College Experiences and the Socially Responsible Leadership Skills of Community College Students

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College Experiences and the Socially Responsible Leadership Skills of Community College Students

Abstract
Leadership development in higher education is increasingly emphasizing socially responsible leadership, a process that improves the human condition for everyone, not only those with power and privilege. College students’ experiences with other students through service, projects, and social interaction have been shown to cultivate socially responsible leadership, the type of leadership scholars are calling for to help communities adapt to geopolitical and socio-economic change continuing apace. Community colleges are typically omitted from college outcome studies, although they enroll almost half of all undergraduate students today and are serving an increasingly diverse population. This quantitative study used the Multi-Institutional Study of Leadership data sets collected in 2009 and 2012 to examine the value of selected demographic variables, precollegiate experiences, and college experiences in predicting socially responsible leadership of community college students. Using hierarchical multiple linear regression analyses, socio-cultural conversations with peers and community service emerged as significant predictors of students’ socially responsible leadership capacity. In addition, grade point average, sexual orientation, and leadership training in high school were also significant predictors of students’ capacity for socially responsible leadership. As a result of this study, community colleges should be recognized as having the capacity to develop leaders concerned with improving the human condition in their communities and should ensure they intentionally develop this capacity through curricular and co-curricular programming. Additional implications of findings and recommendations for future research and policy and practice are discussed.

Document Type
Dissertation

Degree Name
Doctor of Education (EdD)

Department
Executive Leadership

First Supervisor
W. Jeff Wallis

Subject Categories
Education

This dissertation is available at Fisher Digital Publications: https://fisherpub.sjfc.edu/education_etd/266
College Experiences and the Socially Responsible Leadership Skills
of Community College Students

By

Ann Marrott Hamann

Submitted in partial fulfillment
of the requirements for the degree
Ed.D. in Executive Leadership

Supervised by

Dr. W. Jeff Wallis

Committee Member

Dr. Adam L. Rockman

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St. John Fisher College

August 2016
Dedication

This dissertation is dedicated to my husband, David, who provided countless hours and warm support on this journey; and to our two daughters, Catherine and Elizabeth, whose support of and belief in me were inspiring. I’m hopeful this encourages you to someday embark on your own doctoral degree and pursue your intellectual passion. This dissertation is also dedicated to my parents, Barbara and Edward, no longer on this earth, but whose insistence on high standards and values of higher education will always be with me.

Dedication and warm thanks go to my dissertation committee: Dr. W. Jeff Wallis, chair; and Dr. Adam L. Rockman, committee member. Your guidance, insight, patience, and perspectives were exactly what I was looking for in a doctoral program in which to grow. I consider myself so fortunate to have learned from you both.

Many thanks go to Dr. Stephanie Townsend, whose excellent teaching and unending patience made it possible for me to pursue this study design.

Hearty thanks to my colleagues at SUNY Ulster who asked about and provided support for my pursuit of a doctoral degree. Particular thanks go to Judy Capurso, not only for her expert librarianship, but also for her sense of humor, and reassurance that I could achieve this.

Thanks and dedication go to Dr. Hadi Salavitabar and Dr. Arnaldo Sehwerert, whose good natured reminding, cajoling, and insisting I earn a doctorate paid off—finally!
Lastly, this dissertation is dedicated to SJFC Cohort 6 at the College of New Rochelle. You have enriched my life and changed it in ways I never expected, but for which I am extremely grateful. Godspeed to us all!
Biographical Sketch

Ann Marrott Hamann is currently senior vice president for enrollment management and student services at the State University of New York (SUNY) Ulster. She holds her Associate in Science degree in Mass Communications from SUNY Ulster, her Bachelor of Science degree in Journalism from Syracuse University, and her Master of Science in Health Communications from Iowa State University. She has been engaged in higher education administration for more than 25 years. Ms. Marrott Hamann came to the EdD program in Executive Leadership at St. John Fisher College in the spring of 2014 and pursued the study of community college students’ socially responsible leadership capacity under the direction of Dr. W. Jeff Wallis and Dr. Adam L. Rockman. She received the EdD in 2016.
Abstract

Leadership development in higher education is increasingly emphasizing socially responsible leadership, a process that improves the human condition for everyone, not only those with power and privilege. College students’ experiences with other students through service, projects, and social interaction have been shown to cultivate socially responsible leadership, the type of leadership scholars are calling for to help communities adapt to geopolitical and socio-economic change continuing apace. Community colleges are typically omitted from college outcome studies, although they enroll almost half of all undergraduate students today and are serving an increasingly diverse population. This quantitative study used the Multi-Institutional Study of Leadership data sets collected in 2009 and 2012 to examine the value of selected demographic variables, precollegiate experiences, and college experiences in predicting socially responsible leadership of community college students. Using hierarchical multiple linear regression analyses, socio-cultural conversations with peers and community service emerged as significant predictors of students’ socially responsible leadership capacity. In addition, grade point average, sexual orientation, and leadership training in high school were also significant predictors of students’ capacity for socially responsible leadership. As a result of this study, community colleges should be recognized as having the capacity to develop leaders concerned with improving the human condition in their communities and should ensure they intentionally develop this capacity through curricular and co-curricular
programming. Additional implications of findings and recommendations for future research and policy and practice are discussed.
Table of Contents

Dedication ..................................................................................................................................... iii

Biographical Sketch .................................................................................................................... v

Abstract ........................................................................................................................................ vi

Table of Contents ........................................................................................................................ viii

List of Tables ................................................................................................................................ xi

List of Figures ............................................................................................................................... xii

Chapter 1: Introduction ................................................................................................................ 1

  Problem Statement .................................................................................................................... 3

  Theoretical Rationale .............................................................................................................. 6

  Statement of Purpose ............................................................................................................. 15

  Research Questions ........................................................................................................-------- 15

  Significance of the Study ...................................................................................................... 17

  Definitions of Terms ............................................................................................................. 18

  Chapter Summary ................................................................................................................. 20

Chapter 2: Review of the Literature ......................................................................................... 21

  Introduction and Purpose ....................................................................................................... 21

  Review of Literature ............................................................................................................. 22

  Chapter Summary ................................................................................................................. 65

Chapter 3: Research Design Methodology ............................................................................... 67

  Introduction ............................................................................................................................. 67
## List of Tables

<table>
<thead>
<tr>
<th>Item</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 4.1</td>
<td>Summary of Respondents’ Enrollment Status</td>
<td>85</td>
</tr>
<tr>
<td>Table 4.2</td>
<td>Summary of Respondents’ Age, Gender, and Sexual Orientation</td>
<td>87</td>
</tr>
<tr>
<td>Table 4.3</td>
<td>Summary of Respondents’ GPA, Parental Education, and Parental or Self Income</td>
<td>88</td>
</tr>
<tr>
<td>Table 4.4</td>
<td>Summary of Respondents’ Demographic Data Compared to Students Enrolled Nationally in Community Colleges in 2009 and 2012</td>
<td>89</td>
</tr>
<tr>
<td>Table 4.5</td>
<td>Correlations of Potential Predictor Variables with Socially Responsible Leadership</td>
<td>91</td>
</tr>
<tr>
<td>Table 4.6</td>
<td>Predictor Variables of Socially Responsible Leadership Descriptive Statistics</td>
<td>92</td>
</tr>
<tr>
<td>Table 4.7</td>
<td>Hierarchical Regression Analyses Predicting Socially Responsible Leadership</td>
<td>94</td>
</tr>
</tbody>
</table>
## List of Figures

<table>
<thead>
<tr>
<th>Item</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1.1</td>
<td>The Social Change Model of Leadership Development</td>
<td>13</td>
</tr>
<tr>
<td>Figure 3.1</td>
<td>Astin’s Input-Environment-Output Model</td>
<td>72</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

According to the Association of American Colleges & Universities (AAC&U) (2007, 2012), outcomes of higher education urgently point to a need for an enlightened and informed citizenry, preparing graduates to serve as leaders in our local, national, and global communities. In addition, while the AAC&U (2012) is urging higher education leaders to prepare their students for more personal and social responsibility, having the capacity to understand and appreciate perspectives different from their own, there is a widening gap between what students believe their campuses need to do in this regard and what is currently being done (Dey, Ott, Antonaros, Barnhardt, & Holsapple, 2010). One need only listen to the news to hear the growing cacophony of polarizing viewpoints surrounding race, class, immigration, economic opportunity, and political and religious viewpoints dividing communities in the United States. Yet, as reported in a national study of leadership, only 35% of college seniors completed a leadership development experience by their last semester in college (Dugan et al., 2011), which the six researchers describe as a troubling concern. Moreover, studies of college students in long-term leadership programs show that students actually demonstrate less awareness and appreciation for diverse viewpoints, running counter to the skills needed in today’s global communities called for by higher education and leadership scholars (Dugan & Komives, 2010).

For the last 30 years leadership scholars have been summoning a redefinition—or transformation—of leadership and its constructs from one of top-down, hierarchical,
command and control to one of being a collaborative process. This redefinition positions leadership as being interested in all voices, particularly those historically marginalized, where power and influence are shared and distributed (Kezar, Carducci, & Contreras-McGavin, 2006; Wagner, 2009).

With the call for more social responsibility to understand diverse perspectives and the change in the definition of leadership as backdrops, the social change model (SCM) of leadership development has emerged on the leadership stage as a major role specifically designed for college students. Centered on the tenets of inclusiveness, values, process, a focus on the common good, and the belief that all students are capable of leadership, this transformational leadership model relies on students interacting with other students as key methods of cultivating socially responsible leadership (SRL) (Higher Education Research Institute [HERI], 1996). SRL is defined as “operating with an awareness of the ways in which the group’s decisions and actions affect others. Socially responsible leaders are concerned about the well-being of group members and about the impact of the group’s decisions on the community” (Wagner, 2009, p. 3).

This dissertation bridges the gap between the type of social change leadership needed in our communities and the very college students embedded in them—community college students. While there is a varied canon of literature related to the SCM and SRL as they relate to college students as a whole, scholars agree that community college students have been routinely overlooked in college impact studies (Pascarella, 2006; Pascarella & Terenzini, 2009). With their growing numbers in enrollment and increasing ethnic and racial diversity when compared to college students previously studied, one wonders if society can afford to continue to overlook a potential source of leadership
heretofore untapped and unrecognized. Specifically, this study examined the relationship of selected college experiences on developing SRL in community college students. Chapter 1 discusses this problem in detail and outlines the research methodology used to close the gap between what is needed in SRL in our communities and what may be available through community college students. It also explains the theoretical background and framework for how the SCM came into focus in 1996 and why it continues to be relevant today. This chapter also explicates the importance of this study.

**Problem Statement**

This research examined the influence of selected college experiences on developing SRL skills in community college students. The need for college students to exhibit more civic engagement, leadership, and to participate in their communities as citizens is urgent, according to the AAC&U (2007). It is a call from the 100-year old organization, which is comprised of 1,300 member institutions focused on the quality, standing of, and access to an undergraduate liberal education, which it believes is essential for today’s students to become tomorrow’s well-versed citizens. Members represent all forms of higher education—public and private community colleges, 4-year colleges, and research and comprehensive universities. The AAC&U is committed to four main efforts: social responsibility, equity and inclusion, liberal education, and the hallmarks of higher education required to prepare students for this century. As such, the AAC&U is urging all sectors of higher education—including community and technical colleges—to rethink their curricula to ensure United States’ students possess the skills needed to participate in a rapidly changing global society. It renewed this call with the issue of its 2013-2017 strategic plan (AAC&U, 2012), stipulating that higher education
needs to equip its students with “civic knowledge and engagement, local and global intercultural knowledge and competence” that is “anchored through active involvement with diverse communities and real-world challenges” (p. 2). Moreover, in Engaging Diverse Viewpoints (Dey et al., 2010), AAC&U issued core commitments in tandem with its Liberal Education and America’s Promise (LEAP), which underscores outcomes critically important for college students to demonstrate to ensure they are successful workers, thinkers, and citizens in this century. Key among these outcomes are personal and social responsibility, where students are aware of, interested in, and capable of seeking, understanding, and living with perspectives different from their own. “Today’s college graduates must be prepared to work and live in a global context where being well-informed about and open to the perspectives of others is critical,” wrote Dey et al. (2010, p. 10).

The skills needed to be successful in the 21st century extend to those related to leadership. Over the last 30 years, successful leadership has undergone a redefinition: it is no longer seen as hierarchical, production-oriented, command of the individual leader as having control over followers through traits with which he was born. Kezar et al. (2006) noted that leadership has undergone nothing short of a revolution—transformed from one of social control to that of social change for social improvement. As a result, successful leadership has emerged as a collective, collaborative process that is shared among participants and needed to navigate the turbulent change taking place globally in today’s socioeconomic and ethnically diverse communities due to technology, shifts in demographic trends, and political upheaval (Kezar et al., 2006).
In *Leadership Reconsidered: Engaging Higher Education in Social Change* (Astin & Astin, 2000) higher education scholars identified the need for leadership development concerned with creating social change in the United States (U.S.) to address racial inequality, economic disparity, and the lack of civic involvement. Subsequently, leadership development in higher education is increasingly emphasizing SRL, which is a process considerate of all concerned that works toward improving the human condition for everyone, not just a select few (Cilente, 2009; Dugan & Komives, 2010). As such, social justice outcomes are at the center of contemporary leadership studies in higher education, rather than position, power, and efficiency (Dugan & Komives, 2012). Moreover, leadership scholars assert the best way to cultivate socially responsible leadership is by providing students with an opportunity to interact and share experiences with other students—tutoring, community service activities, residential life responsibilities, and student club and organization activities (HERI, 1996).

According to the American Association of Community Colleges (AACC) (2016), community college students comprise 45% of all undergraduate students in the United States. Yet, these students have historically been overlooked by researchers investigating college student leadership development (Pascarella & Terenzini, 2005). While there is a varied canon of research on the development of college students’ leadership skills, most of it has been developed for students who reside on large, 4-year college or research university campuses, but who comprise a minority of college undergraduates (Dugan, Garland, Jacoby, & Gasiorski, 2008; Pascarella & Terenzini, 2005). However, numbers of community college students are expected to increase as President Barack Obama’s administration has challenged the U.S. citizenry to graduate 5 million more students from
these two-year institutions by 2020 ("Building American skills," 2014). These are students who are more culturally and demographically diverse than college students previously studied (Bueschel, 2009; Miles, 2010; Pascarella, 2006). Moreover, in January, 2015, in an effort to expand access to higher education, President Obama proposed free tuition to attend a community college to students who meet the criteria, which include attending full-time and maintaining a 2.5 grade point average (The White House, 2015). To understand this burgeoning sector of higher education, a call by scholars for more research on community college student development has emerged (Dugan et al., 2008a; Pascarella, 2006; Pascarella & Terenzini, 2005), which includes expanded research on more socioeconomic and socio-culturally diverse students (Miles, 2010; Pascarella, 2006; Posner, 2004, 2012).

Given the abundance of research on college student leadership development, the paucity of studies on community college students (Pascarella & Terenzini, 2005; Pascarella & Terenzini, 2009), and the enduring and heightened call for all sectors of higher education to develop leadership for social change in its students, this study examined the development of SRL skills of community college students. In addition, given the body of literature demonstrating that college experiences provide some of the most effective methods of developing leadership skills, this study examined the influence of selected college experiences on developing SRL skills of community college students.

Theoretical Rationale

The theoretical rationale for this study had its roots in Burns’ concept of transforming leadership explicated in his 1978 book, Leadership (Cilente, 2009). Tracing the social, economic, and political struggles of England and France in the 17th and 18th
centuries as viewed by intellectual leaders of the day, Burns detailed the interplay and intersection of liberty and power. At the time, the goals of leaders and their power, typically concentrated in the Catholic Church and government, were designed for social control and viewed as taking liberty away from those in the community. Burns called this negative liberty and chronicled the competition with positive liberty, or majority rule by the people in society. At the time, intellectual leaders debated how established institutions of religion and government could create positive liberty by representing and serving the public, not oppressing or denying its needs. That is, the intellectual leaders were suggesting that the power of institutions could be harnessed to enhance the liberty of the public by providing social welfare opportunities, such as healthcare and education.

**Transforming leadership theory.** Burns (1978) argued that today’s intellectual leader is concerned with knowledge and values and theorizes ideas to improve the human condition. This focus makes intellectual leaders transforming leaders who are not only concerned with the product of social change and the values of equality, justice, and liberty, but also with the process, requiring that it be conducted with integrity, honesty, and fairness (Burns, 1978). As a process, argued Burns, leaders and followers influence each other.

Burns’s work has generated a considerable body of research and literature employing and assessing transformational leadership (Northouse, 2013). Scholars influenced by Burns’s work include Bass and Avolio (1995), who developed the Multifactor Leadership Questionnaire, which among other leadership characteristics, measures one’s use of transformational leadership practices (Roberts, 2007). Burns also influenced Kouzes and Posner’s (1988, 2006) work on transformational leadership, which
produced *The Leadership Challenge* and the Student Leadership Practices Inventory, which measures students’ use of transformational leadership characteristics (Dugan & Komives, 2012; Roberts, 2007).

In addition, Burns’s work greatly influenced that of Rost (1991), who argued that leadership thought must move away from the great man theories of the industrial revolution and create a new school of leadership scholarship needed for the immediate and distant future—a postindustrial approach. Today, the postindustrial framework is the most widely used paradigm when studying leadership development in college students (Roberts, 2007).

**Postindustrial leadership theory.** The great man theories posited leadership as hierarchical, one-way, command and control communication designed to improve worker productivity (Northouse, 2013; Rost, 1991). In *Leadership for the 21st Century* Rost (1991), dismisses this view of leadership as management, or an industrial view of leadership. Instead, to equip society to deal with the direction and pace of change driven by technology, science, and the emerging global economy, a new paradigm is needed that recognizes leadership as relational, networked, and multidirectional within an organization or community (Rost, 1991). This new paradigm must also recognize that it is only when people are working together on a mutual purpose to affect change that the activity can be called leadership, writes Rost. With leadership seen as relational and collaborative—not coercive—postindustrial leadership empowers people at every level—local, regional, national, and international—to take action, postulating that all people have leadership capacity (Roberts, 2007; Rost, 1991).
Rost (1991) points out that intending real change was not part of Burns’s (1978) initial definition of transforming leadership, but only became part of the definition later on. To intend change is important, notes Rost (1991), as leaders and followers are working together toward a future set of changes. These are different from results and goals, which are rooted in the industrial paradigm of leadership. Rost agrees with Burns in that leaders and followers must be working toward mutually beneficial purposes. These purposes must be value-driven, long term, integrated, and meaningful for both leaders and followers. Aspects of Rost’s postindustrial paradigm, such as change, integrity, and values are in other paradigms, such as social constructivist, postmodern, and critical theory (Kezar et al., 2006). Some scholars have suggested Rost’s postindustrial paradigm needs to discuss the interplay of morality, ethics, and values more vigorously (Burns, 1991; Ciulla, 1995).

Leadership theory has moved toward Rost’s (1991) approach for the last 25 years, as it has inspired considerable thought and scholarly study on leadership as it shifts from one of social control to that of social change for social improvement (Kezar et al., 2006). The burgeoning body of work emerging with transformational leadership theory and postindustrial leadership paradigm as their underpinnings in the 1990s provided the United States Department of Education (USDOE) with the impetus to fund the creation of new higher education leadership development models (Cilente, 2009; Roberts, 2007). With leadership evolving as an inclusive, non-hierarchical process that is available to all people, new methods of teaching, assessing, and studying leadership had to be developed in colleges and universities (Cilente, 2009). One model that emerged from the funding was the social change model (SCM) and it is now the most widely used postindustrial
theoretical model to develop higher education student leadership programs (Kezar et al., 2006).

**Social change model of leadership development.** With funding from the USDOE, the Higher Education Research Institute (HERI) at the University of California, Los Angeles, with Alexander and Helen Astin as co-principal investigators, assembled a group of scholars to devise new higher education leadership models. Gathered under the auspices of HERI (1996), the scholars referred to themselves as an ensemble and included Susan Komives, Nance Lucas, Carol Leland, and Dennis Roberts. The music metaphor underscored the important role each individual scholar played in developing the model, while acknowledging the process used to accomplish the work by the group (Cilente, 2009; HERI, 1996). While each person contributed their expertise as an individual scholar, such as a single musician does in an ensemble, their collective work was influenced by listening, considering, and responding to each other, such as a jazz ensemble does, to ultimately create one piece of music or one model that is representative of everyone’s contributions (Cilente, 2009; HERI, 1996).

According to Cilente (2009), the SCM is rooted in the work of Burns (1978), Rost (1991), and Astin and Leland’s (1991) seminal work *Women of Influence, Women of Vision*. Taking a feminist perspective, Astin and Leland (1991) studied 77 women leaders over three generations whose work instigated and inspired social change. Astin and Leland re-conceptualized the expectations and the process of leadership, positing that it is a product of one’s experiences, not the result of genetic makeup or of hierarchical position. The authors concluded that leadership emerges from a desire for social justice, and for the removal of oppression and discrimination. United by these values, effective
leadership results from the collective action of people empowering others to become engaged to work collaboratively toward a common purpose of social change.

Drawing on the work of Burns (1978), Rost (1991), and Astin and Leland (1991), the SCM’s major assumptions are that leadership is concerned with improving the human condition through social change; that all students are capable of leadership; that leadership is values-based, not values-neutral; and that it is a collaborative process (Cilente, 2009; Dugan & Komives, 2012). The model embraces the tenets of service, inclusiveness, and equity (HERI, 1996). In addition, the model assumes that service to improve the human condition is a valuable leadership development method with college students (Cilente, 2009, Dugan & Komives, 2012; HERI, 1996). The SCM relies on students working and interacting with each other, which provides the greatest influence on leadership development (HERI, 1996). The SCM has two goals: to help students discover themselves by identifying their values, interests, priorities, and leadership competencies; and to prepare students to lead social change in their communities (Cilente, 2009; HERI, 1996). It asserts that all students have the ability and responsibility to lead and participate in social change to improve their community, whether community is defined as a small group on campus or a network of universities across the world.

The SCM is referred to as the seven Cs leading to change, which is the eighth C (Cilente, 2009; HERI, 1996). This model recognizes that through higher education experiences, students cultivate skills in three domains related to individual, group, and society, or community, interactions. Specifically, as shown in Figure 1.1, the characteristics in the individual domain are:
• consciousness of self, being aware of one’s values, attitudes, and beliefs that provide the impetus to take action;
• congruence, behaving, thinking and feeling in concert with one’s values, attitudes, and beliefs; and
• commitment, the extent to which one pursues outcomes and results that are in line with one’s values, attitudes, and beliefs.

The characteristics in the group domain are:
• collaboration, the capacity one has to work with others to realize a common outcome by developing and sharing trust in one’s self and with others;
• common purpose, the ability one has to work with others to understand the outcomes to be accomplished and engage in analysis to identify and work collectively toward goals; and
• controversy with civility, the ability one has to debate and disagree respectfully with others while possessing the capacity to see viewpoints different from one’s own and remain constructively engaged.

In the community or society domain, the characteristic is citizenship, which is the capacity to engage in a community as an individual and as a member of a group working collaboratively to foster common good for others. The last C is change, or the ability to foster change for social improvement while possessing the ability to change and adapt to environments that are continuously changing (HERI, 1996; Cilente, 2009).

The first seven characteristics are influenced by the college experience of formal learning in the classroom and learning through co-curricular and extracurricular activities (HERI, 1996). These characteristics work synergistically to increase a student’s capacity
to continually change. That is, while learning about themselves and collaborating with other students on class and/or service projects, students learn how to continually adapt to new environments through change while maintaining their individual and group values (Cilente, 2009; HERI, 1996). The SCM of leadership development is not only concerned with the product or result, but also with the process, to ensure voice is given to all of those impacted (Roberts, 2007). Figure 1.1 provides a visual depiction of the three domains, their corresponding construct, and the interaction among these constructs.


In *The Handbook for Student Leadership Development*, Dugan and Komives (2012) briefly mentioned that one of the limitations of the SCM is that it does not address
cultural competence. The model does not explicitly address and measure a student’s ability to work with people whose backgrounds, values, and perspectives are different from their own. While this ability is important to increase one’s capacity for SRL, Dugan and Komives (2012) indicated that its omission could imply that it is unimportant.

**Summary of theoretical rationale and relationship to study.** With the publication of three seminal works, *Leadership* (Burns, 1978), *Leadership for the 21st Century* (Rost, 1991), and *Women of Influence, Women of Vision* of (Astin and Leland, 1991), the definition of successful leaders in U.S. communities began to change from one of social control to one of social change for social improvement (Cilente, 2009; HERI, 1996; Kezar et al., 2006). This provided the impetus for higher education to change the way it defined and taught leadership, giving rise to socially responsible leadership and to the social change model of leadership (HERI, 1996). This model is comprised of eight characteristics relating to how well one knows oneself and lives one’s beliefs, how well one works in small group settings, how one functions within one’s community and how one creates social change while staying true to one’s beliefs. In college students these characteristics are best developed through interactions with other students through tutoring, student club participation, and on-campus employment, for example (HERI, 1996). This study measured the predictive value of selected college experiences on socially responsible leadership skills of community college students.
Statement of Purpose

The purpose of this quantitative study was to examine the value of selected college experiences on the prediction of community college students’ SRL skills. Experiences selected for the study were those previously studied at 4-year colleges and universities and that may be found at community colleges: socio-cultural conversations with peers (Dugan & Komives, 2010), community service (Dugan, 2006b; Dugan & Komives, 2010; Soria, Nobbe, & Fink, 2013), and positional leadership roles (Dugan, 2006b; Haber & Komives, 2009). Using the theoretical framework of the SCM leadership development, SRL is comprised of eight characteristics previously mentioned: consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change (Cilente, 2009; HERI, 1996).

