by being involved in mentoring relationships (e.g., mentoring for personal development and/or mentoring for leadership empowerment). The research questions presented in Chapter I address mentoring outcomes and the demographics of the mentor-protégé pairings on leadership capacity in resident assistants. This review of the literature has provided context for the definitions, theoretical framework, and variables in the research questions. More specifically, the variables related to leadership, socially responsible leadership, leadership efficacy, leadership capacity, mentoring, and resident assistants were discussed.

# Summary

In this chapter, I have provided a review of the literature related the evolution of leadership theory, socially responsible leadership, mentoring theory, and the evolution of the role of the resident assistant. Multiple definitions of leadership, including an overview of the evolution in the philosophy and epistemology of contemporary leadership theory were also addressed. The historical perspective related to mentoring relationships was discussed along with the main functions of mentoring. As a group that exists on most campuses with roles that have remained consistent for over sixty years, there is a need to examine RAs and their leadership capacities and efficacies. Resident assistants are often hired because they have been or have the potential to be great leaders on their floor communities. RAs' leadership capacities have not been examined through the Multi-Institutional Study of Leadership. Due to their high

levels of responsibility, intentional (and often ongoing) hands-on training, and mentoring from faculty members, student affairs administrators, and peers, there is a gap in the literature that needs examination. The purpose of this chapter was to present and synthesize literature related to the topic, variables, and further substantiate the need for this research to be conducted. In Chapter III the connection between the problem statement, purpose of the study, research questions, and conceptual framework will be presented.

## CHAPTER III. METHODOLOGY

Leadership scholars and practitioners have put forth time, effort, and energy to equip student leaders with the abilities to make positive, purposeful social change for the common good. More than 200 research studies over the past century have examined the effectiveness of leadership interventions at the collegiate level (Dugan & Komives, 2011a). However, most studies on leadership outcomes have focused on leadership capacity, self-efficacy, learning, attitudes or intentions with little emphasis on a more integrative approach with increased attention on student development (Dugan & Komives, 2011b). For quite some time, leadership educators relied on best practices and/or intuition when designing leadership interventions; studies conducted within the last decade have been grounded in both evidence-based practice and research (Dugan, Bohle, Gebhardt, Hofert, Wilk, & Cooney, 2011). This study integrated research on leadership development and mentoring practices to examine resident assistants' socially responsible leadership capacities and leadership efficacies. The findings may result in questioning the effectiveness of leadership interventions and their perceived impact on student leaders.

#### Context

As mentioned at length in Chapter II, the 2009 Multi-Institutional Study of Leadership (MSL) is an international research database that contains national information on the role of higher education in developing leadership capacities focusing on specific environmental conditions fostering leadership development (J. Dugan, personal communication, October 21, 2010). Although the database is international, the MSL is a national study that provides a platform for participating institutions to provide both evidence-based practice and contribute to the understanding of college student leadership development. The principal investigator (PI) of the MSL is Dr. John P. Dugan. More than 250 institutions in the United States, Canada, Mexico, and Jamaica participated in the study with over 300,000 college student respondents ("Current Multi-Institutional Study of Leadership Information," n.d.). I focused on a sub-group, resident assistants utilizing mentoring relationships as an environmental predictor on socially responsible leadership and leadership efficacy. A more comprehensive overview of the purpose of the study is provided below.

# **Purpose of the Study**

The purpose of this study was to examine how resident assistants' leadership capacities (socially responsible leadership and leadership efficacy) were influenced by being involved in mentoring relationships (e.g., mentoring for personal development and/or mentoring for leadership empowerment). As mentioned in Chapter I, leadership capacity includes students' leadership behaviors and their efficacy to enact those behaviors. Leadership capacity is operationalized in this study through socially responsible leadership and leadership efficacy. Studies have been conducted on mentoring relationships, but none have included the demographics of the mentor-protégé pairings and their impact on mentoring outcomes and leadership capacity. Therefore, I explored the most significant type of mentor relationships (e.g., faculty member, student affairs professional, employer, or other student) the resident assistants identified. I also examined if there was a link between the mentoring relationship and most significant type of mentor and the resident assistants' leadership capacity. Finally, I investigated whether the race and/or gender of the mentor-protégé match was significant.

In order to provide context and common understanding of terminology and concepts related to the MSL study, it is necessary to define terms, concepts, and key words. Many of these definitions appear as an important part of the three research questions. The more generalizable key terms with multiple definitions were defined in Chapter I. In this chapter, I will discuss how these terms directly align with the instrument, scales, and variables of interest I used in my study.

## **MSL-Specific Definitions and Key Terms**

**Leaders.** According to Matusak (1997) leaders are individuals who have passion, make a difference, and impact an organization or community. In the MSL, leaders are not defined through their positions, roles, or titles but through their actions and behaviors (e.g., community service participation, empowering others to lead, engaging in political activism).

**Leadership Capacity.** Leadership capacity includes leadership behaviors and the leaders' efficacy to enact those behaviors. Leadership capacity is measured in the MSL by the Socially Responsible Leadership Scale as the educational outcome of socially responsible leadership.

**Leadership Efficacy.** According to Hannah, Avolio, Luthans, and Harms (2008), "leadership efficacy is a specific form of efficacy associated with the level of confidence in the knowledge, skills, and abilities associated with leading others" (p. 669); leadership efficacy is measured by the Leadership Efficacy Scale and is an outcome (dependent) variable in the study.

**Mentor.** Mentors originate from an array of roles in higher education including faculty members, student affairs educators, employers, and other students (Campbell, 2012; Parks, 2000). In the Multi-Institutional Study of Leadership (MSL) study, a mentor is defined as "a person who intentionally assists your growth or connects you to opportunities for career or personal development" (Multi-Institutional Study of

Leadership Codebook, 2010, pp. 10-11). According to Johnson (2007) mentors "promote socialization, learning, career advancement, psychological adjustment, and preparation for leadership" (p. 4). Mentorship is measured through two mentoring scales and defined in mentoring outcomes below.

Mentoring for Leadership Empowerment. Mentoring for leadership empowerment is more aligned with the career mentoring orientation. These action-focused tasks include empowering self and others to *engage* in leadership. Examples of mentoring for leadership empowerment include engaging in ethical leadership and empowering others to engage in leadership.

**Mentoring for Personal Development.** Mentoring for personal development is more aligned with the psychosocial orientation. In college student development theory psychosocial or life-skill tasks including developing autonomy, managing emotions, developing interdependence, and developing a sense of purpose (Campbell et al., 2012; Chickering & Reisser, 1993) are cultivated through mentoring relationships. Examples of mentoring for personal development in the MSL include living up to one's potential, developing problem-solving skills, and being a positive role model.

**Mentoring Outcomes.** In this study, mentoring outcomes were "outcomes for students in mentoring relationships" (Personal communication, J. Dugan, October 15, 2010). Mentoring outcomes are an environmental predictor (independent variable) on leadership capacity (dependent variable) as measured by two scales, the Leadership Empowerment and the Personal Development Scales. Mentoring for leadership empowerment includes encouraging protégés to enact leadership behaviors and encouraging others to do so. Mentoring for personal development includes supporting protégés interpersonally. Both mentoring scales are discussed at length in the instrumentation section in this chapter.

**Mentoring Relationships.** According to Kram (1985) mentoring requires a relational, supportive component (psychosocial) and a vocational socialization (career mentoring) component to balance tasks and relationships. Consistent with higher education literature, the MSL study categorizes mentoring relationships as either psychosocial (e.g. openness to new experiences) or career mentoring (e. g., socialization to the work world) (Campbell et al., 2012). Mentoring relationships are operationalized through both mentoring outcomes in the MSL survey (leadership empowerment and personal development).

**Mentorship.** Mentorship in its most recent interpretation emerged in the 1980s and is "characterized by reciprocal learning and focused on goal attainment and personal growth" (Campbell et al., 2012, p. 597). More recently Parks (2000) defined mentorship as an "intentional, mutually demanding, and meaningful relationship between two individuals, a young adult and an older, wiser figure who assists the younger person in learning the ways of life" (p. 127). Mentorship is operationalized in the MSL survey by respondents reporting their most significant mentor.

**Resident Assistant.** The resident assistant is a paraprofessional role held by a student who is selected, trained, supervised, and evaluated on tasks and responsibilities related to promoting personal development of one's peers and maintaining a supportive and educational residential environment (Winston & Fitch, 1993). The sub-sample included participants who self-selected their affiliation as a "resident assistant" and who completed 90% of the MSL survey.

**Socially Responsible Leadership (SRL).** SRL is directly tied to the constructs and purposes of the Social Change Model of leadership (SCM). SRL is operationalized through aggregating the individual (consciousness of self, congruence, commitment), group (collaboration, common purpose, controversy with civility), society (citizenship), and outcome (change) constructs of the Social Change Model into a single variable that measure the student's overall capacity for socially responsible leadership.

There are three research questions that guided this study. As mentioned in Chapter I, an overarching question is: When accounting for control measures and collegiate mentor-protégé demographics, do mentored resident assistants exhibit significantly higher leadership capacities than non-mentored counterparts? To address the problem statement, the research questions were somewhat sequential in nature starting with a broader view of mentoring relationships and progressing to a more specific examination of demographic factors. The research questions are:

# **Research Questions**

- Do resident assistants who participate in mentoring relationships exhibit significantly higher leadership capacities than resident assistants who do not, after accounting for control measures such as pre-college activities, race, gender, sexual orientation, and grade point average?
- 2. Is there a significant relationship between type of mentor and resident assistant leadership capacity, after accounting for the aforementioned control measures?
- 3. Does the relationship between mentoring relationships and leadership capacity differ based on the race and gender match of the mentor-protégé pairing, after accounting for the aforementioned control measures?

#### **Conceptual Framework: Astin's Input-Environment-Outcome Model**

In Chapter I a problem statement was identified; studies have been conducted on mentoring relationships, but none have included the demographics of the mentor-protégé pairings and their impact on mentoring outcomes and leadership capacity in resident assistants. To address this problem, this study's purpose is to examine how resident assistants' leadership capacities (socially responsible leadership and leadership efficacy) are influenced by being involved in mentoring relationships (e.g., mentoring for personal development and/or mentoring for leadership empowerment). The research questions presented in Chapter I address mentoring outcomes and demographics of the mentor-protégé pairings on leadership capacity in resident assistants. The review of the literature provided context for the definitions, theoretical framework, and variables in the research questions.

Astin's (1993) Input-Environment-Outcome (I-E-O) model is adapted for this study for use in cross-sectional research instead of the traditional longitudinal format. In this college impact model Astin examined how pre-college characteristics and the collegiate environment contribute to student outcomes and serves as the MSL's conceptual framework. In other words, the MSL's cross-sectional design requires student participants to reflect on past experiences to capture input data. Although the respondents were in college, they were asked questions that required them to report pre-college characteristics and activities. To capture environmental data, students were asked about their college leadership, institutional type, transfer student status, racial group membership, gender, class standing, and perceptions of climate (e.g., sense of belonging) (Astin, 1993; Dugan & Komives, 2011; Pascarella & Terenzini, 2005).

Researchers can use covariates to control for pre-college characteristics and other confounding factors to accurately assess the role the college environment has on educational

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outcomes (e.g., leadership capacity, leadership efficacy, mentoring outcomes). In the MSL, *inputs* are defined as students' pre-college characteristics (e.g., pre-college activities, pre-test for socially responsible leadership, pre-test for leadership efficacy); *environments* are defined as factors in the collegiate environment (e.g., type of mentor, gender or race match of the mentor-protégé pairings); and *outcomes* are defined as students' characteristics across the SCM theoretical measures (constructs) after being exposed to the college environment (e.g., socially responsible leadership, leadership efficacy, post-tests) (J. Dugan, personal communication, October 21, 2010). For an overview of the I-E-O model for this study, see Figure 3 below.

# Figure 3

# I-E-O Overview of Variables



## Main Sample

The Multi-Institutional Study of Leadership's 2009 sample consists of 34% (n = 118,733) of the 337,482 students invited to participate from January to April of 2009. Institutions that participated in the MSL were asked to find a sample of full-time and part-time undergraduate students. Smaller institutions (fewer than 4,000) surveyed all matriculated undergraduates; larger institutions could have a sample size of 4,000. Invitations to participate were sent via e-mail.

Researchers conducting secondary analysis on the MSL data choose a sub-sample to study. I chose resident assistants (ENVJ7), as they have not been studied and findings may be of interest to campus housing and residence life professionals (J. Dugan, personal communication, October 15, 2012). The resident assistant sub-sample size is 6,006. The sub-sample includes the total number of respondents who indicated they were resident assistants (n = 6,455) and who completed 90% of the survey. When the 90% threshold was met, the variable sample size was reduced to 6,006.

#### **Resident Assistant Mentoring Profile**

Resident assistants were asked if they have ever been mentored and 95.6% indicated they had been mentored at least once (n = 5,741) while 4.4% indicated they had never been mentored (n = 265). Frequencies and *t*-tests were conducted to examine the number of RAs who identified each type of mentor; they could select up to six types of mentor. Faculty were identified by 79.75% of the RAs, 60.32 % of RAs identified student affairs staff, 53.20% identified their employers, 37.81% identified community members, 78.25% identified a parent or guardian, and 74.15% identified another student. RAs were asked to identify their most significant mentor (faculty, student affairs, employer, other student) and could only select one type. After choosing their most significant mentor, they reported the mentors' gender and race(s).

#### **Sub-Sample Characteristics**

Table 3 describes the characteristics of the sub-sample of 6,006 resident assistants. The sample consisted of 8.3% African Americans/Blacks, 0.3% American Indians/Alaska Natives, 8.8% Asian Americans/Pacific Islanders, 65.5% Caucasians/Whites, 8.2% Latinos/Hispanics,

# Table 3

Sub-Sample Characteristics

Variable	n	%
Race		
African American/Black	4968	.3
American Indian/Alaska Native	19	.3
Asian American/Asian	528	8.8
Caucasian/White	3,931	65.5
Latino/Hispanic	223	3.7
Middle Eastern	44	.7
Multiracial	490	8.2
Race not included above	148	2.5
Grade Point Average		
3.50 - 4.00	2,371	39.5
3.00 - 3.49	2,269	37.8
2.50 - 2.999	681	6.1
2.00 - 2.49	202	3.4
1.99 or less	33	.5
No college GPA	16	.3
Pre-College Activities (Very Involved)		
Student Council/Government	1,201	20.0
Pep/Spirit Club, Cheer	816	13.6
Performing Arts	2,313	38.5
Academic Clubs	1,754	29.2
Organized Sports	2,745	45.7
Leadership Positions	2,807	46.7
Major		
Science, Technology, Engineering,	1 217	20.7
Drafaggional and Dra Drafaggional	1,217	20.7
Professional and Pre-Professional	552 047	0.0
	947	10.1
Business Administration	98U 242	15.4
	343	10./
Education Hasteh Dalatad Eistat	409	ð.U
Health-Kelated Fields	<b>3</b> 80	0.0
winn/interdisciplinary Studies	88	1.5
Social Sciences	982	10./
Undecided	111	1.9

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(Table 3 continues)

(Table 3 continued)

Variable	n	%
Gender		
Women	3,438	57.2
Men	2,411	40.1
Transgender	26	.4
Sexual Orientation		
Heterosexual	5,291	88.1
Bisexual	161	2.7
Gay/Lesbian	162	2.7
Questioning	83	1.4
Rather Not Say	174	2.9
Citizenship/Generation Status		
Grandparents, parents, and you		
were born in the U.S.	3,720	61.9
Both parents and you were born in		
the U.S.	699	11.6
You were born in the U.S.	649	10.8
You are a foreign-born,		
naturalized citizen	251	4.2
You are a foreign-born, resident		
alien/permanent resident	172	2.9
International student	381	6.3
Parents' Education		
Less than high school/GED	118	2.0
High school/GED	715	11.9
Some college	732	12.2
Associate's degree	497	8.3
Bachelor's degree	1,653	27.5
Master's degree	1,326	22.1
Doctorate/professional degree	753	12.5
I do not know	66	1.1

0.7% Middle Eastern, 8.2% Multiracial, and 2.5% Race not indicated. Variables with "I do not know", "I would rather not say", and "not included" were incorporated as missing data for analyses. The grade point averages reported were 39.5% in the 4.00 - 3.50 range, 37.8% in the 3.49 - 3.00 range, 16.1% in the 2.99 - 2.5 range, 3.4% in the 2.49 - 2.00 range, 0.5% at 1.99 or

below; 0.3% reported no college grade point average. Respondents indicated they were very involved in pre-college activities. Twenty percent were in student council/government, 13.6% participated in pep/spirit clubs, cheer, 38.5% engaged in performing arts, 29.2% were in academic clubs, 45.7% played organized sports, and 46.7% held leadership positions. The 22 majors were clustered by discipline. They included Science, Technology, Engineering, and Mathematics (STEM) as the reference group (n = 1,217) in comparison to Professional/Pre-Professional (n = 352), Humanities (n = 947), Business and Administration (n = 980), Communication (n = 343), Education (n = 469), Health-Related Fields (n = 380), Multi/Interdisciplinary Studies (n = 982), Social Sciences (n = 982), and Undecided (n = 111).

In the resident assistant (RA) sample, 57.2% identified as women, 40.1% identified as men, and .4% identified as transgender. The sample consisted of 88.1% who identified as heterosexual, 2.7% who identified as bisexual, 2.7% who identified as gay or lesbian, 1.4% who identified as questioning, and 2.9% chose "rather not say". The RAs were asked their generational status; 84.3% reported they were born in the United States, 4.2% reported they were foreign born, naturalized citizens, 2.9% reported they were foreign born, resident aliens/permanent residents, and 6.3% reported they were international students. The majority of the samples' parents had a college education (bachelor's degree = 27.5%, master's degree = 22.1%, and doctorate or professional degree = 12.5%). A small percentage of the respondent's parents (11.9%) had a high school diploma/GED and 12.2% had some college while 2.0% had less than a high school diploma or GED, and 1.1% did not know their parents' education levels.

## Variables and Measures

In order to most accurately measure the impact of the college environment, numerous controls variables (inputs) were selected. Covariates allowed me to isolate the impact of college

environments, such as participating in a mentoring relationship or leadership capacity (Astin, 1991, 1993). The covariates or controls were pre-college activities (e.g., student council, cheerleading, performing arts, academic clubs, organized sports, leadership positions), major, gender, race, sexual orientation, parents' education, citizenship/generational status, and college grade point average. For accuracy, the conceptual framework requires covariates as inputs to control for the influences of the collegiate environment. As depicted in Figure 4, inputs included covariates and the pre-tests for socially responsible leadership and leadership efficacy. Mentoring demographics (type and race/gender pairings) were independent variables. Finally, mentoring outcomes (personal development and leadership empowerment) served as quasidependent variables; they were environmental predictors of the main dependent variable, leadership capacity. Mentoring for personal development is manifested through psychosocial support and mentoring for leadership empowerment is exhibited through career guidance or socialization. The educational outcomes were socially responsible leadership and leadership efficacy (leadership capacity). The variables and outcomes were requested through the MSL data usage form in Appendix K.

**Socially Responsible Leadership Scale.** The MSL Survey has over 400 variables, scales, and composite measures (MSL, "Psychometrics and Design," n.d.). The 71-item Socially Responsible Leadership Scale (SRLS) is the core scale in the MSL survey instrument mentioned in Chapter II. The SRLS has undergone extensive psychometric work. Rigorous methods were used in the creation of the original SRLS to establish content validity of the measures. This process is explained in detail in the original dissertation from which the instrument is derived (Tyree, 1998) and outlined in Chapter II. Construct validity was further examined for the SRLS in early pilot studies of the MSL Survey as well as with the 2006 and 2009 iterations of the

study. According to Dugan (2006a) reliability levels across all eight scales in the original version, revised form, MSL pilot studies, MSL 2006 Survey, and current form demonstrate consistent performance levels. Cronbach Alphas for the socially responsible leadership variable for the 2009 national study were 0.96, and the reliability of the scale in this sample was also 0.94 (Skendall, 2012).

# Figure 4




Given reliability is a function of using an instrument with a specific population and not the instrument itself (Mertens, 2005), Cronbach alphas were calculated for each institution in the 2006 study as well as by categories in each major student sub-population

(i.e., race, gender, sexual orientation). (MSL, "Psychometrics and Design," n.d., para.3). Cronbach alphas were calculated for the educational outcomes in this sub-group and those findings are presented later in this chapter. Further, scholarly publications using the MSL data can be found at www.leadershipstudy.net and in Appendix C while the range of scores and overview of the SRLS can be found in Appendix B.