Socially responsible leadership was chosen over general leadership development as the former is now the most widely used postindustrial model to develop higher education student leadership programs. The intent of this study was to build on the use of the SCM of leadership development with college students in general, by applying it to community college students in particular. Moreover, this study focused attention on the higher education sector that enrolls almost 50% of the undergraduate students in the United States, but whose contributions to student leadership development have gone largely unexplored. The intent of this study was to shorten the gap in what is known about community college student leadership development.

Research Questions

This quantitative study examined the value of selected college experiences on the prediction of community college students’ socially responsible leadership capacity. The
outcome variable was socially responsible leadership as operationalized through the eight constructs of the SCM. The predictor variables were forms of experiential learning that the literature has suggested predict students’ capacity for socially responsible leadership, such as socio-cultural conversations with peers (Dugan & Komives, 2010), positional leadership roles in student clubs and organizations (Dugan, 2006b), and community service (Dugan, 2006b; Dugan & Komives 2010; Soria, et al., 2013). Demographic predictor variables in this study were precollegiate activities, race, gender, parental education, parental income, sexual orientation, and grade point average (GPA). Given the literature reviewed to date, the researcher hypothesized that students who engaged in socio-cultural conversations with peers, positional leadership roles in student organizations, and community service would demonstrate greater capacity for SRL than students who did not. As such, the following research questions were:

1. After accounting for demographic variables and precollegiate experiences, do socio-cultural conversations with peers, leadership positions in student organizations, and/or community service significantly predict higher levels of socially responsible leadership in community college students?

2. After accounting for demographic variables and precollegiate experiences: (a) do socio-cultural conversations with peers significantly contribute to the prediction of socially responsible leadership? (b) does holding leadership positions in college student organizations significantly contribute to the prediction of socially responsible leadership? and (c) does engaging in community service significantly contribute to the prediction of socially responsible leadership?
3. After accounting for demographic variables and precollegiate experiences, how much weight do socio-cultural conversations with peers, leadership positions in student organizations, or community service carry in the prediction of socially responsible leadership?

The data for this study were collected as part of the international Multi-Institutional Study of Leadership (MSL) conducted in 2009 and 2012 (Multi-Institutional Study of Leadership [MSL], 2016). Housed at Loyola University Chicago, the study measured the attitudes, values, beliefs, and activities of students as they related to students’ capacity for SRL and other leadership outcomes (MSL, 2016).

Significance of the Study

Community college students comprise almost half of today’s undergraduates (AACC, 2016) and more are expected under President Obama’s challenge to the U.S. citizenry to graduate 5 million more students from these two-year institutions by 2020 (“Building American skills,” 2014). Yet, community college students are a relatively unstudied population (Pascarella & Terenzini, 2009). At the same time, there is an urgent call by AAC&U to ensure all sectors of higher education address outcomes of personal and social responsibility so that graduates are equipped to navigate an increasingly diverse and global society. These skills focus on understanding, working with, and leading people with different perspectives, but whose values and points of view must be understood to ensure all of those in our community are considered, not only a select few. Can society afford to sustain this gap between burgeoning enrollment at community colleges, the need for all sectors to address social responsibility, and the lack of understanding of outcomes from these two-year institutions? This study attempted to
answer, in part, the call by scholars for more research on how college affects community
college students (Pascarella & Terenzini, 2005; Pascarella & Terenzini, 2009),
specifically focusing on the development of SRL skills. In addition, the study informs
higher education practitioners how college experiences of socio-cultural conversations
with peers, community service, and positional leadership roles in student organizations
may predict community college student leadership capacity.

**Definitions of Terms**

Some definitions of terms used in this dissertation are exact, while others are
ambiguous and require the context of a higher education setting to provide shape and
meaning. For example, types of higher education institutions are classified with precision
through the *Carnegie Classification of Institutions of Higher Education* (The Carnegie
Foundation for the Advancement of Teaching, n.d). Community service, however, may
be a one-time event or a multi-year commitment (Soria et al., 2013). The definitions
provided are anchored in higher education context as used by student affairs personnel
when discussing college experiences with students.

*Community colleges:* were defined as those higher education institutions that
award the associate’s degree, as stipulated by the criteria used by the *Carnegie
Classification of Institutions of Higher Education* (The Carnegie Classification of
Institutions of Higher Education, n.d.). In doing so, these institutions typically provide
the first two years, freshman and sophomore, of college. In addition, these institutions
provide credit and noncredit certificates and diplomas for a range of vocational and
avocational fields (AACC, 2016).
Community service: was a broad term referring to volunteer work conducted to improve the condition of a person or persons (Oxford, 2015). The USDOE defines community service at colleges and universities as formal or informal arrangements that higher education organizations have with governmental, health-related, social welfare, non-profit, and community-based institutions to assist people, particularly low-income people, to meet their needs (USDOE, 2015). Community service may take place in a variety of settings, such as health care, child care, tutoring for literacy training, education, and crime prevention, for example.

College experiences: was a broad term used to describe activities students engaged in with other students for the purposes of conversation, co-curricular activities, or providing service to a community.

Positional leadership roles in student organizations: were defined as holding an officer position in campus student clubs or organizations, serving as captain of a campus athletic team, first chair in a musical group, section editor of a campus publication, or chairperson of a committee (Multi-Institutional Study of Leadership, 2011).

Socially responsible leadership: was defined as “operating with an awareness of the ways in which the group’s decisions and actions affect others. Socially responsible leaders are concerned about the well-being of group members and about the impact of the group’s decisions on the community” (Wagner, 2009, p. 33).

Socio-cultural conversations with peers: were defined as discussions students have with other students different from themselves about values, religion, lifestyles, and political views (Multi-Institutional Study of Leadership, 2011).
Chapter Summary

This chapter discussed the evolution of leadership from one of social control to that of social change for social improvement and explained the importance of college students developing the leadership skills needed to lead social change in today’s communities. It highlighted the research conducted on social change leadership development in college students, noting that a gap exists between the college students studied and community college students growing in numbers. Community college students are more ethnically, economically, and racially diverse than populations of college students previously studied and this diversity is expected to expand. While community college students comprise 45% of undergraduates in U.S. colleges and universities, this group of students remains largely unstudied. At the same time, leadership scholars are calling on all citizens to engage in improving the human condition for those in their communities as the direction and pace of societal change will only accelerate as a result of technology, innovation, geopolitical shifts, and socioeconomic inequities. Can society continue to ignore almost half of its college students who are expected to address these challenges, and who reflect the very demographics expected to increase the racial and ethnic diversity of the U.S? This dissertation explored the influence of higher education on college students’ socially responsible leadership capacity and examined the predictive value of selected college experiences on community college students’ capacity for socially responsible leadership. Chapter 2 examines the scholarly literature related to the topic. Chapter 3 describes the methodology used in this quantitative study, while Chapter 4 presents the results. Chapter 5 discusses the results and provides recommendations for policy and practice.
Chapter 2: Review of the Literature

A quick entry of the word *leadership* into Google Scholar revealed more than 2.5 million results. Perhaps this is an overly simplified demonstration, but a graphic one at that, of the enormity of the topic. Scholars have traced the study of leadership back to the work of Plato and Aristotle, which exceeds the capacity of this researcher, but nonetheless illustrates that the study of leadership provides a robust canon of literature on which to draw.

**Introduction and Purpose**

This chapter narrows the discussion of leadership and addresses the major underpinnings of leadership as it relates to that for social change, the kind of leadership scholars agree local and global communities need to help them navigate the turbulent shifts society is experiencing due to upheavals created by advances in technology, science, medicine, and new forms of government across the globe (Astin & Astin, 2000). It begins with the essential question typically asked when discussing leadership, *Are leaders born or made?* Through the presentation and analysis of empirical studies, it then moves to the role of higher education in leadership development, student leadership development through college experiences, and the possible benefits of teaching leadership skills early in a college student’s time at school. This literature review examines research around community college students and leadership development, which is brief. It then moves to an explication of how the social change model emerged and describes selected studies measuring students’ capacity for socially responsible leadership (SRL). This chapter concludes with an analysis and synthesis of the literature,
pointing to the need to understand how community college students and their surrounding communities may benefit from the study of the SCM at the two-year college setting.

**Review of Literature**

Are leaders born or made? Can leadership be learned? The answers to these questions for the last 30 years of leadership scholarship and assessment conclude that leadership skills can be taught to and learned by everyone and are not limited to just a few who are preordained at birth to rise to leadership positions (Gardner, 1990; Komives, Lucas, & McMahon, 1998; Kotter, 2001; Kouzes & Posner, 2012). Kotter (2001) referred to “The most pernicious half-truth about leadership is that it’s just a matter of charisma and vision—you either have it or don’t” (p. 39). Leadership knowledge may be acquired in the classroom through formal instruction, but scholars agree that leadership skills are developed and honed through experience and learning activities that provide a setting to apply and practice skills leading to competency (Doh, 2003; Jenkins, 2013; Kotter, 2001; Kouzes & Posner, 2012; Moore, Boyd, & Dooley, 2010; Wisniewski, 2010).

**Leadership: Can it be learned?** In a qualitative study of contemporary leadership education scholars, Doh (2003) concluded that leadership skills are taught and learned. Doh studied six published leadership education researchers who were also leadership education practitioners, contributing to the discipline through executive training and consulting. These scholars were: Christopher A. Bartlett, Harvard Business School; Kim S. Cameron, University of Michigan Business School; Jay Conger, London Business School and University of Southern California, Los Angeles; Michael A. Hitt, Arizona State University; Stephen Stumpf, Villanova University; and Michael Useem,
Wharton School, University of Pennsylvania. Three interviews were conducted in person, while three were conducted via email. Personal interviews were recorded and each participant was given an opportunity to review the transcript to correct errors or further clarify his response, but could not substantially change the meaning of his response. Doh reported that each scholar then completed a short email survey 3 to 6 months after his initial in-person interview or email response, which further probed the question of whether or not leadership may be taught and learned. Limitations of the study included that only White men, most of whom were from the United States, were interviewed. However, the author noted that the research adds to the discussion of whether or not leadership is an innate or developed skill and further identifies effective leadership development practices (Doh, 2003).

Doh (2003) noted that, without exception, all of the scholars agreed that everyone may develop skills associated with leadership, such as strategic thinking, strategic planning, and effective communication. To what extent participants in leadership development activities become effective leaders is influenced by dispositions or attitudes, which may not be open to change through leadership education. These attitudes, such as motivation and risk-taking, are learned at an early age and engrained through experiences involving family, cultural background, and the process of maturation into young adulthood, wrote Doh. The six scholars also agreed that the classroom has limited application for teaching leadership, such as instruction about leadership models, theories, and frameworks. Doh reported that learning and developing leadership skills, however, takes place through experiential learning by providing opportunities to practice what is taught. By creating meaningful experiences through internships, role-playing exercises,
special work assignments, case studies, and simulations of leadership activities, participants apply the knowledge they have acquired in the classroom to personalize and internalize leadership development skills (Doh, 2003).

Posner’s (2004, 2009, 2012) work has contributed to the discussion of whether or not leadership behaviors may be learned and leadership capacity expanded. Using the Student Leadership Practices Inventory (SLPI), Posner (2012) reported that from 2007 to 2010, 77,387 high school and college students measured their use of five transformational leadership behaviors: challenging the process, inspiring a shared vision, modelling the way, enabling others to act, and encouraging the heart. The SLPI is a 30-item questionnaire that uses a five-point Likert-type scale for students to indicate how frequently they engage in the stated transformational leadership behaviors. The higher a student’s score, the greater use of the transformational leadership behavior by the student (Posner, 2004, 2009, 2012).

In a quantitative, matched sample, longitudinal study with the SLPI, Posner (2009) compared the use of the five practices of exemplary leadership by 169 freshmen business students before they completed a first-year leadership seminar with their use of the practices as college seniors. To form a quasi-control group, Posner asked 212 seniors who had not participated in the leadership seminar to complete the SLPI as a comparison group to those seniors who had completed the leadership seminar. Posner reported that students who completed the leadership seminar showed increases in all five of the behaviors, with four out of the five behaviors having increased at a statistically significant level: inspiring, challenging, enabling, and encouraging. Students who had completed the leadership course in their freshmen year reported significantly greater use
of the five practices in their fourth year than in their first year, and all scores were significantly higher than those students who had not participated in the course (Posner, 2009). Using the quasi-control group comparing those who had not taken the leadership seminar to those who had, Posner noted that it was the seminar that created the change in the students’ leadership behavior, not the process of maturation or aging. Limitations of the study included assessing business majors only, who may have been predisposed to learning and reporting leadership behaviors. Posner called for the study to be validated by administering it to more diverse student groups.

Higher education and leadership development. Providing leadership education to students has long been one of the roles of higher education (Astin, 1993b). Pascarella and Terenzini (2005) provided continued scholarly evidence that bears this out. Their meta-analysis of 2,500 studies conducted from 1991 to 2001 of higher education’s impact on students showed college students develop critical thinking, leadership, and interpersonal skills; independence; self-esteem; and a sense of control over one’s life. Additional outcomes of the higher education experience included students valuing civic and community engagement, diversity, racial understanding, moral reasoning, support for gender equity, and lifelong learning (Pascarella & Terenzini, 2005).

Pascarella and Terenzini (2005) noted that a student’s development, including leadership development, is a complex and interactive process. It is the combination of formal and informal learning: experiences in the classroom; and interaction with peers, faculty, and students different from themselves through curricular and co-curricular activities (Pascarella & Terenzini, 2005).
**Student leadership development through experiential learning.** Today’s college students prefer hands-on, experiential learning and, therefore, learn differently than students did a generation ago, posited Wisniewski (2010) in her qualitative study of behaviorist versus constructivist learning. Students born after 1980, called millennials, prefer the constructivist over the behaviorist approach to learning, particularly when it comes to leadership education, explained Wisniewski. Behaviorist approaches to teaching rely on transferring knowledge and information through passive learning by students in which they learn on their own through lecture, memorization, and reading textbooks. Constructivist learning engages students in creating knowledge through interdisciplinary research, experiential and active learning, and interaction with other students around the world through technology to collaborate on group projects (Wisniewski, 2010).

Using a grounded theory methodology, Wisniewski (2010) studied 66 university students by asking three groups of students from one university seven questions from which she grouped responses with similar explanations. Respondents were equally divided among men and women with 25 enrolled in a face-to-face principles of management class, 22 in a face-to-face leadership theory and practice course, and 19 in an online version of the leadership theory and practice course. Wisniewski did not provide an age breakdown and reported that almost half (32) of the respondents were business majors, while other majors included exercise science, photography, psychology, biology, math, criminal justice, and those undecided on a major. Wisniewski did not enumerate any limitations of her study or findings.
Wisniewski (2010) reported that students overwhelmingly preferred learning that required them to participate and work with a diversity of students. For example, responses to the question “How do students learn best?” (p. 59), Wisniewski stated that more than “42% indicated that students learn best through active participation and group work” (p. 60). Narrative responses included “’This generation is very hands-on’” and “’If teachers use old technology, their students will shut down’” (Wisniewski, 2010, p. 60). In response to the question “What learning experiences are most memorable to you? How do you learn best?” (Wisniewski, 2010, p. 59), students explained their best learning takes place through active engagement in hands-on work dealing with real-world issues and situations. When asked about instructional methods that are least effective for them, students listed reading off PowerPoint presentations (20%), long lectures (17.6%), and memorization (15%), reported Wisniewski.

Similarly, Moore, et al. (2010) conducted a qualitative study of the impact of experiential learning on students in a professional leadership development course. The authors concluded that experiential learning enabled the students to learn leadership concepts and skills more deeply, as evidenced by the students’ description of their own progress through Kolb’s (1984) four phases of the experiential learning cycle (Moore et al., 2010). These four phases are: concrete experience, abstract experimentation, reflective observation, and active experimentation (Kolb, 1984).

Moore et al. (2010) studied college juniors and seniors in a five-week summer course in professional leadership development. The researchers assigned a code to each student to provide an audit trail of data. Of the 66 respondents, 50 were less than or equal to 22 years of age, with 16 older than 23. Forty were female. Agricultural leadership and
development was the major of 29 of the students, with 37 students having other majors, reported Moore et al. Classroom lecture introduced leadership theories and concepts and then the students applied the concepts and information to the experiential learning components. These components consisted of case studies, films, and each student placed in a leadership learning community in which they worked on a group project. At the end of each day, students reflected and answered four questions in their journals: What was learned that day? What were the major, new insights gained? What did the material mean to the student? and How would the student apply the material to his or her own life? (Moore et al.). At the conclusion of the course, students wrote a comprehensive reflection paper. Through content analysis, recurring themes in the reflection journals and final paper were identified.

Moore et al. (2010) reported that three themes emerged from the five-week combination of classroom and experiential learning: students retained the information, students internalized the information to apply it to their own lives, and students transformed their definition of leadership and how they saw themselves as leaders. That is, while the classroom portion informed the students of concepts and theories, it was the process of using the information in real-life settings that enabled the students to learn it deeply. This deeper learning took place as students integrated their new experiences into previously-held beliefs to create new knowledge for and about themselves, explained Moore et al. The study concluded by recommending that experiential learning components should be built into instruction to ensure students learn a subject deeply and in ways that are meaningful to them.
Assimilating new information about one’s self to create a personal and deeper understanding of leadership was the focus of grounded theory research conducted by Komives, Owen, Longerbeam, Mainella, and Osteen (2005). Setting out to understand the lived experiences of students at one university who “were exemplars of relational leadership (p. 594),” rather than hierarchical leadership, Komives et al. (2005) selected 13 students to study intently through three one to two hour interviews each. A structured interview approach was used to ensure consistency across all interviewers and, using comparative analysis, the research team revised questions to address emerging issues as the interviews progressed. The theme of each interview was very intentional. The first interview asked each student about their childhood and how their upbringing and early experiences influenced them to become the young adults that they were. Komives et al. focused the second interview on the students’ experiences with leadership and explored how the students worked with others. The third interview centered on the students’ changing view of leadership and the influences that shaped those changes. Using open, axial, and selective coding methodology, the researchers identified almost 6,000 items that were then categorized into 245 abstract concepts that related to five general concepts forming the underpinnings of the grounded theory. These five areas are: essential developmental influences, developing self, group influences, the changing view of one’s self, and the changing and broadening view of leadership. The five researchers connected concepts and themes within each students’ interviews and then among the content from all students to create the emergent theory. Komives et al. write:

The experiences and reflections of these students revealed the dynamic process of developing a leadership identity. Students had different experiences, came to new
awareness of themselves in leadership context at different ages, identified a variety of ways these experiences and contexts had an impact on them, yet they engaged with the process in similar ways leading to credibility in the emergent theory. The theory emerged as the relationships between the concepts combined into an integrated framework that explained the phenomenon of leadership identity. (p. 596)

Based on the five concepts that intersected and interplayed among and between each other, the researchers then turned their attention to the process of leadership identity formation, reporting that students engaged in six separate stages (Komives et al., 2005). These actions were awareness of leaders, exploring activities and groups, identifying a leader in a group, and recognizing that leadership could be shared by all members of the group—it was not preordained in one individual. Moreover, stage five was generativity, in which students recognized they have the ability to mentor and support other students in developing their own leadership identity. Komives et al. reported that stage six was integration and synthesis, in which students incorporated and practiced relational leadership into their everyday lives as leaders and as members, believing that they could successfully work with a diverse group to accomplish a mutually agreed upon goal.

Using the leadership identity model developed by Komives et al. (2005), Odom, Boyd, and Williams (2012) conducted a phenomenological study of students’ leadership development. Also predicated on Kolb’s (1984) cycle of experiential learning, this study coupled a personal leadership course with a personal growth project (PGP) (Odom et al., 2012). In learning the new skill, students also learned about themselves, concluded Odom et al. For example, some students selected yoga, playing an instrument, archery,
or cake decorating for their PGP. The leadership identity model suggests that becoming aware of oneself is defined by five activities that may take place singularly or in combination: deepening self-awareness, building self-confidence, establishing interpersonal efficacy, applying new skills, and expanding motivations (Komives et al., 2005). Odom et al. noted that effective leadership development begins with an individual knowing and understanding oneself and, therefore, they focused their research on the construct of the student developing a greater and deeper awareness of him or herself. Acknowledging that developing one’s leadership identity is “a severely multifarious phenomenon” (p. 54), Odom et al. chose a phenomenological approach to record the students’ lived experiences to develop a deep, thick, and rich understanding of how one’s identity of self is changed. In the process of learning a new skill, Odom et al. posited that students would also learn about themselves and develop life-long skills that could be applied to leadership, such as organizing, public speaking, listening, and motivating.

The researchers chose 90 undergraduate students enrolled in a personal leadership education course at Texas A&M University (Odom et al., 2012). These students were chosen from a total population of 229 students enrolled in the course taught by three instructors who purposely randomly sampled reflection papers for study, reported Odom et al. An audit trail was created so that these and other researchers could examine the rubric used to determine grouping and results. The researchers noted that the papers were retrospective, not introspective, and focused on the students reflecting on their lived experiences after they had completed their PGP. The three researchers used content analysis to examine the papers. The results of the study showed that 86% deepened self-awareness, 52% gained more self-confidence, and 44% reported an increase in
interpersonal efficacy. In addition, 57% reported learning new skills that could be applied in leadership situations, such as listening to others, problem solving, time management, and the importance of continuous learning. Odom et al. noted that in learning the new skill, students learned about themselves, such as how they like to learn, what is important to them, their strengths, areas to strengthen, and how they can apply this awareness to potential leadership situations. Although the authors did not identify limitations of their study, they did conclude that the PGP was an effective method to help students develop awareness of themselves as people and to develop skills as professionals, which could then be vital to developing their leadership capacity and identity (Odom et al., 2012).

College experiences in the form of internships and collaborative group projects emerged as effective leadership development methods in one of the largest quantitative, longitudinal studies of leadership development in college students (Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001). The researchers concluded there is leadership potential in all college students and it is developed in different ways. The authors studied 10 institutions and a total 875 students—425 who had participated in selected leadership development activities in college and 450 who had not. The authors conducted a pretest of college freshmen, which examined their high school experiences, demographic information, interests, plans, values, and attitudes. The authors then conducted a posttest of these students, adding 20 additional questions to determine if the students developed leadership skills and capacity. Descriptive statistics showed that the students who had participated in leadership education and development activities showed a greater increase in leadership development outcomes than those students who did not participate, reported
Cress et al. The researchers then conducted an explanatory factor analysis to further examine the developmental differences between those students who participated in leadership programs and those who did not. Grouping the responses into five categories, the researchers measured leadership commitment and understanding, leadership ability, civic responsibility, multicultural awareness, and the development of social and personal values. Using analysis of variance (ANOVA) for each of the five outcomes, Cress et al. found that leadership program participants’ scores were significantly higher than nonparticipants in all five areas. Questioning if these differences were a result of the programs’ impact or if they reflected self-selected or predisposed characteristics of participants, the authors then conducted a multivariate analysis on the longitudinal data. Cress et al. used four sets of independent predictor variables that were controlled before including whether or not a student was a participant in a leadership program. These predictor variables were demographic characteristics, the student’s major, predisposition characteristics, and the student’s involvement in different college experiences. All of these could influence the extent to which students developed leadership characteristics independent of being a participant in a leadership program. Cress et al. concluded that students developed leadership skills and capacity through college experiences, particularly volunteer work, class group projects, and internships, even when they had not participated in a leadership development program. When controlling for participation in a leadership program, the analysis showed the more hours a student spent volunteering the higher the student’s scores were for leadership ability, civic responsibility, multicultural awareness, and the development of social and personal values. The more students engaged in class group projects, the greater were their scores for leadership
commitment and understanding, leadership ability, multicultural awareness, and the
development of social and personal values. Students who were interns showed the
greatest gains in leadership commitment and understanding, civic responsibility, and
multicultural awareness, reported Cress et al.

With this data, Cress et al. (2001) concluded that all students are capable of
leadership and that experiential opportunities—in this study, in the form of volunteering,
interning, and collaborating with classmates—directly and positively impacted a
student’s leadership development. The authors posited that similar results could be
achieved through other experiential formats, such as service learning and community
service projects. Cress et al. noted that one limitation of the study was that it examined
students from only 10 institutions in the U.S. and these may not be representative of all
colleges and universities.