The original SRLS developed by Tyree (1998) measured socially responsible leadership through eight independent scales, each measuring a construct of the Social Change Model of leadership. Table 2 offered definitions for each construct and definition. For accuracy, Tyree (1998) utilized the Crowne-Marlowe Scale when creating the SRLS to remove questions that were highly related with social desirability. SRLS items are designed with Likert response scales ranging from 1=*strongly disagree* to 5= *strongly agree* with negative items being reverse scored. The original SRLS contained 103 items, while the MSL adaptation was created to reduce the length of the instrument and respondent burden resulting in a 71-item modified instrument (Campbell et al., 2012).

Examples from the study of 71-item SRLS from the MSL Codebook for each of the "7 Cs" are: controversy with civility (e.g., "Creativity can come from conflict"), consciousness of self (e.g., "I know myself pretty well"), congruence (e.g., "My behaviors are congruent with my beliefs"), common purpose (e.g., "I contribute to the goals of the group"), collaboration (e.g., "Collaboration produces better results"), commitment (e.g., "I am focused on my responsibilities"), citizenship (e.g., "I work with others to make my communities better places"), and change (e.g., "I am comfortable with initiating new ways of looking at things"). In the MSL Study, all the values of the Social Change Model (SCM) are grouped into a single variable (OMNIBUS) to measure socially responsible leadership; for this study, that variable is called socially responsible leadership. The Cronbach's alphas for the SCM individual constructs were .89 and .89 for group constructs. As mentioned earlier, the socially responsible leadership (omnibus) variable's Cronbach's alpha was .94. To examine information related to the modified version of the SRLS' validity and reliability, see Appendix C.

Leadership Efficacy Scale. In the MSL Survey, the Leadership Efficacy Scale measures students' confidence in their knowledge, skills, and abilities to take on a leadership role. The four-point scale was based on Bandura's (1997) Social Learning Theory. The Leadership Efficacy Scale is used to assess select leadership behaviors (e.g., "leading others" or "working on a group project"). Response options ranged from 1= not at all confident to 4= very confident. The Leadership Efficacy pre-test examined pre-college characteristics and the post-test examined during-college characteristics to accurately measure the impact of collegiate environment (e.g. mentoring) and the outcome variables (e.g., leadership capacity). The pre- and post-test items included: leading others, organizing a group's task to accomplish a goal, taking initiative to improve something, and working with a team on a group project. The Cronbach's alpha for the leadership efficacy scale is .88. On the four-point scale the resident assistant sample reported the following confidence levels: not at all confident n = 45 (.8%), somewhat confident n = 443(7.4%), confident n = 2,950 (49%), and very confident n = 2,568 (42.7%). In essence, 91.7% of all resident assistants self-reported they were confident or very confident in their knowledge, skills, and abilities as leaders. The range of scores and overview of the Leadership Efficacy Scale can be found in Appendix B.

**Mentoring Scales.** Little is known about how mentoring relationships lead to growth in leadership capacity (Campbell et al., 2012; Dugan & Komives, 2011). Mentoring outcomes are measured in the MSL through the leadership empowerment scale and the personal development scale. These scales were created by the MSL research team by factor analyses. The leadership empowerment scale has three items requesting respondents to indicate their level of agreement that their mentor has empowered them to engage in leadership, their ability to empower others to engage in leadership, and their ability to engage in ethical leadership. The mentoring for personal development scale has seven items including: living up to one's potential, being a positive role model, mentoring others, valuing working with others from diverse backgrounds, being open to new experiences, developing problem-solving skills, and identifying areas for self-improvement. The seven-item personal development scale had a Cronbach's alpha level of .89 provides an overview of the connection between the theory, study, instrument, and scales of interest. The range of scores and overview of mentoring scales can be found in Appendix B.

#### **Data Collection and Security**

The MSL administrator is the Survey Sciences Group, LLC (SSG) independent research consultants with expertise in multi-campus studies ("Multi-Study of Leadership Data Collection Overview," n.d.). The MSL Survey was an online survey that allowed students to share their experiences at a moment in time and/or comfortable place while they reflected and/or accessed the survey multiple times. For convenience, students had the option to leave the survey and resume it at a later time.

### Figure 5

### **Overview of Educational Outcome Scales**



Data collection was conducted from January 2009 through April 2009; each participating institution selected a three-week time period most conducive to their academic calendar for students to receive the survey electronically. Confidentiality and consent were outlined in correspondence with respondents and students received no more than four contacts ("Multi-Study of Leadership Data Collection Overview," n.d.). Data collection overview information can be retrieved from http://leadershipstudy.net/design/data-collection-methods/. According to the MSL data security document, confidentiality of respondents was assured through the use of password-protected internal servers and secure personal identifiers. "Data [were] received and transmitted via password-protected, 128-bit SSL technology...We use both stand-alone networks and firewalls to safeguard data against outside networks attacks" ("Multi-Institutional Study of Leadership Data Security," n.d., para. four).

#### **Data Analysis**

A modified version of Astin's I-E-O model served as the conceptual framework for the study. The I-E-O model holds "pre-college inputs and elements of the collegiate environment interact to produce a range of outcomes" ("MSL Conceptual Model," n.d., para. 1). Respondents included resident assistants (ENV7J) from a variety of institutional sizes and types. The inputs or controls I selected for questions one and two were pre-college leadership including: precollege activities (PRE3A-F), academic major (DEM5), gender (DEM7), sexual orientation (DEM8), U.S. citizenship/generational status (DEM9), race (DEM10C), college grade point average (DEM13), and parents' education (DEM14). For question three, gender and race were not used as a measure of control due to the nature of the research question. Research question three examined the gender and race matches of mentor-protégé pairs. Non-ordinal covariates were transformed into binary variables as needed either by frequency or unique contributions to the study. Race was coded as a dichotomous variable (0 = non-Caucasian/White, 1 =Caucasian/White). Grade point average was recoded so higher grade point averages were associated with higher values (1 = 1.99 or less, 5 = 3.50-4.0). The 22 majors were clustered into ten disciplines with Science, Technology, Engineering and Math as the referent group. Gender was coded as a dichotomous variable (0 = men or transgender, 1 = women). Sexual orientation was dichotomized (0 =non-heterosexual, 1 = heterosexual). The citizenship status variable was also dichotomized (0 = domestic students, 1 = international students). Parents' education was coded as a dichotomous variable (0 = non-Bachelor's, 1 = Bachelor's) and the response "I do not know" was treated as missing data. See Table 4 for an overview of the input variables. These measures of control were intended to more accurately assess the collegiate environments' impact on educational outcomes (dependent variables).

### Table 4

Inputs	n	%
Race		
Caucasian/White	3,931	65.5
All Others	2,075	34.5
Grade Point Average		
3.50 - 4.00	2.371	39.5
3.00 - 3.49	2.269	37.8
2.50 - 2.99	968	16.1
2.00 - 2.49	202	3.4
1.99 or less	33	0.5
No college GPA	16	0.3
Maior		
Science, Technology, Engineering, and Mathematics	1,217	20.7
Professional and Pre-Professional	352	6.0
Humanities	947	16.1
Business Administration	980	15.4
Communication	343	16.7
Education	469	8.0
Health-Related Fields	380	6.5
Multi/Interdisciplinary Studies	88	1.5
Social Sciences	982	16.7
Undecided	111	1.9
Gender		
Women	3,438	57.2
All Others	2,568	42.8
Sexual Orientation		
Heterosexual	5,291	88.1
All Others	715	11.9

## Resident Assistant Input Variables (n=6,006)

(Table 4 continues)

(Table 4 continued)

Inputs	n	%
Citizenship/Generation Status		
International Student	381	6.30
Domestic Student	5,491	93.70
Parents' Education		
Less than high school/GED	118	2.00
High school/GED	715	11.90
Some college	732	12.20
Associate's degree	497	8.30
Bachelor's degree	1,653	27.50
Master's degree	1,326	22.10
Doctorate/professional degree	753	12.50
I do not know	66	1.10

The pre-college measures found in Table 5 below included pre-college experiences (e.g., high school involvement, pre-college leadership training) for statistical analysis (PRE3A-F). The pre-tests for socially responsible leadership and leadership efficacy were also independent variables that served as further measures of control for pre-college experiences.

Table 5

Pre-College Measures

Inputs	M	SD
Pre-College Activities		
Student Council/Government	2.11	1.17
Pep/Spirit Club, Cheer	1.82	1.09
Performing Arts	2.65	1.24
Academic Clubs	2.62	1.11
Organized Sports	2.84	1.23
Leadership Positions	3.02	1.09
Socially Responsible Leadership Pre-test	3.91	.53
Leadership Efficacy Pre-test	2.96	.71

The pre-tests for socially responsible leadership (PREOMNI) and leadership efficacy (PREEFF) were also used as measures of control.

In Table 6 below, the means and standard deviations for all educational outcomes

(outputs) are depicted.

Table 6

### *Resident Assistant Outputs for Model Variables (n=6,006)*

Educational Outcomes	М	SD
SCM Individual Values		
Consciousness of Self	4.01	.55
Congruence	4.18	.58
Commitment	4.31	.56
SCM Group Values		
Common Purpose	4.06	.52
Collaboration	4.09	.53
Controversy with Civility	3.85	.47
Citizenship	4.00	.60
Change	3.84	.52
Mentoring for Leadership Empowerment	3.99	.86
Mentoring for Personal Development	4.24	.66
Leadership Capacity		
Socially Responsible Leadership	4.02	.46
Leadership Efficacy	3.26	.61

The outputs included the eight Social Change Model scales: consciousness of self scale (SELF), congruence scale (CONGRU), commitment scale (COMMIT), collaboration scale (COLLAB), common purpose scale (COMMON), controversy with civility scale (CIVIL), citizenship scale

(CITZEN), and change scale (CHANGE). The two mentoring scales, Mentorship for Personal Development (MENOUTPD) and Mentorship for Leadership Empowerment (MENOUTLE) served as quasi-dependent variables; they provided environmental context related to mentoring relationships for the dependent variable, leadership capacity. Finally, leadership capacity including socially responsible leadership (OMNIBUS) and leadership efficacy (OUTEFF) means and standard deviations were included. Taking the inputs, environments, and outcomes (covariates, independent variables, and dependent variables) into account, the proposed analyses for each research question are provided in Table 7 below.

### Table 7

### Research Questions and Corresponding Analyses

Research Question	Analyses
Do resident assistants who participate in mentoring	I ran descriptive statistics across all constructs
relationships exhibit significantly higher leadership	of the Social Change Model, socially
capacities than resident assistants who do not, after	responsible leadership, and leadership efficacy.
accounting for control measures such as pre-college	I conducted independent sample <i>t</i> -tests to
activities, race, gender, sexual orientation, grade	compare group means. Subsequently, I
point average?	conducted multiple regression. The model
	included covariates, pre-tests, and the variable
	whether the resident assistant had been
	mentored on the dependent variables.

(Table 7 continues)

Research Question	Analyses
Is there a significant relationship between type	I ran descriptive statistics on all dependent
of mentor and resident assistant leadership	variables. I conducted an ANOVA to examine
capacity, after accounting for the	group means of resident assistants by type of
aforementioned control measures?	mentor. Subsequently, multiple regression was
	utilized. The model included covariates, pre-
	tests, and the most significant type of mentors
	on the dependent variables.
Does the relationship between leadership	I ran descriptive statistics on all dependent
capacity and mentoring relationships differ	variables. I conducted independent sample t-
based on the race and gender match of the	tests to examine group means of gender match
mentor-protégé pairing, after accounting for	and race match mentor-protégé pairs.
the aforementioned control measures?	Subsequently, I conducted multiple regression.
	The model included covariates, pre-tests, and
	the computed variables for gender match and
	race match mentor-protégé pairs.

### **Regression Assumptions and Hypotheses**

Multiple regression rests on basic assumptions including: observations in the sample must be randomly sampled and independent of each other; there is a normal distribution with the distribution of scores on the DVs with equal variances, linear relationships exist between all pairs of DVs, all pairs of covariates, and DV-covariate pairs; and the covariates are reliable and measured without error (Mertler & Vannatta, 2002).

The hypotheses for each research question associated with this study can be found below:

H<sub>1</sub>: Resident assistants participating in mentoring relationships will demonstrate significantly higher leadership capacity than those who do not;

H<sub>2</sub>: Resident assistants with student affairs mentors as their most significant mentor will score higher than resident assistants with any other type of mentor (faculty, employer, other student) on the socially responsible leadership and leadership efficacy; and;

H<sub>3</sub>: Same-race and same-gender mentor-protégé pairs will score higher on socially responsible leadership and leadership efficacy.

I utilized multiple regression and examined the influence of several predictor variates because of prior substantive knowledge about the instrument and previous findings. Multiple regression in a single model was utilized rather than stepwise regression because the research is grounded in theory in addition to the researcher's previous knowledge of the study. The researcher positionality section, found below, expands on how I have worked with the Multi-Institutional Study of Leadership's data for nearly six years in different capacities (e.g., Institutional Principal Investigator, summit participant, researcher). If this research were exploratory in nature stepwise regression would have been more appropriate; this study relied on a parsimonious solution, my ability to select a good set of predictor variables. In addition to acknowledging regression assumptions, data concerns were also addressed. Those concerns included careful examination of the intercorrelations among predictor variables to test for multicollinearity, calculating tolerance and variance inflation factors. In Chapter IV the aforementioned concerns are discussed at length.

#### **Researcher Positionality**

I have known the principle investigator, Dr. John Dugan since 2002 when we advised Residence Hall Associations for the only public state institutions in Nevada (Reno and Las Vegas). A year later, Dugan became a leadership coordinator in the student involvement and activities office at the University of Nevada, Las Vegas (UNLV). As leadership coordinator he conducted an institutional assessment to determine students' leadership and service needs for departmental improvement; this study at UNLV served as the pilot study for the MSL. Inspired by the findings from the pilot study at UNLV, Dugan left to pursue his doctorate at the University of Maryland, College Park and the MSL became his dissertation topic; UNLV was one of the participating institutions in the 2006 launch of the MSL as a part of Dugan's dissertation research.

As Dugan was finishing his doctorate and preparing for the 2009 launch of the Multi-Institutional Study of Leadership (MSL), I was an assistant director in the Office of Civic Engagement and Diversity at UNLV (formerly student involvement and activities) and was asked to serve as principal investigator for the second UNLV MSL launch. This involved working with the contracted statisticians from the Survey Science Group to obtain human subject review board approval through an expedited review process, which included approval of the use of electronic informed consent forms. I was also responsible for institution-specific survey question design, ethical considerations, marketing, securing incentives, and division/unit and MSL distribution of findings.

I spent a considerable amount of time and effort soliciting a strong response rate and Dugan and his MSL research team took notice. Because of my efforts, Dugan requested that I participate in a new initiative, the MSL Summit Group. This group met in November 2010, my first semester as a doctoral student at Bowling Green State University. The summit was at Loyola University in Chicago, where Dugan was an assistant professor. This group of leadership educators consisted of scholars and practitioners from across the nation. They were charged with discussing the impact of the study and further areas to extrapolate relevant information from collected data from 2006 and 2009. Additionally, we provided feedback for educational outcomes, variables of interest, and possible sub-studies for the 2012 MSL launch.

#### Summary

This chapter presented an extensive overview of the Multi-Institutional Study of Leadership (MSL) including the instrumentation, variables of interest, scales in the study, and more extensive MSL-specific definitions of terms. An explicit articulation of the independent variables, dependent variables, and covariates were also discussed. Proposed analyses to answer the three research questions were discussed in the text and in a table. Finally, the validity and reliability of the study were discussed in addition to the researcher's familiarity of the study and positionality. The next chapter will introduce the findings.

### CHAPTER IV. FINDINGS

The purpose of this study was to examine how resident assistants' leadership capacities (socially responsible leadership and leadership efficacy) were influenced by being involved in mentoring relationships. I examined if there was a link between the mentoring relationship and most significant type of mentor (faculty member, student affairs professional, employer, or other student) and the resident assistants' leadership capacity. I also investigated whether the race and/or gender of the mentor-protégé match was significant. The guiding research questions were: (1) Do resident assistants who participate in mentoring relationships exhibit significantly higher leadership capacities than resident assistants who do not, after accounting for control measures such as pre-college activities, race, gender, sexual orientation, and grade point average? (2) Is there a significant relationship between type of mentor and resident assistant leadership capacity, after accounting for the aforementioned control measures? (3) Does the relationship between mentoring relationships and leadership capacity differ based on the race and gender match of the mentor-protégé pairing, after accounting for the aforementioned control measures?

#### Mentoring as a Predictor for Socially Responsible Leadership

The first hypothesis from Chapter III was that mentored resident assistants would demonstrate significantly higher leadership capacities than non-mentored counterparts. This hypothesis examined leadership capacities for mentored RAs and non-mentored RAs. Leadership capacity included socially responsible leadership and leadership efficacy scores. I conducted independent samples *t*-tests to analyze differences between groups, as depicted in Table 8 below, RAs group means on all Social Change Model (SCM) values and change variable were higher for mentored RAs than non-mentored RAs. The socially responsible leadership variable

measures socially responsible leadership (SCM constructs and change); mentored RAs had

higher scores on the socially responsible leadership variable as well. I tested to determine if the

variances were equal.

### Table 8

	<u>Mer</u> (1	ntored ] n=5,74	<u>RAs</u> 1)	Noi	n-mentor <u>RAs</u> (n=265)	<u>ed</u>		
Leadership Constructs	М	SD	SE	М	SD	SE	<i>t</i> -Values	Cohen's d
Individual Values								
Consciousness of Self	4.03	.55	.009	3.77	.64	.013	-6.53	.44
Congruence	4.19	.57	.008	3.92	.72	.044	-6.13	.42
Commitment	4.32	.55	.007	4.03	.69	.042	-6.70	.42
Group Values								
Collaboration	4.09	.52	.007	3.83	.65	.039	-6.71***	.44
Common Purpose	4.07	.51	.006	3.81	.67	.041	-6.29***	.43
Controversy with Civility	3.86	.46	.008	3.65	.54	.033	-6.35***	.42
Citizenship	4.02	.59	.008	3.67	.69	.043	-8.15***	.56
Change	3.85	.51	.007	3.71	.55	.034	-4.49***	.26
Leadership Capacity Socially Responsible Leadership	4.03	.45	.006	3.77	.57	.035	-7.27***	.51
	5.21	.00	.000	5.00	.12	.040	-5.50	.52

Means, Standard Deviations, Standard Error, and t-Values for Mentored and Non-Mentored RAs on Educational Outcomes

\*\*\*p < .001

The assumptions for the *t*-test are that the values of individuals are not correlated, the distribution of the continuous variable is normal within the two groups, and the variances in the two groups are equal (Mertler & Vannatta, 2002). With larger sample sizes the equality of variances is a more important assumption. Through SPSS software I examined Levene's Test for Equality of Variances on the dependent variables. The first *t*-value assumes equality of

variances, the second *t*-value does not. If equality of variances is a reasonable assumption, the *F*-test for equality of variances will not be significant. The *F*-test for equality of variances was less than .05 for all dependent variables except change (p = .060) and leadership efficacy (p = .107). Therefore, unequal variances were assumed for SCM constructs and socially responsible leadership. Equal variances were assumed for change and leadership efficacy. I used the appropriate *t*-values when the equality of variances assumptions was not met.

Findings from the independent samples *t*-tests were that mentored resident assistants had significantly higher scores than non-mentored resident assistants on all dependent variables. Initially, I examined Social Change Model (SCM) individual, group, societal, and change constructs as dependent variables. On those leadership constructs that related to individual characteristics, mentored resident assistants reported higher levels of consciousness of self, congruence, and commitment. On those leadership constructs that related to group characteristics, mentored resident assistants reported higher levels of collaboration, common purpose, and controversy with civility. On the leadership construct that related to the society construct, mentored resident assistants reported higher levels of citizenship. On the SCM outcome construct mentored resident assistants reported higher levels of change. Findings from the independent samples *t*-tests were that mentored resident assistants had significantly higher scores than non-mentored resident assistants on leadership capacity (socially responsible leadership efficacy). Mentored resident assistants reported higher scores.

I also examined the effect sizes for all dependent variables. With larger sample sizes there may be statistical significance, but not practical significance. The effect size measures the size of the difference between two groups and is a measure of the practical significance of the difference (Coe, 2002). The effect size or Cohen's d is the difference between the means divided by the standard deviation. Two groups' means should differ by at least .2 standard deviations or more. Cohen (1988) stated d = .2 for a small effect size, d = .5 for a medium effect, and d = .8for a large effect. The values for Cohen's d are reported in Table 8. For all variables the effect sizes are not large; however, the group means differ by at least .2 standard deviations, and the differences ranged from small to medium. The findings indicated mentored resident assistants had significantly higher scores than non-mentored resident assistants on all dependent variables, including leadership capacity (socially responsible leadership and leadership efficacy). This suggests mentored resident assistants demonstrate higher leadership capacities than nonmentored resident assistants.

Multiple regression analysis was conducted to explore mean differences across the dependent variables (eight SCM leadership constructs, socially responsible leadership, and leadership efficacy). IBM SPSS Statistics 22 software was used to conduct the analyses. Control measures (covariates) were pre-college activities, major, gender, race, sexual orientation, citizenship/generation status, parents' education level, and pre-tests for socially responsible leadership and leadership efficacy. The model tested if mentoring significantly predicted the Social Change Model (SCM) individual, group, societal and change constructs, socially responsible leadership, and leadership efficacy. In order to gauge the strength of the predictors, R-Squared values were calculated. R-Squared or the coefficient of determination explained the variation of the data and ranges from 0 to 1; values closer to 1 indicated a greater proportion of variance was accounted for in the model.

I will present each model in table form followed by a brief interpretation of the key predictor associated with the research question. SCM individual values' findings are in Table 9.

### Table 9

## Standardized Coefficients on Social Change Model Individual Constructs

Independent Variables	Consciousness of Self	Congruence	Commitment
Caucasian/White	.022	.059***	.052***
Grade Point Average	.062***	.079***	.096***
Pre-College Activities (Very Highly Involved) Student Council/Government Pep/Spirit Club, Cheer Performing Arts Academic Clubs Organized Sports Leadership Positions	.007 036** .035** .002 .014 .021	.001 062*** .054*** .000 .007 .045**	014 050*** .052*** .012 .007 .049**
Major Professional and Pre-Professional Humanities Business Administration Communication Education Health-Related Fields Multi/Interdisciplinary Studies Social Sciences Undecided	.027* .081*** .047** .040** .042** .032* .025* .079*** 022	.011 .053*** .034* .023 .029* .030* .009 .059*** 018	.002 .032* .026 .008 .016 .009 .007 .060***
Women	.000	036**	065***
Heterosexual	.026*	.028*	.029**
International Students	086***	056***	080***
Bachelor's Degree	.011	.012	.018
Socially Responsible Leadership Pre-test	.389***	.405***	.398***
Leadership Efficacy Pre-test	.141***	.077***	.072***
Mentored	.063***	.058***	.063***
R <sup>2</sup>	.274	.264	.272
Adjusted R <sup>2</sup>	.271	.261	.269

\*p<.05, \*\*p<.01, \*\*\*p<.001

A negatively related standardized coefficient predicts a decrease on the dependent variable; a positively associated standardized coefficient indicates an increase on the dependent variable.

The mentoring variable was significant and positive; mentored RAs are predicted to demonstrate

higher SCM individual competencies. SCM group findings are in Table 10 below.

### Table 10

### Standardized Coefficients on Social Change Model Group Constructs

Independent Variables	Collaboration	Common Purpose	Controversy with Civility
Caucasian/White	.021	011	.052***
Grade Point Average	.051***	.061***	.047***
Pre-College Activities Student Council/Government Pep/Spirit Club, Cheer Performing Arts Academic Clubs Organized Sports Leadership Positions	.020 025 .047*** 004 .013 .031*	.008 029* .040** .012 .003 .050***	005 058*** .075*** .019 .012 .008
Major Professional and Pre-Professional Humanities Business Administration Communication Education Health-Related Fields Multi/Interdisciplinary Studies Social Sciences Undecided	.009 .028* .029* .010 .044** .017 008 .036* 031**	.004 .037* .041** .030* .022 .022 005 .058*** 040**	007 .056*** .006 .015 .008 007 .008 .084*** 012
Women	033**	040**	004
Heterosexual	.019	.012	016
International Students	044***	052***	081***
Bachelor's Degree	.007	.014	014
Socially Responsible Leadership Pre-test	.411***	.373***	.362***
Leadership Efficacy Pre-test	.096***	.097***	.055***
Mentored	.067***	.067***	.064***
R <sup>2</sup>	.264	.241	.205
Adjusted R <sup>2</sup>	.261	.238	.202

\*p<.05, \*\*p<.01, \*\*\*p<.001

The mentoring variable was significant and positive; mentored RAs are predicted to demonstrate

higher SCM group competencies. Citizenship and change results can be found in Table 11.

### Table 11

### Standardized Coefficients on Social Change Model Society and Change Constructs

Independent Variables	Citizenship	Change
Caucasian/White	012	.006
Grade Point Average	.086***	.007
Pre-College Activities Student Council/Government Pep/Spirit Club, Cheer Performing Arts Academic Clubs Organized Sports Leadership Positions Major	.051*** 024* .061*** .030* 001 .048**	.003 014 .052*** .005 .008 022
Professional and Pre-Professional Humanities Business Administration Communication Education Health-Related Fields Multi/Interdisciplinary Studies Social Sciences Undecided	.015 .056*** .022 .015 .038** .022 .031** .082*** 039**	.001 .035* .018 .023 001 .005 .019 .041** 031*
Women	057***	.022
Heterosexual	001	025*
International Students	046***	038**
Bachelor's Degree	004	016
Socially Responsible Leadership Pre-test	.347***	.385***
Leadership Efficacy Pre-test	.082***	.105***
Mentored	.084***	.031**
R <sup>2</sup>	.248	.203
Adjusted R <sup>2</sup>	.245	.200

\*p<.05, \*\*p<.01, \*\*\*p<.001

The mentoring variable suggests mentored RAs are predicted to demonstrate higher citizenship and change competencies.

#### Mentoring as a Predictor for Leadership Capacity

Leadership capacity findings are depicted in Table 12. The mentoring variable was significant and positive for socially responsible leadership and leadership efficacy. Therefore, mentored RAs are predicted to demonstrate higher leadership capacity competencies.

Overall findings included that certain demographics, pre-college activities, majors, the pre-tests for leadership capacity, and participating in mentoring relationships (the key independent variable) were significant predictors of socially responsible leadership and leadership efficacy. Race emerged as a significant positive predictor; resident assistants (RAs) who identify as Caucasian/White are predicted to exhibit higher SCM and leadership capacity competencies. Grade point average (GPA) was positively related; RAs who have higher GPAs are predicted to exhibit higher on SCM individual, group, citizenship, and leadership capacity competencies. Of the pre-college activities, participation in performing arts and leadership in clubs, groups, or sports were the predictors that were significant and consistently positively related. If a resident assistant (RA) engaged in those pre-college activities, it can be predicted their scores will be higher on SCM and leadership capacity competencies. Pep/Spirit Club/ Cheer participation was a negatively associated predictor within the pre-college activities; RAs who participated in this pre-college activity are predicted to score lower on the SCM constructs and leadership capacity.

The 22 majors were clustered into ten disciplines. The referent group was Science, Technology, Engineering, and Mathematics (STEM) majors. Two majors emerged consistently across the models; Humanities (positively associated) and Undecided (negatively related).

### Table 12

### Standardized Coefficients on Leadership Capacity

Independent Variables	Socially Responsible Leadership	Leadership Efficacy
Caucasian/White	.027*	.028*
Grade Point Average	.071***	.059***
Pre-College Activities	012	027
Student Council/Government	.013	.027
Pep/Spirit Club, Cheer	043***	005
Performing Arts	.062***	.029*
Academic Clubs	.013	001
Organized Sports	.009	.01/
Leadership Positions	.033**	.0/4***
Major		
Professional and Pre Professional	000	004
Humanities	.009	.004
Business Administration	.058	.020
Communication	.052	.047
Education	029*	030*
Health-Related Fields	019	- 003
Multi/Interdisciplinary Studies	014	003
Social Sciences	- 075***	052***
Undecided	- 033**	- 058***
Chubblada	.000	
Women	030**	.028*
Heterosexual	.008	.004
International Students	070***	059***
Bachelor's Degree	.002	.009
Socially Responsible Leadership Pre-test	.450***	.184***
Leadership Efficacy Pre-test	.108***	.302***
Mentored	.074***	.049***
$R^2$	.330	.243
Adjusted R <sup>2</sup>	.328	.240

\*p<.05, \*\*p<.01, \*\*\*p<.001

Humanities majors are predicted to exhibit higher SRL and leadership capacity competencies in comparison to STEM majors. Undecided majors are predicted to exhibit lower SRL and leadership capacity competencies in comparison to STEM majors. If an RA identifies as

heterosexual they are predicted to score higher on SCM individual, group, and citizenship but lower on change. In comparison to women, the referent group for gender, men and transgender RAs are predicted to exhibit higher on SCM individual competencies but lower change competencies. Finally, international RAs are predicted to score lower on SCM constructs and leadership capacity in comparison to domestic students. The pre-test for socially responsible leadership and the pre-test for leadership efficacy were positive predictors of SCM constructs and leadership capacity; if an RA had higher scores on the pre-tests they are predicted to have higher capacities for SRL and leadership capacity. The means and standard deviations for all dependent variables for mentored RAs is presented in Table 13 below.

Table 13

Variable	M	SD
Individual Values		
Consciousness of Self	4.03	.55
Congruence	4.19	.57
Commitment	4.32	.55
Group Values		
Collaboration	4.09	.52
Common Purpose	4.07	.51
Controversy with Civility	3.86	.46
Citizenship	4.02	.59
Change	3.85	.51
Leadership Capacity Socially Responsible Leadership	4 03	45
Leadership Efficacy	3.27	.60

Social Change Model Constructs and Leadership Capacity Means and Standard Deviations for Mentored RAs

#### Type of Mentor and Leadership Capacity

As mentioned in Chapter II, we know little about how mentoring relationships lead to growth in leadership capacity (Campbell et al., 2012; Dugan, 2011). The second research question examined the type of mentor and leadership capacity (socially responsible leadership and leadership efficacy). Hypothesis two argued resident assistants (RAs) who identified student affairs practitioners as their most significant mentors would exhibit higher leadership capacities, after accounting for control measures (e.g., pre-college activities, race, gender, sexual orientation, grade point average, major, parents' education level, generation status, pre-tests). It was then posited that RAs who were mentored by student affairs staff would exhibit significantly higher levels of socially responsible leadership and leadership efficacy than RAs who identified being mentored by any other mentoring type.

To be clear, as mentioned in Chapter III, RAs were asked if they have been mentored at all. If they indicated "yes" they were asked to select which type of mentors they have encountered and they could select multiple types of mentors; this will be referred to as mentoring encounters. If an RA has been mentored, they selected their most significant mentor's type. The options for most significant type of mentor included faculty, student affairs employer, or other student and they could only select one type. As depicted in Table 14 below, RAs' most identified significant mentor was a faculty member (n = 2,426), followed by another student (n = 1,576), a student affairs professional (n = 1,106), and an employer (n = 426). Once the type of most significant mentor was determined, the respondents were asked to report the gender and race of their mentors. Resident assistants reported 48.3% of their most significant mentors are women (n=2,898) and 43.0% are men (n=2,580). With respect to race, 72.5% of most significant mentors were Caucasian/White (n=4,356) and 10.0% African American/Black (n=600).

Of mentored RAs, half of the sample was randomly selected to participate in one of two sub-studies. These sub-studies were mentoring outcomes/spiritual meaning and collective racial efficacy (B. Correia, personal communication, May 13, 2013). A total of 2,710 RAs completed the mentoring for leadership empowerment scale, and 2,706 RAs completed the mentoring for personal development scale.

Table 14

Demographic	n	%
Most Significant		
Mentors		
Faculty	2,426	40.4
Student Affairs	1,106	18.4
Employer	426	7.1
Other Student	1,576	26.2
Gender		
Women	2,898	48.3
Transgender	62	1.0
Men	2,580	43.0
Race		
Caucasian/White	4,356	72.5
Middle Eastern	134	2.2
African	600	10.0
American/Black		
Native American	85	1.4
Asian	371	6.2
American/Pacific Islander		
Latino/Hispanic	268	4.5
Multiracial	210	3.5
Unsure	190	3.2
Race not indicated above	77	1.3

Mentor Profile Frequencies including Type, Race, and Gender

Note: Reported race and gender protégé and mentor frequencies differ slightly from the sub-sample and mentoring profile crosstab frequencies.

In order to have a better understanding of the scales' items and resident assistant responses, see Table 15 below for the means and standard deviations for each item on the mentoring for personal development and mentoring for leadership empowerment scales. The race and gender mentor-protégé pairings will be discussed at length in the final research question.

Table 15

Scale	My mentor has helped me:	М	SD
Mentoring for Leadership Empowerment	empower myself to engage in leadership.	4.08	.95
	Empower others to engage in	3.95	.94
	leadership. Engage in ethical leadership.	3.96	.97
Mentoring for	live up to my potential.	4.45	.79
Personal Development	Be a positive role model.	4.39	.80
	Mentor others. Value working with others from	3.93	.93
	diverse backgrounds.	3.98	.92
	Be open to new experiences.	4.33	.79
	Develop problem-solving skills.	4.28	.82
	Identify areas for self-improvement.	4.32	.79

Means and Standard Deviations on Mentoring Outcome Scales

*Note: The mentoring for leadership empowerment and mentoring for personal development scales are 5-point scales.* 

A one-way between subjects analysis of variance (ANOVA) examines differences between means. ANOVA assumptions include response variables are normally distributed, samples are independent, variances are equal, and responses for a given group are independent and normally distributed random variables (Mertler & Vannatta, 2002). An ANOVA was conducted to compare most significant mentor on mentoring outcomes, Social Change Model constructs, and leadership capacity. A main effect of type of mentor was found for mentoring for leadership empowerment, F (3, 2706) = 32.728, p<.001and mentoring for personal development, F (3, 2702) = 12.136, p<.001. Since a statistically significant result was found on mentoring outcomes, I computed post hoc tests. See Table 16 for the mentor profile on mentoring outcomes. Both mentoring outcomes were not significant on Levene's test of homogeneity of variances; I used the Bonferroni post hoc test. Post hoc comparisons using the Bonferroni test indicated that the mean score for RAs mentored by student affairs professionals was significantly greater than faculty members, employers, and other students on mentoring for leadership empowerment. Post hoc comparisons using the Bonferroni test indicated by student affairs was significantly greater than faculty, employer, and other student on mentoring for personal development.

### Table 16

n	М	SD	SE	
1,171	3.92	.85	.025	
539	4.32	.81	.035	
222	4.01	.96	.064	
778	3.88	.84	.023	
1,170	4.22	.67	.019	
538	4.39	.66	.028	
222	4.25	.69	.046	
776	4.17	.61	.022	
	n 1,171 539 222 778 1,170 538 222 776	n $M$ 1,171 3.92 539 4.32 222 4.01 778 3.88 1,170 4.22 538 4.39 222 4.25 776 4.17	n $M$ $SD$ 1,171 3.92 .85 539 4.32 .81 222 4.01 .96 778 3.88 .84 1,170 4.22 .67 538 4.39 .66 222 4.25 .69 776 4.17 .61	n         M         SD         SE $1,171$ $3.92$ $.85$ $.025$ $539$ $4.32$ $.81$ $.035$ $222$ $4.01$ $.96$ $.064$ $778$ $3.88$ $.84$ $.023$ $1,170$ $4.22$ $.67$ $.019$ $538$ $4.39$ $.66$ $.028$ $222$ $4.25$ $.69$ $.046$ $776$ $4.17$ $.61$ $.022$

#### Most Significant Mentor Profile on Mentoring Outcomes

#### Type of Mentor as a Predictor of Socially Responsible Leadership

An ANOVA was conducted on the individual, group, societal Social Change Model (SCM) constructs and change as dependent variables. The SCM individual and group variables were out of a possible 15.00; the SCM society and change variables were out of a possible 5.00. The individual (consciousness of self, congruence, and commitment), group (common purpose, collaboration, and controversy with civility), and society (citizenship) mean scores were highest for resident assistants RAs who identified student affairs as their most significant mentors. The change mean scores were very close between faculty (M = 3.888) and student affairs (M = 3.887). A main effect of type of mentor was found for individual F (3, 5530) = 10.107, p<.001, group F (3, 5530) = 11.187, p<.001, society F (3, 5530) = 24.592, p<.001, and change F (3, 5530) = 12.996, p<.001.

Since a statistically significant result was found, I computed post hoc tests. Individual constructs were significant on Levene's test of homogeneity of variances; I used the Games-Howell post hoc test. Post hoc comparisons using the Games-Howell test indicated that the mean individual scores for student affairs was not significantly different in comparison to faculty. Results also indicated the mean individual score for employer was not significantly different in comparison to other student. However, faculty and student affairs were significantly greater than both employer and other student. The group, societal, and change constructs were not significant on Levene's test of homogeneity of variances; I used the Bonferroni post hoc test.

Post hoc comparisons using the Bonferroni test indicated that the mean score for RAs mentored by student affairs was significantly different in comparison to faculty, employer, and other student on group constructs. Post hoc comparisons using the Bonferroni test indicated that the mean score for RAs mentored by student affairs was significantly different in comparison to faculty, employer, and other student on the societal construct. Post hoc comparisons using the

Bonferroni test indicated that the mean score for change for RAs mentored by student affairs was not significantly different in comparison to faculty. Post hoc comparisons indicated that employer and other student were significantly different in comparison to all other mentoring types on change. ANOVA results suggest resident assistants (RAs) with student affairs mentors have higher capacities for group and societal outcomes of the Social Change Model. RAs with faculty and student affairs mentors have higher capacities for individual and change outcomes of the Social Change Model. Therefore, if an RA identifies a student affairs professional as their most significant mentor, they exhibit higher capacities across all constructs of the Social Change Model.

An ANOVA was conducted for leadership capacity (socially responsible leadership and leadership efficacy). A main effect of type of mentor was found for socially responsible leadership, F(3, 5530) = 14.832, p<.001. A main effect of type of mentor was also found for leadership efficacy, F(3, 5530) = 23.298, p<.001. Since a statistically significant result was found, I computed post hoc tests on socially responsible leadership (SRL). SRL was significant on Levene's test of homogeneity of variances; the Games-Howell test was used.

The Post hoc comparisons using the Games-Howell test indicated that the mean scores for student affairs mentors and faculty mentors were significantly different than employers as mentors and other students as mentors on socially responsible leadership. However, employers and other students did not significantly differ; faculty members and student affairs professionals did not significantly differ.

Leadership efficacy was not significant on Levene's test of homogeneity of variances; the Bonferroni test was used. The Post hoc comparisons using the Bonferroni test indicated that the mean score for other students as mentors was significantly different in comparison to student affairs, employer and faculty mentors on leadership efficacy. Student affairs, faculty, and employers by mentoring type did not significantly differ on leadership efficacy. ANOVA results suggest resident assistants with student affairs mentors have higher socially responsible leadership capacities.

Hypothesis two argued RAs mentored by student affairs staff would demonstrate higher Social Change Model (SCM) individual, group, society, and change scores than any other type of mentor (faculty, employer, other student). As depicted in Table 17, RAs with student affairs mentors demonstrated higher SCM individual, group, and society scores. With respect to the most significant mentor profile and leadership capacity, RAs mentored by student affairs professionals had higher leadership capacity mean scores (socially responsible leadership and leadership efficacy) than any other type of significant mentor (faculty, employer, other student).

Multiple regression analyses were conducted exploring mentoring outcomes and can be found in Table 18 below. The model included covariates, pre-tests, and dummy variables for faculty, employer, and other student as most significant type of mentor with student affairs as the reference group. In comparison to student affairs mentors, faculty members, employers, and other students are negatively related on both mentoring outcomes. Therefore, resident assistants with student affairs professionals as their most significant mentors are predicted to demonstrate higher mentoring for leadership empowerment and mentorship for personal development competencies.