By contrast, Jenkins (2013) was surprised to find that experiential learning
activities, such as role playing, simulations, and games, were among the least-used
methods to teach leadership. Instead, leadership educators relied on class discussion,
interactive lecture and discussion, and small group discussion as the top three strategies
used most often to instruct students (Jenkins, 2013). In the first of its kind, Jenkins
conducted a quantitative Internet survey of 303 undergraduate leadership educators,
asking them to identify the strategies they used most often from among 24 of the most
commonly used leadership instructional methods. Jenkins invited prospective
respondents who had taught a face-to-face undergraduate leadership class within two
years before the survey from the International Leadership Association (ILA), the National
Association of Student Personnel Administrators (NASPA) Student Leadership Programs
group, and the National Clearinghouse for Leadership Programs (NCLP). In a second approach, Jenkins also randomly selected potential respondents from the ILA Directory of Leadership Programs to complete the survey. Response rates from the first approach were disappointing with rates of 7.84% from ILA, 10.04% from NCLP, and .93% from NASPA. Randomly selecting members from ILA, however, produced a response rate of 52.49% with 83.8% of them White, 55% of them women, and 95% of them teaching at a 4-year public or private college or university. Jenkins reported a 95% confidence interval and provided the mean and standard deviation for each instructional strategy. He further explained he conducted an explanatory factor analysis to discover the factors common among the individual strategies to group those with similar characteristics. For example, discussion-based strategies included class discussion, interactive lecture and discussion, and small group discussion. Jenkins found these to be the most prevalent strategies used, and noted that while these build students’ conceptual understanding of leadership theories and frameworks, they do not provide skill development. The explanatory factor analysis showed that activities that do provide an opportunity to apply and develop leadership skills, such as role playing, simulation, and games, ranked among the lowest instructional strategies used.

Jenkins (2013) contrasted the results from his study with the prevalence of leadership scholarship emphasizing the importance of experiential learning activities to develop leadership skills, and questioned if leadership educators consider experiential learning unimportant or if the educators are uncomfortable with or unskilled in their application. Perhaps, Jenkins posited, experiential learning is used more widely in programming led by higher education student affairs professionals who oversee extra or
co-curricular leadership development activities, such as leadership forums and out of classroom leadership activities.

**Leadership education and year in college.** In addition to the fundamental questions of who may be a leader, how leadership is developed, and how it may be assessed, researchers are interested in knowing the most effective year in college for students to be exposed to leadership development opportunities. Two studies shed some light on this question. In a study of first-year college students, Nahavandi (2006) concluded that students should receive leadership education sooner, rather than later, in their college career, preferably in their first year. Nahavandi provided the results from two semesters of a pilot program where leadership education was embedded in a history course for first-year learning communities. That is, students discussed leadership traits of historical figures and studied leadership theories as they related to the historical leaders and their challenges. Assignments for the class included a seven-page analysis of a leader and his or her style, traits, and behaviors based on class content of leadership theories and concepts. Assignments also included a poster presentation summarizing the paper, from which students described their research to their peers. The author referred to general results from his study that showed when 18- and 19-year-olds received leadership education, they exhibited greater interest in leadership and a greater desire to model leader behaviors. The students therefore, Nahavandi posited, cultivated these interests and skills throughout their college experience. However, data were not provided on the number of students who participated or how it was determined that students demonstrated a changed interest in leadership knowledge or ability.
Posner (2009) presented a case for making leadership education available early in students’ college experiences so that students benefit from, practice, and improve these skills as they go through college. As described earlier, Posner compared the use by 384 business students of the five practices of exemplary leadership: modeling the way, inspiring a shared vision, challenging the process, enabling others to act, and encouraging the heart. College students who had completed the leadership course in their freshman year reported significantly greater use of the five practices in their fourth year than in their first year. Posner also compared the scores of the students who received the program with those who had not, finding that scores for inspiring, challenging, enabling, and encouraging were significantly higher than those who had not participated. Posner proposed that equipping students with these skills early in their college experience, as freshmen and sophomores, gave students the opportunity to practice, improve, and benefit from these skills as they progressed through college. He suggested leadership development opportunities should be offered to students in their first year of college, rather than waiting until the students are juniors or seniors with relatively little time left to practice and develop these skills in a learning environment (Posner, 2009).

**Community colleges and student leadership development.** For 45% of the undergraduates in the U.S. (AACC, 2016), community colleges provide the first two years of higher education and yet, this sector of higher education has traditionally been omitted from the study of the effect of college on students (Pascarella & Terenzini, 2005). Pascarella and Terenzini (2005) called for more research attention and scholarly analysis of community college students, as the community college experience is more complicated than first assessed and deserves closer examination. In their meta-analysis,
Pascarella and Terenzini noted that community colleges are among college types that have been ignored by scholars and researchers who study students of large, prestigious, residential research universities, but whose students account for a minority of undergraduates.

Pascarella and Terenzini (2005) pointed out that, when compared to their 4-year counterparts, community college students had a higher ability to recognize that they controlled their own academic success, called locus of attribution. That is, community college students realized their academic success was predicated on their time and effort devoted to academic work, as opposed to believing that luck, preordained skill, precollege mastery, or a professor’s grading practice cast the mold for their success. The authors noted that this is not only important because their developmental and intellectual gains were higher, but because this realization was present in their first year of college and continued through subsequent years of college, which influenced their persistence in successive years of higher education. In addition, Pascarella & Terenzini noted that community college students showed greater awareness and openness to racial and cultural differences. The authors suggested that community colleges have been overlooked and undervalued by 4-year, residential, research institutions and private liberal arts colleges when, instead, these organizations should pay greater attention to community colleges and what the data show they are accomplishing (Pascarella & Terenzini, 2005).

In addition, community colleges enroll more students of color, students who are first in their families to attend college, and adults, defined as those over the age of 25 (Pascarella & Terenzini, 2005). For example, the AACC (2016) reported that of
Hispanic, Black, and Native American undergraduate students, 57%, 52%, and 62%, respectively, were enrolled at community colleges in 2014. Of all students enrolled at community colleges, 37% are 21 years old or younger, 49% are 22 to 39 years old, and 14% are 40 years old or older (AACC, 2016). The first age group, as students living on campus, has been the traditional focus of college student leadership studies, but is not representative of a majority of college students (Dugan et al., 2008; Pascarella & Terenzini, 2005).

The omission of community college students from the study of college’s impact on students, including leadership development, may be due to a myth believed and propagated by higher education (Pascarella & Terenzini, 2009). This myth states that students who begin at community colleges are 15% less likely to graduate from a 4-year college, had they begun at the 4-year college. However, Pascarella and Terenzini (2009) noted that when socioeconomic, psychographic, and demographic variables were controlled, the difference was trivial in graduation rates when freshmen started at two-year versus 4-year institutions.

Similarly, an empirical, longitudinal study of 19 colleges and universities by Seifert, Pascarella, Erkel, and Goodman (2010) concluded that when controlled for background characteristics that included level of learning at time of college entry, demographic, and socioeconomic factors, the difference was trivial between learning outcomes of community college students when compared to those of students at liberal arts colleges. With the dependent variables indicating expected liberal arts educational outcomes, Seifert et al. (2010) used eight scales that were validated and nationally recognized reliable measures of liberal arts outcomes. The researchers used three models
to examine data from the Wabash National Study of Liberal Arts Education to determine colleges’ impact on students. The first model did not account for any student characteristics and looked at liberal arts outcomes of students at community colleges, research universities, and regional colleges and compared them to liberal arts outcomes of students at liberal arts colleges. The second model controlled for student background and compared liberal arts outcomes posttest scores by educational institution. The third model controlled for student background characteristics and compared pretest scores of liberal arts outcomes by educational institution. Model 1 indicated dismal outcomes of community college students when compared to students at the liberal arts colleges and indicated negative effects on students’ development. When Model 2 was run, however, the difference in student outcomes was no longer statistically significant, as student background was controlled. In Model 3, in which student characteristics were controlled, the differences in pre-test liberal arts outcomes by institution ceased to be statistically significant. Seifert et al. reported it was not the quality of instruction at liberal arts colleges that resulted in better performance outcomes of students from these colleges over those from community colleges, but the characteristics of students when they entered these two very different institutions that had the greatest impact on particular learning and development outcomes. The total number of students involved in the study was not included in the journal article.

Community college students, however, are like other traditional college students studied in that they are looking for involvement and to affect real change on their campuses (Miles, 2010). In a qualitative study of student leadership, Miles (2010) conducted in-depth interviews with five community college student government leaders
from five different colleges in the southern and Midwestern portions of the United States. Because there is a dearth of literature on community college student leadership, Miles noted that the qualitative approach would provide rich, descriptive information from which other researchers could build subsequent research. Miles kept field notes when interviewing the students and provided a listing of 26 questions she asked the students, which included “What made you want the position”? and “Where were you when you received the news that you won the election”? (p. 89). Using content analysis, Miles grouped the students’ responses into categories and reported three recurring themes emerged. These themes focused on students recognizing the importance of building relationships with their peers and with college administrators, working with their peers to foster a sense of pride in their institution, and working constructively with college administration to accomplish goals that would benefit students and the institution. In line with these themes, the student government leaders wanted to understand what their peers needed on campus, worked to meet these needs, and wanted to contribute to the overall positive experience that students had on their campuses. Miles cautioned generalizing to other institutions, as her sample was small.

Older adults are also eager to affect change and, given the numbers of students over 40 on community college campuses, may merit attention. Manning, Wilson, and Harlow-Rosentraub (2006) provided leadership instruction and leadership self-assessments to 94 volunteers in a college classroom-based institute coupled with experiential learning as a supervised field experience. The average age of participants was 62.8. The volunteers received 60 to 80 hours of classroom instruction and then 200 to 450 hours of supervised field placement to provide experiential learning. The
Researchers noted that the classroom instruction and field placement did not only impart new knowledge and build leadership confidence, competence, and self-efficacy, but they also counteracted unproductive notions of leadership that may have been widely and deeply held by volunteers. These beliefs included leaders are born, not made; leadership is synonymous with charisma; and the best form of leadership is hierarchical. Using the Leadership Practices Inventory (Kouzes & Posner, 1988) and a self-efficacy scale based on Bandura’s (1997) guidelines, Manning et al. (2006) conducted pre and post program assessments of participants’ leadership practices and leadership self-efficacy. Even when controlling for previous college education and previously-held management positions, Manning et al. reported significant gains in both leadership areas. Manning et al. concluded that these citizens’ life experiences combined with instruction and experiential learning resulted in a compelling source of human and social capital energized and equipped to address a range of community needs and issues.

Social change and measuring social change. Being aware and meeting the needs of everyone in a community is the goal of socially responsibility leadership (Cilente, 2009). This is a relatively new form of leadership created in 1996 and based, in part, on the work of Astin and Leland (1991), who wrote Women of Influence: Women of Vision (Cilente, 2009; HERI, 1996). Astin and Leland (1991) challenged the current notion and study of leadership at the time such as trait, contingency, and situational leadership theories, which posited leaders are born, not made. In addition, they asserted a constructivist approach to leadership, and noted that knowledge is acquired through experiences and observations, which form perspectives, through which new knowledge is framed and positioned. Therefore, knowledge—such as leadership knowledge—is not
innate, in that some people are born with it and others are not, but is developed. In addition, the authors questioned the true outcome of leadership, and examined leaders who were committed to social improvement.

To offer a new theoretical framework for leadership, Astin and Leland (1991) conducted a qualitative study of 77 women leaders whose work instigated and inspired social change from the 1950s, 1960s, and 1970s. They studied women executives and scholars in higher education, in private foundations, and in national organizations dedicated to policy analysis and advocacy for women’s issues. The authors’ conceptual framework centered around five main aspects that included studying the role of positional and non-positional leaders, who were defined as being less visible than positional leaders, but whose work as scholars or practitioners influenced and led social change. The researchers also asked the female leaders about experiences that influenced them as children and how the changing environment impacted their perceptions of leadership. Astin and Leland asked their subjects, or instigators of social change, about women who influenced them, whom the researchers called predecessors. The researchers also asked the women leaders about how they identified their successors, and called these newest women leaders their inheritors.

Using background questionnaires; one and a half to two hour interviews for each woman; and artifacts, such as speeches and published work; Astin and Leland (1991) identified three emerging themes in their study of women leaders:

- Leadership is about collective action; that one person may be an instigator, but that instigator empowers others to get involved, and to engage and to work with others toward a common purpose.
Leadership is fueled by a desire for social justice and for the removal of oppression and discrimination.

Effective leaders are consistently high performers. That is, they are consistent about the values they uphold and pursue, and they empower others to act, rather than controlling them.

Moreover, the women leaders built consensus, as opposed to dominating others with their values and views, and they were networked, rather than hierarchical (Astin & Leland, 1991). In addition, the women leaders were excellent listeners and communicators; delegators; and supporters of their colleagues, peers and group members.

Areas for further study, the authors suggested, included identifying what creates the characteristics that lead people to work and act for social change, and to understand the prerequisites for inspiring people to collaborate and work toward collective action.

Astin and Leland’s (1991) study provided, in part, the impetus at the end of the last century for the USDOE to recognize that the definition of leadership was changing and, therefore, higher education needed to change how it developed leaders in its citizens (Cilente, 2009). Realizing that leadership and its constructs were changing from an industrial, hierarchical view where leaders were preordained at birth with innate qualities to that of a relational, non-hierarchical view inclusive of everyone, the USDOE sponsored the development of new leadership education models, explained Cilente. One model that emerged from this funding is the social change model (SCM) and it is now the most widely used postindustrial theoretical model to develop higher education student leadership programs (Kezar et al., 2006). Under the auspices of the Higher Education Research Institute (HERI) at the University of California, Los Angeles, with Alexander
and Helen Astin as co-principal investigators, the scholars who developed the SCM theoretical framework included Susan Komives, Nance Lucas, Carol Leland, and Dennis Roberts (HERI, 1996).

The SCM theoretical framework positions leadership as improving the human condition through social change; that all students are capable of leadership; that leadership is values-based, not values-neutral; and that it is a collaborative process (Cilente, 2009; Dugan & Komives, 2012). The model embraces the tenets of service, inclusiveness, and equity (HERI, 1996). In addition, the model assumes that service to improve the human condition is a valuable leadership development method with college students (Cilente, 2009; Dugan & Komives, 2012; HERI, 1996). The SCM relies on students working and interacting with each other through discussions, interactions, and service, which provide the greatest influence on leadership development (HERI, 1996). The SCM has two goals: to help students discover themselves by identifying their values, interests, priorities, and leadership competencies; and to prepare students to lead social change in their communities (Cilente, 2009; HERI, 1996). Communities may range from a student club to a network of campuses across the world (Cilente, 2009).

As itemized earlier, the SCM is referred to as the seven Cs leading to change, which is the eighth C (Cilente, 2009; HERI, 1996). This model recognizes that through higher education experiences, students cultivate skills in seven areas related to their development as an individual, as an effective leader within a group, and as an effective citizen within society that lead to the eighth C (Cilente, 2009; HERI, 1996). These characteristics are:
• consciousness of self, being aware of one’s values, attitudes, and beliefs that provide the impetus to take action;
• congruence, behaving, thinking, and feeling in concert with one’s values, attitude, and beliefs;
• commitment, the extent to which one pursues outcomes and results that are in line with one’s values, attitudes, and beliefs;
• collaboration, the capacity one has to work with others to realize a common outcome by developing and sharing trust in one’s self and with others;
• common purpose, the ability one has to work with others to understand the outcomes to be accomplished and engage in analysis to identify and work collectively toward goals;
• controversy with civility, to debate and disagree respectfully with others while possessing the capacity to see viewpoints different from one’s own and remain constructively engaged;
• citizenship, the capacity to engage in a community as an individual and as a member of a group working collaboratively to foster common good for others; and
• change, the ability to foster change for social improvement while possessing the ability to change and adapt to environments that are continuously changing (Cilente, 2009; HERI 1996).

The first seven characteristics are influenced by the college experience of formal learning in the classroom and learning through co-curricular and extracurricular experiences (Cilente, 2009; HERI, 1996). These characteristics work synergistically to
increase a student’s capacity to continually change while working for social change, which is the last C. That is, while learning about themselves and collaborating with other students on service projects, students learn how to continually adapt to new environments through change while developing an awareness of and ability to effect social improvement (Cilente, 2009; HERI, 1996). The SCM of leadership development is not only concerned with the product or result, but also with the process, to ensure voice is given to all of those impacted (Roberts, 2007).

The SCM is operationalized to measure SRL, which is defined as “operating with an awareness of the ways in which the group’s decisions and actions affect others. Socially responsible leaders are concerned about the well-being of group members and about the impact of the group’s decisions on the community” (Wagner, 2009, p. 3). The socially responsible leadership scale (SRLS) is a valid, reliable quantitative tool that is consistently used by researchers to assess students’ capacity for SRL as it relates to the SCM (Dugan & Komives, 2010; Rosch & Caza, 2012). It is a 68 item Likert-style scale that measures the level of agreement to statements that probe the level of eight constructs: consciousness of self, commitment to achieve personal values, congruence or taking action in line with personal values, controversy with civility, collaboration, working with others toward a common purpose, being an active citizen, and working with others to create social change (Dugan & Komives, 2010). Examples of studies using the SRLS to measure students’ capacity for social change include Dugan (2006a); Dugan (2006b); Dugan and Komives (2010); Haber and Komives (2009); Ricketts, Bruce, and Ewing (2008); Rosch and Caza (2012); and Soria et al., (2013).
Using the SRLS in a descriptive study of 859 undergraduates from one institution, Dugan (2006a) examined the differences between college men and women across the eight constructs of the SCM. Using a multivariate analysis of covariance (MANCOVA), Dugan found that women scored higher than men across all constructs, with six of the eight constructs demonstrating statistical significance. The researcher noted that the constructs of collaboration and controversy with civility were not statistically significant. This was unexpected, reported Dugan, as previous studies of women’s leadership indicated collaborative and shared decision making as strengths. However, Dugan noted that men also scored high on this construct and posited that men may be developing this characteristic or a greater awareness of its importance.

Using the same dataset, Dugan (2006b) also examined the impact of community service, positional leadership roles, student organization membership, and formal leadership programming on students’ SRL. Dugan hypothesized there would be no mean differences across the eight constructs of the SCM as measured by the SRLS with regard to a student’s engagement in these four activities. Dugan ran a multivariate analysis of variance (MANOVA) to find the mean differences across the eight constructs of the SCM as they related to involvement in the four activities. Statistically significant mean differences were revealed between students who participated in the activities and those who did not. In addition, Dugan ran t-tests to determine if there were differences between the scores of each of the eight constructs of those students who were involved versus those who were not. Community service positively influenced five of the constructs to the greatest extent: consciousness, commitment, collaboration, common purpose, and citizenship. This was followed by positional leadership roles, which
positively influenced four constructs: commitment, collaboration, common purpose, and citizenship. Limitations of the study, noted Dugan, included that it was not longitudinal, only one institution was represented, and that the measuring tool came from the construct of SRL, which may or may not suite other institutions’ leadership frameworks.

As a follow up to this study Soria et al., (2013) used a quantitative study and examined the impact on SRL as measured by the SRLS of students who were engaged in community service on their own, through a class, through student organizations, or through work-study options. Asking 3,423 randomly selected students at a large, public, research university to complete the SRLS for a 37.5% response rate, Soria et al. also collected demographic data, asked about precollege experiences and behaviors, and current behaviors and involvement in college. Running seven regression models for the first seven constructs of the SCM (which excluded the construct of change), Soria et al. found that students who participated in community service on their own had the highest scores on the SRLS for consciousness of self, congruence, commitment, collaboration, citizenship, common purpose, and controversy with civility. Participation in student organizations influenced collaboration and common purpose, while community service through classes-only did not show an increase in SRL. Limitations of the study included that it was conducted at one institution, it was not longitudinal, and the researchers did not provide a definition of community service on the survey. As a result, the researchers noted, the definition was unique to the student completing the survey. As a cautionary note, Soria et al. pointed out research that indicates students who are engaged in community service on their own may be more disengaged from traditional, formal student clubs and organizations focused on community service on campus. Therefore,
noted Soria et al., student life practitioners are encouraged to connect students performing community service on their own with students and organizations on campus also committed to community service.

Serving the community through service learning must be a component of leadership education, argued Ricketts et al., (2008), to build civic engagement and an awareness that today’s students are tomorrow’s change agents. In a quantitative study, Ricketts et al. invited all 2,056 students enrolled in a college of agriculture at a large land-grant university to complete the socially responsible leadership scale (SRLS) for a 39% response rate. Ricketts et al. did not state limitations of their study. It is unclear to what extent demographic variables influenced the results, as 33% of their respondents were from one academic major and 60% were women.

Ricketts et al. (2008) provided the mean score and standard deviation for all 68 items, which were grouped within the eight constructs. Students’ scores were highest for self-awareness or consciousness of self, indicating an awareness of priorities and values, although self-confidence ranked somewhat lower. Students’ scores were also highest for commitment or pursuing their values and priorities and working toward a common purpose. Moreover, while students recognized the importance of working toward a common purpose and having a shared vision within the group, they did not necessarily see themselves in the role of shaping that vision. Ricketts et al. reported moderate agreement with statements about congruence or behaving in ways that are consistent with one’s thinking and feeling. The students noted the importance of acting with integrity and being seen as trustworthy and genuine. In addition, students’ scores were high for controversy with civility, indicating a relatively high comfort level with differences and
perspective that are different from their own. Students’ scores were lowest for collaboration, citizenship, and initiating change (Ricketts et al., 2008).

In summary, Ricketts et al. (2008) reported that students were aware of their values, valued ethical leadership, and could identify issues about which they felt passionately. However, the results indicated students had moderate agreement with and interest in collaborating and cooperating with others to achieve a common goal. In addition, the students indicated little vision or interest to take action to improve others’ welfare. This is due, Rickets et al. posited, to the students’ uncertainty about their leadership efficacy to create change. Higher education must provide multiple experiences to build this confidence and competence by engaging students in role playing, case studies, and simulation exercises, and encourage involvement in student clubs and organizations that help build leadership skills and capacity, the authors concluded. In addition, the researchers postulated, educators should include collaborative projects in class requiring students to work together toward a common goal to strengthen the connection between collaboration and teamwork leading to change. It is then important that students recognize this is how change is created outside of college and in real life. With respect to the low citizenship score, the researchers suggested that service learning should be built into coursework. This experiential learning method helps students understand what is needed in their communities, involves students directly in meeting those needs, and fosters students’ leadership self-efficacy to address these challenges (Ricketts et al., 2008).

Dugan and Komives (2010) continued to examine the influences on college students’ development of SRL in a study of 14,252 college students from 25 states and
the District of Columbia. The data were part of the first Multi-Institutional Study of Leadership, a national study of college students’ behaviors, beliefs, and values and Dugan and Komives focused on college seniors. Using Astin’s (1993a) input-environment-output model as the conceptual model, Dugan and Komives controlled for precollegiate experiences that could influence students to score relatively high values on the SRLS. That is, by controlling for the input, the researchers wanted to see what experiences took place during college (environment) that showed the greatest influence on the students’ development of SRL (output). The researchers noted that the reliability of the SRLS ran from .75 on controversy with civility to .82 on commitment. Dugan and Komives ran regression analyses to determine the effect of different blocks of variables on each of the eight constructs of the social change model. These blocks were demographic characteristics, leadership efficacy, institutional characteristics, and collegiate experiences. This last block included 10 variables that included internships, membership in student organizations, and long-duration leadership development programs. The regression analyses for the first three blocks showed significant, but minimal, variance among the eight constructs measured by the SRLS. With regard to the block of leadership experiences, Dugan and Komives found that three variables had the greatest predictive value of SRL. These variables were: engaging in socio-cultural conversations with peers, which was a significant predictor across all eight constructs; mentoring relationships with faculty, which was a significant predictor across seven constructs; and community service, which was a significant predictor for six of the constructs. Other collegiate experiences that were positively and significantly predictive of the collaboration construct of SRL included internships, peer mentoring, mentoring by
student affairs professionals, and membership in student clubs and organizations. Dugan and Komives pointed out that participation in short and moderate duration leadership programs significantly and positively influenced some of the eight constructs, but that participation in long-duration leadership programs significantly and negatively correlated to development of the eight constructs. Dugan and Komives posited that long-duration leadership programs may rely on the traditional, hierarchical view of leadership, which is inconsistent with the social change model. Moreover, the researchers suggested, students who seek out long-term duration leadership programs, such as those in a college leadership minor, may see themselves as hierarchical leaders which is, again, inconsistent with the SCM theoretical framework. An intervening or intermediate variable studied by Dugan and Komives was that of self-efficacy, which the researchers noted accounted for considerable variance across the eight constructs. That is, calling on Bandura’s (1997) theory of self-efficacy, Dugan and Komives reported that the greater the student’s agreement with the statement of leadership behavior on the SRLS, the more likely the student believed he or she was successful demonstrating, or living, that statement.

Dugan and Komives (2010) pointed out that one of the limitations of the study was that it was cross sectional and not longitudinal and, therefore, a true causal relationship between these experiences and the development of SRL could not be made. Moreover, the researchers noted that development is a dynamic process, continually changing as students incorporate new knowledge and different experiences. As such, this research should be thought of as one moment in time and not a singular developmental assessment.
Using the 2009 MSL data set, Gleason (2012) hypothesized statistical significance would be found in the SRL scores of students based on the type of college they attended, as defined by the *Carnegie Classification of Institutions of Higher Education* (The Carnegie Foundation for the Advancement of Teaching, n.d). Gleason suggested that students with higher SRL pretest scores would select baccalaureate institutions believing they would have greater opportunities to engage in activities designed for social change. By contrast, Gleason hypothesized, students less interested in social change would select doctoral/research and research (very high) institutions to align with research interests. Therefore, Gleason suggested, students from research institutions would demonstrate lower pre and posttest scores for SRL when compared to students at baccalaureate institutions.

Gleason (2012) first examined students’ SRL pretest scores based on institutions’ Carnegie Classification. While there was statistical significance, there was very little practical significance, as only .02% of the difference among students’ scores could be explained by the type of institution the student was attending. An unexpected finding was that students attending the doctoral/research and research (very high) institutions demonstrated higher mean scores for SRL than students at baccalaureate institutions. Gleason questioned if students at larger institutions selected them, in part, for their diversity.

Similarly, Gleason examined the differences among Carnegie Classifications and the omnibus posttest SRL score. Again, statistical significance was found, but the effect size was .0001, which explained only .01% of the difference in mean scores by type of institution. To explore this further, Gleason (2012) then ran a series of hierarchical
regression analyses to identify if there were background or experience variables that
could predict students’ capacity for SRL. Gleason noted that SRL scores were positive
predictors of students’ engagement in social change, even among associate degree
granting institutions.

Among the regression analyses Gleason (2012) examined was a block related to
college experiences. Gleason reported that only the scales referring to students’
engagement in social change behaviors and socio-cultural conversations with peers were
significant predictors of students’ SRL among all Carnegie Classifications. The
researcher pointed out that community service was a positive predictor for all college
types with the exception of associate degree granting institutions. Positional leadership
in on or off campus organizations did not demonstrate statistical significance, reported
Gleason.

The SRLS was also used to measure the effect of a 16-week leadership course that
was based on the SCM (Buschlen & Dvorak, 2011). The researchers employed a quasi-
experimental design in which 108 students, called Group A, were taught the social
change model concepts in a course and were compared against 152 students who did not
take the course, called Group B. Both groups were similar to each other in demographic
characteristics. Administering a pretest on the first day of class to both groups, Buschlen
and Dvorak reported that the groups were initially similar, in that they scored relatively
close together among the eight constructs measured in the SRLS. In an ANOVA, Group
A scored 4.027, when the eight constructs were aggregated and Group B scored 3.991.
The researchers noted an ANOVA was chosen to measure between group differences
because the eight constructs intersect and interrelate with each other and running separate $t$-tests on each construct inflates the Type 1 error rate (Buschlen & Dvorak, 2011).

On the last day of class, Group A and Group B completed the SRLS as a posttest and the posttest scores of the two groups were significantly different from each other (Buschlen & Dvorak, 2011). Group A’s overall mean score increased from 4.027 to 4.202. Group B’s overall mean score increased slightly, from 3.991 to 3.998. Specifically, the constructs of collaboration, common purpose, controversy with civility, citizenship, and change were significantly higher for Group A when compared to Group B. The constructs of consciousness of self, congruence, and commitment were not significantly different between the two groups. In addition, Buschlen and Dvorak (2011) examined within group mean differences of the pretest as compared to the posttest. Paired $t$-tests showed significant differences in the pre and posttests on collaboration, common purpose, controversy with civility, citizenship, and change within Group A. The differences between the pre and posttest of Group B were not significant for any of the constructs, with the exception of common purpose (Buschlen & Dvorak, 2011).

Buschlen and Dvorak (2011) concluded by agreeing with Dugan (2006b), who suggested that incorporating community service into a college leadership program helps students develop SRL. In addition, the researchers stated that the SCM theoretical framework can serve as an effective backdrop against which co-curricular leadership programs may be designed. These programs may include out-of-the-classroom, experiential opportunities, such as weekend retreats and student organizations. In addition, Buschlen and Dvorak pointed out that millennials—those students born after 1980—consider community service to be important, having embarked on fulfilling hours
of community service in high school. It is, therefore, important for higher education faculty to integrate this service into the teaching-learning process so that students may reflect on what they have contributed, what they have done, and what is important to them as they develop their leadership skills and capacity (Buschlen & Dvorak).

Rosch and Caza (2012) engaged in quantitative research with the SRLS by examining the effect of a short-term leadership training program on 612 students at a large, public, Midwestern university. Students were selected from those who attended optional 1-hour leadership workshops from 2007 to 2010. Over the three-year period, Group 1 received the SRLS just before the students embarked on the training, as a pretest group. Group 2 completed the SRLS at the conclusion of the training. Group 3 completed the SRLS 3 months after the training. The response rates were 51%, 31%, and 28%, respectively. It is important to note that students were randomly assigned to each group and, therefore, Rosch and Caza note:

There is no a priori reason to believe there are significant differences between respondents in each group. Therefore, the responses in each group should be representative of all individuals at that phase of leadership training, which allows for comparison across the time-lagged cross-sectional snapshots. (p. 34)

Rosch and Caza (2012) reported that two of the eight constructs of the SCM, consciousness of self and collaboration, showed correlations too high to demonstrate their individual or discriminant validity. Therefore, the researchers studied only six of the SCM constructs: congruence, commitment, common purpose, controversy with civility, citizenship, and change.
Students’ scores increased after the short-term trainings in Group 2 in the areas of commitment, common purpose, controversy with civility, and citizenship (Rosch & Caza, 2012). However, there was no effect in congruence or change. The researchers suggested that some constructs of the SCM may be easier to influence with short-term training than those that are more complex, which may require more intensive and longer-term pedagogies. The authors noted that SRL scores remained elevated 3 months after the last training program. After running Pearson’s correlations, the researchers reported statistically significant correlations among six of the constructs, which demonstrated the students recognized the characteristics of the SCM interrelate. This interrelation may help explain why the SCM measures remained elevated 3 months after the training, according to Rosch and Caza. As students used their new skills, they became aware of how the individual constructs needed to integrate to provide successful leadership in complicated settings, posited the researchers. Rosch and Caza (2012) concluded that short-term training affects SRL skills, although not all SCM constructs are impacted equally. Limitations of the study included that it was conducted at one institution in the Midwest and that all students were self-selected volunteers, which limits the study’s ability to be generalized (Rosch & Caza, 2012).

Using a different measuring tool, but arriving at similar results, Thompson (2006) concluded that the greatest influences on students’ definition of effective leadership are experiences with faculty and staff in higher education, internships, and interactions with peers. Using the leadership attitudes and belief scale (LABS–III) developed by Wielkiewicz (2000), Thompson asked 809 students at a small, private, Midwest college to complete the 28-item scale. A total of 459 participated, for a response rate of 57.2%.
The LAB–III measures students’ beliefs and thinking about leadership, differentiating their responses into leadership beliefs that revolve around hierarchy, command and control, or those that are systemic, relational, collaborative, and recognize the importance of contributions from all members of a group. Based on their scores, students are assigned as high hierarchical/high systemic, high hierarchical/low systemic, low hierarchical/high systemic or low hierarchical/low systemic (Wielkiewicz, 2000). Thompson’s study asked students to what extent they thought each of eight resources contributed to their leadership attitudes and beliefs. Not unexpectedly, reported Thompson, those students who attributed their leadership beliefs to interactions with faculty and staff at the college, conversations with peers, and internships reported a higher level of systemic leadership beliefs. That is, these resources helped students engage in developing an understanding that effective leadership is collaborative leadership, in which leadership is shared with all members of the group, noted Thompson. The researcher pointed out that a limitation of his study was that it was conducted in one small college in the Midwest and may not be generalizable to other institutions.

Analysis and synthesis of studies. Higher education professionals claim graduates of American colleges and universities increasingly need leadership skills to understand, manage, and lead the social, geopolitical, technological, and economic change that will continue apace across the globe (AAC&U, 2007; Astin & Astin, 2000; Connaughton, Lawrence, & Ruben, 2003; HERI, 1996). Moreover, scholars are calling for socially responsible leadership (SRL), or leadership that is concerned with the welfare
and improving the human condition of all involved, not just those with power and privilege (Dugan, 2006b; Dugan & Komives, 2010; HERI, 1996; Wagner, 2009).

Can leadership skills be taught or are they just for people born with leadership characteristics? Leadership can be taught and learned (Doh, 2003; Gardner, 1990; Komives, Lucas, & McMahon, 1998; Kotter, 2001; Kouzes & Posner, 2012; Posner, 2009). In particular, leadership is taught to and learned by college students (Cress et al., 2001; Kouzes & Posner, 2006; Posner, 2009; Posner, 2012). A recent review of the literature showed there are 1,500 leadership studies programs in higher education (Jenkins, 2013) with scholars calling for more experiential opportunities to build leadership skills (Cress et al., 2001; Jenkins, 2013; Moore et al., 2010; Odom et al., 2012; Posner, 2012; Ricketts et al., 2008; Wisniewski, 2010).

Learning through one’s own experiences, a constructivist approach to the teaching-learning process, requires students to participate and become active learners, thereby making the information meaningful to the student, who internalizes it at a deeper level (Jenkins, 2013; Moore et al., 2010; Wisniewski, 2010). Building competence and confidence through involvement and experience may take many forms, but the common theme is that students are involved in hands-on manipulation of concepts and information that they can then relate to real-world challenges and situations they face (Jenkins, 2013; Moore et al., 2010; Odom et al., 2012; Wisniewski, 2010). Through service learning (Cress et al., 2001; Ricketts et al., 2008), community service (Cress et al., 2001; Dugan, 2006b; Dugan & Komives, 2010; Soria et al., 2013), and internships (Cress et al., 2001; Thompson, 2006; Wisniewski, 2010), students develop knowledge about themselves, which they then transfer to knowledge about their own leadership preferences, styles,
strengths and weaknesses. This is also true for role plays (Jenkins, 2013), positional leadership in student clubs and organizations (Dugan, 2006b; Miles, 2010) and in-class collaborations (Cress et al., 2001; Moore et al., 2010; Wisniewski, 2010). These experiences give students the opportunity to practice leadership skills and develop confidence (Dugan et al., 2008; McCormick, Tanguma, & Lopez, 2002; Posner, 2009; Ricketts et al., 2008). Another experience reported to increase students’ leadership awareness, knowledge, and capacity includes studying social, political, and military leaders in a history class (Nahavandi, 2006). Moreover, some experiential opportunities which may, at first, have nothing to do with leadership, may also develop leadership skills. Odom et al. (2012) suggested that learning a new skill, such as cake decorating or how to play an instrument, may teach students about themselves: their learning preferences, strengths, and areas to be strengthened. These activities have leadership development ramifications because this discovery helps students understand themselves, a first step in leadership development (Odom et al., 2012). In addition, the combination of working with students different from themselves and discovering aspects about themselves as-yet unknown helps students also develop multicultural, civic, and community awareness, and a sense of responsibility (Cress et al., 2001; Komives et al., 2005; Ricketts et al., 2008).

College experiences in the form of community service (Dugan, 2006b; Dugan & Komives, 2010; Soria et al., 2013), service learning (Ricketts et al., 2008), positional leadership roles (Dugan, 2006b), and membership in student clubs and organizations (Dugan & Komives, 2010) also influence SRL. Moreover, students who report engaging
in socio-cultural conversations with peers demonstrate greater capacity for SRL than students who do not (Dugan & Komives, 2010).

The SCM operationalizes SRL by defining eight constructs that are related to the development of the student as an individual, as a member of group, and as a citizen in society (Buschlen & Dvorak, 2011; Cilente, 2009; Dugan, 2006b; Dugan & Komives, 2010; HERI, 1996; Ricketts et al., 2008; Soria et al., 2013). The SCM was developed specifically for college students as a framework of cognitive and behavioral skills needed to be successful in the 21st century, which will continue to see the rapid pace and multidirectional force of change caused by science, medicine, and technology (Cilente, 2009; Connaughton et al., 2003; HERI, 1996). The SCM’s major assumptions are that leadership is concerned with improving the human condition through social change; that all students are capable of leadership; that leadership is values-based, not values-neutral; and that it is a collaborative process (Buschlen & Dvorak, 2001; Cilente, 2009; Dugan, 2006b; Dugan & Komives, 2012; HERI, 1996; Ricketts et al., 2008; Soria et al., 2013). Based, in part, on Astin and Leland’s (1991) seminal work, *Women of Influence: Women of Vision*, the model embraces the tenets of service, inclusiveness, and equity (Cilente, 2009; HERI, 1996). In addition, the model assumes that service to improve the human condition is a valuable leadership development method with college students (Cilente, 2009; Dugan, 2006b; Dugan & Komives, 2012; HERI, 1996). The SCM relies on students working and interacting with each other through social, service, and project-based experiences, which provide the greatest influence on leadership development (Cress et al., 2001; HERI, 1996; Jenkins, 2013; Moore et al., 2010; Odom et al., 2012;
Posner, 2012; Ricketts et al., 2008; Wisniewski, 2010). It is now the most widely used model of leadership development in higher education (Kezar et al., 2006; Roberts, 2009).

The socially responsible leadership scale (SRLS) uses the eight constructs of the SCM to assess a student’s capacity for SRL (Buschlen & Dvorak, 2011; Dugan, 2006b; Dugan & Komives, 2010; Ricketts et al., 2008; Rosch & Caza, 2012; Soria et al., 2013). It is a statistically valid and reliable tool comprised of 68 Likert-type scale items asking students to what extent they agree with statements about their beliefs, values, and behaviors as they relate to working as an individual, within a group, and within society (Dugan, 2006b; Dugan & Komives, 2010; Owen, 2012). The studies cited demonstrate that students increased their capacity for SRL after a variety of college experiences, such as community service (Dugan, 2006b; Dugan & Komives, 2010; Soria et al., 2013), service learning (Ricketts et al., 2008), positional leadership roles and membership in student clubs and organizations (Dugan, 2006b), socio-cultural conversations with peers (Dugan & Komives, 2010), and short-term leadership development seminars (Rosch & Caza, 2012).

However, care must be taken when generalizing research on college students to all college students (Dugan et al., 2008; Pascarella, 2006; Pascarella & Terenzini, 2005). Most of the studies of college student leadership development are of students who lived on 4-year college or university campuses (Cress et al., 2001; Posner, 2004; Posner, 2009; Ricketts et al., 2008). Community college students have been omitted from the robust study of college’s impact on students, including leadership development, due to the incorrect belief that the education received is lacking in rigor (Pascarella & Terenzini, 2005; Pascarella & Terenzini, 2009; Seifert et al., 2010) and that most college students
reside on 4-year college campuses (Dugan et al., 2008). Moreover, Pascarella and Terenzini (2005) noted that much of the research conducted prior to 1990 was conducted on White, middle income to affluent, 18- to 22-year-old students. This demographic does not reflect a majority of college students today (Dugan et al., 2008; Pascarella & Terenzini, 2005). By contrast, demographic data indicate that today’s college students are more culturally and demographically diverse than college students previously studied (Bueschel, 2009; Miles, 2010; Pascarella, 2006). For example, Bueschel (2009) noted that 85% of the increase in the 18- to 24-year-old age group in the U.S. to 2020 will be from minority and immigrant families, with 40% from low-income families. In addition, 45% of the undergraduate students in the U.S. are enrolled in community colleges (AACC, 2016), with the federal government encouraging more enrollment in these two-year schools to increase individual prosperity and national productivity (“Building American skills,” 2014; The White House, 2015).

The outcomes of students who attend community colleges are similar to those who attend liberal arts colleges, when incoming student characteristics are controlled (Seifert et al., 2010), which should help debunk the myth that community colleges do not provide academic rigor (Pascarella, 2009). Moreover, some scholars (Nahavandi, 2006; Posner, 2009) suggested that intentional leadership development should take place within the first two years of college so that students may practice what they learned in a safe environment and may benefit from these skills as they progress through their college career.

However, the opportunity for leadership development should not be assigned exclusively to young adults (Manning et al., 2006). Manning et al. (2006) argued that
leadership development in older adults can be very effective and they may be vital leaders of solutions to challenges communities face. Combining classroom instruction with experiential learning, Manning et al. demonstrated that older adults possess the ability to re-learn leadership skills and employ them effectively in their communities. Based on these studies of adults at different points in the age spectrum (Posner, 2009; Manning et al., 2006), it may be argued that the community college population could be a rich source of leadership potential given the age ranges these colleges serve (AACC, 2016). That is, not only is the 18 to 22-year-old student at the community college an unstudied population (Pascarella & Terenzini, 2005; Pascarella & Terenzini, 2009), but the older adult and students across the age continuum attending community colleges may be overlooked and untapped sources of leadership potential—the very leadership needed in our communities.

**Chapter Summary**

This chapter began by citing research addressing whether or not leadership can be taught or learned noting that contemporary scholars agree that leadership can be learned. Through a synthesis of the literature presented, it concluded that a robust collection of research concerning college student leadership development exists, although it predominantly focuses on students who reside on large college or university campuses. The literature presented also showed that college experiences can be the most effective and most preferred forms of learning leadership skills, particularly SRL skills. In addition, this chapter noted that community college students are routinely overlooked for study due, in part, to popular myths that surround them. The scholars cited noted that more research is needed on community college students and how they are impacted by
college. Finally, the synthesis of the literature suggested that community colleges may have the diverse mix of student demographics, interests, and life experiences that position their graduates to be effective leaders in their communities.
Chapter 3: Research Design Methodology

Introduction

There is a considerable and growing canon of literature demonstrating the relationship between students’ engagement with various forms of college activities and their increased capacity for socially responsible leadership (SRL), or leadership concerned for all in the community (Buschlen & Dvorak, 2011; Dugan, 2006b; Dugan & Komives 2010; Haber & Komives, 2009; Ricketts et al., 2008; Rosch & Caza, 2012; Soria et al., 2013; Thompson, 2006). Most, if not all, of the published studies on college student leadership development are focused on students who reside on large college and university campuses, but whom comprise a minority of college students (Dugan et al., 2008). Even with 45% of the undergraduates in the U.S. enrolled in community colleges (AACC, 2016), community college students remain an unstudied population when considering college impact (Pascarella, 2006; Pascarella & Terenzini, 2009). This dissertation attempted to shorten the gap through this quantitative study focused on the predictive value of college experiences on the SRL capacity of community college students. The outcome variable was SRL as operationalized through the eight constructs of the social change model (SCM). The predictor variables were three forms of experiential learning the literature has suggested influence students’ capacity for SRL: socio-cultural conversations with peers, positional leadership roles in student organizations, and community service. A conceptual framework that formed the underpinnings of the data sets used is outlined and explained the interaction among students’ previous experiences and background, current experiences, and outcomes. The research questions for this study were:
1. After accounting for demographic variables and precollegiate experiences, do socio-cultural conversations with peers, leadership positions in student organizations, and/or community service significantly predict higher levels of socially responsible leadership in community college students?

2. After accounting for demographic variables and precollegiate experiences: (a) do socio-cultural conversations with peers significantly contribute to the prediction of socially responsible leadership? (b) does holding leadership positions in college student organizations significantly contribute to the prediction of socially responsible leadership? and (c) does engaging in community service significantly contribute to the prediction of socially responsible leadership?

3. After accounting for demographic variables and precollegiate experiences, how much weight do socio-cultural conversations with peers, leadership positions in student organizations, or community service carry in the prediction of socially responsible leadership?

**Null hypotheses.** The null hypotheses for this dissertation were grounded in the predictive value of college experiences as they related to community college students’ capacity for socially responsible leadership. As such, the null hypothesis for research question 1 was after accounting for demographic variables and precollegiate experiences, socio-cultural conversations with peers, leadership positions in student organizations, and/or community service would not significantly predict higher levels of socially responsible leadership.
The null hypothesis for research question 2 stated that after accounting for demographic variables and precollegiate experiences (a) having socio-cultural conversations with peers would not significantly contribute to the prediction of socially responsible leadership; (b) holding leadership positions in college student organizations would not significantly contribute to the prediction of socially responsible leadership; and (c) engaging in community service would not significantly contribute to the prediction of socially responsible leadership. The null hypothesis for research question 3 stated that the weight would be equal among socio-cultural conversations with peers, leadership positions in student organizations, and community service in the prediction of socially responsible leadership.

The data for this study were collected through the international Multi-Institutional Study of Leadership conducted in 2009 (MSL 2009) and 2012 (MSL 2012). Housed at Loyola University Chicago, the studies measured the attitudes, values, beliefs, and activities of students as they related to students’ capacity for SRL and other leadership outcomes (MSL, 2016). This chapter outlines the history of the MSL and describes the MSL 2009 and 2012 data sets collection techniques. This section also specifies the variables studied and the statistical analyses used to answer the research questions.

**Research Context**

This quantitative study answered the research questions by using the MSL 2009 and 2012 datasets combined. The MSL was selected because the SCM was the initial theoretical framework used to design the MSL. According to the MSL (2016) website, the SCM was selected as it is the leadership development model most widely used with
Conducted initially in 2006 by the National Clearinghouse for Leadership Programs (NCLP) based at the University of Maryland, the MSL was subsequently conducted in 2009, 2010, 2011, and 2012 and is now conducted every three years. Data collection for the current study concluded in April, 2015 and the next study will be conducted in 2018 (MSL, 2016). The current data set is available only to those institutions who participated in the current study and available only to other researchers after three or more years. Therefore, the 2012 dataset is now available to researchers whose institutions did not participate in the 2012 study.

In addition to NCLP, initial sponsorship was provided by the C. Charles Jackson Foundation, the American College Personnel Association: College Educators International Educational Leadership Foundation, the National Association of Student Personnel Administrators, the University of Maryland, and LeaderShape (MSL, 2016). To date, more than 250 institutions of higher education totaling more than 300,000 students have participated in the MSL studies (MSL, 2016). The study is now based out of Loyola University Chicago, with its principal investigator as John Dugan, who is associate professor in the School of Education at the university (Loyola University Chicago, 2016).

The MSL is a causal-comparative design (Dugan, Komives, & Segar, 2008), which Creswell (2014) describes as “nonexperimental quantitative research…in which the investigator compares two or more groups in terms of a cause (or independent variable) that has already happened” (p. 12). Johnson (2001) explains that the variables
cannot be manipulated, as in an experimental design, as they occur naturally. Moreover, Johnson points out, causal-comparative design is the simplest quantitative method to examine and demonstrate cause-and-effect relationships among variables or phenomena, although cause-and-effect cannot be proven.

Creswell (2014) advises researchers to select a design most appropriate to answer the research questions. He notes that quantitative research tests “objective theories by examining the relationship among variables” (p. 4), which applies to the SCM as a theoretical framework, and the influences on it, as addressed in the previous chapter. Moreover, he points out that one’s worldview determines one’s research design, and explained that among these is the postpositivist view, to which the researcher subscribes in part:

Postpositivists hold a deterministic philosophy in which causes (probably) determine effects or outcomes. Thus, the problems studied by postpositivists reflect the need to identify and assess the causes that influence outcome . . . It is also reductionistic in that the intent is to reduce the ideas into a small, discrete set to test, such as the variables that comprise hypotheses and research questions. . . . Finally, there are laws or theories that govern the world, and these need to be tested or verified and refined so that we can understand the world. (p. 7)

Based on Creswell’s expertise, the researcher’s worldview, and a review of the literature studying SRL and the SCM, the researcher concluded that a quantitative study was the most appropriate design to answer the research questions. In addition, the SCM is the foundational theoretical framework upon which the MSL is built, yielding a robust
sample to study. An analysis of the students’ responses could be accomplished most efficiently using quantitative methods.

**Conceptual framework.** The conceptual framework for the MSL relied on Astin’s (1993a) input-environment-output (I-E-O) model (MSL, 2016) and is illustrated in Figure 3.1. Sorting the data collected across three primary domains, this model posits that when examining and assessing the effect of college experiences on students, researchers must first record the state at which the student begins, or input; the environment, or the practice or program the student experienced; and the output, or the result or change in a student’s state. In other words, the researcher must first understand the state at which the student begins to determine the effect an experience has on a student’s state at a future point (Astin, 1993b).