### Table 17

Outcome	n	М	SD	SE
Individual				
Faculty	2,426	12.64	1.43	.03
Student Affairs	1,106	12.68	1.36	.04
Employer	426	12.37	1.56	.08
Other Student	1,576	12.46	1.46	.04
Group				
Faculty	2,426	12.08	1.27	.03
Student Affairs	1,106	12.23	1.21	.04
Employer	426	11.94	1.35	.07
Other Student	1,576	11.96	1.32	.03
Society				
Faculty	2 426	4 03	57	01
Student Affairs	1,106	4.16	.54	.02
Employer	426	3.97	.58	.03
Other Student	1,576	3.97	.58	.01
Change				
Faculty	2.426	3.89	.51	.01
Student Affairs	1.106	3.89	.50	.02
Employer	426	3.79	.52	.03
Other Student	1,576	3.80	.50	.01
Socially Responsible Leadership				
Faculty	2 426	4 05	42	00
Student Affairs	1 106	4 09	41	01
Employer	426	3.98	.45	.02
Other Student	1,576	3.99	.43	.01
Leadership Efficacy				
Faculty	2.426	3.31	.59	.01
Student Affairs	1 106	3 36	57	02
Employer	426	3 29	60	03
Other Student	1,576	3.18	.59	.01

Most Significant Mentor Profile on Social Change Model Individual, Group, Society, and Change Constructs and Leadership Capacity

The Social Change Model (SCM) constructs depicted in Table 19 were also examined through regression. The key independent variables on type of mentor were not significant for employer or other student on SCM individual (consciousness of self, congruence, commitment) constructs. However, the variable for type of mentor was significant for faculty. Therefore, in comparison

### Table 18

# Standardized Coefficients on Mentoring Outcomes

Independent Variables	Mentoring for Leadership Empowerment	Mentoring for Personal Development
Caucasian/White	.006	040*
Grade Point Average	.053**	048*
Pre-College Activities Student Council/Government Pep/Spirit Club, Cheer Performing Arts Academic Clubs Organized Sports Leadership Positions Major Professional and Pre-Professional Humanities Business Administration Communication Education Health-Related Fields Multi/Interdisciplinary Studies Social Sciences Undecided	.049* 012 .031 004 .011 .070** .041** .011 .097*** .069** .098*** .082*** .030 130*** 013	.040 012 .019 .026 .015 .050* .032 .066** .066** .054* .054* .077*** .052* .011 .083***
Women	010	046*
Heterosexual	010	.037*
International Students	087***	065**
Bachelor's Degre	.030	.023
Socially Responsible Leadership Pre-test	.114***	.192***
Leadership Efficacy Pre-test	.060**	.046*
Type of Mentor Faculty Employer Other Student R <sup>2</sup> Adjusted R <sup>2</sup>	216*** 090*** 204*** .118	122*** 054** 138*** .115
Aujusieu K	.109	.100

\*p<.05, \*\*p<.01, \*\*\*p<.001

to student affairs mentors, RAs with faculty mentors are predicted to exhibit higher SCM individual competencies. With regard to SCM group constructs (collaboration, common purpose, controversy with civility) the type of mentor variables were not significant. The type of mentor does not predict SCM group constructs and having a faculty member, an employer, or another student as a mentor does not differ from having a student affairs mentor on SCM group competencies.

The society construct (citizenship) findings can also be found in Table 19 below. The variables for type of mentor for faculty and employer were not significant. Therefore, RAs who have a faculty member or an employer as a mentor do not differ from RAs with a student affairs mentor on citizenship competencies. However, the variable on type of mentor for other student was significant. In comparison to student affairs mentors, RAs with other students as mentors are predicted to exhibit lower SCM citizenship competencies. The Social Change Model outcome construct (change) variables on type of mentor were significant predictors of change. In comparison to student affairs mentors, RAs with faculty members as mentors are predicted to exhibit higher change competencies. However, in comparison to student affairs mentors, RAs with employers or other students as mentors are predicted to exhibit higher change competencies.

Overall, SCM findings related to the significant predictors included that certain demographics, pre-college activities, majors, the pre-tests for leadership capacity, and the key independent variables (type of mentor) were significant predictors of the Social Change Model (SCM) constructs and leadership capacity (socially responsible leadership and leadership efficacy). Race emerged as a positive predictor; resident assistants (RAs) who identify as Caucasian/White are predicted to demonstrate higher SCM individual and group competencies. Grade point average (GPA) was positively related; RAs who have higher GPAs are predicted

## Table 19

# Standardized Coefficients on Social Change Model Constructs

Independent Variables	Individual	Group	Society	Change
White/Caucasian	.052***	.033**	009	.007
Grade Point Average	.083***	.056***	.085***	.002
Pre-College Activities				
Student Council/Government	002	.009	.049***	.003
Pep/Spirit Club, Cheer	055***	041**	024	014
Performing Arts	.055***	.062***	.064***	.054***
Academic Clubs	.006	.012	.035**	.005
Organized Sports	.011	.012	.002	.009
Leadership Positions	.045**	.035*	.049**	020
Major				
Professional and Pre-Professional	.015	.003	.016 ***	.001
Humanities	060***	.045**	.058***	.032*
Business Administration	.041**	.030*	.021	.020
Communication	.028*	.023	.017	.024
Education	.033**	.028*	.039**	001
Health-Related Fields	.027*	.013	.022	.007
Multi/Interdisciplinary Studies	.015	001	.032**	.019
Social Sciences	.072***	.065***	.081***	.039
Undecided	023*	.033**	042***	029
Women	041***	033***	060***	.020
Heterosexual	-033**	.010	.004	024*
International Students	081***	064***	045***	038**
Bachelor's Degree	.016	.004	003	.015
Socially Responsible Leadership Pre-test	.440***	.427***	.351***	.386***
Leadership Efficacy Pre-test	.103***	.090***	.080***	.102***
Type of Mentor				
Faculty	.039**	.014	017	.031*
Employer	006	002	016	020
Other Student	002	009	035**	037*
$R^2$	.322	.280	.242	.206
Adjusted R <sup>2</sup>	.319	.277	.239	.203

to have higher SCM individual, group, and society competencies. Of the pre-college activities, participation in performing arts was the predictors that were significant and consistently positively related on SCM individual, group, society, and change competencies. Three majors emerged consistently; Humanities was positively associated on SCM individual, group, and society constructs in comparison to the reference group, Science Technology, Engineering, and Math (STEM) majors. Education and Social Sciences majors are predicted to have higher SCM individual, group, and society competencies in comparison to STEM majors. Undecided majors are predicted to score higher on SCM group competencies and lower on individual and society competencies in comparison to STEM majors. In comparison to women, the reference group for gender, men and transgender RAs are predicted to demonstrate lower SCM individual, group, and society competencies. If an RA identified as heterosexual they are predicted to have lower SCM individual and change capacities. Finally, international RAs are predicted to score lower on all SCM competencies in comparison to domestic students. The pretest for socially responsible leadership and the pre-test for leadership efficacy were positive predictors of SCM constructs; if an RA had higher scores on the pre-tests they are predicted to have higher scores on the post-tests.

#### Type of Mentor as a Predictor of Leadership Capacity

With a better understanding of the individual, group, society, and change constructs of the Social Change Model, regression analysis was conducted on leadership capacity. The socially responsible leadership and leadership efficacy findings can be found in Table 20. The variables on type of mentor for faculty, employer, and other student were not significant predictors of socially responsible leadership. Therefore, having a faculty member, an employer, or another student does not differ from having a student affairs mentor on socially responsible

### Table 20

# Standardized Coefficients on Leadership Capacity

Independent Variables	Socially Responsible Leadership	Leadership Efficacy
Caucasian/White	.030*	.030*
Grade Point Average	068***	.056***
Pre-College Activities Student Council/Government Pep/Spirit Club, Cheer Performing Arts Academic Clubs Organized Sports Leadership Positions Major Professional and Pre-Professional Humanities Business Administration Communication Education Health-Related Fields Multi/Interdisciplinary Studies Social Sciences Undecided	.013 043*** .065*** .015 .011 .035* .035* .033* .027* .030* .020 .015 .075*** 034**	.024 005 .033** 001 .021 .076*** .005 .019 .048** .041** .028* .000 .004 .051*** 054***
Women	034**	.026*
Heterosexual	.011	.007
International Students	070***	058***
Bachelor's Degree	.003	.010
Socially Responsible Leadership Pre-test	.453***	.188***
Leadership Efficacy Pre-test	.105***	.299***
Type of Mentor Faculty Employer Other Student R <sup>2</sup> Adjusted R <sup>2</sup>	.021 010 018 .326	.010 .004 063*** .245 242
Aujusieu K	.323	.242

\*p<.05, \*\*p<.01, \*\*\*p<.001
leadership. The variables on type of mentor for faculty and employer were not significant predictors of leadership efficacy. Therefore, having a faculty member or an employer does not differ from having a student affairs mentor on leadership efficacy. However, the variable on type of mentor for other student was a significant negative predictor of leadership efficacy. Therefore, RAs with student affairs mentors are predicted to exhibit higher leadership efficacy competencies in comparison to RAs who have other students as mentors.

With respect to leadership capacity, race emerged as a positive predictor; resident assistants (RAs) who identify as Caucasian/White are predicted to demonstrate higher leadership capacity competencies. Grade point average (GPAs) was negatively associated for socially responsible leadership (SRL) and positively related for leadership efficacy; lower GPAs suggest higher SRL and higher GPAs predict leadership capacity competencies. Of the pre-college activities, participation in performing arts was significant and positively related; an RA is predicted to demonstrate higher leadership capacity. Pep/Spirit Club/ Cheer participation was a negatively associated predictor for SRL.

Business Administration, Communication, Education, and Social Sciences were on leadership capacity and Undecided was negatively related leadership capacity in comparison to the reference group, STEM majors. In comparison to women, the reference group for gender, men and transgender RAs are predicted to demonstrate higher socially responsible leadership and lower leadership efficacy competencies. Finally, international RAs are predicted to score lower on leadership capacity in comparison to domestic students. The pre-test for socially responsible leadership and the pre-test for leadership efficacy were positive predictors of leadership capacity; if an RA had higher scores on the pre-tests they are predicted demonstrate higher leadership capacity competencies. Type of mentor was not a predictor of socially responsible leadership competencies. However, it is predicted RAs with student affairs professionals as mentors will demonstrate higher leadership efficacy competencies than RAs with other students as mentors.

### **Race and Gender Match**

The third hypothesis argued the gender and race match of mentor-protégé pairings will predict leadership capacity. It addressed research question three: Does the relationship between mentoring relationships and leadership capacity differ based on the race and gender match, after accounting for control measures?

### **Mentor Profile**

RAs were asked to report their most significant mentors' genders and races. Of the 5,741 mentored RAs, 5,420 responded to the gender demographic question. The mentor-protégé gender profile can be found in Table 21 below.

### Table 21

### Most Significant Mentor-Protégé Pair Gender Profile

Mentor-Protégé	n	%
Women-Women	2,146	75.80
Women-Transgender	3	.11
Women-Men	682	24.09
Transgender-Transgender	14	23.73
Transgender-Women	20	33.90
Transgender-Men	25	42.37
Men-Men	1,470	58.10
Men-Transgender	4	.16
Men-Women	1,056	41.74

*Note: Gender match frequencies differ slightly from gender protégé or gender mentor frequencies from the crosstab sub-sample and mentor profiles.* 

The pairings included gender match (n = 3,630) and cross gender (n = 1,790) pairings. The RAs reported genders of their most significant mentors were men (n = 2,580), women (n = 2,898), and transgender (n = 62). Crosstabs on the resident assistant gender and most significant mentor gender were women-women mentor-protégé pairs (n = 2,146), transgender-transgender mentor-protégé pairs (n = 1,470). Cross-gender pairs included: women-transgender mentor (n = 3), women protégé-men mentor (n = 682), men protégé-transgender mentor (n = 4), and men protégé-women mentor (n = 1,056). The mentor-protégé pairings with the highest frequency was women-women pairs and the lowest frequency was women-transgender pairs.

With respect to race, the most frequently reported mentor-protégé pair consisted of Caucasian/White-Caucasian/White pairings (n=3,289 of 5,401). The mentors' racial profile can be found in Table 22 below. The mentor profile included: White (n = 4,353), Middle Eastern at (n = 129), African American/Black (n = 583), Native American (n = 83), Asian American/Pacific Islander (n = 359), Latino/Hispanic (n = 263), Multiracial (n = 203), "Race Unknown" (n = 77), and "Race Not Indicated" (n = 77). The responses for the racial profile of the mentors totaled to 6,291 because these variables were permutations or disaggregated racial categories that allowed for unique racial group identification (MSL Codebook, n.d.).

The mentor-protégé race pairs RAs reported include same-race (n = 3,899) and cross-race (n = 1,502) pairings. Caucasian/White, Middle Eastern, and Latino/Hispanic protégés reported having Caucasian/White mentors most frequently. African American/Black protégés reported having African American/Black mentors most frequently. Native American and Asian American/Pacific Islanders both reported that their mentors were Asian American/Pacific

### Table 22

#### % % Protégé Race Mentor Race n n Caucasian/White 4253 Caucasian/White\* 82.56 72.42 3,289 Middle Eastern 18 .43 African American/Black 180 4.30 Native American 10 1.23 Asian American/Pacific 276 6.60 Islander 2.63 110 Latino/Hispanic 304 7.26 Multiracial 66 1.58 Race Not Indicated Middle Eastern 129 2.20 Caucasian/White\* 49 37.98 Middle Eastern 12 9.30 African American/Black 8.53 11 Native American 3.10 4 Asian American/Pacific 25 19.38 Islander 4.65 6 Latino/Hispanic 15 11.63 Multiracial 7 5.42 Race Not Indicated African 583 9.93 Caucasian/White 161 7.61 American/Black 0.34 Middle Eastern 2 African American/Black\* 273 46.83 Native American 2 0.34 Asian American/Pacific 46 7.90 Islander 3.09 18 Latino/Hispanic 67 11.49 Multiracial 14 2.40Race Not Indicated Native American 83 1.41 Caucasian/White 17 20.48 Middle Eastern 1 1.20 African American/Black 5 6.02 Native American 4 4.82 Asian American/Pacific 33 39.76 Islander\* 4 4.82 Latino/Hispanic 13 15.66 Multiracial 6 7.23 Race Not Indicated

### Most Significant Mentor-Protégé Racial Profile

(Table 22 continues)

Protégé Race	n	%	Mentor Race	n	%
Asian	359	6.12	Caucasian/White	91	25.35
American/Pacific			Middle Eastern	2	.56
Islander			African American/Black	12	3.34
			Native American	1	.28
			Asian American/Pacific	182	50.70
			Islander*	11	3.06
			Latino/Hispanic	44	12.26
			Multiracial	16	4.46
			Race Not Indicated		
Latino/Hispanic	263	4.48	Caucasian/White*	99	37.64
1			Middle Eastern	2	.76
			African American/Black	20	7.60
			Native American	1	.38
			Asian American/Pacific	25	9.51
			Islander	66	25.10
			Latino/Hispanic	44	16.73
			Multiracial	6	2.28
			Race Not Indicated		
Multiracial	203	3.46	Caucasian/White	50	24.63
			Middle Eastern	4	1.97
			African American/Black	26	12.81
			Native American	0	0
			Asian American/Pacific	38	18.72
			Islander	13	6.43
			Latino/Hispanic	59	29.06
			Multiracial*	13	6.40
			Race Not Indicated		

(Table 22 continued)

Note: "Unsure" and "Race Not Indicated" responses accounted for 4.50% (n = 269); race match frequencies differ slightly from race protégé or race mentor frequencies from the subsample and mentor profiles. \*Denotes highest frequency of most significant mentor.

Islander most frequently. Multiracial protégés reported the highest frequencies with Multiracial

mentors.

### **Role of Gender and Race on Mentor-Protégé Pairings**

The mentor-protégé gender and race profiles provided some context, however examining the gender and race characteristics of the protégé sample was warranted. In Table 23 below, the means, standard deviations, and *t*-values of the RA gender characteristics were examined. Findings indicated women resident assistants scored higher on the Social Change Model individual, group, society, and change constructs. Women resident assistants also scored higher on leadership capacity (socially responsible leadership and leadership efficacy).

### Table 23

	Women		Men		
Outcome	М	SD	М	SD	<i>t</i> -Values
SCM-Individual	12.66	1.38	12.34	1.67	7.547**
SCM-Group	12.11	1.23	11.87	1.51	6.436**
SCM-Society	4.07	.55	3.92	.64	9.466**
SCM-Change	3.85	.49	3.83	.50	.957
Socially Responsible Leadership	4.05	.41	3.97	.49	7.043**
Leadership Efficacy	3.27	.61	3.26	.63	.380

Means, Standard Deviations, and t-Values of RA Gender Characteristics on Educational Outcomes

### \*\*p<.01

In Table 24 below, the means, standard deviations, and *t*-values of the RA race characteristics are displayed. In order to compare disaggregated gender and race variables, gender and race were dummy coded with the largest number and all others (e.g., women and all other genders, Caucasian/White and all other races).

### Table 24

Outcome	<u>C/W</u> n M (SD)	ME n M (SD)	AA/B n M (SD)	<u>NA/AN</u> n M (SD)	<u>AA/PI</u> n M (SD)	L/H n M (SD)	<u>Multi.</u> n M (SD)	<u>F- Value</u>
SCM-	3,931	44	496	19	528	223	490	
Individual	12.63	11.44	12.66	11.19	11.66	12.57	12.63	
		(2.15)	(1.49)	(3.08)	(1.82)	(1.54)	(1.59)	35.538**
	(1.41)							
SCM-Group	3,391	44	496	19	528	223	490	
1	12.07	11.08	12.13	11.02	11.42	12.08	12.14	
		(1.98)	(1.34)	(2.71)	(1.67)	(1.42)	(1.45)	21.968**
	(1.27)							
SCM-Society								
	3,391	44	496	19	528	223	490	
	4.01	3.77	4.10	3.61	3.83	4.03	4.05	
	(0.58)	(0.78)	(0.59)	(1.08)	(0.64)	(0.65)	(0.65)	11.246**
SCM-Change	3,391	44	496	19	528	223	490	
C	3.85	3.62	3.94	3.64	3.67	3.90	3.90	
	(0.51)	(0.62)	(0.51)	(0.68)	(0.53)	(0.53)	(0.53)	14.471**
Socially	3.391	44	496	19	528	223	490	
Responsible	4.04	3.72	4.08	3.67	3.80	4.05	4.07	
Leadership	(0.42)	(0.65)	(0.45)	(0.90)	(0.55)	(0.47)	(0.48)	26.693**
Leadership	3,391	44	496	19	528	223	490	
Efficacy	3.29	3.19	3.31	3.17	2.98	3.30	3.30	
	(0.59)	(0.81)	(0.61)	(0.79)	(0.70)	(0.64)	(0.63)	17.941**

Means, Standard Deviations, and F-Values of RA Racial Characteristics on Educational Outcomes

Note: C/W=Caucasian/White, ME=Middle Eastern, AA/B=African American/Black, NA/AN=Native American/Alaska Native, AA/PI= Asian American/Pacific Islander, L/H=Latino/Hispanic, and Multi=Multiracial. The disproportionate sample numbers reflect that half the participants were randomly given the mentoring sub-scale; the other half received a spirituality sub-scale; \*\* <math>p < .01

The dummy variables for gender in Table 25 below were consistent with *t*-test findings; women resident assistants (RAs) scored highest on all Social Change Model constructs and on leadership capacity.

### Table 25

Means, Standard Deviations, and t-Values of Dummy Variable RA Gender Characteristics on Educational Outcomes

	<u>Wo</u>	men	<u>All Ot</u>	<u>hers</u>	
Outcome	М	SD	М	SD	<i>t</i> -Values
SCM-Individual	12.66	1.38	12.31	1.72	8.099***
SCM-Group	12.11	1.23	11.85	.65	7.020***
SCM-Society	4.07	.55	3.91	.54	9.907***
SCM-Change	3.85	.49	3.83	.51	1.450
Socially Responsible Leadership	4.05	.41	3.96	.64	7.618***
Leadership Efficacy	3.27	.61	3.26	.59	.713

\*\*\*p<.001

However, when examining the dummy variables for race in Table 26 below, Caucasian/White RAs had higher means on all Social Change Model (SCM) constructs although the *t*-values for society and change were not significant. The SCM and leadership capacity findings contrasted in comparison to the disaggregated racial findings in Table 24. This is an important finding that will be discussed at length in Chapter V.

With a better overall understanding of gender and race, the gender match and race match of mentor-protégé pairings were further examined. The Social Change Model (SCM) individual, group, society, and change constructs were explored; the gender match and race match variables were not significant and did not predict SCM constructs.

### Table 26

	White		All Others		
Outcome	М	SD	М	SD	<i>t</i> -Values
SCM-Individual	12.63	1.41	12.29	1.74	7.390***
SCM-Group	12.07	1.27	11.87	1.57	4.966***
SCM-Society	4.01	.58	3.98	.65	1.819
SCM-Change	3.85	.51	3.83	.54	1.360
Socially Responsible Leadership	4.04	.42	3.97	.52	5.068***
Leadership Efficacy	3.29	.59	3.21	.67	4.599**

Means, Standard Deviations, and t-Values of Dummy Variable RA Racial Characteristics on Educational Outcomes

\*\* p<.01, \*\*\*p<.001

Therefore, gender match and race match mentor-protégé pairs do not differ from cross gender and cross race mentor-protégé pairs. The entire model including the standardized coefficients with the gender match variable can be found in Table 27.

### Table 27

## Standardized Coefficients on Social Change Model Gender Findings

Independent Variables	Individual	Group	Society	Change
Grade Point Average	.092***	062***	082***	002
Pre-College Activities				
Student Council/Government	.006	.017	.061***	.001
Pep/Spirit Club, Cheer	058***	037**	016	011
Performing Arts	.054***	.059***	.063***	.044**
Academic Clubs	.006	.007	.032*	.000
Organized Sports	.002	.002	012	.003
Leadership Positions	.041**	.030*	.047**	024
Maior				
Professional and Pre-Professional	.018	.003	.018	001
Humanities	.073***	.051**	.065***	.032*
Business Administration	.043**	.030*	.028	.015
Communication	.030*	.003	.019	.017
Education	.039**	.051**	.052***	012
Health-Related Fields	034**	030*	031*	- 001
Multi/Interdisciplinary Studies	.018	.020	.036*	.015
Social Sciences	077***	065***	090***	031*
Undecided	016	025*	.036**	028*
Heterosexual	.031**	.002	.001	036**
International Students	107***	082***	049***	040***
Bachalor's Dagraa	021	007	005	013
Bachelor's Degree	.021	.007	005	015
Socially Responsible Leadership Pre-test	.416***	.401***	.328***	.371***
Leadership Efficacy Pre-test	.111***	.098***	.081***	.109***
Condor Motoh	006	021	022	017
	000	021	023	01/
$R^2$	.288	.248	.210	.188
Adjusted R <sup>2</sup>	.285	.245	.207	.184

\*p<.05, \*\*p<.01, \*\*\*p<.001

### Table 28

### Standardized Coefficients on Social Change Model Race Findings

Independent Variables	Individual	Group	Society	Change
Grade Point Average	.093***	.064***	084***	.001
Pre-College Activities				
Student Council/Government	.005	.015	.059***	.001
Pep/Spirit Club, Cheer	056***	036**	015	011
Performing Arts	.055***	.061***	.064***	.046**
Academic Clubs	.006	.007	.032*	002
Organized Sports	.002	.003	011	.004
Leadership Positions	.042**	.031*	.047**	023
Major Professional and Pre-Professional	.017	.002	.016	003
Humanities	.074***	.051**	.065***	.032*
Business Administration	.043**	.016	.027	.016
Communication	.030*	.030*	.020	.017
Education	.038**	.021	.052***	011
Health-Related Fields	.034**	.027	.030*	001
Multi/Interdisciplinary Studies	.018	.018	.036**	.015
Social Sciences	.078***	003	.090***	.030
Undecided	016	026	038**	029
Heterosexual	.030*	.001	.000	035**
International Students	108***	086***	052***	045***
Bachelor's Degree	023*	.009	003	010
Socially Responsible Leadership Pre-test	.415***	.399***	.327***	.370***
Leadership Efficacy Pre-test	.111***	.098***	.081***	.110***
Race Match	.000	017	016	026
$R^2$	.287	.248	.210	.188
Adjusted R <sup>2</sup>	.284	.244	.206	.185

\*p<.05, \*\*p<.01, \*\*\*p<.001

### Leadership Capacity and Mentor-Protégé Pairings

Leadership capacity regression analyses were conducted and presented in Table 29 below. The models included the covariates, pre-tests, and race match or gender match variable. The findings for socially responsible leadership and leadership efficacy were not significant. The gender and race match variables did not predict leadership capacity; gender match and race match mentor-protégé pairs do not differ from cross gender and cross race mentor-protégé pairs on leadership capacity.

### Table 29

Mentor-Protégé Race Match and Gender Match Comparison of Means, Standard Deviations, and t-Values on Leadership Capacity

Outcome	Race	М	SD	t-Value	Gender	М	SD	t- Value
Socially								
Responsible	Race Match	4.04	.42		Gender Match	4.04	.43	
Leadership	Cross Race	4.04	.46	-0.437	Cross Gender	4.06	.42	1.557
Leadership	Race Match	3.29	.59		Gender Match	3.28	.59	
Efficacy	Cross Race	3.27	.62	-1.223	Cross Gender	3.29	.61	.621

\*\*p<.05

For a more comprehensive understanding of the models, Table 30 includes the gender match variable and Table 31 includes the race match variable on leadership capacity (socially responsible leadership and leadership capacity). As stated earlier, regression findings suggest there is no difference between same and cross race mentor-protégé pairings on leadership capacity.

### Table 30

# Standardized Coefficients on Leadership Capacity Gender Findings

Independent Variables	Socially Responsible Leadership	Leadership Efficacy
Grade Point Average	072***	054***
Pre-College Activities		
Student Council/Government	.021	.036*
Pep/Spirit Club, Cheer	040**	005
Performing Arts	.063***	.019
Academic Clubs	.011	007
Organized Sports	.000	.014
Leadership Positions	.030*	.066***
Major		
Professional and Pre-Professional	.011	004
Humanities	.066***	.024
Business Administration	.035*	.048**
Communication	.026*	.036**
Education	.032*	.028*
Health-Related Fields	.025	010
Multi/Interdisciplinary Studies	.016	004
Social Sciences	.078***	.042**
Undecided	027*	
Heterosexual	.005	007
International Students	088***	075***
Bachelor's Degree	.006	.016
Socially Responsible Leadership Pre-test	.432***	.167***
Leadership Efficacy Pre-test	.113**	.312***
Gender Match	019	008
$R^2$	.296	.226
Adjusted R <sup>2</sup>	.293	.223

\*p<.05, \*\*p<.01, \*\*\*p<.001

### Table 31

# Standardized Coefficients on Leadership Capacity Race Findings

Independent Variables	Socially Responsible Leadership	Leadership Efficacy
Grade Point Average	074***	054***
Pre-College Activities		
Student Council/Government	.020	.037*
Pep/Spirit Club. Cheer	039**	005
Performing Arts	.064***	.019
Academic Clubs	011	008
Organized Sports	001	.014
Leadership Positions	.031*	.065***
Maior		
Professional and Pre-Professional	.010	005*
Humanities	.067***	.024
Business Administration	.035*	.047**
Communication	.027*	.038**
Education	.032*	.028*
Health-Related Fields	.025	011
Multi/Interdisciplinary Studies	.016	004
Social Sciences	.078***	.042**
Undecided	028*	058***
Heterosexual	004	009
International Students	090***	075***
Bachelor's Degree	.008	.016
Socially Responsible Leadership Pre-test	.431***	.167***
Leadership Efficacy Pre-test	.113***	.311***
Race Match	015	.000
$R^2$	.295	.225
Adjusted R <sup>2</sup>	.292	.222

\*p<.05, \*\*p<.01, \*\*\*p<.001

### Summary

In this chapter the findings for the research questions and hypotheses were investigated. The finding for research question one suggests mentored resident assistants will demonstrate higher leadership capacities than non-mentored counterparts on all Social Change Model (SCM) constructs and leadership capacity. The findings for research question two include that the type of mentor is not a predictor of SCM group or socially responsible leadership capacities. However, RAs mentored by faculty members are predicted to exhibit higher SCM individual and change capacities. RAs who identified student affairs professionals as their mentors will exhibit higher SCM society and leadership efficacy competencies than RAs mentored by other students. Research question three results included there was no statistical significance found for gender match or race match mentor-protégé pairs on the SCM constructs or leadership capacity (socially responsible leadership and leadership efficacy). The next chapter provides a synthesis of findings, interpretations, implications for practice, and considerations for future research.

### CHAPTER V. DISCUSSION, CONCLUSIONS AND IMPLICATIONS

This chapter provides a summary of the study, statement of the problem, review of the methods, an interpretation of results, and overview of the study's connection to involvement theory. The chapter will conclude with the study's limitations, delimitations, implications for practice, and considerations for future research related to mentoring relationships and leadership capacity.

### Summary of the Study

The Multi-Institutional Study of Leadership (MSL) is an international research database and national study on the role of higher education in developing leadership capacities focusing on environmental conditions that foster leadership development (J. Dugan, personal communication, October 21, 2010). The MSL affords researchers an opportunity to study educational outcomes through a postindustrial, contemporary leadership lens utilizing the Social Change Model (SCM) as the theoretical framework and Astin's I-E-O model as the conceptual framework. As mentioned in Chapter II, the practical application of the Social Change Model on college campuses complements the use of the model as a framework in scholarly research (Bonous-Hammarth, 2001; Dugan, 2006a, 2006b; Dugan & Komives, 2011a; Dugan, Morosini, & Beazley, 2011; Dugan & Yurman, 2011; Ewing, Bruce, & Ricketts, 2009; Kezar, Carducci, & Contreras-McGavin, 2006; Komives, 2011; Dugan & Komives, 2011a; Komives, et al., 2007; Ricketts, Bruce, & Ewing, 2008; Skendall, 2012). The SCM draws upon three areas of literature: student involvement, peer interaction/socialization, and leadership development (Dugan, 2006a, Dugan, 2006b). Due to the practical application and connection to leadership scholarship, Dugan and Komives (2011a) stated the SCM recently became the definitional approach for scholars studying leadership as a collegiate educational outcome. The SCM measured educational

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outcomes based on the model's individual, group, and society values, purpose, and outcome; the outcome of the SCM is positive, purposeful change. Socially responsible leadership is the aggregate of the individual, group, society, and change constructs. The conceptual framework, Astin's Input-Environment-Outcome (I-E-O) model allows researchers to control for pre-college characteristics and experiences or input data (I) when examining the collegiate environment's (E) impact on educational outcomes (O). This study is significant because it offers unique contributions to leadership scholarship by examining the mentoring outcomes and demographics of mentor-protégé pairings on resident assistants' leadership capacities.

The purpose of this study was to examine how resident assistants' leadership capacities (socially responsible leadership and leadership efficacy) were influenced by being involved in mentoring relationships (e.g., mentoring for personal development and/or mentoring for leadership empowerment). Leadership capacity includes students' leadership behaviors and their efficacy to enact those behaviors. Leadership capacity is operationalized in this study through socially responsible leadership and leadership efficacy. I sought to explore the most significant type of mentors (e.g., faculty member, student affairs professional, employer, or other student) resident assistants identified. I examined if there was a link between the mentoring relationship and most significant type of mentor and the resident assistants' leadership capacity. I also investigated whether the race and/or gender of the mentor-protégé match was significant.

#### **Statement of the Problem**

For decades leadership scholars and practitioners have attempted to equip student leaders with the knowledge, skills, and abilities to make positive, purposeful societal change for the common good. In fact, the main educational outcome of the Social Change Model of leadership is positive, purposeful *change*. Most leadership studies have focused on leadership capacity, self-efficacy, learning, attitudes and intentions with little emphasis on a more integrative approach with increased attention to student development (Dugan & Komives, 2010). More than 200 research studies over the past century have examined the effectiveness of leadership interventions at the collegiate level (Dugan & Komives, 2011b). In order to cultivate the capacities of student leaders, it is absolutely necessary to have an understanding of and incorporation of both leadership theories and practices. There is an identified gap in theory-topractice and practice-to-theory in designing leadership interventions. Few studies have looked to evidence-based practice and often practitioners do not utilize emerging research when designing leadership interventions (Dugan, Bohle, Gebhardt, Hofert, Wilk, & Cooney, 2011). The gap has resulted in leadership interventions that have little or no impact on student leaders or result in leadership development as a byproduct as opposed to the result of intentional design. Additionally, there is a gap in the literature on environmental influences and educational outcomes of students participating in mentoring relationships (Swap, Leonard, Shields, & Abrams, 2001). The studies conducted on mentoring relationships have not included the demographics of the mentor-protégé pairings or the relationship of mentoring outcomes to leadership capacity in resident assistants.

#### **Review of Methods**

In Chapter I the guiding question was: When accounting for control measures and collegiate mentor-protégé demographics, do mentored resident assistants exhibit significantly higher leadership capacities than non-mentored counterparts? The study-specific research questions included: (1) Do resident assistants who participate in mentoring relationships exhibit significantly higher leadership capacities than resident assistants who do not, after accounting for control measures such as pre-college activities, race, gender, sexual orientation, grade point

average? (2) Is there a significant relationship between type of mentor and resident assistant leadership capacity, after accounting for the aforementioned control measures? (3) Does the relationship between mentoring relationships and leadership capacity differ based on the race and gender match of the mentor-protégé pairing, after accounting for the aforementioned control measures?

As discussed in Chapter III the 2009 Multi-Institutional Study of Leadership (MSL) served as the data source for this study. All resident assistants who completed 90% of the instrument were included in this analysis for a total sample of 6,006. The conceptual framework allows researchers to isolate pre-college characteristics from the collegiate experiences. In other words, the MSL's cross-sectional design requires student participants to reflect on past experiences to capture input data and report pre-college characteristics and activities. To capture environmental data, students were asked about their during-college experiences. The pre-college and during-college experiences were captured in the MSL survey by questions associated with the pre-tests and post-tests for socially responsible leadership and leadership efficacy (leadership capacity). The isolated environmental data is utilized to examine the collegiate environment's impact on educational outcomes (e.g., mentoring outcomes, socially responsible leadership, leadership efficacy). The analysis for the three research questions included comparing the means through independent sample *t*-tests or analysis of variance (ANOVA) and regression analyses.

### **Interpretations on Socially Responsible Leadership**

The overarching goal of the study was to explore resident assistants' leadership capacities; these influential students have the potential to serve as transformational change agents as mentioned in Chapter II. Transformational change agents leave a lasting impact long after they have graduated. These former students have the potential to transform their communities and society by strategically creating positive, purposeful, and sustainable change, the outcome of the Social Change Model. Bainton (2006) shared a useful analogy on transformational leadership by discussing the impact of boiling water on a carrot, an egg, and a coffee bean. When a carrot is boiled, it becomes soft. When an egg is boiled, the shell becomes hard. However, when a coffee bean is boiled, the bean transforms the water. When an RA engages in a mentoring relationship, he or she has an increased aptitude to serve as an agent for transformational change and the potential to positively impact her or his environment and/or communities for the better.

The MSL's theoretical and conceptual frameworks allowed me to examine the collegiate environment's influence on students' leadership capacities. Findings from this study are connected to previous MSL research on socially responsible leadership capacity. Dugan (2006b) conducted a descriptive analysis of socially responsible leadership (SRL) capacity of involved and uninvolved students and found significant mean differences between involved and uninvolved students. I found significant mean differences between mentored and non-mentored resident assistants (RAs) on socially responsible leadership and leadership efficacy (leadership capacity) of RAs for research question one.

Through independent sample *t*-tests and regression I compared group mean scores of mentored and non-mentored resident assistants on Social Change Model constructs to better understand socially responsible leadership. A better understanding of socially responsible leadership and leadership efficacy provides a more thorough understanding of the study's dependent variable, leadership capacity. Each research question had one model including covariates (pre-college activities, major, gender, sexual orientation, citizenship/generational

status, race, parents' education level, parents' income, grade point average) and the socially responsible leadership and leadership efficacy pre-tests along with a research-question specific key predictor. The key predictor for research question one was the mentoring variable. Mentoring emerged as a strong positive predictor for all constructs of the Social Change Model (SCM) and leadership capacity. Independent *t*-tests revealed mentored resident assistants (RAs) reported higher leadership capacity scores than non-mentored resident assistants. Regression analysis results determined mentoring significantly predicted all SCM constructs and socially responsible leadership. Dugan's 2006b study found significant scores across most of the constructs of the Social Change Model for involved students; this study found significant scores all constructs of the Social Change Model and the socially responsible leadership for mentored RAs. The significant finding for socially responsible leadership (SRL) and leadership efficacy suggests a mentored resident assistant is predicted to demonstrate significantly higher leadership capacity than a non-mentored resident assistant.

Dugan, Komives, and Segar (2008) examined socially responsible leadership and influences of race, gender, and sexual orientation utilizing the 2006 MSL findings. They found students scored highest on commitment and lowest on change; resident assistants in this study also scored highest on commitment and lowest on change. Dugan et al. (2008) found women scored higher than men on most Social Change Model constructs. I found women RAs scored higher on all SCM constructs and socially responsible leadership than men RAs. Consistent race findings on the congruence variable showed that African American/Black RAs scored highest and Asian American/Pacific Islander RAs scored lowest. There were no significant differences related to sexual orientation in Dugan et al.'s 2008 study; in this study sexual orientation was a covariate (input). Post-hoc analyses and regression were conducted for RAs by most significant mentor (unique predictor) on mentoring outcomes and leadership capacity. The ANOVA revealed a main effect of most significant type of mentor and both mentoring outcomes for student affairs mentors. The ANOVA also revealed a main effect of most significant type of mentor and socially responsible leadership (SRL) for all mentoring types. The SRL finding from this study was further substantiated because resident assistants with student affairs mentors reported higher group mean scores on socially responsible leadership and leadership efficacy (leadership capacity) than any other type of significant mentor. Further, post-hoc analyses on leadership capacity revealed mentored RAs with student affairs mentors statistically differed from faculty, employer, or other student mentoring types on both mentoring outcomes and socially responsible leadership.

#### Type of Mentor and Socially Responsible Leadership

I conducted an analysis of variance (ANOVA) to compare group means for each type of most significant mentor on Social Change Model individual, group, societal, and change constructs. ANOVA results indicated resident assistants (RAs) with student affairs mentors had higher capacities for group and societal outcomes of the Social Change Model. ANOVA findings also revealed RAs with faculty and student affairs mentors have higher capacities for individual and change outcomes of the Social Change Model than employers and other student mentors. When examining Social Change Model (SCM) individual, group, society, and change constructs in comparison to student affairs mentors, faculty mentors were positive predictors for individual and change constructs. Therefore, if an RA identifies a faculty member, they are predicted to demonstrate higher SCM individual and change competencies. Student affairs mentors were positive predictors for citizenship, change, and leadership efficacy in comparison to other students who served as mentors. RAs who identify a student affairs professional as their most significant mentor are predicted to exhibit higher citizenship, change, and leadership efficacy capacities.

ANOVA and post hoc tests on socially responsible leadership indicated that the mean scores for student affairs mentors and faculty mentors were significantly different than employers as mentors and other students as mentors on socially responsible leadership. However, employers and other students did not significantly differ nor did faculty members and student affairs professionals differ significantly. Therefore, the type of mentor does not predict socially responsible leadership. Regression findings confirmed the type of mentor was not a significant predictor of socially responsible leadership. Therefore, having a faculty member, an employer, or another student does not differ from having a student affairs mentor on socially responsible leadership.

Campbell, Smith, Dugan, and Komives (2012) studied mentoring outcomes (personal development and leadership empowerment) and type of mentor on socially responsible leadership capacity. Socially responsible leadership capacity is not the same as leadership capacity as defined by the researcher; socially responsible leadership (SRL) is the aggregation of Social Change Model constructs, whereas leadership capacity includes both socially responsible leadership and leadership efficacy.

The type of mentor and mentoring outcomes findings from the Campbell et al. (2012) study suggested mentoring for personal development was significant for students mentored by faculty in comparison to those mentored by student affairs. In this study, both mentoring outcomes were significant for resident assistants mentored by student affairs professionals. This finding could be due to the nature of the position. With respect to mentoring for personal development, some RAs may need support, validation, and ongoing feedback. The RA paraprofessional position can be potentially stressful and high profile. Most student affairs mentors who have obtained their master's degrees in Student Affairs Administration or College Student Personnel are taught through formal coursework student development theory and how students' cognitive development, moral reasoning, and identities develop as they mature in college. Therefore, student affairs-resident assistant pairing may have a tendency to lean toward a psychosocial mentoring orientation for the protégé. Regarding mentoring for leadership empowerment, RAs have multiple roles and identities and student affairs professionals often wear many hats (e.g., student organization advisor, supervisor, facilitator, teacher) in and out of the classroom, on and off campus, and/or during business and evening hours. Additionally, student affairs professionals may be more visible and accessible for RAs' work-related, academic, interpersonal, or crisis-related needs. Student affairs professionals may be perceived as the type of mentor RAs can look to as role models and leaders.

Campbell et al. (2012) also found that simply having a mentor does not matter, but what takes place in the mentoring relationship matters in leadership development. In the RA substudy, that was not necessarily the case. The MSL 2009 data respondents self-reported if they are a protégé (or have been mentored at least once). Therefore, due to the design of the MSL survey, a protégé could identify a one-time meaningful mentoring encounter; a mentoring encounter and a mentoring relationship could be immensely different. The finding from research question one that a significant difference exists between mentored and non-mentored RAs before accounting for type of mentor is important. In essence, this suggests just having a mentor, mentoring encounter, or mentoring relationship matters. This does not negate Campbell et al.'s argument that what takes places matters, but does argue one strong mentoring encounter or having been mentored once is a strong predictor of leadership capacity.

### **Type of Mentor and Leadership Capacity**

Research question two also examined mentoring outcomes as an environmental predictor of leadership capacity (socially responsible leadership and leadership capacity) through an ANOVA and regression analyses. The most significant types of mentor included: faculty, student affairs, employer, and other student. It was hypothesized student affairs professionals would serve as positive predictors of RAs' mentoring outcomes and leadership capacity scores. Resident assistants with student affairs mentors reported higher group mean scores on both mentoring outcomes than any other type of most significant mentor. ANOVA findings revealed a main effect of most significant type of mentor and mentoring for personal development and mentoring for leadership empowerment. Regression findings disclosed that resident assistants with student affairs mentors are predicted to demonstrate higher mentoring for personal development and mentoring for leadership empowerment competencies. Post-hoc analyses on mentoring outcomes revealed RAs with student affairs mentors reported significantly higher scores on both mentoring outcomes than RAs who identified faculty, employer, or another student. Therefore, student affairs mentors significantly differed from faculty, employers, and other students on both mentoring outcomes.