![Figure 3.1. Astin’s Input-Environment-Output Model. Adapted from Astin, A. W. (1993a). *Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education.* Phoenix, AZ: American Council on Education and The Oryx Press, p. 18.](image-url)
Research Participants

The techniques used to secure the MSL 2009 and 2012 data were the same used to collect the 2006, and 2015 data sets (N. Turman, personal communication, September 8, 2015). Institutional Review Board approval from Loyola University Chicago for 2009 and 2012 are in Appendices A and B, respectively. The studies were administered by a third party firm with expertise in multi-campus studies, the Survey Science Group, LLC (MSL, 2016). Colleges and universities elected to participate in the studies by submitting a fee of $2,750 in 2009 or $3,750 in 2012 and then administered the MSL survey to their students. Sampling was purposeful with campuses asked to select a sample of full and part-time matriculated students totaling 4,000. Campuses with fewer than 4,000 students were asked to distribute the survey to all students. Campuses chose a three-week period between January and May in 2009 or 2012 to distribute the survey by email and students completed it at the time and location of their choosing. Students could also log out before submitting it and complete it at a later time within the three-week window. Explanations of confidentiality, data privacy, and data security were included in the invitations to complete the survey as was a statement of approval of the study by the institutional review board at Loyola University Chicago. Students received no more than four contacts or reminders to complete the survey to avoid any sense of coercion or undue pressure to participate (N. Turman, personal communication, September 8, 2015).

For 2009, 102 colleges and universities participated from 31 states and the District of Columbia. This amounted to 115,632 students for a 34% response rate. For 2012, 82 colleges and universities participated, amounting to 77,148 completed cases for a 33% response rate (N. Turman, personal communication, June 22, 2016).
To secure the MSL 2009 and 2012 data, a formal request was made to the MSL team via an online application, complying with the requirements outlined in Appendix C. The requirements included: name and contact information of proposer; the program, university, and advisor for the study, if the proposer was a student; the time frame for the study; a prospectus that contained the purpose of the study with specific research questions; specific sub-sample of cases, such as community college students; specific variables that are requested in this study; and potential publication outlets for the study if the researcher intended to publish the results (MSL, 2016). The completed request form is in Appendix D. A $500 fee was required to receive the data, which were provided via a Drop Box drive. Although the researcher intended to study only the participants from 2012, the MSL research team stated that there were only two community colleges that participated in 2012 and the study’s protocol for maintaining confidentiality of participating institutions requires at least three institutions be included in a data set. To ensure the confidentiality of the participants, the MSL research team offered data from community college students who participated in the 2009 study, in addition to the 2012 participants, without additional cost.

**Instruments Used in Data Collection**

This quantitative study conducted a statistical analysis using the MSL 2009 and 2012 data sets. A review of the *MSL 2009 Codebook* (MSL, 2009) and *2012 Codebook* (MSL, 2011), showed the surveys were comprised of 40 and 41 closed-ended qualitative and quantitative questions, respectively. The last questions, 41 and 42, respectively, were opened ended asking students to write their definition of leadership. In addition, students
self-reported demographic information used to describe the sample and considered as
input variables. These variables are listed in Appendix E.

**Input variables.** The researcher selected eight variables in order to examine if
they predicted statistically significant levels of SRL capacity. These variables had been
identified by the MSL conceptual design as input or potentially influential variables
determining a student’s starting point on educational outcomes before entering college.
Six of the predictor variables were related to demographic characteristics, as detailed in
Appendix E: gender, race, sexual orientation, estimate of grades so far in college,
parental education, and parental income.

One of the predictor variables was related to precollegiate experiences or high
school experiences. In the MSL 2009 and 2012 these were measured by more than 11
questions that spanned a range of extra and co-curricular activities that, when combined,
obliterated the definition and impact of specific precollegiate experiences. For example,
precollegiate experiences referred to the frequency of participating in student clubs and
organizations, such as student government, band, or organized sports. It also referred to
the frequency with which the student held leadership positions in student organizations;
and participated in community service, community or work-related organizations, such as
scouts or professional association; taking leadership positions in community
organizations; and working with others to address societal problems. The researcher
chose to define precollegiate experiences by selecting the question directly related to
precollegiate leadership development: “Looking back to before you started college, how
often did you engage in…training or education that developed your leadership skills?”
The response categories were 0=Never, 1=Sometimes, 2=Often, 3=Very Often (MSL, 2011, p.4)

The remaining predictor variable was the pretest for socially responsible leadership, as it is identified by MSL as an input variable (MSL, 2016). That is, could students’ assessment of their SRL capacity before they started college be a significant predictor of their SRL in college? For both study years, the pretest used eight questions to determine the pretest score for SRL. However, between the two studies, different questions were used to determine the construct of consciousness of self in the social change model. In 2009, students were asked to what extent they agreed with the statement “I had low self-esteem” with response categories of 1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; or 5=Strongly agree (MSL, 2009, p. 5). In 2012, this construct was measured by asking the respondent to rate agreement with the statement “I knew myself pretty well” (MSL, 2011, p. 4), with the same response categories. The researcher was advised, however, these questions do not measure the same construct and not to include it in the pretest calculation of socially responsible leadership (S. Townsend, personal communication, March 21, 2016).

In addition, a question to determine the construct of change included in the 2009 study was not included in the 2012 study. For the 2012 dataset, the construct of change was omitted as a set of separate questions, as change is measured in MSL 2012 by totaling answers to the first seven constructs to arrive at an omnibus measure. This is considered to be the combined result of all other capacities enacted together and a more accurate measure of SRL (N. Turman, personal communication, September 10, 2015).
Therefore, only six constructs worded exactly the same between study years were considered and are listed in Appendix F.

**Environment variables.** Experiences during college, or environmental variables in the MSL used in this study, are identified broadly as interacting with others who hold different perspectives from the respondent, leadership development opportunities on and off campus, and engagement in civic activities. Drawing from Chapter 2 and the environmental factors in college students’ lives as measured in MSL 2009 and 2012, the predictor variables examined were socio-cultural conversations with peers, leadership positions in student organizations, and community service.

For socio-cultural conversations with peers, a mean score was calculated based on nine questions that formed the socio-cultural discussions subscale predetermined in the study (MSL Codebook, 2012), as listed in Appendix G. To determine positional leadership in college organizations, the study asked students “Since starting college, how often have you held a leadership position in a college organization(s)? (ex. Officer in a club organization, captain of athletic team, first chair in musical group, section editor of newspaper chairperson of committee)?” Response categories were 0=Never, 1=Once, 2=Sometimes, 3=Many times, 4=Much of the time (MSL, 2011, p. 6). Community service was determined by students’ responses to: In an average month, do you engage in any community service? Responses were 1=Yes or 2=No (MSL, 2011, p. 3). Variables are listed in Appendix H.

**Outcome variable.** The outcome variable in this study was the student’s capacity for socially responsible leadership. The socially responsible leadership scale (SRLS) was first introduced by Tracy Tyree (1998) as part of her doctoral work at the University of
Maryland under Susan Komives. The instrument’s validity and reliability have been tested in several studies and produce consistently reliable and valid results (Dugan & Komives, 2010). Initially a 103-item Likert-type scale, the SRLS was subsequently decreased for the 2009 study to 71 items through standard data reduction methods, reported Dugan and Komives, and reliability and validity remained high. The authors noted that “reliability for the adapted SRLS ranged from a low of .75 on controversy with civility and citizenship to a high of .82 on commitment” and that “consistent reliability levels have been obtained in subsequent research with the adapted instrument” (Dugan & Komives, 2010, p. 531). The MSL 2012 Codebook (MSL, 2011) indicated continued reduction to 38 items in the number of questions needed to measure SRLS while reliability remained high. In addition, a question to determine the construct of change included in the 2009 study was not included in the 2012 study. For the 2012 dataset, the construct of change was omitted as a set of separate questions, as change is measured in MSL 2012 by totaling answers to the first seven constructs to arrive at an omnibus measure. This is considered to be the combined result of all other capacities enacted together and a more accurate measure of SRL (N. Turman, personal communication, September 10, 2015). The variables comprising the socially responsible leadership scale are listed in Appendix I.

From the 2009 SRLS, only those answers were used for questions also posed in the 2012 dataset to calculate a mean SRL score for each student derived from responses to the same questions. Appendix I lists the variables used from the 2009 and 2012 data sets to calculate the mean SRL omnibus score for each student, with response categories of 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree.
Procedures for Data Collection and Analysis

Once the data were acquired, the researcher compared the two datasets to ensure the identical names were applied to each variable under study and to confirm that the same scale and range were used. For example, the Likert-style scale in the 2009 socio-cultural conversations with peers subscale used 1=Never, 2=Sometimes, 3=Often, 4=Very Often, while in the 2012 study this subscale used 0=Never, 1=Sometimes, 2=Often, 3=Very Often. However, the questions were worded exactly the same in both studies. The 2009 naming protocol was used as the benchmark, with only three variables needing to be recoded in the 2012 data set. Appendix J lists any discrepancies in the variables under study in both datasets and describes the steps taken to ensure they measured the same variable and naming protocol. The datasets were then combined to form one dataset.

The Statistical Package for the Social Sciences (SPSS) version 22 was used to conduct the data analysis. A set of descriptive statistics were run to determine the frequency of demographic variables outlined in Appendix E.

Hierarchical multiple regression was determined to be the best statistical analysis for several reasons. Regression is most appropriate when using continuous or scaled variables, as this study’s outcome variable was when examining students’ SRL scores, and the predictor variables were when examining socio-cultural conversations with peers and positional leadership roles in college. The goal of multiple regression is to explain the variance of or change in the outcome variable by the predictor variables (Meyers, Gamst, & Guarino, 2013). In addition, Urdan (2010) notes that multiple regression allows the researcher to examine the individual and combined effects of more than one
independent or predictor variable on one dependent or outcome variable. This effect includes looking at the relative strength of each predictor variable on the outcome variable, while controlling for other covariates (Urdan, 2010). Moreover, multiple regression is used in the social and behavioral sciences as it uses the relationship among the independent variables to predict or estimate the outcome of the dependent variable. Urdan urges caution, however, noting that multiple regression demonstrates correlation, not causation.

Meyers et al. (2013) points out that examining multiple predictor or explanatory variables provide a more accurate portrayal of a setting or situation, rather than examining only one variable in isolation. Multiple regression enables researchers to examine the dynamic that exists among and between variables. It provides researchers with a method to explain a relationship and interaction among variables, as well as predict the influence of one variable on another (Meyers et al., 2013). The authors note that the predictor variables and outcome variable need to first be evaluated for statistical significance. That is, when taken together, can the predictor variables explain a statistically significant variance in the outcome variable? The following aligns the research questions with the statistical analyses performed to derive answers reported in Chapter 4.

Research question 1 was: After accounting for demographic variables and precollegiate experiences, do socio cultural conversations with peers, leadership positions in student organizations, and/or community service significantly predict socially responsible leadership? Descriptive statistics were run against the outcome variable of socially responsible leadership to test the overall significance for regression. It included
demographic variables as covariates and the predictor variables of precollegiate leadership training. Subsequently, hierarchical multiple regression was conducted, entering variables for socio-cultural conversations with peers, leadership positions in student organizations, and community service in the second block. $F$ statistics and $p$ values were examined for statistical significance. Adjusted $R^2$ values were examined to determine the amount of variance explained by the covariates and predictor variables.

Research question 2 was multi-part and asked: After accounting for demographic variables and precollegiate experiences: (a) do socio-cultural conversations with peers significantly contribute to the prediction of socially responsible leadership? (b) does holding leadership positions in college student organizations significantly contribute to the prediction of socially responsible leadership? and (c) does engaging in community service significantly contribute to the prediction of socially responsible leadership? Using hierarchical multiple regression, $t$ and $p$ values were examined to test for statistical significance of the three predictor variables in predicting socially responsible leadership.

Research question 3 asked: After accounting for demographic variables and precollegiate experiences, how much weight do socio cultural conversations with peers, leadership positions in student organizations, or community service carry in the prediction of socially responsible leadership? From the hierarchical multiple regression conducted to address research question 2, beta weights were examined to determine the relative importance of the three forms of experiential learning in predicting socially responsible leadership.
Chapter Summary

This chapter outlined the use of the MSL 2009 and MSL 2012 data sets, which were combined to form one data set used to answer the research questions under consideration regarding the role of socio-cultural conversations with peers, positional leadership roles in student clubs and organizations, and community service in predicting socially responsible leadership skills in community college students. It outlined the rationale for undertaking a quantitative study, noting that the MSL 2009 and MSL 2012 theoretical frameworks are based on the social change model to measure college students’ capacity for socially responsible leadership. It also discussed using SPSS to conduct hierarchical multiple regression to determine if socio-cultural conversations with peers, positional leadership roles in college organizations and/or community service significantly predict higher levels of SRL in community college students.
Chapter 4: Results

Research Questions

The focus of this quantitative study was to determine the value of college experiences in the form of socio-cultural conversations with peers, holding a leadership position in a student organization, and/or engaging in community service when predicting a student’s capacity for socially responsible leadership. The specific questions were:

1. After accounting for demographic variables and precollegiate experiences, do socio-cultural conversations with peers, leadership positions in student organizations, and/or community service significantly predict higher levels of socially responsible leadership in community college students?

2. After accounting for demographic variables and precollegiate experiences: (a) do socio-cultural conversations with peers significantly contribute to the prediction of socially responsible leadership? (b) does holding leadership positions in college student organizations significantly contribute to the prediction of socially responsible leadership? and (c) does engaging in community service significantly contribute to the prediction of socially responsible leadership?

3. After accounting for demographic variables and precollegiate experiences, how much weight do socio-cultural conversations with peers, leadership positions in student organizations, or community service carry in the prediction of socially responsible leadership?

Data from the Multi-Institutional Study of Leadership (MSL) collected in 2009 and 2012 were used after receiving permission from its principal investigator at Loyola
University Chicago. The data were combined into one dataset. As needed, the researcher recoded variables in the combined dataset to ensure they used the same response scales. For example, when answering the question “How often have you engaged in the following activities during your college experience?” the Likert-type scale in 2009 used 1=Never, 2=Once, 3=Sometimes, 4=Often (MSL, 2009, p. 6). In 2012 the responses for this question were 0=Never, 1=Once, 2=Sometimes, 3=Often (MSL, 2011, p. 5). The 2009 naming protocol was used as the benchmark, with only three variables needing to be recoded in the 2012 data set, as displayed in Appendix J. In addition, students who indicated more than one race were coded as multiracial. This chapter reports the results of descriptive and inferential statistics using these data.

Data Analysis and Findings

All data were self-reported by students. The total sample size was 2,399 students who completed surveys. The valid number of cases ranged from 1,604 to 2,331. When running the correlation coefficients, pairwise deletion was used. This method includes all cases that contained relevant data for each variable under study (Vogt & Johnson, 2011).

The demographic information of the study’s respondents is presented in Tables 4.1 to 4.3. As shown in Table 4.1, 65.2% of respondents were full-time students, with 75% indicating they were in their freshmen or sophomore years of college.
Table 4.1

Summary of Respondents’ Enrollment Status

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Valid n</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin college at current institution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1,721</td>
<td>73.8</td>
</tr>
<tr>
<td>No</td>
<td>610</td>
<td>26.2</td>
</tr>
<tr>
<td>Current enrollment status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>1,298</td>
<td>65.2</td>
</tr>
<tr>
<td>Part-time</td>
<td>693</td>
<td>34.8</td>
</tr>
<tr>
<td>Current class level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>506</td>
<td>31.5</td>
</tr>
<tr>
<td>Sophomore</td>
<td>697</td>
<td>43.5</td>
</tr>
<tr>
<td>Junior</td>
<td>167</td>
<td>10.4</td>
</tr>
<tr>
<td>Senior (4th year and beyond)</td>
<td>90</td>
<td>5.6</td>
</tr>
<tr>
<td>Unclassified</td>
<td>144</td>
<td>9</td>
</tr>
</tbody>
</table>

As shown in Table 4.2, 52.4% of the respondents were 17 to 24 years old and 42.5% were 25 to 49 years old. The age of respondents ranged from 17 to 66 years old ($M = 28$, $SD = 10.0$). Of the respondents, 54.7% were female and 45.3% were male. The majority, 88.2%, reported being heterosexual with 6.2% preferring not to answer the question. Of the respondents, 58.7% reported being White, while 16.2% reported being
African American or Black, 7.9% were multiracial, 7.3% were Asian American/Asian, and 7% were Hispanic.

As shown in Table 4.3, 72.8% reported grade point averages (GPA) of 3.00 to 4.00 out of a possible 4.0. In terms of parental education, 32.8% of students reported their parents had a high school diploma/GED or less, 31.2% had some college or an associate’s degree, 17.4% had a bachelor’s degree, and 15.5% had a graduate degree. Slightly more than one-third of students reported their parental or own income at less than $25,000, 40.6% reported their parental or own income between $25,000 and $99,999, and 8.7% reported their parental or own income at greater than $100,000. There was considerable missing data with one-quarter of the sample reporting they did not know or preferred not to report their parental or own income.
Table 4.2

**Summary of Respondents’ Age, Gender, and Sexual Orientation**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Valid n</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-24</td>
<td>964</td>
<td>52.4</td>
</tr>
<tr>
<td>25-29</td>
<td>258</td>
<td>14.0</td>
</tr>
<tr>
<td>30-39</td>
<td>320</td>
<td>17.4</td>
</tr>
<tr>
<td>40-49</td>
<td>204</td>
<td>11.1</td>
</tr>
<tr>
<td>50-64</td>
<td>92</td>
<td>5.0</td>
</tr>
<tr>
<td>65 and over</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Unknown</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1010</td>
<td>54.7</td>
</tr>
<tr>
<td>Male</td>
<td>836</td>
<td>45.3</td>
</tr>
<tr>
<td>Transgender</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Sexual orientation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>1624</td>
<td>88.2</td>
</tr>
<tr>
<td>Bisexual</td>
<td>43</td>
<td>2.3</td>
</tr>
<tr>
<td>Gay/Lesbian</td>
<td>43</td>
<td>2.3</td>
</tr>
<tr>
<td>Questioning</td>
<td>16</td>
<td>0.9</td>
</tr>
<tr>
<td>Rather not say</td>
<td>115</td>
<td>6.2</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>1081</td>
<td>58.7</td>
</tr>
<tr>
<td>African American/Black</td>
<td>299</td>
<td>16.2</td>
</tr>
<tr>
<td>Multiracial</td>
<td>145</td>
<td>7.9</td>
</tr>
<tr>
<td>Asian American/Asian</td>
<td>134</td>
<td>7.3</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>129</td>
<td>7.0</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>21</td>
<td>1.1</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>5</td>
<td>0.3</td>
</tr>
<tr>
<td>Race/Ethnicity not included above</td>
<td>29</td>
<td>1.6</td>
</tr>
</tbody>
</table>
Table 4.3

Summary of Respondents’ GPA, Parental Education, and Parental or Self Income

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Valid n</th>
<th>Valid %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimate of grades so far in college</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.50 – 4.00</td>
<td>643</td>
<td>34.9</td>
</tr>
<tr>
<td>3.00 – 3.49</td>
<td>697</td>
<td>37.9</td>
</tr>
<tr>
<td>2.50 – 2.99</td>
<td>356</td>
<td>19.3</td>
</tr>
<tr>
<td>2.00 – 2.49</td>
<td>101</td>
<td>5.5</td>
</tr>
<tr>
<td>1.99 or less</td>
<td>26</td>
<td>1.4</td>
</tr>
<tr>
<td>No college GPA</td>
<td>18</td>
<td>1.0</td>
</tr>
<tr>
<td>Parental education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than a high school diploma or less than a GED</td>
<td>130</td>
<td>7.1</td>
</tr>
<tr>
<td>High school diploma or a GED</td>
<td>472</td>
<td>25.7</td>
</tr>
<tr>
<td>Some college</td>
<td>380</td>
<td>20.7</td>
</tr>
<tr>
<td>Associate degree</td>
<td>193</td>
<td>10.5</td>
</tr>
<tr>
<td>Bachelor degree</td>
<td>321</td>
<td>17.4</td>
</tr>
<tr>
<td>Master degree</td>
<td>205</td>
<td>11.1</td>
</tr>
<tr>
<td>Doctorate or professional degree</td>
<td>81</td>
<td>4.4</td>
</tr>
<tr>
<td>Don’t’ know</td>
<td>58</td>
<td>3.2</td>
</tr>
<tr>
<td>Parental or own income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $25,000</td>
<td>250</td>
<td>36.4</td>
</tr>
<tr>
<td>$25,000 - $54,999</td>
<td>182</td>
<td>23.0</td>
</tr>
<tr>
<td>$55,000 - $99,999</td>
<td>125</td>
<td>17.6</td>
</tr>
<tr>
<td>$100,000 - $199,999</td>
<td>27</td>
<td>7.1</td>
</tr>
<tr>
<td>$200,000 and over</td>
<td>29</td>
<td>1.6</td>
</tr>
<tr>
<td>Don’t know</td>
<td>325</td>
<td>17.7</td>
</tr>
<tr>
<td>Rather not say</td>
<td>148</td>
<td>8.1</td>
</tr>
</tbody>
</table>

Table 4.4 compares selected demographic characteristics of the respondents with national data available on community college students for the combined years of 2009 and 2012.
Table 4.4

Summary of Respondents’ Demographic Data Compared to Students Enrolled Nationally in Community Colleges in 2009 and 2012

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Valid n</th>
<th>MSL 2009/12 %</th>
<th>National %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current enrollment status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>1,298</td>
<td>65.2</td>
<td>42.4</td>
</tr>
<tr>
<td>Part-time</td>
<td>693</td>
<td>34.8</td>
<td>57.6</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-24</td>
<td>964</td>
<td>52.4</td>
<td>59.3</td>
</tr>
<tr>
<td>25-29</td>
<td>258</td>
<td>14.0</td>
<td>13.5</td>
</tr>
<tr>
<td>30-39</td>
<td>320</td>
<td>17.4</td>
<td>14.0</td>
</tr>
<tr>
<td>40-49</td>
<td>204</td>
<td>11.1</td>
<td>7.9</td>
</tr>
<tr>
<td>50-65</td>
<td>92</td>
<td>5.0</td>
<td>4.3</td>
</tr>
<tr>
<td>65 and over</td>
<td>1</td>
<td>0.1</td>
<td>0.6</td>
</tr>
<tr>
<td>Age Unknown</td>
<td>0</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1,010</td>
<td>54.7</td>
<td>57.7</td>
</tr>
<tr>
<td>Male</td>
<td>836</td>
<td>45.3</td>
<td>42.3</td>
</tr>
<tr>
<td>Transgender</td>
<td>0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Broad racial group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>1,081</td>
<td>58.7</td>
<td>53.6</td>
</tr>
<tr>
<td>African American/Black</td>
<td>299</td>
<td>16.2</td>
<td>14.7</td>
</tr>
<tr>
<td>Multiracial</td>
<td>145</td>
<td>7.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Asian American/Asian</td>
<td>134</td>
<td>7.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>129</td>
<td>7.0</td>
<td>17.5</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>21</td>
<td>1.1</td>
<td>N/A</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>5</td>
<td>0.3</td>
<td>1.1</td>
</tr>
<tr>
<td>Race/Ethnicity not above</td>
<td>29</td>
<td>1.6</td>
<td>6.2</td>
</tr>
</tbody>
</table>

A mean score was first computed for students’ socially responsible leadership (SRL) using the variables listed in Appendix I. SRL was screened for its distribution. The skew statistic was -.89, within the acceptable limits of a normal distribution. The kurtosis statistic was 5, indicating a leptokurtic distribution. This indicated there was not a normal distribution and a greater percentage of scores were closer to the mean, with fewer in the higher or lower portions of the distribution (Urdan, 2010). However, with the skew statistic so small, it was determined the regression could proceed (S. Townsend, personal communication, March 21, 2016).

A bivariate correlation was then conducted to examine the relationships between the predictor variables identified in Chapter 3 and the outcome variable of SRL. Specifically, it was determined if there was a statistically significant correlation between SRL and the predictor variables of gender, sexual orientation, race, college GPA, parental education, parental or self income, and participation in leadership training in high school. This was done because only those predictor variables that were significantly correlated with the outcome variable would be included in the regression analysis.