Resident assistants may espouse multiple identities and roles. Perhaps due to the complexities of their lives and situational needs, the type of mentor RAs seek might be based on who can best provide the most appropriate and accessible psychosocial, emotional, academic, and work-related support. Many resident assistants may also envision themselves working in student affairs and seek socialization from mentors and advisors who are student affairs

professionals. Both of these examples offer unique connections student affairs mentors and resident assistants could share related to mentoring for mentoring for personal development and leadership empowerment.

According to Campbell et al. (2012) the third finding reported was that the type of mentor influences leadership outcomes; they found students mentored by student affairs professionals (n = 36,197) demonstrated higher socially responsible leadership capacities than those mentored by faculty. Research question two also examined leadership capacity (socially responsible leadership and leadership efficacy) and type of most significant mentor reported by resident assistants. I examined leadership capacity through both socially responsible leadership and leadership efficacy lenses. Hannah, Avolio, Luthans, and Harms (2008) argued future leadership research should include leader efficacy. I found RAs who identified student affairs professionals as their most significant mentors (n=1,106) demonstrated higher socially responsible leadership and leadership efficacy than those mentored by any other type of most significant mentor. As mentioned in Chapter II, there is an important distinction to be made between researching capacity and efficacy.

Efficacy can expand or limit choices with respect to engaging or not engaging in a challenging task or leadership experience (Dugan, 2011, Hannah et al., 2008). Leadership self-efficacy also influences one's efforts and persistence; those with low self-efficacy tend to avoid extra effort and commitment because most people tend to avoid tasks they do not believe they can accomplish (Denzine & Anderson, 1999). Therefore, research on leadership capacity is centered on examining "students' enacted leadership belief, style, and approach" (Dugan & Komives, 2011, p. 61) as opposed to their beliefs in their leader or leadership capabilities. "Efficacy is a primary predictor of capacity and moderates whether or not an individual enacts

leadership behaviors" (Dugan, et al., 2012, p. 175). Kezar, Carducci, and Contreras-McGavin (2006) articulated that effective leaders use goal setting and relationship-building while relying on transformational *and* transactional qualities.

With respect to leadership capacity (socially responsible leadership and leadership efficacy), the type of mentor is not a predictor of socially responsible leadership (SRL). Therefore, having a faculty member, an employer, or another student does not differ from having a student affairs mentor on socially responsible leadership competencies. The finding from research question one was that having been mentored was a predictor of socially responsible leadership. The type of mentor was not a predictor of SRL; given the mixed significant and nonsignificant Social Change Model individual, group, society, and change findings, I am not particularly surprised the type of mentor does not predict socially responsible leadership. With regard to leadership efficacy, significant findings suggest other student mentors emerged as negative predictors of leadership efficacy in comparison to student affairs mentors. This finding was not surprising because post hoc results indicated the mean scores for other students as mentors was significantly lower in comparison to student affairs, employer and faculty mentors on leadership efficacy. Therefore, RAs with student affairs mentors are predicted to exhibit higher leadership efficacy capacities in comparison to other student mentors. The leadership efficacy results suggest student affairs administrators have the potential to impact protégés' confidence levels and encourage them to create positive purposeful transformational change in their communities.

### Gender Match and Leadership Capacity

To address research question three, I examined the Social Change Model (SCM) constructs. A comparison of independent sample *t*-tests and regression analyses were conducted.

The covariates in the model for research question three included pre-college activities, major, sexual orientation, citizenship/generational status, parents' education level, parents' combined income, grade point average; race and gender as measures of control were removed. The pre-tests for socially responsible leadership and leadership efficacy and the gender match and race match variables were also included in the model. It was hypothesized same-gender pairs would score significantly higher on socially responsible leadership based on MSL 2006 findings. Dugan (2006b) explored the SCM and leadership development among college men and women; mean scores revealed women scored higher on all eight SCM values. Follow-up analysis indicated significance on six of the eight scales. Dugan argued colleges should strive to close performance gaps between men and women and conduct more research linked to the SCM and predictors from the collegiate environment that contribute to students' development. With respect to leadership efficacy, Dugan (2006b) found women scored lower on leadership efficacy; women scored higher on leadership efficacy in this study. Nonetheless, no significant findings were found on the SCM individual, group, society, or change constructs.

Independent *t*-tests revealed cross-gender mentor-protégé pairs reported higher leadership capacity (socially responsible leadership and leadership efficacy) scores than same-gender pairs. Komives (1991) conducted a study examining the relationship of same- and cross-gender work pairs of resident assistants (RAs) and their supervisors, hall directors (HDs) on employee outcome measures (e.g., HD's vision, motivation to do extra effort for their RA role, satisfaction with their HD). The majority of the supervisors (58%) and RAs (55%) were women. One third of the supervisor-supervisee pairs were women-women. The results found no differences between gender of the supervisor and supervisee on the dependent variables. Komives' stated her findings were consistent previous research. However, women RAs in Komives' study

reported slightly higher levels of satisfaction when their HDs were men, but the differences were not significant. This study also found cross-gender mentor-protégé pairs have higher mean scores on leadership capacity. However gender match was not a predictor of leadership capacity; gender match and cross-gender mentor-protégé pairs did not differ on leadership capacity.

Young, Cady, and Foxon (2006) concluded gender similarity and interpersonal skills were relevant for women protégés' perceptions of and satisfaction with their women mentors, however, they did not explore cross-gender mentoring relationships. Ensher and Murphy (1997) found gender similarity to be less salient than race similarity in mentoring relationships. According to Johnson (2007) mentoring literature findings revealed men and women were mentored at equivalent rates and mentoring functions were consistent across sex; cross-sex and same-sex mentorships have been deemed equally successful. This is substantiated by the frequencies of cross-gender mentor-protégé pairs and the findings that gender match and crossgender pairs did not differ on leadership capacity. Regression analyses determined the race and gender mentor-protégé pairings and leadership capacity further validate the results from the first research question; resident assistants who participated in mentoring relationships will demonstrate significantly higher leadership capacities than resident assistants who do not.

#### **Race Match and Leadership Capacity**

I examined same- and cross-race mentor-protégé pairings. A comparison of independent sample *t*-tests and regression analyses were conducted. The research question three covariates in in the model were pre-college activities, major, sexual orientation, citizenship/generational status, parents' education level, grade point average, pre-tests; race and gender as measures of control were removed. The gender match and race match variables were also included in the

model. It was hypothesized same-race pairs would score significantly higher on leadership capacity (socially responsible leadership and leadership capacity).

Ragins (1997) identified an important research conundrum; he argued research on race and mentoring relationships have inconsistent findings because confounding variables have not been used as measures of control. As mentioned previously, this study implemented covariates as measures of control in addition to two pre-tests. With respect to the Social Change Model constructs, African American/Black RAs had the highest mean scores on seven of the eight Social Change Model constructs and on leadership capacity. Multiracial RAs had a slightly higher mean scores on SCM group constructs. Asian American/Pacific Islander RAs had lower mean scores on all Social Change Model (SCM) constructs and leadership capacity for both race and gender.

Through regression analysis, this study found the race match and gender match for mentor-protégé pairings does not predict leadership capacity (socially responsible leadership and leadership efficacy). Perhaps this is due to the resident assistants' egalitarian views on mentorship with respect to gender and race and the disproportionate number of diverse mentors. This finding is very useful because there may be a limited number of potential mentors of racially diverse or non-binary gender backgrounds. Therefore, being mentored by someone of a different race or gender is not disadvantageous; what is most important is that the resident assistant has been mentored. I hypothesized similarities in demographics (gender match and/or race match) may be an important factor in the mentor-protégé relationship for resident assistants. Resident assistants encounter and respond to emergencies (e.g., sexual assaults, domestic violence, hate crimes) where dimensions of identity (race, gender, sexual orientation, religion) are the focus. Perhaps this sub-sample has acquired the capacities to engage in difficult dialogue with a variety of audiences due to the nature of the paraprofessional position. The educational programming component of the role often requires RAs to serve as peer educators and facilitate reflective conversations on topics including but not limited to sexual health, building inclusive environments, and body image for diverse residential audiences. Perhaps the lack of significant differences by race match or gender match is tied to this sample's scores on mentoring outcomes. As resident assistants, they are required to enact leadership (mentoring for leadership empowerment) while simultaneously being the go-to person in their residential community for support (mentoring for personal development). Ragins (1997) concluded from his research that cross-race mentorships can be as helpful, valuable, and satisfying as same-race mentorships. As mentioned earlier, the non-significant race match and gender match findings on leadership capacity further substantiate the results from the first research question; mentored RAs

In Chapter IV it was mentioned that race and gender were disaggregated for research question three rather than being used as a measure of control to identify unique predictors of leadership capacity. For this study, when examining disaggregated dummy variables for each racial category, African-American/Black RAs had the highest mean scores for leadership capacity and mentoring outcomes. However, when examining the collapsed dummy variable consisting of Caucasian/White and all other races, Caucasian/White RAs had the highest mean scores for leadership capacity and mentoring outcome. For further context, Dugan, Kodama, and Gebhardt (2012) used the 2009 MSL data to examine the influences of race on SRL through collective racial esteem (CRE). "CRE examines an individual's self-concept related to membership in a broader racial group and may be used as a correlate of racial identity in assessing the impact of race in quantitative research" (Dugan et al., 2008, p. 174). They found in

quantitative research racial categories had limited meaning for understanding the influences of race on leadership; thus, explaining contradictory findings from qualitative and quantitative studies. They argued disaggregation of analyses by racial group identified unique predicators of SRL along with unique CRE influences.

If social justice is truly a critical component of leadership development, if leadership is the learnable capacity scholars suggest it is, and if higher education intends to fulfill its societal commitment to prepare the next generation of citizen leaders, then the gap in understanding the influences of race on leadership development needs to be diminished. (Dugan et al., 2012, p. 186).

Therefore, the disaggregation of analyses by racial group can identify unique predicators on capacity.

#### Astin's I-E-O Model and Leadership Capacity

As mentioned earlier, Astin's Input-Environment-Outcome model served as the conceptual framework for the design and methodology of this study. The findings from this study focused the environmental influences on leadership capacity while controlling for confounding conditions. According to Astin and Oseguera (2005) pre-college inputs offer a unique predictive power. Of the inputs, pre-college involvement (activities, pre-tests) were the single most consistent positively related control variables on educational outcomes.

Astin (1999) argued highly involved students who invest psychological and physical energy in their academic experiences while frequently interacting with faculty and other students are more likely to persist. Resident assistants (RAs) are involved student leaders who may frequently interact with other students, faculty members, and student affairs professionals. Given the RA profile, those who identified at least one mentoring encounter exhibited significantly higher leadership capacities than RAs who did not. Therefore, mentoring was a predictor of leadership capacity. Type of mentor was not a predictor of socially responsible leadership. However, type of mentor was a predictor of leadership efficacy and student affairs mentors were positive predictors of both mentoring outcomes and leadership efficacy. When examining leadership capacity by gender and race, women RAs had higher means scores than any other gender and African American/Black RAs had higher means scores than any other race. Asian American/Pacific Islander (AAPI) women RAs had lower mean scores than any other gender and AAPI men had lower mean scores than any other race.

With respect to mentor-protégé pairings, race match and gender match is not a predictor of leadership capacity. Regarding gender, research has shown (e.g., Dugan 2006a; Dugan 2006b) women have consistently scored higher than men on the majority of Social Change Model (SCM) constructs. In this study women had higher mean scores on all SCM constructs, socially responsible leadership, and leadership capacity. Therefore, the gap between genders on socially responsible leadership capacity persists. Additionally, women's confidence levels were slightly higher as evidenced by their leadership efficacy mean scores.

With respect to Asian American Pacific Islander (AAPI) survey responses, studies have been conducted and findings indicated when AAPI students respond to surveys, they tend to score in the midrange and avoid extreme responses (e.g., strongly agree or strongly disagree). In contrast, African American/Black students have consistently scored highest on socially responsible leadership. It has been suggested this is due to a need to collaborate with others to obtain goals and accomplish initiatives as individuals, in groups, and within society (Dugan, 2006b). Limitations. There are limitations associated with this study. The MSL's cross-sectional design had certain limits, including that the study is not experimental research. Only experimental research can determine cause and effect. The use of retrospective questioning techniques in cross-sectional studies required students to reflect on their pre-college experiences and self-report; this is appropriate for this study because comparisons across institutions are not the intent—measurement of educational outcomes associated with individual students' leadership capacities is the intent. Although the MSL collects data from many institutions and researchers can control for institutional selectivity and size, each students' retrospective self-reported responses are unique to them and their collegiate experiences. Further, between-college effects tend to be poor predictors of student outcomes once one controls for pre-college activities (Pascarella & Terenzini, 2005). Admittedly, resident assistants' roles and responsibilities may be relatively similar between institutions; however, the expectations of residence life and housing departments, hiring and evaluation processes, and training of these paraprofessionals may differ drastically.

I must acknowledge this study reported findings on the mentor-protégé relationships and experiences from the protégé perspective only; therefore, the results are reliant on the protégés' self-reports. Finally, the mentoring that is being self-reported could have occurred one time, therefore it cannot be assumed there is a true mentoring "relationship" as opposed to single mentoring encounters. Respondents reported the most significant type of mentor, and that mentor's gender and race. Yet, there is no further context related to the mentoring relationship (e.g., duration of the mentoring relationship, including additional mentor demographics). This information could provide more insight into the mentor-protégé dynamics.

**Delimitations.** The Multi-Institutional Study of Leadership's 2009 sample consists of 34% cases (n = 118,733) of the 337, 482 students invited to participate (Campbell et al, 2012; Dugan et al., 2012). Although this is an impressive sample size, I have demonstrated there is a need to step away from the larger sample (general effects) and begin to examine sub-samples within the study (conditional effects). As mentioned earlier, resident assistants have not been examined as a sub-sample and there is only one published article on mentoring outcomes utilizing the MSL. Thereby, an examination of mentoring outcomes and leadership capacity in resident assistants (n = 6,006) was a clear choice made by the researcher to offer a unique contribution to MSL research agenda. I made a decision to study a sub-sample in the MSL, the number of respondents and responses are fewer, however, this was an intentional decision. Although the number was small (n = 20) I chose not to eliminate transgender responses in the mentor-protégé gender pairings in *t*-tests to present a more accurate and inclusive depiction of the findings. With respect to major, the 22 majors were clustered into 10 disciplines and Science, Technology, Engineering, and Mathematics was chosen as the reference group.

The Multi-Institutional Study of Leadership (MSL) has been used to examine educational outcomes of the collegiate environment since 2006. In that time many publications, theses, and dissertations have been produced utilizing the data. The MSL study uses the Social Change Model as the theoretical framework and Astin's I-E-O model as the conceptual framework. Due to the large number of studies and extensive work utilizing environmental predictors on educational outcomes, I chose a single regression model including the covariates and pre-tests rather than employing multi-block hierarchical regression. Many MSL researchers have utilized hierarchical regression in connection to the I-E-O conceptual framework; in the first block they included covariates, the second block has included one or both pre-tests, and the third block has

included the unique variable for their research question (e.g., institutional selectivity, mentoring outcomes, short-term immersion involvement). As mentioned earlier, the single-model approach I utilized included the covariates, pre-tests, and key predictors on the dependent variables. Due to the number of covariates, independent variables, and dependent variables this approach was a more concise and direct method to report findings in text and table form.

### **Implications for Practice**

The findings from this study equip educators and potential mentors with evidence-based information on the benefits of cultivating the leadership capacities of resident assistants (RAs). These findings also address both practical and scholarly implications often missing in research findings. The student affairs practitioners (e.g., hall directors, student organization advisors, leadership coordinators, fraternity and sorority advisors) resident assistants learn from outside of the classroom and the faculty they learn from inside the classroom can have a direct, positive influence on RAs' leadership capacities. Findings from this study suggest even one quality mentoring encounter is beneficial for RAs. Findings indicated that mentored RAs scored significantly higher than non-mentored RAs on each value of the Social Change Model, socially responsible leadership, and leadership efficacy. Additionally, RAs mentored by student affairs professionals scored higher than any other type of significant mentor on both mentoring outcomes and leadership efficacy. Student affairs professionals have various opportunities to establish mentoring relationships with RAs and college students in general due to the nature of the profession and help build their confidence levels in their abilities as leaders.

Student affairs practitioners should strive to frequently interact in both informal and formal capacities with resident assistants because there is a measurable benefit. Findings from this study support that gender match and race match mentor-protégé pairs do not significantly
differ from cross-race and cross-gender mentor-protégé pairs on leadership capacity. As mentioned earlier, this finding could be helpful because there may be a limited number of potential mentors of racially diverse or non-binary gender backgrounds. Therefore, being mentored by someone of a different race or gender is not disadvantageous; what is most important is that the resident assistant has been mentored. Therefore, any most significant type of mentor on a college campus can impact a resident assistant's leadership capacity (socially responsible leadership and leadership efficacy).

Institutions of higher education can also benefit from mentoring relationships with resident assistants. Stakeholders in higher education acknowledge matriculation, retention and graduation of students as a priority; student leaders who aid in retention efforts are valuable and how they are developed and mentored is worthy of study. Therefore, those who mentor resident assistants are not only benefitting the protégé and who they encounter, but may increase retention efforts and student satisfaction with their collegiate experiences. This is particularly salient for certain types of institution. For public state institutions, a residency requirement may be in place. Resident assistants (RAs) can play a very important role in retaining first-year students who live on campus, particularly at large institutions where students may feel like a "number". In contrast, RAs can play an essential role at residential, liberal arts campuses. Many students choose to live on campus all four years and having an RA may be the only consistent aspect of their collegiate experiences as majors change and co-curricular activity interests are modified. Therefore, institutions of higher education should recognize the contributions of RAs and the mutual benefits associated with mentoring these student leaders.

Through a bigger picture student affairs lens, student affairs and faculty could assume mentoring roles for promising undergraduate resident assistants and master's students who want to be in the field as professionals. Therefore, socialization into the profession by way of mentoring through both psychosocial and career orientations has the potential to be quite beneficial for the protégé. Professional associations should continue to offer or develop opportunities for mentoring encounters. For example, one of the Student Affairs Administrators in Higher Education (NASPA) knowledge communities, student leadership programs, has a mentor-mentee program for first-time NASPA national conference attendees. The intent is for the protégés to spend time with seasoned professionals to learn about navigating the conference, the profession, and the mentors' career path. This mentoring program will be extended to the regional levels in 2013-2014 to offer mentoring encounters at regional conferences and is open to undergraduate students. There is also a larger mentoring effort, the NASPA Undergraduate Fellows Program (NUFP), a mentoring program designed specifically for undergraduate students who want to pursue careers in student affairs administration. College Student Educators International (ACPA) annually hosts the Convention Colleagues program which pairs first-time attendees, new professionals, and graduate students are seated at tables for an event to mingle, network, and explore career options. The National Association for Campus Activities (NACA) has a leadership fellow and mentor program for underrepresented ethnicities to become familiarity with the association and profession. These are examples that student affairs as a profession is aware of the benefits of mentoring encounters and offer formal and informal mentoring opportunities.

#### **Future Research**

Future research has the ability to validate previous findings and lessen the gap between theory and practice. Findings from the 2006 Multi-Institutional Study of Leadership (MSL) were consistent with findings from the 2009 MSL on gender and race related to socially responsible leadership. This may be because researchers have explored disaggregated data by race and gender to expose unique effects. In this study, mentoring outcomes on leadership capacity (socially responsible leadership and leadership efficacy) of resident assistants was examined while controlling for confounding conditions. However, there is more research that should be conducted to explain the replication of findings and unexplained gaps in literature from the 2006 and 2009 MSL studies.

With regard to unexplained gaps in literature this study cannot explain, of particular interest is Asian American/Pacific Islander (AAPI) RAs' lower leadership capacity mean scores and African American/Black RAs' higher leadership capacity mean scores. There is a need for educators to investigate this phenomenon further though qualitative means. I suggest qualitative methods because these findings are consistent with the 2006 Multi-Institutional Study of Leadership findings and there is still no deeper understanding of why these findings persist, only speculations.

With respect to mentoring outcomes, research could be conducted on the mentor and protégé pairs. The MSL provides somewhat limited insights from the protégé (type, race, gender) and yet we hear nothing from the mentor. To be able to fully understand the relationship, the researcher should hear from both mentor and protégé. Same-race mentor-protégé pairs have higher group means on leadership capacity than cross-race pairs. Cross-gender pairs have higher group means on leadership capacity than same-gender pairs. However, as mentioned earlier, gender match and race match are not predictors of leadership capacity. Perhaps a qualitative approach (e.g. mentor-protégé interviews or focus groups) could further explain the dynamics associated with race and gender mentor-protégé pairings.

Finally, this study was designed to be replicated for different sub-samples or student group types (e.g., orientation leaders, fraternity/sorority members, student organization members) from the Multi-Institutional Study of Leadership (MSL) data. Many researchers have utilized the entire MSL sample, yet few have sought to explore sub-samples within the larger group. This study utilized researcher-selected covariates of interest to me. Other researchers may want to explore the most significant type of mentor or mentor-protégé race and gender pairings and students' major as opposed to using major as a measure of control (e.g., Science, Technology, Engineering, and Math (STEM) majors). This would be particularly interesting for majors with a predominance of a single gender (e.g., Engineering) or race (African American Studies). In addition, other researchers may choose different covariates for predictive purposes.

With respect to the MSL survey design, I offer some recommendations for those who plan to use the data in the future. First, grade point average should be reverse coded for accuracy of the interpretation of findings; if the grade point average is not recoded the standardized coefficient appears to be negatively related when that is not the case. In addition, the CORE90 variable is very important and can be overlooked with the large number of variables in the MSL codebook. As mentioned in Chapter III, that variable will assist researchers with cleaning up missing data because it will only include cases where respondents completed at least 90% of the survey. Finally, there were two sub-studies that participants were randomly selected to complete (mentoring outcomes/spiritual or collective racial efficacy). It is not explicitly stated in the MSL Codebook that roughly half of a sample completed one sub-study; this is important because the sample size decreases significantly. For instance, of roughly 6,000 RAs fewer than 3,000 completed the mentoring outcomes sub-study. However, the participants who were not selected in the sub-study will still appear in analysis, but will dramatically decrease the mentoring outcome means; they will need to be treated as missing data for accurate mentoring outcome means, and standard deviations.

Select members of the Multi-Institutional Study of Leadership team presented at College Student Educators International (ACPA) Convention in March of 2013 on recent Social Change Model findings. They found self-awareness and individual values predicate the group and societal values. They suggested a revision for the model to make it more linear and reflect the aforementioned finding. The proposed change would require the model to begin with individual values to understand self then move to group values. The group values promote being in relationship, collaborating, and developing social perspective taking. Social perspective taking was implemented in the 2009 study and the 2012 study. It involves the ability to see things from another's perspective while remaining true to oneself. In essence, once one is self-aware and other-aware they are able to move into the societal arena and engage in citizenship for positive, purposeful change. At this same presentation, the importance of resiliency as an outcome was discussed. Resiliency is the determination to complete a task regardless of obstacles or circumstances. "Neither life, nor leadership, is a linear path free of stress or setbacks" (Whitney, 2007, p. 4). Because of leader persistence, I argued leadership efficacy should be included in addition to socially responsible leadership for a more comprehensive view of leadership capacity. Based on this presentation and emerging leadership research, I argue for a third persistence-based inclusion, resiliency for a more holistic depiction of leadership capacity (socially responsible leadership and leadership efficacy).

#### Conclusion

This study examined mentoring encounters on college campuses including most significant type of mentor and gender match and race match of mentor-protégé pairings for

resident assistants while controlling for confounding factors. The findings offer insights and comparisons to the 2006 Multi-Institutional Study of Leadership findings. However, there is much more to be learned about mentoring and leadership capacity. More specifically, there are consistent demographic findings on socially responsible leadership that warrant further investigation and a wide array of options to explore leadership efficacy and mentoring outcomes. It is my hope that by bringing the subject to light, more educators will conduct further research and more college students will engage in mentoring encounters. As noted many times, mentoring is a positive predictor of leadership capacity and through mentorship resident assistants are equipped with the abilities and confidence levels to create positive, purposeful transformational change.

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Inputs	n	%
Race		
African American/Black	496	8.3
American Indian/Alaska Native	19	.3
Asian American/Asian	528	8.8
Caucasian/White	3,931	65.5
Latino/Hispanic	223	3.7
Middle Eastern	44	.7
Multiracial	490	8.2
Race not included above	148	2.5
Grade Point Average		
3.50 - 4.00	2,371	39.5
3.00 - 3.49	2,269	37.8
2.50 - 2.99	968	16.1
2.00 - 2.49	202	3.4
1.99 or less	33	.5
No college GPA	16	.3
Pre-College Activities (Very Involved)		
Student Council/Government	1,201	20.0
Pep/Spirit Club, Cheer	816	13.6
Performing Arts	2,313	38.5
Academic Clubs	1,754	29.2
Organized Sports	2,745	45.7
Leadership Positions	2,807	46.7
Major (Clustered)		
Science, Technology, Engineering, and Mathematics	1,217	20.7
Professional and Pre-Professional	352	6.0
Humanities	947	16.1
Business Administration	980	15.4
Communication	343	16.7
Education	469	8.0
Health-Related Fields	380	6.5
Multi/Interdisciplinary Studies	88	1.5
Social Sciences	982	16.7
Undecided	111	1.9

APPENDIX A.	RESIDENT ASSISTANT FU	LL SAMPLE PROFILE

## (Appendix A continued)

Inputs	n	%
Major		
Agriculture	37	.6
Architecture/Urban Planning	54	.9
Biological/Life Sciences	465	7.7
Business	924	15.4
Communication	343	5.7
Computer and Information Sciences	101	1.7
Education	469	7.8
Engineering	322	5.4
Ethnic, Cultural Studies, and Area Studies	35	.6
Foreign Languages and Literature	93	1.5
Health-Related Fields	380	6.3
Humanities	461	7.7
Liberal/General Studies	57	.9
Mathematics	126	2.1
Multi/ Interdisciplinary Studies	88	1.5
Parks, Recreation, Leisure Studies	39	.6
Physical Sciences	166	2.8
Pre-Professional	259	4.3
Public Administration	56	.9
Social Sciences	982	16.4
Visual and Performing Arts	301	5.0
Undecided	111	1.8
Gender		
Women	3,438	57.2
Men	2,411	40.1
Transgender	26	.4

(Appendix A continues)

Inputs	n	%
Transgender Identification		
Female to Male	5	.1
Male to Female	4	.1
Intersex	11	.2
Sexual Orientation		
Heterosexual		
Bisexual	5,291	88.1
Gay/Lesbian	161	2.7
Questioning	162	2.7
Rather Not Say	83	1.4
	174	2.9
Citizenship/Generation Status		
Grandparents, parents, and you were born in the U.S.		
Both parents and you were born in the U.S.	3,720	61.9
You were born in the U.S.	699	11.6
You are a foreign-born, naturalized citizen	649	10.8
You are a foreign-born, resident alien/permanent	251	4.2
resident	172	2.9
International student		
	381	6.3
Parents' Education		
Less than high school/GED	118	2.0
High school/GED	715	11.9
Some college	732	12.2
Associate's degree	497	8.3
Bachelor's degree	1,653	27.5
Master's degree	1,326	22.1
Doctorate/professional degree	753	12.5
I do not know	66	1.1

(Appendix A continued)

Inputs	n	%
Parents' Income		
Less than \$12,500	293	4.9
12,500-\$24,999	328	5.5
25,000-\$39,999	476	7.9
40,000-\$54,999	489	8.1
\$55,000-\$74,999	687	11.4
\$75,000-\$99,999	779	13.0
\$100,000-\$149,999	860	14.3
\$150,000-\$199,999	335	5.6
\$200,000 +	425	7.1
I do not know	838	14.0
I would rather not say	348	5.8
Religion		
Agnostic	478	8.0
Atheist	194	3.2
Baptist	527	8.8
Buddhist	104	1.7
Catholic	1,396	23.2
Church of Christ	112	1.9
Eastern Orthodox	40	.7
Episcopalian	95	1.6
Hindu	63	1.0
Islamic	72	1.2
Jewish	128	2.1
LDS (Mormon)	148	6.0
Lutheran	360	4.0
Methodist	242	3.6
Presbyterian	217	.4
Quaker	24	.3
Seventh Day Adventist	18	.7
Unitarian/Universalist	40	.5
UCC/Congregational	28	13.0
Other Christian	779	2.2
Other Religion	132	.2
None	664	11.1

(Appendix A continued)

Inputs	n	%
Disabilities		
Deaf/Hard of Hearing	84	1.4
Blind/Visual Impairment	55	.9
Speech/Language Condition	22	.4
Learning Disability	118	2.0
Physical or Musculoskeletal (ex. multiple sclerosis)	42	.7
Attention Deficit Disorder/ Attention Deficit Hyperactivity Disorder	176	2.9
Psychiatric/Psychological Condition (ex. Anxiety	264	4.4
disorder,		
major depression)	23	.4
Neurological Condition (ex. brain injury, stroke)	261	4.3
Medical (ex. diabetes, severe asthma)	97	1.6
Other		
Institutional Selectivity		
Special	53	.9
Non-Competitive	255	4.2
Less Competitive	243	4.0
Competitive	1,327	22.1
Very Competitive	2,032	33.8
Highly Competitive	1,299	21.6
Most Competitive	746	12.4
Enrollment Status		
Full Time	5,855	97.5
Less than Full Time	151	2.5
First-Generation Status		
First-Generation	833	13.9
Non First-Generation	4,961	85.6
	,	

## APPENDIX B. 2009 MSL SUB-STUDY SCALES

## Socially Responsible Leadership Pre-Test and Scale Items

Number of items: 71

Constructs of the Social Change Model (n=8)

- Individual Values
  - Consciousness of Self Scale
  - Congruence Scale
  - Commitment Scale
    - Range for each construct: Low=1, High=5
    - Range for individual values: 1=Low, High=15
- Group Values
  - Collaboration Scale
  - Common Purpose Scale
  - Controversy with Civility Scale
    - Range for each construct: Low=1, High=5
    - Range for group values: 1=Low, High=15
- Societal Value
  - o Citizenship Scale
    - Range for societal value: 1=Low, High=5
- Outcome Value
  - Change
    - Range for outcome value: 1=Low, High=5

#### Leadership Efficacy Pre-Test and Scale

Range: Low=1, High=4

Number of items: 4

Items:

- Leading others
- Organizing a group's tasks to accomplish a goal
- Taking initiative to improve something
- Working with a team on a group project.

## Mentoring for Leadership Empowerment Scale

Range: Low=1, High=5

Number of items: 3

Scale Items

- Empower myself to engage in leadership
- Empower others to engage in leadership
- Engage in ethical leadership

## **Mentoring for Personal Development Scale**

Range: Low=1, High=5

Number of items: 7

Scale Items:

- Live up to my potential
- Be a positive role model
- Mentor others
- Value working with others from diverse backgrounds
- Be open to new experiences
- Develop problem-solving skills
- Identify areas for self-improvement

**Overview of Scales provided by MSL** 

# BRIEF OVERVIEW OF SCALES IN THE 2009 MULTI INSTITUTIONAL STUDY OF LEADERSHIP

**Content of MSL Instrument:** The MSL consists of core scales that all students receive that will be repeated in subsequent years and sub-studies that are administered to a subgroup of the sample. The sub-studies noted below will be included in the 2009 and 2010 data gathering.

## Core scales:

**Socially Responsible Leadership:** measures the core values of the Social Change Model: consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change.

**Leadership Efficacy**: measures students' confidence in their leadership abilities.

o Example: Working with a team on a group project

**Cognitive Skills\*:** measures students' self-reported growth in advanced cognitive skills, including critical thinking, self-directed

learning, and making complex connections between topics.

o Example: Ability to put ideas together and to see relationships between ideas

**Campus Climate:** defined as the degree to which members of the campus community feel connected and appreciated measured using two distinct factors: (1) Sense of belonging – how strongly individuals feel that they belong within their campus community, and (2) Feeling of discrimination – perceived and actual sources of discrimination directed at an individual or group of individuals.

o Example: I feel valued as a person at this school (Belonging Climate)

o Example: I often do not feel supported on this campus (Discriminatory Climate)

**Socio** Cultural Discussions with Peers\*: measures frequency with which students engage with their peers outside the classroom around a set of compelling social and cultural issues, including domestic diversity, peace and justice, and politics.

o Example: *Held discussions with students whose political opinions were very different from your own* 

**Social Change Behaviors:** taking an active role in making a difference for the common good. o Example: *Been actively involved with an organization that addresses a social or environmental problem* 

o Example: *Signed a petition or sent an email about a social, political or environmental issue* **Mentoring**: identifies those who are mentors for college students

o Example: Since starting college, how often have the following types of mentors assisted you in your growth or development?

## Sub studies:

**Collective Racial Esteem**: examines an individual's domain specific sense of self-concept related to membership in a broader racial group informed by four subcomponents representing private CRE (i.e., personal assessment of the value of one's racial group), public CRE (i.e., personal beliefs regarding how others value one's racial group), identity salience (i.e., the degree of centrality of one's racial group membership to their self-concept), and membership (i.e., personal beliefs about how well one functions as a member of their racial group) (Crocker Luhtanen, Blaine, & Broadnax, 1994).

o Example: Public perception: In general, others respect my race.

o Example: Salience: Overall, my race has very little to do with how I feel about myself. Reverse scored)

**Mentoring Outcomes**: explores mentoring outcomes for students in mentoring relationships o Example: *Develop problem solving skills* 

**Spirituality**\*\*: defined as the process of meaning making with self and community through the act of seeking congruence of one's personal values, living a balanced and integrated life, and willingness to engage with and accept others whose values and beliefs may be different from one's own.

o Example: Think about developing a meaningful philosophy of life

**Social Perspective Taking**: defined as the ability to take another person's point of view (Underwood & Moore; Franzoi, Davis, & Young, 1985) and/ or accurately infer the thoughts and feelings of others (Gehlbach, 2004)

o Example: Perspective-taking: *Before criticizing somebody*, *I try to imagine how I would feel if I were in their place*.

o Example: Empathy: Other people's misfortunes do not usually disturb me a great deal.
Reverse scored)
\*Used by permission of the National Study of Living-Learning Programs; \*\* Adapted from HERI Spirituality Study

## BRIEF OVERVIEW THE 2009 MULTI INSTITUTIONAL STUDY OF LEADERSHIP

The Multi-Institutional Study of Leadership (MSL) is an annual, international survey of leadership development among college students. The study examines the role of higher education in developing leadership capacities with a focus on specific environmental conditions that foster leadership development. MSL is a partnership of the National Clearinghouse for Leadership Programs, Survey Sciences Group and the Center for Student Studies with additional financial support from the National Association of Campus Activities, the C. Charles Jackson Foundation, and participating institutions.

#### Theoretical Framework: The Social Change Model (HERI, 1996)

The Social Change Model of Leadership Development (SCM) serves as the foundation of the Socially Responsible Leadership Scale (SRLS), which is the core of the MSL instrument. This model approaches leadership as a purposeful, collaborative, values-based process that results in positive social change.

#### The Core Values of the Social Change Model Individual Values

Consciousness of Self-Being self-aware of the beliefs, values, attitudes, and emotions that motivates one to take action.

Congruence- Acting in ways that are consistent with one's values and beliefs. Thinking, feeling, and behaving with consistency, genuineness, authenticity, and honesty toward others.

Commitment-Having significant investment in an idea or person, both in terms of intensity and duration. Having the energy to serve the group and its goals. Commitment originates from within, but others can create an environment that supports an individual's passions.

(Adapted from Wagner, W. (2007). The Social Change Model of

leadership: A brief overview. Concepts & Connections, 15(1), p. 9).

## **Group Values**

Collaboration -Working with others in a common effort, sharing responsibility, authority, and accountability. Multiplying group effectiveness by capitalizing on various perspectives and talents, and on the power of diversity to generate creative solutions and actions.

Common Purpose- Having shared aims and values. Involving others in building a group's vision and purpose.

Controversy with Civility- Recognizing two fundamental realities of any creative effort: 1) that differences in viewpoint are inevitable, and 2) that such differences must be aired openly but with civility.

## **Community Values**

Citizenship-Believing in a process whereby an individual and/or a group become responsibly connected to the community and to society through some activity. Recognizing that members of communities are not independent, but interdependent.

A key assumption of the SCM is that the ultimate goal of leadership is positive social change, "**change**" is considered to be at the "hub" of the SCM. Change The SCM is grounded in the

belief in the importance of making a better world and a better society for oneself and others. The SRLS, however, measures one's comfort with change and the Social Change Behaviors scale measures engagement in change efforts.

## **BRIEF OVERVIEW OF VARIABLES & SCALES IN THE 2009 MULTI INSTITUTIONAL STUDY OF LEADERSHIP**

The following items are included in the MSL instrument. One should keep in mind that while an item might be a campus experience or environment variable, it could be used as an outcome measure as well! The assessment or research question you are asking should guide your variable choice. See the examples to the right for some suggestions and examples.

**Demographic and Classification Variables (Inputs):** The following variables can be used as classification, sorting, or control variables for your statistical analysis.

- § Age
- § Gender
- § Sexual Orientation
- § Ethnic/racial background
- § Current Living Arrangements
- § Ability/Disability
- § US Citizen Generational Status
- § Socioeconomic Status (education of parents and family income; indicates first generation students)
- § College grades (also may be an outcome variable)
- § Religious affiliation
- § Academic Major
- § Transfer status
- § Full or part time enrollment
- § Class year
- § Political Views

**Pre College Experiences:** Respondents indicated the degree of their pre-college involvement in numerous experiences.

§ Involvement in high school clubs, sports, or service

- § Involvement in community organizations
- § Pre-college leadership training

Pre Tests (Bridges): The MSL 2009 instrument contains the following quasi-pre-tests\*.

- § Socially Responsible Leadership Scales
- § Efficacy of Cognitive Skills
- § Leadership Efficacy
- § Spirituality
- § Social Perspective Taking
- § Social Change Behaviors
- § Collective racial esteem

**Campus Experiences (Environments):** The MSL 2009 instrument contains the following measures of campus experiences, involvement, and interaction.

- § Breadth and depth of campus organization involvement
- § Nature of community service involvement
- § Academic engagement experiences (e.g., study abroad, internships)
- § Amount of on- or off- campus work experience
- § Leadership training participation
- § Positional Leadership frequency (on and off campus)
- § Active members frequency (on and off campus)
- § Engagement in socio-cultural issues discussion
- § Social change behavior frequency
- § Mentoring and race/gender of significant mentor

Outcome Measures: The MSL 2009 instrument contains the following outcome measures.

- § Consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, change, and an omnibus SRLS score
- § Leadership efficacy
- § Growth in cognitive complexity
- § Collective racial esteem
- § Spirituality and meaning-making
- § Outcomes of mentoring relationships
- § Social Perspective Taking
- § Social change behavior frequency
- § Open ended: What leadership means to you?
- \* quasi-pretest refers to retrospective measures in this cross-sectional study

## SOME EXAMPLES OF HOW TO USE YOUR 2009 MULTI INSTITUTIONAL STUDY OF LEADERSHIP DATA

The MSL provides multiple ways in which the data could be used for assessment, evaluation, and research. The following are examples of ways that the data could be utilized.

#### Conceptual Framework Astin's I E O Model

An adapted version of Astin's (1993) I-E-O model is the conceptual framework for the design of the MSL instrument. It is also a useful resource to use when conducting assessment, evaluation, and research and allows individuals to better isolate the role of the college environment on a particular outcome measure.

Inputs: Students' pre-college characteristics

*Environments:* Programs, experiences, relationships, and other factors in the collegiate environment

*Outcomes:* Students' characteristics across theoretical measures associated with Social Change Model values or other outcomes after exposure to the college environment

#### Assessing Descriptive Information

**Question:** What percent of commuter students participate in campus student organizations? **Method:** Cross-tabs, means, or frequencies

#### Assessing Link to Academics

**Question:** Do students who are involved in college organizations have a higher college GPA than those who do not? **Method:** T-test or one-way ANOVA

#### Assessing Difference

**Question:** Is student participation in community service significantly different from our peer institutions? **Question:** Is there a difference in leadership self-efficacy between male students and female students? **Method:** T-test, one-way ANOVA, or regression

#### Assessing Relationships

Question: Is there a significant relationship between socio-cultural discussions and leadership outcomes?Question: Is there a significant relationship between class standing and leadership efficacy for first generation students?Method: Correlation

#### Assessing Influence

**Question:** Do socio-cultural discussions have an effect on leadership outcomes above and beyond race and gender?

**Question:** Which college experiences contribute to self-perceived growth in leadership efficacy? **Method:** Regression

#### Assessing Learning Outcomes

**Outcome:** Recognize one's responsibility to participate in one's own community and the broader society.

**Question:** Do students who participate in leadership programs score higher on citizenship than those who do not?

Method: T-test or one-way ANOVA

*Note: MSL Leadership Scale document was provided electronically by Dr. John P. Dugan and presented at the MSL 2012 Summit* 

#### APPENDIX C. PSYCHOMETRICS AND DESIGN CONSIDERATIONS

#### Validity and Reliability

The MSL survey includes more than 400 variables, scales, and composite measures. As such, it would be impossible to detail full information related to the validity and reliability of measures. Much of this information can be found in academic articles published using the various scales. These are listed in the MSL web library accessible via the following web address: www.leadershipstudy.net.