Table 4.5 lists the input variables and the corresponding Pearson correlations. Of the predictor variables under study GPA, sexual orientation, and participating in high school leadership training were found to be statistically significant at the .05 level. Therefore, these variables were retained as predictors. The variables of gender, race, parental education, and parental or self income were not significantly correlated with socially responsible leadership. Therefore, these variables were omitted from the regression analysis.
Table 4.5

*Correlations of Potential Predictor Variables with Socially Responsible Leadership*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Correlation</th>
<th>p value</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.025</td>
<td>.291</td>
<td>1,847</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td>-.097</td>
<td>.000</td>
<td>1,845</td>
</tr>
<tr>
<td>Race</td>
<td>-.012</td>
<td>.598</td>
<td>1,843</td>
</tr>
<tr>
<td>GPA</td>
<td>-.103</td>
<td>.000</td>
<td>1,841</td>
</tr>
<tr>
<td>Parental Education</td>
<td>.010</td>
<td>.669</td>
<td>1,841</td>
</tr>
<tr>
<td>Parental Income</td>
<td>-.044</td>
<td>.061</td>
<td>1,840</td>
</tr>
<tr>
<td>Leadership Training in High School</td>
<td>.256</td>
<td>.000</td>
<td>2,182</td>
</tr>
</tbody>
</table>

Descriptive statistics for the predictor variables are displayed in Table 4.6. The mean for SRL was 4.06, with a standard deviation of .51 and an n of 1,826.
Table 4.6

*Predictor Variables of Socially Responsible Leadership Descriptive Statistics*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current SRL Capacity</td>
<td>4.06</td>
<td>.51</td>
<td>1,826</td>
</tr>
<tr>
<td>GPA</td>
<td>2.04</td>
<td>.51</td>
<td>1,826</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td>1.33</td>
<td></td>
<td>1,826</td>
</tr>
<tr>
<td>Leadership Training in High school</td>
<td>2.06</td>
<td>.98</td>
<td>1,826</td>
</tr>
<tr>
<td>Socio-cultural Conversations with Peers</td>
<td>2.68</td>
<td>.98</td>
<td>1,826</td>
</tr>
<tr>
<td>Positional Leadership in Student Organizations</td>
<td>1.68</td>
<td>.98</td>
<td>1,826</td>
</tr>
<tr>
<td>Community Service While in College</td>
<td>1.69</td>
<td>.46</td>
<td>1,826</td>
</tr>
</tbody>
</table>

Upon review of the demographic information, the validity of the pretest of socially responsible leadership was called into question. Vogt and Johnson (2011) note that, when measuring psychometrics, validity “is the accuracy of inferences, interpretations, or actions that are made on the basis of test scores” (p. 415). Of the sample under study, 60% were older than 22 years of age. That is, 40% were considered to be college students ages 17 to 21, who needed to recall experiences from one to four years prior to completing the MSL survey, while students older than this group needed to recall experiences at least four or more years prior. As noted earlier the standard deviation was 10 years. Given that a large percentage of the students would be recalling
experiences from far in their past, it was determined there could be a great deal of
measurement error and the SRL pretest was, therefore, not used as a predictor variable.

To answer the research questions, a two-stage hierarchical multiple regression
analysis was conducted to predict the level of socially responsible leadership as reported
by undergraduate students. In step one, GPA, sexual orientation, and participation in
leadership training in high school were entered. In step two, socio-cultural conversations,
positional leadership, and community service were entered.

Results of the hierarchical regression analysis are shown in Table 4.7. In the first
step, the demographic control variables were statistically significant ($F (3, 1822) = 59.95,$
$p = .000$, $\text{adjusted } R^2 = .09$). The researcher referred to $\text{adjusted } R^2$, rather than $R^2$, as
$\text{adjusted } R^2$ takes into account the effect of the sample size and number of variables in the
regression model. Huck (2012) noted that $R^2$ can become inflated by adding more
variables that may or may not be correlated. The $\text{adjusted } R^2$ provides a better goodness
of fit statistic in that any predictor variable correlated with the outcome variable will
increase the $\text{adjusted } R^2$ and any predictor variable not correlated with the outcome
variable will decrease the $\text{adjusted } R^2$. As indicated in Table 4.7 by the $t$-values and their
corresponding significance levels, all three demographic control variables significantly
contributed to the model.
Table 4.7

*Hierarchical Regression Analyses Predicting Socially Responsible Leadership*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>β</th>
<th>t</th>
<th>Adjusted R²</th>
<th>F</th>
<th>R² Change</th>
<th>F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GPA</td>
<td>-.10*</td>
<td>-4.44*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Precollegiate Leadership Training</td>
<td>.26*</td>
<td>11.81*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td>-.09*</td>
<td>-4.04*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>.202</td>
<td>77.84*</td>
<td>.114</td>
<td>87.23*</td>
<td>87.23*</td>
<td></td>
</tr>
<tr>
<td>Socio-cultural Conversations</td>
<td>.33*</td>
<td>14.76*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positional Leadership</td>
<td>.00</td>
<td>.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Service</td>
<td>-.10*</td>
<td>-4.42*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* The scale for community service was 1=Yes, 2=No when respondents were asked if they engaged in any community service in an average month. The relationship, at first, appears to be negatively correlated, as those who engage in community service have the lower number on this question.

*p* <.05.

In step two, scores for socio-cultural conversations with peers, holding a positional leadership role in a student organization, and community service were entered. In this step, the model increased substantially in its predictive power (*F* (3, 1819) = 87.23, *p* = .000, *adjusted R²* = .20). In assessing the *adjusted R²* for the final model of .20, explaining a small, moderate, or large effect size depends on the behavior being measured. Meyers et al. (2013) note that context is important when interpreting effect
size as 10% may explain a considerable effect if complex human behavior is studied.
The researchers write “. . . and so the magnitude of the effect must be considered with
respect to the theoretical and empirical milieu within which the research was originally
framed” (Meyers et al., 2013, p. 347). In the case of a student’s capacity for socially
responsible leadership, it is reasonable to interpret an adjusted $R^2$ of .20 as a medium
effect size.

As indicated in Table 4.7 by the $t$-values and their corresponding significance
levels, both socio-cultural conversations and community service significantly contributed
to the model, but positional leadership did not. The greatest weight in the prediction
came from socio-cultural conversations ($\beta = .33$).

**Research questions and results.** The first research question was: After
accounting for demographic variables and precollegiate experiences, do socio-cultural
conversations with peers, leadership positions in student organizations, and/or
community service significantly predict higher levels of socially responsible leadership in
community college students? Examining the $F$ statistic and its corresponding $p$-value in
Table 4.7 indicates socio-cultural conversations with peers, positional leadership roles in
student organizations, and/or community service were statistically significant predictors
of students’ socially responsible leadership capacity. The null hypothesis was rejected.

The second research question was: After accounting for demographic variables
and precollegiate experiences: (a) do socio-cultural conversations with peers significantly
contribute to the prediction of socially responsible leadership? (b) does holding
leadership positions in college student organizations significantly contribute to the
prediction of socially responsible leadership? and (c) does engaging in community
service significantly contribute to the prediction of socially responsible leadership? To address these questions, the $t$ values and corresponding $p$ values of the individual predictor variables were examined. Table 4.7 indicates that, after accounting for GPA, sexual orientation, and precollegiate leadership, socio-cultural conversations with peers and community service each significantly contributed to the prediction of student’s SRL capacity. The data indicated that holding positional leadership in student clubs and organization was not a statistically significant predictor of SRL capacity. The null hypothesis was rejected for socio-cultural conversations and community service. The null hypothesis was not rejected for positional leadership.

The third research question was: After accounting for demographic variables and precollegiate experiences, how much weight do socio-cultural conversations with peers, leadership positions in student organizations, or community service carry in the prediction of socially responsible leadership? To address this question, the beta weights were examined in Table 4.7, which shows the weight of each predictor variable. Beta values are derived from standardized coefficient calculations (Vogt & Johnson, 2011) and range from zero to one. They are absolute values and the closer the beta values are to one, the more weight the predictor variable carries in the prediction of the outcome variable. Socio-cultural conversations with peers carried the most weight and was followed by precollegiate leadership training. GPA, sexual orientation, and community service were statistically significant, but carried much lower weight in the prediction.

**Summary of Results**

The data set was used to answer this study’s research questions enumerated at the beginning of this chapter. For the first research question, the null hypothesis was
rejected, as hierarchical regression indicated that, after accounting for GPA, sexual orientation, and precollegiate leadership training, socio-cultural conversations with peers, positional leadership roles, and/or community service predicted statistically significantly higher levels of socially responsible leadership in community college students. An analysis of the adjusted $R^2$ in the regression summaries indicated that 9% of the variance in students’ socially responsible leadership scores could be predicted by their GPA, sexual orientation, and attending leadership training in high school. Moreover, after accounting for these predictor variables, an additional 20% of the variance in the prediction of students’ socially responsible leadership capacity could be attributed to students participating in socio-cultural conversations with peers, positional leadership roles, and/or community service.

For the second research question, the null hypothesis was rejected for the roles of socio-cultural conversations and community service. The hierarchical regression demonstrated that, after accounting for control measures and attending leadership training in high school, only socio-cultural conversations with peers and community service each significantly contributed to the prediction of socially responsible leadership in community college students in the study. Leadership positions in student organizations was not a statistically significant predictor of socially responsible leadership, according to the regression analysis.

For the third research question, the regression model demonstrated that socio-cultural conversations with peers carried the greatest weight in the prediction of socially responsible leadership, followed by leadership training in high school, and community service.
According to this regression model, socio-cultural conversations with peers is a statistically significant predictor of community college students’ socially responsible leadership capacity. This experiential opportunity holds the greatest relative importance when compared to community service, which was also found to be predictive of students’ SRL capacity. Implications of these findings, limitations of this study, and directions for future research are discussed in Chapter 5.
Chapter 5: Discussion

Introduction

This study concentrated on the predictive value of selected college experiences on community college students’ socially responsible leadership capacity. This form of leadership is recognized as that needed to help 21st century citizens navigate the breadth and depth of socioeconomic and geopolitical change that is taking place across the world (Astin & Astin, 2000; HERI, 1996). It is the form of leadership development most widely taught in United States’ colleges and universities today (Kezar et al., 2006).

A review of the literature revealed that a considerable amount of research on college student leadership exists, but it has focused largely on students who reside on 4-year college and university campuses and almost entirely excludes community college students. However, this sector of higher education enrolls 45% of the United States’ undergraduate students (AACC, 2016). These students are more diverse in age, race, ethnicity, academic preparation, and socioeconomic background than college students heretofore studied (Pascarella & Terenzini, 2005). In addition, the diversity of college students is expected to increase (Bueschel, 2009). This study attempted to close the gap between what is known about college student leadership development and its application to community college students. Understanding the influences on and potential of these students is urgent and important as these are the very people embedded in our communities who may be poised and equipped to address local and regional challenges.

This quantitative study examined the predictive value of selected demographic variables, precollegiate and current college experiences on community college students’ capacity for socially responsible leadership. Socially responsible leadership was the
outcome variable and the predictor variables were socio-cultural conversations with peers, positional leadership roles in student clubs and organizations, and community service. Community college student responses collected through the international Multi-Institutional Study of Leadership conducted in 2009 and 2012 were analyzed to answer the following research questions:

1. After accounting for demographic variables and precollegiate experiences, do socio-cultural conversations with peers, leadership positions in student organizations, and/or community service significantly predict higher levels of socially responsible leadership in community college students?

2. After accounting for demographic variables and precollegiate experiences: (a) do socio-cultural conversations with peers significantly contribute to the prediction of socially responsible leadership? (b) does holding leadership positions in college student organizations significantly contribute to the prediction of socially responsible leadership? and (c) does engaging in community service significantly contribute to the prediction of socially responsible leadership?

3. After accounting for demographic variables and precollegiate experiences, how much weight do socio-cultural conversations with peers, leadership positions in student organizations, or community service carry in the prediction of socially responsible leadership?

Upon further review, it was determined that precollegiate experiences could be an amalgam of 11 different experiences that included participating in band, student government, interscholastic athletics, and different clubs and organizations in high
school. To study the precollegiate experience directly related to potential leadership development, the researcher narrowed precollegiate experiences to that of participating in leadership training while in high school.

All research questions were answered by the results of a hierarchical multiple linear regression. Research question 1 was answered with the overall hierarchical model. Step 1 examined the variance explained by the significant demographic variables and precollegiate leadership, which was 9%. Step 2 examined the variance explained by socio-cultural conversations with peers, community service, and positional leadership in college clubs and organizations. This second step explained 20% of the variance and was significant at the .05 level. The null hypothesis was rejected.

Research question 2 was addressed by examining the $t$ values of the individual predictors. The null hypothesis was rejected for socio-cultural conversations with peers and community service, as they demonstrated significance. The null hypothesis was not rejected for positional leadership roles in student organizations as it did not demonstrate significance.

Research question 3 was answered through an examination of beta weights produced through the regression analysis. Socio-cultural conversations with peers demonstrated more than three times the beta weight at .33 than community service did at .10. Precollegiate leadership training had a beta weight of .26, while GPA and sexual orientation were .10 and .09, respectively.

The major finding from this research is that socio-cultural conversations with students’ peers hold the highest value when predicting community college students’ capacity for socially responsible leadership (SRL). Students discussing political,
religious, and lifestyle preferences with others who are different from themselves leads to an expanded capacity for leadership that is considerate of all involved. Providing time and facilities for students to meet and discuss formally or informally their values and differences provides the greatest opportunity for students to develop leadership skills needed for the 21st century. These results are antithetical to calls for more segregation of ethnicity, perspectives, and values on college campuses to protect students from views they may find offensive and in society at large to allegedly increase safety and security.

Community service also emerged as a significant predictor of SRL. As policy makers consider the value of various experiential opportunities for college students, this finding underscores that community service is not only important for the immediate outcome it produces, but also for the socially responsible leadership capacity it predicts in today’s college students.

A student’s GPA was a positive predictor of SRL. This correlation suggests that students who are doing well may also be more engaged in activities on campus through which they have the opportunity to interact with people different from themselves. Similarly, those who do not have robust GPAs may be juggling multiple responsibilities that take time away from classroom or study opportunities and interacting with other students in general, let alone students different from themselves in particular.

Sexual orientation was a negative, but significant, predictor of SRL. Given how the data were coded, this indicates that identifying as heterosexual was less predictive of socially responsible leadership than identifying as lesbian, gay, bisexual, and transgender (LGBT). Community colleges may be the sectors of higher education where the intersectionality of race, class, ethnicity, and sexual orientation are most pronounced in
which students possess multiple identities. An implication from this finding is that community colleges must improve their visible appreciation and support for LGBT students and those who may be questioning their gender identity beyond the binary choices of male and female. These students possess a capacity for SRL that should be recognized and employed in their communities.

The researcher has been an employee of one of the community colleges in the State University of New York (SUNY) system for 25 years. She is the beneficiary of a community college education, understanding the access these two-year institutions provide to students with a range of ages, abilities, interests, educational goals, and multicultural backgrounds. It is through this lens that she examines the findings and provides recommendations for future research, policy, and practice as they relate to community colleges that have the potential to increase the SRL capacity of their two-year college students.

**Implications of Findings**

A review of the demographic data of the respondents in this study indicated a diversity of ages, races, and ethnicities. This is expected, as Pascarella and Terenzini (2005) noted community colleges have historically served a more diverse population than 4-year colleges and universities.

With the exception of full-time and part-time attendance status of students, the data set reflected the national population in attendance at community colleges in 2009 and 2012. An unexpected number of respondents at 65.2% were full-time and 34.8% were part-time in the dataset, which compared to 42.4% and 57.6%, respectively, attending community colleges in the U.S. at the time (National Center for Education
Statistics [NCES], 2016). Table 4.4 illustrates the comparison of the MSL 2009 and 2012 data sets to selected demographic statistics collected on the population of students in attendance at community colleges in 2009 and 2012. The respondents’ demographic data reflect those nationally of students in attendance at the two-year colleges in 2009 and 2012.

At first review, it was unexpected that of the 1,846 respondents answering the question about gender that no one reported being transgender. In addition, while 88% reported being heterosexual, only 2.3% reported being gay/lesbian, bisexual, or transgender. This is compared to the national average of 3.4% of all adults and 6.4% of 18 to 29 year olds in 2012 who reported being gay/lesbian, bisexual, or transgender (Gates & Newsport, 2012). However, just over 6% indicated they would rather not report their sexual orientation.

Self-reported GPA indicated that 73% of the respondents believed they were performing at a 3.00 out of a possible 4.00 points, with about 25% performing in the 2.00 up to the 2.99 range. Examining the 2009 dataset only, Gleason (2012) questions if students reported inflated GPA values for social desirability, which is a consideration. However, high GPA could indicate that students who self-selected to complete the survey were also those who were more engaged in college work, study and co-curricular activities, and fundamentally more attentive to the world around them, providing the impetus to complete the optional survey.

It was anticipated that 25% of the study’s respondents reported the highest educational level attained by one or more of their parents was a high school diploma or GED and that 7% reported less than a high school diploma or less than a GED. It was
also expected that 21% of the participants reported one or more parents attained some college, but that only 11% and 17%, respectively, completed an associate or bachelor’s degree. As Pascarella and Terenzini (2005) noted, community college students are frequently the first in their family to attend college, as these colleges provide access to higher education opportunities that have historically not been available to marginalized groups.

Parents’ or self-reported income displays the range of age groups responding to the survey: students recently out of high school, young adults, and older adults supporting families. This was expected. For example, just over 11% reported annual income of less than $11,499, 27% reported annual income between $12,500 and $39,900, and 21% reported annual income of $40,000 to $74,999.

**Input variable: GPA.** Implications of this study point to the need for higher education professionals to provide support to community college students who may struggle with issues of academic achievement, but who may have the capacity to be socially responsible leaders in their communities. The diverse students found at community colleges are balancing multiple obligations of college, work, and family. With these demands competing for study time a student’s GPA may be negatively impacted. However, it is these very experiences that increase these students’ capacity for SRL in that they have historically been the racial, ethnic, and cultural groups marginalized through hierarchical leadership paradigms and traditional structures of race, class, and gender (Barone, 2009). Community colleges should examine the academic and student support services for their students to ensure these services are available at times and in formats that are accessible and convenient to their clientele so they may benefit
from them and strengthen their GPA. In addition, the two-year colleges need to ensure that information about these services is distributed and presented to students in ways that are effective and meaningful. For example, tutoring assistance for an English course may be more effectively communicated to a student by a one-to-one conversation between faculty member and student, rather than a generic campus-wide email on academic support services.

As a higher GPA is associated with a higher capacity for SRL, colleges and universities should leverage this correlation, ensuring students are assigned peer tutors different from themselves to help facilitate socio-cultural conversations among them. With the foundation of the students’ interaction based on academic support and assistance contributing to student success, the students will also have the opportunity to informally discuss social, recreational, and cultural topics leading to an increased capacity for SRL.

In addition, the positive correlation between GPA and SRL scores serves to remind academic, community, and organizational leaders that GPA is only one measure of an individual. Those with adequate, but perhaps less robust GPAs, may contribute socially responsible leadership in the areas of community building and creating social change by providing insight and experience not heretofore recognized or tapped. This ability should be considered when non-profit and/or community-based organizations are considering candidates for employment, grants, or funding designed to improve the condition of all concerned in society through social change. Higher education professionals should facilitate discussions with students who demonstrate the interest and ability in working with community-based organizations (CBOs), but whose GPAs may be more average than exemplary. These discussions should help students develop a facility
with understanding socially responsible leadership, their interest in and commitment to creating social change on behalf of the CBO, and how their own experiences equip them with skills, knowledge, and abilities to be able to do so.

That GPA was positively correlated with SRL was inconsistent with Gleason’s (2012) findings of a positive correlation between GPA and SRL in all sectors of higher education with the exception of community college students. Gleason noted that students who have higher GPAs may also be more likely to engage in experiences and activities that build SRL and may be more adept at applying concepts taught in the classroom to their everyday experiences. He also suggested that, as a more diverse population than typically seen on 4-year college and university campuses and frequently being the first in their family to attend college, community college students may score lower on confidence as it relates to the consciousness of self C in the SCM. That is, students not familiar with the higher education environment may be unsure of what is expected of them and lack confidence in being able to fulfill these new requirements. Gleason suggested that the orientation into the world of higher education may negatively impact community college students who could be overwhelmed by its structure. However, he noted the diversity of student backgrounds could positively affect students’ scores on the Cs related to change, civility, and citizenship, which could account for higher scores on the SRL scale.

**Input variable: sexual orientation.** This study points to work community colleges have before them to assure students that these campuses recognize and welcome a plurality of views related to sexual orientation and gender identity. Given the relatively high percentage reported of heterosexual students, LGBT students may not be accurately
disclosing or are questioning their sexual orientation. This also holds true for gender identity in which only females and males were recorded and no one identified as transgender.

Community colleges must provide education and information to their faculty and staff on sexual orientation and gender identity to create a common language, knowledge, and technical expertise that is understood by all employees around these issues. This is to ensure there is comfort and competence by campus colleagues when facilitating class discussions or referring students to resources available that appropriately addresses these topics. It is only when students feel safe, respected, and understood that they will feel comfortable disclosing their sexual orientation and gender identity.

Those groups historically marginalized, such as the LGBT community, could be expected to demonstrate higher capacities for leadership leading to social change than those who have not been marginalized, such as heterosexuals. Were these community college students validated as potential leaders of social change with the capacity for socially responsible leadership, they could be tapped and recognized as such, unafraid to declare all of their identities and even more available to communities and their challenges.

**Input variable: leadership training in high school.** Community college educators should examine the kind of leadership training that is available during a student’s high school years to understand that which cultivates increased levels of SRL. Given the difference of age, race, and ethnicity of the students in this study when compared to those previously studied, there may be a definition of leadership training not heretofore recognized. It is important to understand how training—when viewed through
diverse lenses—during a student’s teenage years contributes to their capacity for socially responsibly leadership. It is through this understanding that educators and practitioners can then attempt to replicate it in a variety of community based settings.

A singular definition of this variable was not provided to respondents and the survey allowed them to define it individually. With the respondents in this study presenting as older than respondents heretofore studied with the MSL, this study's respondents—of which 46% were between the ages of 25 and 64—may draw on their accumulated experiences and knowledge to define leadership training. Reflecting on their childhood and young adult years, this study's respondents may define leadership training more broadly, recognizing they were taught leadership skills through school, community, religious, or family activities not overtly labeled as leadership building exercises, but accomplishing similar outcomes. That is to say, it may only be after one has accumulated enough personal and professional experiences that one realizes there were SRL lessons embedded in taking care of an ill family member, assisting an elderly neighbor, helping a less fortunate classmate, leading a recycling drive, or fundraising for an animal shelter. That these activities may hold socially responsible leadership building capacity is important as they are accessible and affordable activities available in a variety of community settings.

Moreover, given the racial and ethnic diversity of respondents, the same may hold true of respondents’ definition of leadership training in high school. In other words, leadership training may be examined through respondents’ diverse lenses as that which took place through racial or ethnic affinity group socialization, recreational activities,
participating in cultural traditions, or other important life experiences that may be labeled as leadership development through racial and cultural norms.

**Environment variable: socio-cultural conversations with peers.** Given their predictive value of SRL, policy makers should consider how socio-cultural conversations can take place intentionally and systemically on college campuses. That is, policy makers should identify how these conversations are formalized in a variety of settings, such as across disciplines, courses, experiential learning formats, and extra-curricular activities to ensure students are exposed to views different from their own. In addition, intentionally ensuring there is a plurality of views expressed and facilitating constructive socio-cultural conversations around them in the classroom and through co-curricular activities is a skill development opportunity for faculty and staff that should be considered further. When allocating scarce resources, attention should be paid to furthering socio-cultural conversations given their potential to influence socially responsible leadership.

This recommendation is in stark contrast to the observation that some are making of higher education wherein students must be shielded from viewpoints they find offensive and upsetting (Shulevitz, 2015). However, Shulevitz (2015) asserted in an essay in *The New York Times* that shielding students from opinions and perspectives different from their own dulls their intellectual and emotional development. Enabling and allowing students to only congregate, listen to, and interact with students like themselves or who do not challenge their views leads to “self-infantilization,” the essayist wrote, and does not prepare them for the world outside of the college confines, noting that:
... while keeping college-level discussions “safe” may feel good to the hypersensitive, it’s bad for them and for everyone else. People ought to go to college to sharpen their wits and broaden their field of vision. Shield them from unfamiliar ideas, and they’ll never learn the discipline of seeing the world as other people see it. They’ll be unprepared for the social and intellectual headwinds that will hit them as soon as they step off the campuses whose climates they have so carefully controlled. What will they do when they hear opinions they’ve learned to shrink from? If they want to change the world, how will they learn to persuade people to join them? (Shulevitz, 2015)

Given the continual racial and ethnic diversification of community colleges, the importance of socio-cultural conversations with peers is underscored as it holds potential to bridge difference and build cultural competence among students during their first or only two years of higher education. For example, socio-cultural conversations allow students to learn directly from other students’ experiences through different lenses of race, ethnicity, class, sexual orientation, and gender identity. It is in comparing information about other students’ experiences to their own that students may challenge their own values, develop new insights, and widen their perspectives as they construct new knowledge and beliefs, which then influence their behaviors.

That socio-cultural conversations with peers emerged as statistically significant was expected, as these have been positive predictors of SRL in previous studies (Dugan, 2007; Dugan & Komives, 2010; Gleason, 2012). This experiential opportunity may be particularly well-suited to the community college setting. Pascarella and Terenzini (2005) demonstrated that community college students showed greater awareness and
openness to racial and cultural differences, given their diversity of racial and ethnic
groups and that they are among those who have historically been marginalized. This
diversity is expected to continue. In its annual Fact Sheet AACC (2016) notes that
enrollment in community colleges is currently 49% White, 14% Black, 6% Asian
American/Asian, 22% Latino/Hispanic, and 3% multiracial. When compared to race and
ethnicity demographics in 2009 and 2012, as shown previously in Table 4.4, the largest
shifts are seen in White students, a 5 percentage point decrease, and Latino/Hispanic
students, a 4 percentage point increase. These numbers indicate that community college
demographics continue to evolve, serving more groups previously thought of as ethnic or
racial minorities.