The Socially Responsible Leadership Scales (SRLS), which comprise the core of the MSL survey instrument, have undergone extensive psychometric work. Rigorous methods were used in the creation of the original SRLS to establish content validity of the measures. This process is explained in detail in the original dissertation from which the instrument is derived (Tyree, 1998). Construct validity was further examined for the SRLS in early pilot studies of the MSL instrument as well as with the 2006 and 2009 iterations of the study and demonstrated appropriate and consistent relationships amongst outcomes variables and other theoretically supported measures.

Reliability levels across all eight scales in the original version, revised form, MSL pilot studies, MSL 2006 study, and current form demonstrate consistent performance levels. Given reliability is a function of using an instrument with a specific population and not the instrument itself (Mertens, 2005), Cronbach alphas were calculated for each institution in the 2006 study as well as by categories in each major student sub-population (i.e., race, gender, sexual orientation). Reliabilities across all of these were consistent across all scales and did not deviate by more than .12. Reliability levels for these scales and all other composite measures for the MSL are available in the appendices to your institutional report.

#### Accuracy of Self-Report Data

The MSL instrument relies largely on student self-report data. Student self-reports have received considerable attention with regard to their accuracy and ability to adequately measure educational gains, despite the fact that researchers suggest that they can produce accurate results under specific conditions (Anaya, 1999; Astin, 1993; Bauer, 1992; Gonyea, 2005; Pace, Barahona, & Kaplan, 1985; Pike, 1995). These conditions include rigorous methodological standards as well as ease of participant use (Gonyea).

The participant component is characterized by the ability to comprehend questions, the ability to retrieve necessary information, perceived value of the questions being asked, and clarity of response options (Gonyea). When the above is in place, selfreports can generally be considered appropriate. This study was consistent with these considerations given the primary outcome measures have undergone field-testing in a variety of studies (Dugan, 2006a, 2006b; Dugan & Komives, 2007; Gehrke, 2008; Humphreys, 2007; Meixner, 2000; Morrison, 2001; Rickets, Bruce, & Ewing, 2008; Rubin, 2000) as well as multiple pilot studies. Additionally, the Crown-Marlowe measure of social desirability was employed as a means to remove items in which the responses appeared to be biased. Furthermore, a study of self and peer-reported leadership behaviors and the quality of those behaviors found self-reports of leadership to be generally accurate (Turrentine, 2001).

#### **Cross-Sectional Designs**

This study employs a cross-sectional research design in which students were asked to reflect retrospectively on past knowledge and experiences as a means to capture input data. Researchers indicate that when measuring leadership development as an educational outcome, retrospective questions may provide a stronger indication of student gains due to concerns associated with response-shift bias that emerge in traditional time elapsed studies (Howard, 1980; Howard & Dailey, 1979; Rohs, 1999, 2002; Rohs & Langone, 1997). The inherent assumption in measurement of change is a common metric at each point in time and that:

A person's standard for measurement of the dimension being assessed will not change from pretest to posttest. If the standard of measurement were to change, the posttest ratings would reflect this shift in addition to the actual changes in the person's level of functioning. Consequently, comparisons of pretest with posttest ratings would be confounded by this distortion of the internalized scale. Rohs & Langone, p. 51)

Researchers suggest cognitive dimensions associated with understanding leadership may cause a shift in the standards of measurement and as such cross-sectional designs offer an appropriate approach in addressing the effect (Howard; Howard & Dailey; Rohs, 1999, 2002; Rohs & Langone).

#### Weighting of Data

When surveying any population it is nearly always the case that there are nonrespondents. To the extent that respondents differ systematically in one way or another from nonrespondents, a bias may result when drawing conclusions from the data. To minimize this potential for bias, a nonresponse adjustment has been calculated for each school. An individual school's nonresponse adjustment will be used for all analysis and reporting that looks at an individual school's data. Weighting for nonresponse involves applying a weight to each individual respondent so that he or she represents a certain number of nonrespondents that are similar in terms of selected characteristics. The size of the weights depends on the level of under- or overrepresentation. Weighting classes for 2012 were constructed using three demographic variables: gender, race/ethnicity, and class standing. Three-way cross-tabulations were conducted using those variables from the school provided sample to calculate the cell percentage of each weighting class for both the sample data and the response data. The sample data contains all cases that were selected to be fielded in the data collection period; the response data contains only those cases that responded to the survey, including complete and partial responses.

A detailed description of the weighting classes and the construction of nonresponse weights for your institution are provided in separate documentation on the MSL Exchange, accessible via the archived 2012 school guide at: www.mymsl.net/2012.

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Note: Psychometrics were retrieved from http://leadershipstudy.net/design/psychometrics/
#### APPENDIX D. MSL SAMPLING OVERVIEW

A structural sampling protocol is used to increase the likelihood of obtaining the necessary return rate for institutional data to be generalizable to the campus population. Main Sample

Participating institutions are asked to draw a sample of students from their undergraduate population (this should include full- and part-time students). The sample size for the <u>MSL</u> <u>Standard Package</u> is 4,000 students. If your institution has fewer than 4,000 students, MSL will survey all matriculated undergraduates. MSL invites students to participate via e-mail, so you *must* provide e-mail addresses for each student in the sample. We are aware that your institution may have unique policies about sharing student information and will assist you in satisfying all IRB requirements to ensure confidentiality of data.

#### Comparative Sample

You may also select an additional sample in order to compare a sub-population against the benchmark set by your normative data. This comparative sample is optional. Individuals in the comparative sample may include any population of your choice, such as:

- students in a leadership course
- student organization members
- peer educators
- students in a particular academic major/minor

The MSL Standard Package includes a comparative sample of 1,000 students.

*Note:* Sampling overview was retrieved from http://leadershipstudy.net/design/sampling/

#### APPENDIX E. MSL DATA COLLECTION

The MSL is administered online by the Survey Sciences Group, LLC. SSG is an independent research organization with specific expertise in multi-campus studies. All data are collected using empirically proven standards for web-based survey research. MSL's online format allows students to share their experiences at any time or place that is convenient to them. They can respond to the MSL when they feel comfortable, secure, and unhurried. Respondents further enjoy the option of leaving the survey and resuming it from their last completed answer. The data-collection period extends from January through the end of April, and each institution will select a three-week window that best fits their unique academic calendar. Students are invited to participate via personalized e-mails. Each correspondence outlines the study, addresses issues of confidentiality and consent, and supplies a link to the survey instrument. Students may receive up to four total contacts.

As the survey is administered, SSG provides comprehensive respondent support via email or telephone to minimize the inconvenience to your students. The service also allows students to opt out of the survey by replying to any MSL correspondence and requesting to be removed from the dataset. SSG will monitor the survey completion rates and work with you to encourage participation if the response is insufficient. To increase your response rate, you may host a sweepstakes-style drawing for students who complete the survey. Your institution will decide on the number, type, and value of the prizes; and SSG will conduct the random drawing. Additionally, the MSL offers a number of monetary prizes raffled at the national level to stimulate survey response.

Note: Data collection overview was retrieved from http://leadershipstudy.net/design/datacollection-methods/

#### APPENDIX F. MSL DATA SECURITY

Survey Sciences Group, LLC (SSG) fully commits to confidentiality and security of survey data. We approach security in two ways:

- 1. Protocols for maintaining confidentiality of survey participants and their data
- 2. Technical systems that prevent unwanted access of data from outsiders

## Confidentiality

Protecting the confidentiality of study participants is the most important concern of the SSG staff working with the data. All individuals employed at SSG are bound by confidentiality as condition of their employment. They have signed a pledge of confidentiality and have been trained in procedures for maintaining confidentiality and privacy.

Data are stored on SSG internal servers that are password protected. The survey data captured in the web-based interface do not have any personal identifiers (individual or company name, email address, other contact information) in the data files. Personal identifiers are kept in a separate sample file in a secure space on our local file server accessible only by staff who requires this information as part of their work. We never rent, sell, or give your personal information to any third party for the purpose of directly marketing any products or services to you. Any information you provide in the survey is used strictly for research purposes. Data Security

We establish both logistical and physical barriers to protect respondent data to ensure its secure transmission and storage. Data are received and transmitted via password-protected, 128-bit SSL technology. Survey data submitted are encrypted before transmission via the SSG web site from participants' PCs/laptops to a secured server at SSG. Data are archived in secure servers, accessible through password-protected networks by appropriate personnel. We use both stand-alone networks and firewalls to safeguard data against outside networks attacks. The security of the information on our system has never been compromised.

Many websites use "cookies" to store information about a user in order to expedite the completion of forms on future visits to that site. SSG does not use cookies on our website. The only information we collect from you on our website or any web-based survey is the information you provide.

SSG monitors industry alerts and trends to ensure that we abide by the latest laws and regulations in protecting respondent data. We rigorously uphold — and often surpass — industry standards for research ethics, privacy, and confidentiality.

If you have questions about data confidentiality and security, please contact us at:

E-mail: privacy@surveysciences.com

Toll-free: 800.774.0142

and request to speak with our Privacy, Confidentiality and Ethics Officer.

Note: Data security was retrieved from http://leadershipstudy.net/design/data-security/

## APPENDIX G. PRINCIPAL INVESTIGATOR AND PROJECT CONSULTANTS Principal Investigator

Dr. John P. Dugan currently serves as an Assistant Professor in the Higher Education graduate program at Loyola University Chicago where he teaches courses on leadership, student development theory, and multiculturalism for social justice. John's research interests focus on the influences of higher education in shaping college students' involvement and leadership development with a specific emphasis on marginalized voices and ideas. John currently services as the Principal Investigator for the Multi-Institutional Study of Leadership (MSL), an international research program examining the influences of higher education on socially responsible leadership and other educational outcomes (e.g., efficacy, resilience, social perspective-taking, identity development) in the United States.

To date more than 175 institutions in the United States, Canada, Mexico, and Jamaica have participated in the study yielding over 250,000 college student participants. John's research has generated 24 printed or in press publications (e.g., refereed articles, books, and book chapters), more than 60 presentations at national and international conferences. John is a past recipient of the ACPA: College Educators International Burns B. Crookston Doctoral Research Award, Nevitt Sanford Award for Research in Student Affairs, and was named an Emerging Professional Annuit Coeptis. Additionally, the National Association for Student Personnel Administrators (NASPA) recognized John as the Melvene Hardee Dissertation of the Year Runner Up and the NASPA Knowledge Community for Student Leadership awarded him the 2009 award for Outstanding Student Leadership Research.

#### **Project Consultants**

Dr. Susan R. Komives is Professor Emeritus in the College Student Personnel Administration program at the University of Maryland, immediate past president of the Council for the Advancement of Standards in Higher Education, and a former President of the American College Personnel Association. She served as Vice President of two colleges and is the author of a dozen books or monographs including *Student Services, Exploring Leadership, Leadership for A Better World,* and the *Handbook for Student Leadership Development*. She was a member of the teams that wrote *Learning Reconsidered* and the ensemble that developed the Social Change Model of Leadership Development.

She is a co-founder of the National Clearinghouse for Leadership Programs, a former senior scholar with the James MacGregor Burns Academy of Leadership, and a member of the Board of Directors of the International Leadership Association. She is the 2011 recipient of the University of Maryland Board of Regent's Award for Faculty Teaching and the NASPA Shaffer Award for Academic Excellence as a graduate faculty member. A recipient of both the ACPA and NASPA outstanding research and scholarship awards, her research includes a grounded theory on Leadership Identity Development and the international Multi-institutional Study of Leadership. She is the 2012 recipient of the ACPA Life Time Achievement Award. Dr. Julie E. Owen is an Assistant Professor of Leadership and Integrative Studies at New Century College, George Mason University, where she teaches courses on socially responsible leadership, civic engagement, and community-based research. She is a Research Scholar for the National Clearinghouse for Leadership Programs and is co-editor of the *Handbook for Student Leadership Development*. She is active on several national research teams, including serving as a project consultant for the Multi-Institutional Study of Leadership (MSL) and a research team

member of the Leadership Identity Development (LID) project. She is a frequent presenter, consultant, and keynote speaker on topics related to leadership, social change, and organizational development.

Owen is the 2005 recipient of the K. Patricia Cross Future Leaders Award, the 2008 recipient of the CAS research grant, a 2011 ACPA Annuit Coeptis initiate, and a 2012 Mason teaching excellence award winner. She has assumed leadership roles in numerous professional associations including ACPA: College Educators International and the International Leadership Association (ILA). Owen received her B.A. degree (1993) in psychology and English from the College of William and Mary, and her M. Ed. (1996) in College Student Personnel Administration from James Madison University. She holds a certificate of non-profit administration from Duke University (2000) and received her PhD (2008) in college student personnel at the University of Maryland, College Park.

Note: Principle Investigator and Project Consultant information retrieved from http://leadershipstudy.net/about/research-team/principal-investigators/

### APPENDIX H. RESEARCH PARTNERS AND SPONSORSHIPS

The Multi-Institutional Study of Leadership (MSL) exists due to the generous sponsorship and support of a variety of organizations over the course of the project. Sponsorship Is Provided By: The National Clearinghouse for Leadership Programs (NCLP) Survey Sciences Group Prior Funding Support Has Been Provided By: The C. Charles Jackson Foundation ACPA Educational Leadership Foundation NASPA Foundation NACA Foundation University Maryland LeaderShape Inc. *Note: Research partners and sponsorship information retrieved from http://leadershipstudy.net/about/research-team/research-partners/* 

## APPENDIX I. 2009 PARTICIPATING SCHOOLS

- Alfred University
- Baylor University
- Berry College
- Bridgewater State College
- Brigham Young University-Hawaii
- Bryant University
- Bucknell University
- California Lutheran University
- California State University–Sacramento
- Clemson University
- Colgate University
- Colorado State University
- Columbia College
- Cornell College
- CUNY Bernard M Baruch College
- CUNY Lehman College
- DePaul University
- Drake University
- Drexel University
- Duke University
- Elmhurst College
- Elon University
- Furman University
- Gallaudet University
- George Mason University
- Georgia Southern University
- Gettysburg College
- Guilford College
- Hamline University

- Harvard University
- Houghton College
- Indiana University–Bloomington
- Jackson State University
- John Carroll University
- Kansas State University
- Kent State University
- Loyola Marymount University
- Loyola University Chicago
- Mansfield University
- Marquette University
- Meredith College
- Metropolitan State College of Denver
- Millikin University
- Mills College
- Missouri Western State University
- Monroe Community College
- Montgomery College
- Moravian College
- North Carolina Central University
- North Carolina State University
- Northeastern Illinois University
- Northeastern State University
- Northwestern University
- Ohio University
- Pacific Lutheran University
- Regis University
- Roger Williams University
- Rollins College
- Saint Joseph's University
- Saint Mary's University of Minnesota

- Samford University
- Seattle University
- Sonoma State University
- Southern Methodist University
- Suffolk County Community College
- SUNY at Binghamton
- SUNY at Buffalo
- SUNY at Geneseo
- SUNY–Potsdam
- Temple University
- Texas A & M University
- Texas Christian University
- University of Arizona
- University of California–Berkeley
- University of Central Florida
- University of Central Oklahoma
- University of Chicago
- University of Colorado at Boulder
- University of Detroit Mercy
- University of Illinois at Urbana–Champaign
- University of Iowa
- University of Kansas
- University of Louisville
- University of Maryland–College Park
- University of Maryland Eastern Shore
- University of Massachusetts-Lowell
- University of Minnesota–Twin Cities
- University of Monterrey
- University of Nevada–Las Vegas
- University of North Carolina at Chapel Hill
- University of North Carolina at Greensboro

- University of North Carolina–Wilmington
- University of Richmond
- University of Rochester
- University of San Diego
- University of San Francisco
- University of Scranton
- University of South Florida
- University of Tampa
- University of Wisconsin–La Crosse
- University of Wisconsin–Madison
- University of Wisconsin–Oshkosh
- University of Wisconsin–Stevens Point
- Wilson College
- Wartburg College
- Youngstown State University

Note: Participating school information retrieved from http://leadershipstudy.net/about/participating-campuses/2009-schools/

#### APPENDIX J. CURRENT MSL INFORMATION

The Multi-Institutional Study of Leadership (MSL) is an international research program focused on understanding the influences of higher education in shaping socially responsible leadership capacity and other leadership related outcomes (e.g., efficacy, cognitive skills, resiliency). Designed as a collaborative research program, participation in the MSL provides institutions with a platform from which to engage in evidence-based practice while contributing to the knowledgebase on college student leadership development as well.

To date MSL has:

- Partnered with approximately 250 institutions in the U.S., Canada, Mexico, and Jamaica with over 300,000 student respondents.
- Contributed more than 50 publications and 100 presentations enhancing the work of leadership educators.
- Provided a critical data source for students traditionally under-represented in quantitative research, including students of color, LGBT students, and commuter students.

Note: Current MSL information retrieved from http://leadershipstudy.net/

#### APPENDIX K. MSL 2009 DATA USAGE FORM

#### Submitted and Prepared by: Sherry Lynn Early

#### Name and contact information for proposer;

Sherry Lynn Early Higher Education Administration Doctoral Program

330 Education Building

Bowling Green State University

Bowling Green, OH 43403

searly@bgsu.edu

775-338-1343 (cell)

Advisor: Dr. Michael Coomes

#### Identify the time frame for the study;

Dissertation Proposal Defense-By November 30, 2012

Dissertation Defense- By April 30, 2013

**Provide a prospectus that contains the purpose of the study with specific research questions** (this can be brief);

The purpose of this study is to examine how resident assistants' leadership capacities are influenced by engaging in mentoring relationships (e.g. mentoring for personal development and/or mentoring for leadership empowerment) as well as the type of mentoring relationship (e.g. faculty, student affairs, employer, peer, or community member). The study will examine if there is an interaction between the mentoring relationship and type of mentor on resident assistants' leadership capacity. The study will also investigate whether the race and/or gender of the mentor-mentee match is significant.

Research Questions:

- 1. Do resident assistants who participate in mentoring relationships score higher socially responsible leadership than resident assistants who do not?
- Is there a significant relationship between type of mentor and resident assistant leadership capacity, after accounting for control measures (e.g. socioeconomic status, academic major, class year, etc.)?
- 3. How does the relationship between social change behaviors and mentoring relationships differ based on the race and gender of the mentor, after accounting for control measures (e.g. socioeconomic status, academic major, class year, etc.)?

**Identify the year of data collection requested** (e.g., 2006 or 2009) along with any specific subsample of cases (e.g., religiously affiliated institutions, only female students);

I would like to use the 2009 data; the sub-sample of interest is resident assistants.

## Identify the specific variables that are requested;

The variables of interest are:

- Pre-College Leadership
- Gender
- Race
- Sexual Orientation
- Ethnic/racial background
- Current Living Arrangements
- Mentoring
- Race/Gender of Significant Mentor
- Type of Mentor

- Mentoring Outcomes
- Socially Responsible Leadership (quasi pre- and post-tests)
- Ability/Disability
- Socioeconomic Status
- Age
- U.S. Citizen Generational Status
- College Grades
- Academic Major
- Class Year
- Full or Part Time Enrollment
- Religious Affiliation

## Identify possible publication outlets for the study if you intend to publish results.

Journal of College & University Student Housing

The Review of Higher Education

Journal of College Student Development

Journal of Student Affairs Research and Practice

Talking Stick

Knowledge Community for Student Leadership Programs newsletter

Commission for Student Involvement's Interchange

About Campus

#### APPENDIX L. OFFICE OF RESEARCH COMPLIANCE DECISION

# BGSU.

#### BOWLING GREEN STATE UNIVERSITY

Office of Research Compliance

DATE:	January 2, 2013
TO:	Sherry Early, Ph.D.
FROM:	Bowling Green State University Human Subjects Review Board
PROJECT TITLE:	[402721-1] An Examination of Mentoring Relationships and Leadership Capacity in Resident Assistants
SUBMISSION TYPE:	New Project
ACTION:	DETERMINATION OF NOT RESEARCH
DECISION DATE:	January 2, 2013

Thank you for your submission of New Project materials for this project. The Bowling Green State University Human Subjects Review Board has determined this project does not meet the definition of human subject research under the purview of the HSRB according to federal regulations.

Comment:

This determination was made based upon the information in the HSRB application which indicated that the researcher will receive a de-identified secondary dataset.

We encourage you to continue to confirm with the HSRB whether future projects of this nature require review.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact the Office of Research Compliance at 419-372-7716 or hsrb@bgsu.edu. Please include your project title and reference number in all correspondence regarding this project.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Bowling Green State University Human Subjects Review Board's records.

## APPENDIX M. LIST OF ABBREVIATIONS

Lesbian, Gay, and Bisexual	LGB
Multi-Institutional Study of Leadership	MSL
Principal Investigator	PI
Resident Assistant	RA
Resident Director	RD
Social Change Model of Leadership	SCM
Socially Responsible Leadership	SRL
Socially Responsible Leadership Scale	