Environment variable: community service. Community colleges need to
increase the attention paid to community service conducted by their students to leverage
the benefits it provides, not the least of which is predicting socially responsible
leadership. Typically enrolling older, more diverse students than traditional 4-year
colleges and universities, community service conducted by community college students,
in all likelihood, spans a wide range of activities that should be explored further. These
activities may include fund drives conducted by neighborhood groups and parent-teacher
organizations in schools. They may include volunteer work provided by the students who
are parents of children involved in youth organizations, such as 4-H, Boy Scouts of
America, Girl Scouts of the USA, or done on behalf of coaching or fundraising for
athletic teams in schools or communities. That community service is a significant
predictor of SRL underscores the importance of tapping into community college students
who are embedded in our communities and may not only understand the challenges faced
by communities, but are equipped with the skills to address them through their education and community service. Moreover, through their community service, these students may have the networks needed to successfully instigate social change. This finding compels community colleges to not only understand the kinds of community service in which their students are engaging, but to also understand how this service is equipping students with skills, knowledge, and abilities related to socially responsible leadership.

In addition, community colleges that provide community service opportunities through student activities and those related to them, such as service-learning or internships in community based organizations, should complement instruction around these experiential opportunities with that of social change and socially responsible leadership. Given that students engaged in these activities may be predisposed to action leading to social change, these students would benefit from understanding their individual development within the social change model and how the activities help them develop the characteristics within the other domains of the SCM: group and community or society.

That community service emerged as a positive predictor of socially responsible leadership is consistent with previous research on college students. It is, however, inconsistent with Gleason’s (2012) work, which found that this form of experiential learning was a positive predictor in all higher education institutions with the exception of those awarding associate degrees. While Gleason’s study used a composite variable that measured the frequency of community service and whether or not it was done as part of a class, an organization, or on the student’s own time, this study used one variable to determine the respondent’s participation in community service.
A consistent definition of community service was not provided to respondents, leaving it open for interpretation. Self-constructed definitions of community service could have ranged from being a one-time participant in a fund raising walk to hundreds of hours contributed as part of a school-based community service program. Yet, even with this as an incomplete and inconsistent definition of community service, this variable continues to emerge as a significant predictor for SRL and should be studied more fully so that appropriate resources of time, attention, and funding are allocated.

Environment variable: positional leadership in student organizations. That there was no significance between these activities with SRL compels community colleges to examine the outcomes around and resources invested in students fulfilling positional leadership roles in college student organizations at these two-year institutions. With college fees, paid by students, devoted to funding clubs and organizations, student services personnel need to examine the learning outcomes achieved from the positional leadership roles of these clubs to demonstrate students are developing skills that equip them to succeed in the 21st century. These skills, as noted by the AAC&U (2012), are multicultural and intercultural competence and civic engagement that are grounded in an understanding of challenges facing local and global communities.

Positional leadership roles appear to be experiences ready-made for students to develop a variety of leadership skills, including those related to socially responsible leadership. Students in these roles are leading groups at community colleges—colleges more diverse than those previously studied—which provide a natural setting for students to interact with students different from themselves. Student service professionals should find activities to ensure socio-cultural conversations with peers take place. Moreover,
training and education should be available to students in positional leadership roles to ensure they are equipped to moderate and facilitate these discussions among peers to ensure events and activities sponsored by the organizations are culturally representative of the student body and furthering the multicultural awareness and competence community colleges need to impart.

The fact that positional leadership roles in student organizations did not result as a statistically significant predictor of SRL was in contrast to work by Dugan (2006b) and Haber and Komives (2009). This could be due to a difference in clubs and organizations on community college campuses when compared to 4-year colleges and universities. Perhaps many of the student organizations on community college campuses are focused on recreational, social, or affinity groups such as a chess club, drama or theater club, or a co-curricular club, such as a veterinary technician student organization. In these instances students are associating with like-minded individuals where the development of leadership skills in general and socially responsible leadership in particular are not central tenets of the position. Moreover, 62% of all full-time community college students work full or part-time to support themselves or their families (AACC, 2016), which most likely precludes them from spending time on campus to engage in activities not directly related to coursework or events for which they are responsible through their leadership position. This underscores the importance of student services personnel including SRL as part of training and orientation for students elected or appointed to positional leadership roles of student organizations and monitoring students’ capacity for SRL as an important learning outcome of the student development experience.

Limitations
The results of this study must be examined with an understanding of its limitations. Due to the need for confidentiality, the names of the community colleges that participated in the MSL 2009 and 2012 studies were not disclosed to the researcher and, as such, it is difficult to ascertain whether the community colleges represented in the dataset are an adequate representation of community colleges nationally. In addition, this was a purposeful sample, where students were invited to participate in the survey and could choose to do so, or not. Data are not available on the differences of students who completed the survey compared to the students who did not. This makes it difficult to identify whether there were any response biases.

In terms of measurement for precollegiate leadership training and community service, the potential exists for wide variations in the quality and/or intensity of each of these that have an undetermined impact affecting the results. As a result, respondents may have used a number of interpretations or definitions, based on their age and life experiences. This would increase the degree of measurement error for those variables.

A possible history effect may also exist because approximately 70% of the sample was collected during the Great Recession in the United States, which was from 2007 to 2009 (Rich, 2013). It is well documented that community college enrollment increases during times of economic stress (AACC, 2015). During 2007 to 2009 community colleges saw an average increase of 5.6%, which contributed to a peak enrollment nationally in 2010. During this time, the unemployment rate rose from 5% as of December 2007 to 10% in October, 2009 (Rich, 2013). It may be that many of the students enrolled in community colleges during the 2009 study year and thereafter were enrolled as a response to major downward shifts in the economy. The researcher
questions if the students enrolled in 2009 were representative of those who usually enroll in community colleges or were characterized by a heightened sense of personal, professional, or economic stress? If so, the researcher questions if this could have caused respondents to over or under represent typical self-reported behaviors, recollections, and values as reported in responses to the MSL2009 and 2012? For example, respondents were asked, to respond 1=Yes, 2=No to an inquiry about whether they engaged in any community service in an average month (MSL, 2011, p. 3). Students returning to school in response to economic stress may define average in a new context if time and financial constraints precluded them from participating in community service that, up until enrolling in college, was part of a daily, weekly, or monthly schedule.

**Recommendations**

The study of college students’ capacity for socially responsible leadership continues to provide a robust area of research. The next section outlines recommendations for future research, policy, and practice.

**Recommendations for future research.** This study examined the omnibus score for community college students’ SRL, but future research could examine the individual scores for each of the seven constructs that comprise the social change model and are measured through SRL. Questions posed could include: Do community college students indicate stronger scores in selected aspects of the seven Cs of the SCM than other sectors of college students? Are there sociodemographic variables that may assist with predicting these constructs of the SCM? Similarly, are there constructs within the SCM in which community college students score particularly low and what activities could
secondary school and higher education take to address them so that community college students may become full partners in social change?

Additional research should explore the statistically significant positive correlation between GPA and SRL in community college students. Is this a result of community college students with higher GPAs being more engaged in campus activities in general and being able to interact with students different from themselves in particular? Or, given their diversity and multiple demands on their time, do community college students struggle to find time in general to devote to their studies and campus interactions, resulting in lower GPAs and lower SRL? Recognizing the contributing factors to a higher GPA as it correlates to SRL is an important step to address as it points to understanding the appropriate and adequate systems to put in place to support students in their journey to be successful professionals and prospective leaders of social change.

Additional research should focus on the statistically significant, but negative, correlation between sexual orientation and SRL. As college campuses attempt to diversify their institutions through inclusion and equity initiatives, it is important to understand the contributions of all constituent groups.

That race and gender did not indicate they were statistically significant predictor variables was unanticipated upon first review. Dugan et al. (2008) reported that in the 2006 MSL, Black/African American students demonstrated higher capacities for SRL. The scholars posited that historically oppressed racial and ethnic groups develop greater capacities for relational and collaborative leadership as one way to improve their condition. However, Gleason (2012) did not find a correlation between SRL and race, and questioned if other variables were involved. In addition, gender has emerged in
previous studies as a significant predictor of SRL as women have demonstrated greater capacities for SRL than men. Dugan (2006) reported that women’s mean scores across all eight constructs of SRL were higher than men’s and this finding was reiterated by Dugan et al. (2008) and Dugan and Komives (2010). Gleason (2012), however, did not find this to be case across all sectors of higher education and reported that only in master’s degree granting institutions did men demonstrate a negative correlation to SRL. It is important to understand the predictive value of race and gender toward socially responsible leadership so that higher education professionals may allocate the appropriate resources—time, attention, and funding—to those groups for whom SRL is a challenge and leverage those groups for whom SRL is comfortable and embedded in their leadership style.

The researcher made a conceptual decision on how to account for high school experiences by choosing to examine only leadership training in high school, which emerged as a statistically significant predictor variable. This decision was made because precollegiate experiences were comprised of responses to 11 different questions related to students’ involvement in high school activities: playing an instrument in band, participating in interscholastic sports, holding a student government office, or being an active member in a civic organization. Considering students’ precollegiate experiences as an amalgam did not seem to be as useful as understanding the predictive value of one of these experiences. It is understood that leadership training in high school could be associated with other variables, such as those just mentioned. Future research should explore leadership training in high school: its pedagogy, duration, content, context, and its impact. It should also study how this experience may be coupled with other
precollegiate experiences of students who participate in the array of co-curricular, social, civic, and athletic experiences available to further enhance students’ capacity for socially responsible leadership.

In addition, future research should consider examining age as a predictor of SRL of community college students. Dugan and Komives (2010) reported age was a significant positive predictor. Manning et al. (2006) reported in their study that older adults were capable of shedding unproductive and outdated notions of hierarchical leadership and replacing them with those centered on collaborative relationships to lead to social change. The scholars wrote that instruction in this type of leadership, which forms the underpinnings of the SCM, coupled with an experiential learning project, produced enthused and energized citizens committed to social change, confident they could improve their communities. Given the range of ages at community colleges, additional research should examine the predictive value of age as it relates to the seven constructs of the social change model. For example, are there constructs for which age is a significant predictor and, if so, could these age groups become effective mentors to other age groups at community colleges who struggle with a particular construct?

Additional research should focus on and refine the definition of community service. With today’s millennials—those students born after 1980—needing or wanting to meet high school graduation standards requiring the completion of community service hours or projects, it would behoove educators to know what forms of community service demonstrate the greatest predictive value for socially responsible leadership capacity.

**Recommendations for policy.** Considering the results of this study, community colleges need to include leadership development, specifically socially responsible
leadership development, in the learning outcomes they explain that students will develop as a result of the community college experience. Not typically found in vision or mission statements of community colleges, these two-year institutions need to underscore to their prospective and current students, faculty and staff, local and regional communities, and to the national community college sector that they contribute to the leadership development of college students. Developing the capacity to interact, communicate, and collaborate with people different from themselves to address social change, civic, and socio-cultural issues facing a community is exactly what the AAC&U (2012) is calling for in its strategic plan for a successful future in an increasingly diverse United States. With almost 50% of undergraduates in the U.S. enrolled in community colleges, these two-year institutions need to inform policy makers and community college advocacy groups about the potential they hold to develop socially responsible leaders who are aware, prepared, and poised to address civic and social leadership challenges in the communities from which these students hail.

This point may become even more urgent when one considers Posner’s (2009) suggestion that leadership development should begin during the first two years of college so that students have the opportunity to practice skills as they progress through college. This presupposes students continue to a 4-year degree. Intentionally discussing and developing these skills in students' first two years of higher education will assist them throughout their collegiate experience in working with and understanding students different from themselves through class projects and informal discussions. Moreover, community college students may not transfer to a 4-year degree, and higher education professionals should ensure that the only two years of college students may want, need or
are able to afford should include the intentional discussion and development of these skills.

Given the increasing diversity of community college campuses and the skills of civic engagement and global citizenship needed by college graduates to be contributors to their communities, these two-year institutions need to examine their mission and vision statements and policies to ensure they proactively address the importance of students learning about multicultural ideas and issues. This learning outcome must be seen by the two-year institutions as an essential skill needed by today’s college graduates. Policy makers need to recognize that students learn about racial, ethnic, religious, gender identity, and sexual orientation viewpoints different from their own through formal and informal opportunities on campus to interact with students different from themselves.

Institutions with policies providing spaces for students to segregate themselves from other students for fear of being offended by opposing viewpoints should seriously consider if these spaces are assisting students or leading to further isolation of students from the plurality of viewpoints that comprise our communities. If policy has established dividers among students with differing viewpoints then policy can just as intentionally eliminate these dividers to enable students to interact formally and informally with students different from themselves. A faculty member skilled in facilitating socio-cultural conversations among students and peers is an obvious suggestion for these discussions taking place in classrooms. Student development personnel must then look to where, when, and how students congregate informally on campus to understand the most appropriate way to cultivate these discussions among students that maintain the authenticity of the conversations while recognizing a plurality of views to students.
In addition, higher education policy makers, when examining the value of experiential opportunities as complementary to classroom learning, should consider the results of this study demonstrating that students’ conversations with people different from themselves and community service were significant predictors of students’ socially responsible leadership. That is, in addition to developing technical and job-related skills through experiential opportunities, policy makers should recognize that selected activities, such as community service, are also associated with building skills needed to be an effective citizen, as well as an effective worker. These are skills that contribute to college students’ leadership development as potential agents of social change, as they have an awareness and concern for all in the community.

Moreover, policy makers on community college campuses need to cultivate more visibility around their recognition and support for LGBT students or those students who may be questioning their sexual orientation or gender identity. Students will only self-disclose their sexual orientation and gender identity if they feel safe in doing so, and knowing their information will not be shared with others or used against them.

**Recommendations for practice.** Ensuring faculty are equipped to facilitate socio-cultural conversations among college students’ peers should begin with ensuring diversity and multiculturalism are addressed in higher education teacher preparation courses to inform the newest teachers graduating from colleges and universities. Information about socio-cultural differences should be augmented with opportunities for new teachers to practice facilitating conversations around these differences to develop competency in doing so. In addition, professional development, training, coaching, and mentoring of current faculty should be considered as ways to equip professionals already
in the field with a set of skills to help them foster socio-cultural conversations in classrooms.

Group exercises around a topic with an educator skilled in fostering socio-cultural information sharing among and between students could be an effective method of facilitating these conversations in more formalized settings. Similarly, small-group projects as part of class requirements where students are intentionally assigned to work with people different from themselves could be provided, with an opportunity to deconstruct the experience post assignment. It is in the post-assignment exercise that students’ experiences and challenges that arose because of differing viewpoints and perspectives could be discussed and examined. Moreover, policy makers should consider the value of funding professional development programs for faculty and staff to facilitate socio-cultural conversations across a variety of pedagogical formats. Professionals expected to integrate this form of experiential learning into their course requirements must be provided with appropriate support, information, and an opportunity to apply this information in constructive settings that enable them to receive critiques and feedback.

In addition, student life and student service professionals should examine how to facilitate these conversations through co-curricular and extra-curricular activities for students. For example, an orientation program on leadership for students elected or appointed to positional leadership roles on campus could include how, as leaders, the students recognize, embrace, and work with perspectives and values different from their own as well as a plurality of perspectives within the group.

While research using the MSL has focused on socio-cultural conversations with students’ peers and their value in predicting socially responsible leadership, it leads to the
question of how faculty and staff develop their own capacity for socially responsible leadership. That is, do conversations among faculty and staff with peers different from themselves with regard to political, religious, and lifestyle views have a predictive value when examining these professionals’ own capacity for socially responsible leadership? Future research should examine how they develop their capacity for socially responsible leadership, given their proximity and positionality to today’s college students.

**Conclusion**

The development of leadership skills in their graduates is an urgently needed outcome from higher education institutions (Astin & Astin, 2000). The call to succeed in this endeavor is intensifying by national scholars to ensure today’s college graduates are prepared to meet tomorrow’s challenges. The American Association of Colleges and Universities renewed its call in 2012 for colleges and universities to not only develop leadership skills in their students, but to also build skills related to ethics and serving as engaged citizens. These skills focus on understanding and working with people who have different perspectives to ensure all those in communities are considered (Dey et al., 2010).

Moreover, societal change or upheaval is due to the ever expanding pace of change related to innovations in health, medicine, science, and technology. These, coupled with geo-political shifts, are positive and negative disruptors of the national and world-wide economies, contributing to continuous socioeconomic instability. Today’s college students must be engaged local and global citizen-leaders to not only help their communities understand these changes, but to also work with others to lead sustainable solutions to these challenges.
These expectations are made of all college graduates, including two-year institutions, or community colleges, which enroll 45% of all of the undergraduate students in the U.S. (AACC, 2016). More students are expected under President Barack Obama’s call for 5 million more graduates from these two-year institutions by 2020 (“Building American skills,” 2014). Studies of the effect of college on students have focused on students who reside on the campuses of large 4-year colleges or universities. More study is needed, scholars note, on community college students who reflect the racial and ethnic diversity of today’s and future college students (Pascarella & Terenzini, 2005), which is expected to increase. This study closed the gap slightly between the burgeoning enrollment at community colleges, the need for all sectors to address social responsibility, and the lack of understanding of outcomes from these two-year institutions.

Moreover, leadership has been undergoing a transformation since the end of the 20th century, moving from forms that are hierarchical and top-down to those that are collaborative and relational. That is, successful leadership in the 21st century is no longer seen as command and control, where leaders are born, not made. It is, rather, concerned with being socially responsible so that the human condition for all is considered, not only that of those in power and with privilege (Kezar et al., 2006).

The redefinition of leadership is built on the work of James MacGregor Burns and Joseph Rost, who in 1978 and 1991 respectively, published work that examined hierarchical, or industrial, leadership and questioned its value and relevance for the next century. The scholars anticipated an emerging global society that was rapidly becoming interconnected economically, socially, and politically and called for leadership that would
help communities successfully transform to meet these challenges. Burns called for modern leaders to be transforming leaders as they should not only be concerned with outcomes to improve the human condition, but also with the process to ensure it is conducted with integrity and honesty (Burns, 1978). Leadership needed for the post-industrial age, or postindustrial leadership, is networked, collaborative, and relational, postulated Rost (1991). In addition, leaders and followers influence each other, are interchangeable, depending on the situation, and everyone is invited and expected to contribute to leadership, wrote Rost.

Transformational leadership theory and the postindustrial leadership paradigm prompted the United States Department of Education (USDOE) to explore and create new higher education leadership development models (Cilente, 2009; Roberts, 2007). With leadership evolving as an inclusive, non-hierarchical process available to all people, new methods of teaching, assessing, and studying leadership had to be developed in colleges and universities (Cilente, 2009). One model that emerged from the funding is the social change model (SCM) and it is now the most widely used postindustrial theoretical model to develop higher education student leadership programs (Kezar et al., 2006).

The SCM is referred to as the seven Cs leading to change, which is the eighth C (Cilente, 2009; HERI, 1996). This model recognizes that through higher education experiences, students cultivate skills in three domains related to individual, group, and society or community, interactions. The characteristics in the individual domain are:

- consciousness of self, being aware of one’s values, attitudes, and beliefs that provide the impetus to take action;
• congruence, behaving, thinking and feeling in concert with one’s values, attitudes, and beliefs; and

• commitment, the extent to which one pursues outcomes and results that are in line with one’s values, attitudes, and beliefs.

The characteristics in the group domain are:

• collaboration, the capacity one has to work with others to realize a common outcome by developing and sharing trust in one’s self and with others;

• common purpose, the ability one has to work with others to understand the outcomes to be accomplished and engage in analysis to identify and work collectively toward goals; and

• controversy with civility, the ability one has to debate and disagree respectfully with others while possessing the capacity to see viewpoints different from one’s own and remain constructively engaged.

In the community or society domain, the characteristic is citizenship, which is the capacity to engage in a community as an individual and as a member of a group working collaboratively to foster common good for others. The last C is change, or the ability to foster change for social improvement while possessing the ability to change and adapt to environments that are continuously changing (HERI, 1996; Cilente, 2009).

Today’s college students are learning differently from their 20th century peers, preferring constructivist approaches to build and ascertain knowledge (Wisniewski, 2010). As such, today’s students prefer to learn through hands-on opportunities to manipulate concepts, ideas, and physical materials and to explore and experiment under the guidance of instructors, mentors, or supervisors. Leadership for social change, or
socially responsible leadership, in particular, is learned most effectively by students when they have the opportunity to learn from other students through conversations with peers different from themselves, service to others, or assisting other students (HERI, 1996). Scholars have demonstrated that experiential opportunities, such as community service (Dugan, 2006b; Dugan & Komives, 2010; Soria et al., 2013) and positional leadership roles in student clubs (Dugan, 2006; Haber & Komives, 2009) are significant influencers of students’ socially responsible leadership capacity.

This study examined three types of college experiences and their relationship to students’ capacity for socially responsible leadership. Data were collected through the Multi-Institutional Study of Leadership in 2009 and 2012, conducted by Loyola University Chicago. The study contained scales and subscales to measure students’ beliefs, values, and behaviors before they attended college and while they were attending college. One of the scales included in the study was the socially responsible leadership scale, which measured a student’s capacity for socially responsible leadership. Using hierarchical multiple linear regression analyses this study examined the predictive value of socio-cultural conversations with peers, positional leadership roles in college clubs and organizations, and community service on community college students’ capacity for socially responsible leadership.

Research question 1 asked if, after controlling for demographic variables and precollegiate experiences, if socio-cultural conversations with peers, community service, and/or positional leadership roles in student clubs and organizations were statistically significant predictors of students’ SRL. Results indicated all three, when taken collectively, were significant predictors. In addition, sexual orientation was a statistically
negative predictor and GPA and participation in leadership training while in high school were positive predictors of a student’s SRL score.

Research question 2 asked if, after controlling for demographic variables and precollegiate experiences, if each one of these experiences—socio-cultural conversations with peers, positional leadership roles in college clubs and organizations, and community service—when taken individually were a statistically significant predictor of a student’s SRL score. Socio-cultural conversations with peers and community service both emerged as statistically significant.

Research question 3 asked about the relative contribution of each form of college experience delineated above to a student’s capacity for socially responsible leadership. Socio-cultural conversations demonstrated the greatest contribution, with community service contributing a significant, but minimal, predictive value.

Findings and ramifications from this study indicate that community college students have the capacity to demonstrate socially responsible leadership and this capacity should be cultivated through curricular and co-curricular experiences. Moreover, the movement toward creating segregated spaces on college campuses to prevent college students from hearing views different from their own is an initiative heading in the opposite direction of what contributes to students’ capacity for socially responsible leadership. Through socio-conversations with peers, students learn about religious, political, and lifestyle values and choices different from their own. Through this, students not only develop knowledge about other people and their experiences, but also develop knowledge about themselves: their values, strengths, and areas to be
strengthened (HERI, 1996), which all contribute to expanding their capacity for socially responsible leadership.
References


Appendix A

IRB Approval Letter from Loyola University Chicago for MSL 2009

December 30, 2008

Dear Dr. John Dugan,

Thank you for submitting the research project entitled: The Multi-Institutional Study of Leadership (MSL), for expedited review by the Institutional Review Board for the Protection of Human Subjects. After careful examination of the materials you submitted, we have approved this project as described for a period of one year.

Approximately eleven months from your initial review date, you will receive a renewal notice stating that approval of your project is about to expire. This notice will give you detailed instructions for submitting a renewal application. If you do not submit a renewal application prior to December 30, 2009, your approval will automatically lapse and your project will be suspended. When a project is suspended, no more research or writing regarding human subjects may be done until the project is reevaluated and re-approved. I recommend that you respond to these annual renewals in a complete and timely fashion.

This review procedure, administered by the IRB, in no way absolves you, the researcher, from the obligation to immediately inform the IRB in writing if you would like to change aspects of your approved project (please consult our website for specific instructions). You, the researcher, are respectfully reminded that the University’s ability to support its researchers in litigation is dependent upon conformity with continuing approval for their work. Should you have questions regarding this letter or general procedures, please contact the Compliance Manager at (773) 508-2689. Kindly quote File #74115, if this project is specifically involved.

With best wishes for the success of your work,

Dr. Raymond H. Dye, Jr.
Chair, Institutional Review Board

http://www.luc.edu/ors/irb_home.shtml
Appendix B

IRB Approval Letter from Loyola University Chicago for MSL 2012

IRB Application Letter

Friday, September 09, 2011

Dear John Dugan,

On Wednesday, September 07, 2011 the Loyola University Chicago Institutional Review Board (IRB) reviewed and approved your Initial application for the project titled ‘Multi-Institutional Study of Leadership 2012’. Based on the information you provided, the IRB determined that:

- the risks to subjects are minimized through (i) the utilization of procedures consistent with sound research design and do not unnecessarily expose participants to risk, and (ii) whenever appropriate, the research utilizes procedures already being performed on the subjects for diagnostic or treatment purposes
- the risks to participants are reasonable in relation to anticipated benefits, if any, to participants, and the importance of the knowledge that may reasonably be expected to result
- the selection of subjects is equitable
- informed consent be sought from each prospective subject or the subject’s legally authorized representative, in accordance with, and to the extent required by §46.116
- informed consent be appropriately documented, in accordance with, and to the extent required by §46.117
- when appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of subjects
- when appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data
- when some or all of the subjects are likely to be vulnerable to coercion or undue influence, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons, additional safeguards have been included in the study to protect the rights and welfare of these subjects

In addition, the IRB determined that documented consent is not required for all participants.

The IRB approved a waiver of documentation of informed consent.

This review procedure, administered by the IRB, in no way absolves you, the researcher, from the obligation to adhere to all Federal, State, and local laws and the Loyola University Chicago policies. Immediately inform the IRB if you would like to change aspects of your approved project (please consult our website for specific instructions). You, the researcher, are respectfully reminded that the University’s ability to support its researchers in litigation is dependent upon conformity with continuing approval for their work.

Please notify the IRB of completion of this research and/or departure from the Loyola University Chicago by submitting a Project Closure Report using the CAP system. In all correspondence with the IRB regarding this project, please refer to IRB project number #664 or IRB application number #551.

The IRB approval granted for this project expires on 9/7/2012 12:00:00 AM

If you have any questions regarding this approval, the IRB, or the Loyola University Chicago Human Subject Protection Program, please phone the Assistant Director for Research Compliance at (773) 508-3689 or email the IRB at irb@luc.edu.

Best wishes for your research,

Raymond H. Dye, Jr., Ph.D.
Chairperson, Institutional Review Board
Appendix C

Request to Use Data from Multi-Institutional Study of Leadership

Proposals for use of Multi-Institutional Study of Leadership (MSL) Data

The MSL is committed to advancing evidence-based practice and empirical research in higher education particularly in the area of leadership education. To this end, we are happy to engage in data sharing to advance this important work. Any school is more than welcome to share their data with others and/or publish results from their institutional data. The MSL embargos the national data set for three years prior to making it available to others for use. This means that the 2012 data are currently available for use. Furthermore, MSL is an aggregate data set and due to contractual and IRB compliance issues data cannot be shared for individual institutions or any partitions of data that could reveal institutional affiliation.

Information regarding the study is available via the study website (www.leadershipstudy.net). This document outlines details about the MSL data as well as the process for requesting data.

| Principal Investigator | Dr. John P. Dugan  
| Assistant Professor, Higher Education  
| Loyola University Chicago  
| jddugan1@luc.edu |
| Available Data Set | MSL currently has one master data set, which has data associated with the core outcome measures (i.e., social change model values, leadership efficacy, complex cognitive skills).  

2012 data: Approximately 77,150 students on 82 campuses  
• Class Year: 16,658 First-years; 16,894 Sophomores; 19,414 Juniors; 22,680 Seniors  
• Gender: 48,264 Females; 28,571 Males; 147 Transgender  
• Racial Groups: 3,314 African American/ Black; 118 American Indian; 6,120 Asian American/ Asian; 3,961 Latino/ Hispanic; 620 Middle Eastern; 6,687 Multiracial; 55,004 White/ Caucasian; 1,0773 Not Included  
• Sexual Orientation: 70,187 Heterosexual; 4,237 Bisexual/ Gay/ Lesbian/ Questioning; 1,881 Rather Not Say  
• Generational Status: 11,098 First Generation; 64,952 Non-First Generation  

Some unique variables in this data set include:  
• Social Change Behaviors  
• Leadership Efficacy  
• Cognitive Skills  
• Outcomes of Mentoring Relationships  
• Spirituality: Search for Meaning  
• Social Perspective-Taking  
• Collective Racial Esteem  
• Campus Climate (Sense of Belong & Non-Discriminatory)  
• Outcomes of Socio-Cultural Discussions with Peers  
• Aspirations  
• Resiliency
| **MSL-Institutional Survey** | The project also includes the MSL-Institutional Survey examining various campus variables that may influence leadership outcomes (e.g., budget, curriculum, specific programs). The Co-Principal investigator for this data is Dr. Julie Owen of George Mason University. If you are interested in using MSL-IS data then please contact Dr. Owen directly (jowen4@gmu.edu) |
| **Access to Data** | Priority access of MSL data is first given to members of the research team hosted at Loyola University Chicago. Proposals with research questions and variable selections that do not overlap with MSL research team projects will be considered on a case-by-case basis. Variables being used in research team articles may still be considered for use in theses or dissertations, but there may be restrictions on the publication of findings with priority given to MSL team articles. Those interested in using MSL data are encouraged to visit the “Reports & Publications” webpage on the MSL website, which provides information about existing publications. You will want to ensure that your proposed study does not overlap with the questions that have already been asked. The Reports and Publications webpage can be accessed via the following link: [http://leadershipstudy.net/resources/reports-publications/](http://leadershipstudy.net/resources/reports-publications/) |
| **Submitting a Proposal** | The contact person for requests to use MSL data is MSL Project Manager Natasha Turman ([mslconnection@gmail.com](mailto:mslconnection@gmail.com)). Individuals can obtain a copy of the MSL Codebook* prior to their proposal to aid in this process. The proposal must contain: 1. Name and contact information for proposer; 2. If the proposer is a student, it must identify the program, university, and advisor for the study; 3. Identify the time frame for the study; 4. Provide a prospectus that contains the purpose of the study with specific research questions; 5. Identify any specific sub-sample of cases (e.g., religiously affiliated institutions, only female students); 6. Identify the specific variables that are requested in this study; 7. Identify possible publication outlets for the study if you intend to publish results. All proposal should be submitted electronically and adhere to the above parameters. The PI will make every attempt to respond in a timely manner to requests. However, it is recommended that proposals be submitted well before data are needed. * Note that the MSL instrument may not be copied, reproduced, or used for data collection without the express written permission of the Principal Investigator. Additionally, the full data set may not be requested for exploratory research. Proposers are expected to provide clear research questions and the specific variables to be used in analyses. |
| **Conditions for Use** | The researcher(s) of an approved proposal must further agree to the following items. A document with this information will be signed by the researcher(s) prior to release of the data. 1. Obtain IRB approval on home campus and provide copy of documentation with signed document; |
2. Follow MSL and local IRB protocols (e.g., storage of data, access to data, destroy data upon project completion);
3. If a project of a student researcher for a thesis or dissertation, provide evidence of supervision by thesis/dissertation advisor;
4. Use variables only for the proposal proposed. Must obtain additional approvals from MSL for other uses of data;
5. We encourage publications of findings; said publication must cite source of data and cite at least one of the MSL articles or a source identified by the PI. Limitations on publications may be a stipulation in use of the data;
6. Furnish one copy (electronically) of a completed thesis or dissertation AND furnish an electronic copy of any articles published using MSL data;
7. Any publications and/or presentations must acknowledge the source of the data and refer the audience to the MSL website for more information.

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<td>1. If a proposal is accepted, the researcher will sign an agreement to comply with the above conditions.</td>
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<td>2. The PI will furnish a copy of the approved IRB for use in local campus IRB processes.</td>
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<td>3. The researcher will be provided with a codebook of all variables in the data set including all scales (e.g., reverse scoring, scale construction).</td>
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<td>4. The PI will not be able to provide advising regarding research questions, statistical consulting for any proposals, nor assistance in drafting methods sections. Only basic information will be provided about the data. The assumption is that the user is capable of managing data without assistance. Additional consultation may be available for a separate consulting fee by an MSL team member or Survey Sciences Group staff member. Co-authorship may be necessary if the PI or MSL team member provide substantial contributions to methods or other sections of the proposed study.</td>
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<td>Natasha Turman</td>
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<td>MSL Project Manager</td>
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<td>Loyola University Chicago</td>
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<td><a href="mailto:mslconnection@gmail.com">mslconnection@gmail.com</a></td>
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<tr>
<td>John P. Dugan</td>
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<tr>
<td>Assistant Professor, Higher Education</td>
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<td>Loyola University Chicago</td>
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<td>Chicago, IL 60611</td>
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<tr>
<td>(312) 915-7637</td>
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<tr>
<td><a href="mailto:jdugan1@luc.edu">jdugan1@luc.edu</a></td>
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Appendix D

Application to MSL for 2009 and 2012 Data Request

Dear Ann:

Thank you for expressing interest in using data from the Multi-Institutional Study of Leadership. We would like to inform you that your request has been approved. The following steps must be completed in order to fulfill this request:

• For the data access fee, please make a $500 check payable to Loyola University Chicago. Please do not place any information in the “memo line” of the check.

• Mail check to address below:
  John Dugan
  Multi-Institutional Study of Leadership
  Loyola University Chicago
  820 N. Michigan Avenue, Suite 1100
  Chicago, IL 60611

• The primary method of data transference is through Dropbox. Please send an email to ‘mslconnection@gmail.com’ to inform us of the email address associated with your Dropbox account. Please note data will not be shared until the aforementioned items have been addressed and will take approximately two to three weeks for processing. Should you have any questions or concerns, please contact the MSL Project Manager at mslconnection@gmail.com.

Sincerely,
Natasha Turman
MSL Project Manager

On Sun, Feb 7, 2016 at 6:09 PM, Ann M. Marrott <marrotta@sunyulster.edu> wrote:

From: Ann M. Marrott <[email]>
Email: marrotta@sunyulster.edu
Phone: (845)687-5070
University: St. John Fisher College

Study Time Frame:
February to March, 2016: Data analysis
April to June, 2016: Discussion with dissertation committee, further analysis, draft chapters 4 and 5
June to July, 2016: Complete chapters 4 and 5
August 2016: Defend dissertation
Purpose of Study: The purpose of this quantitative study is to examine the effect of experiential learning on the development of socially responsible leadership skills of community college students. Socially responsible leadership is chosen over general leadership development as the former is now the most widely used postindustrial model to develop higher education student leadership programs. The intent of this study is to build on the use of the social change model of leadership development with college students in general by applying it to community college students in particular. Moreover, the purpose of this study is to focus attention on the higher education sector that enrolls almost 50% of the undergraduate students in the United States, but whose contributions to student leadership development have gone largely unexplored. The intent of this study is to shorten the gap in what is known about community college student leadership development.

Research Questions:
1. Do community college students who participate in socio-cultural conversations with peers exhibit statistically significant different socially responsible leadership capacity than community college students who do not, after controlling for pre-college activities, race, gender, parental education, parental income, sexual orientation, and grade point average?
2. Do community college students who participate in positional leadership roles in student organizations exhibit statistically significant different socially responsible leadership capacity than community college students who do not, after controlling for pre-college activities, race, gender, parental education, parental income, sexual orientation, and grade point average?
3. Do community college students who participate in community service exhibit statistically significant different socially responsible leadership capacity than community college students who do not, after controlling for pre-college activities, race, gender, parental education, parental income, sexual orientation, and grade point average?
4. Is there a statistically significant difference in the capacity for socially responsible leadership between community college students who participated in socio-cultural conversations with peers, positional leadership roles in student organizations, and community service when compared to each other after controlling for pre-college activities, race, gender, parental education, parental income, sexual orientation, and grade point average?
5. Is there a statistically significant difference in the capacity for socially responsible leadership when participation in socio-cultural conversations with peers, positional leadership roles in student organizations, and community service are combined factorially and then compared to each other after controlling for pre-college activities, race, gender, parental education, parental income, sexual orientation, and grade point average?

Sub-Samples Requested: Please only send responses from community college students from 2009 and 2012, per your generous offer of availing both years' data sets to ensure anonymity of the participating community colleges.

Specific Variable Requested: 2009
DEM1, DEM2, DEM3, DEM5, DEM6, DEM7, DEM8, DEM10a, DEM10b, DEM13, DEM14, DEM15, ENV3, ENV3a, ENV3b, ENV3c, ENV3d, ENV3e, ENV6b, ENV6c, ENV9a, ENV9b, ENV9c, ENV9d, ENV9e, ENV9f, PRE3a, PRE3b, PRE3c, PRE3d, PRE3e, PRE3f, PRE4a, PRE4c, PRE4d, PRE4F, PRE5a, PRE5b, PRE5d, PRE5e, PRE5f, PRE5g, PRE5h, PRE6, PRE6a, PRE6b, PRE6c, SRLS1, SRLS2, SRLS3, SRLS4, SRLS5, SRLS6, SRLS7, SRLS8, SRLS9, SRLS10, SRLS11, SRLS12, SRLS13, SRLS14, SRLS15, SRLS16, SRLS17, SRLS18, SRLS19, SRLS20, SRLS21, SRLS22, SRLS23, SRLS24, SRLS25, SRLS26, SRLS27, SRLS28, SRLS29, SRLS30, SRLS31, SRLS32, SRLS33, SRLS34, SRLS35, SRLS36, SRLS37,
SRLS38, SRLS39, SRLS40, SRLS41, SRLS42, SRLS43, SRLS44, SRLS45, SRLS46, SRLS47, SRLS48, SRLS49, SRLS50, SRLS51, SRLS52, SRLS53, SRLS54, SRLS55, SRLS56, SRLS57, SRLS58, SRLS59, SRLS60, SRLS61, SRLS62, SRLS63, SRLS64, SRLS65, SRLS66, SRLS67, SRLS68, SRLS69, SRLS70, SRLS71, PCTUNANSWERED, SRLS_90, CORE_90, SELF, CONGRU, COMMIT, COLLAB, COMMON, CIVIL, CITIZEN, PREOMNI, SOCCUL_RAW

2012
DEM1, DEM2, DEM3, DEM4, DEM6, DEM7, DEM8, DEM10a, DEM10b, DEM13, DEM14, DEM15, ENV3, ENV3a, ENV3b, ENV3c, ENV3d, ENV3e, ENV6b, ENV6c, ENV9a, ENV9b, ENV9c, ENV9d, ENV9e, ENV9f, PRE3a, PRE3b, PRE3c, PRE4a, PRE4c, PRE4d, PRE4F, PRE5a, PRE5b, PRE5d, PRE5e, PRE5f, PRE5g, PRE5h, PRE6, PRE6a, PRE6b, PRE6c, SRLS1, SRLS3, SRLS4, SRLS5, SRLS9, SRLS10, SRLS13, SRLS14, SRLS16, SRLS19, SRLS22, SRLS23, SRLS24, SRLS27, SRLS28, SRLS29, SRLS30, SRLS32, SRLS33, SRLS34, SRLS40, SRLS41, SRLS42, SRLS47, SRLS48, SRLS51, SRLS52, SRLS53, SRLS54, SRLS58, SRLS59, SRLS60, SRLS61, SRLS62, SRLS63, SRLS66, SRLS67, SRLS69, SRLS71

This e-mail was sent from a contact form on Multi-Institutional Study of Leadership (http://leadershipstudy.net)

--
Ann M. Marrott
### Appendix E

**Description of Demographic Variables Collected**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEM1</td>
<td>Begin college at current institution</td>
<td>Yes, No</td>
</tr>
<tr>
<td>DEM2</td>
<td>Current enrollment status</td>
<td>Full-time, Part-time</td>
</tr>
<tr>
<td>DEM3</td>
<td>Current class level</td>
<td>Freshman, Sophomore</td>
</tr>
<tr>
<td>DEM4</td>
<td>Primary major</td>
<td>Select from 22 academic disciplines</td>
</tr>
<tr>
<td>DEM6</td>
<td>Age</td>
<td>Open response</td>
</tr>
<tr>
<td>DEM7</td>
<td>Gender</td>
<td>1=Female 2=Male 3=Transgender</td>
</tr>
<tr>
<td>DEM8</td>
<td>Sexual orientation</td>
<td>1=Heterosexual 2=Bisexual 3=Gay/Lesbian 4=Questioning 5=Rather not say</td>
</tr>
<tr>
<td>DEM10a</td>
<td>Broad racial group</td>
<td>1=White/Caucasian to 8=Race/ethnicity not listed</td>
</tr>
<tr>
<td>DEM10b</td>
<td>Ethnic group memberships</td>
<td>1=Black American to 8=Other Black 1=Asian/Chinese 8= Other Asian 1=Latino to 7=Other Latino</td>
</tr>
<tr>
<td>DEM13</td>
<td>Estimate of grades so far in college</td>
<td>1=3.50-4.00 to 6=No college GPA</td>
</tr>
<tr>
<td>DEM14</td>
<td>What is highest parental education</td>
<td>1=Less than high school to 8=Don’t Know</td>
</tr>
<tr>
<td>DEM15</td>
<td>What is parental income</td>
<td>1=Less than $12,500 to 11= Rather Not Say</td>
</tr>
</tbody>
</table>

*Note: Adapted from MSL 2012 Codebook (Multi-Institutional Study of Leadership, 2011).*
### Variables Related to Pretest of Socially Responsible Leadership

<table>
<thead>
<tr>
<th>Variable Construct Name</th>
<th>Variable Label</th>
<th>Response</th>
<th>SCM</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE5a</td>
<td>Different opinions enriched my understanding</td>
<td>Five point Likert scale</td>
<td>Controversy with civility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1= Strongly Disagree 5= Strongly Agree</td>
<td></td>
</tr>
<tr>
<td>PRE5d</td>
<td>Enjoy working toward common goals</td>
<td>Five point Likert scale</td>
<td>Collaboration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1= Strongly Disagree 5= Strongly Agree</td>
<td></td>
</tr>
<tr>
<td>PRE5e</td>
<td>Hold self accountable for responsibilities agreed to</td>
<td>Five point Likert scale</td>
<td>Commitment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1= Strongly Disagree 5= Strongly Agree</td>
<td></td>
</tr>
<tr>
<td>PRE5f</td>
<td>Worked well when aware of group’s collective values</td>
<td>Five point Likert scale</td>
<td>Common purpose</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1= Strongly Disagree 5= Strongly Agree</td>
<td></td>
</tr>
<tr>
<td>PRE5g</td>
<td>Behaviors reflect beliefs</td>
<td>Five point Likert scale</td>
<td>Congruence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1= Strongly Disagree 5= Strongly Agree</td>
<td></td>
</tr>
<tr>
<td>PRE5h</td>
<td>Value contributing to community</td>
<td>Five point Likert scale</td>
<td>Citizenship</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1= Strongly Disagree 5= Strongly Agree</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Adapted from MSL 2012 Codebook (Multi-Institutional Study of Leadership, 2011).*
### Appendix G

**Variables Related to Current Socio-Cultural Conversations with Peers**

**Forming Socio-Cultural Discussions Scale**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV9a</td>
<td>Talked about different lifestyles/customs</td>
<td>Four point Likert scale 0= Never, 3= Very Often</td>
</tr>
<tr>
<td>ENV9b</td>
<td>Held discussions with students whose personal values were very different from your own</td>
<td>Four point Likert scale 0= Never, 3= Very Often</td>
</tr>
<tr>
<td>ENV9c</td>
<td>Discussed major social issues such as peace, human rights, and justice</td>
<td>Four point Likert scale 0= Never, 3= Very Often</td>
</tr>
<tr>
<td>ENV9d</td>
<td>Held discussions with students whose religious beliefs were very different from your own</td>
<td>Four point Likert scale 0= Never, 3= Very Often</td>
</tr>
<tr>
<td>ENV9e</td>
<td>Discussed your views about multiculturalism and diversity</td>
<td>Four point Likert scale 0= Never, 3= Very Often</td>
</tr>
<tr>
<td>ENV9f</td>
<td>Held discussions with students whose political opinions were very different from your own</td>
<td>Four point Likert scale 0= Never, 3= Very Often</td>
</tr>
</tbody>
</table>

*Note:* Adapted from *MSL 2012 Codebook* (Multi-Institutional Study of Leadership, 2011).
Appendix H

Variables Related to Current Community Service
and Positional Leadership Roles

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Label</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV3</td>
<td>Engage in community service</td>
<td>Yes, No</td>
</tr>
<tr>
<td>ENV6b</td>
<td>Frequency of positional leadership in college group</td>
<td>Five point Likert scale 0= Never 4= Much of the time</td>
</tr>
</tbody>
</table>

*Note:* Adapted from *MSL 2012 Codebook* (Multi-Institutional Study of Leadership, 2011).
## Appendix I
### Variables Related to Omnibus Score for Socially Responsible Leadership

<table>
<thead>
<tr>
<th>Variable Construct Name</th>
<th>Variable Label</th>
<th>Response</th>
<th>SCM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRLS1 with</td>
<td>I am open to others’ ideas</td>
<td>Five point Likert scale</td>
<td>Controversy with Civility Scale</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1= Strongly Disagree 5= Strongly Agree</td>
<td></td>
</tr>
<tr>
<td>SRLS3</td>
<td>I value differences in others</td>
<td></td>
<td>Controversy with Civility Scale</td>
</tr>
<tr>
<td>SRLS4</td>
<td>I am able to articulate my priorities</td>
<td></td>
<td>Consciousness of Self Scale</td>
</tr>
<tr>
<td>SRLS5</td>
<td>Hearing differences in opinions Enriches my thinking</td>
<td></td>
<td>Controversy with Civility Scale</td>
</tr>
<tr>
<td>SRLS9</td>
<td>I am usually self confident</td>
<td></td>
<td>Consciousness of Self Scale</td>
</tr>
<tr>
<td>SRLS10</td>
<td>I am seen as someone who works well with others</td>
<td></td>
<td>Collaboration Scale</td>
</tr>
<tr>
<td>SRLS13</td>
<td>My behaviors are congruent with my beliefs</td>
<td></td>
<td>Congruence Scale</td>
</tr>
<tr>
<td>SRLS14</td>
<td>I am committed to a collective purpose in those Groups to which I belong</td>
<td></td>
<td>Common Purpose Scale</td>
</tr>
<tr>
<td>SRLS16</td>
<td>I respect opinions other than my own</td>
<td></td>
<td>Controversy with Civility Scale</td>
</tr>
<tr>
<td>SRLS19</td>
<td>I contribute to goals of the group</td>
<td></td>
<td>Common Purpose Scale</td>
</tr>
<tr>
<td>SRLS22</td>
<td>I know myself pretty well</td>
<td></td>
<td>Consciousness of Self Scale</td>
</tr>
<tr>
<td>SRLS23</td>
<td>I am willing to devote the time and Energy to things that important to me</td>
<td>Commitment Scale</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------------------------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>SRLS24</td>
<td>I stick with others through difficult times</td>
<td>Commitment Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS27</td>
<td>It is important to me to act on my beliefs</td>
<td>Congruence Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS28</td>
<td>I am focused on my responsibilities</td>
<td>Commitment Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS29</td>
<td>I can make a difference when I work with others on a task</td>
<td>Collaboration Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS30</td>
<td>I actively listen to what others have to say</td>
<td>Collaboration Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS32</td>
<td>My actions are consistent with my values</td>
<td>Congruence Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS33</td>
<td>I believe I have responsibilities to my community</td>
<td>Citizenship Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS34</td>
<td>I could describe my personality</td>
<td>Consciousness of Self Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS40</td>
<td>I work with others to make my communities better places</td>
<td>Citizenship Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS41</td>
<td>I can describe how I am similar to other people</td>
<td>Consciousness of Self Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS42</td>
<td>I enjoy working with others toward common goals</td>
<td>Collaboration Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS47</td>
<td>I participate in activities that contribute to the common good</td>
<td>Citizenship Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS48</td>
<td>Others would describe me as a cooperative person</td>
<td>Collaboration Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS51</td>
<td>I can be counted on to do my part</td>
<td>Commitment Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS52</td>
<td>Being seen as a person of integrity is important to me</td>
<td>Congruence Scale</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>SRLS53</td>
<td>I follow through on my promises</td>
<td>Commitment Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS54</td>
<td>I hold myself accountable for responsibilities I agree to</td>
<td>Commitment Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS58</td>
<td>I know the purpose of the groups to which I belong</td>
<td>Common Purpose Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS59</td>
<td>I am comfortable expressing myself</td>
<td>Consciousness of Self Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS60</td>
<td>My contributions are recognized by others In the groups I belong to</td>
<td>Collaboration Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS61</td>
<td>I work well when I know the collective Purpose values of a group</td>
<td>Common Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS62</td>
<td>I share my ideas with others</td>
<td>Controversy With Civility Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS63</td>
<td>My behaviors reflect my beliefs</td>
<td>Congruence Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS66</td>
<td>I value opportunities that allow me to contribute to my community</td>
<td>Citizenship Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS67</td>
<td>I support what the group is trying to accomplish Purpose</td>
<td>Common Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS69</td>
<td>It is important to me that I play an active role in my communities</td>
<td>Citizenship Scale</td>
<td></td>
</tr>
<tr>
<td>SRLS71</td>
<td>I believe my work has a greater purpose for the larger community</td>
<td>Citizenship Scale</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* Adapted from *MSL 2012 Codebook* (Multi-Institutional Study of Leadership, 2011).
### Appendix J

#### Variables Needing Rescaling to Ensure Consistency

##### Between 2009 and 2012 Datasets

<table>
<thead>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DEM5</td>
<td>Which of the following best describes your primary major? (Select the category that best represents your field of study)</td>
<td>1=Agriculture 2= Architecture/ Urban planning 3= Biological/ Life Sciences (ex. biology, biochemistry, botany, zoology) 4= Business (ex. accounting, business administration, marketing, management) 5= Communication (speech, journalism, television/radio) 6= Computer and Information Sciences 7= Education 8= Engineering 9= Ethnic, Cultural Studies, and Area Studies 10= Foreign Languages and Literature (ex. French, Spanish) 11= Health-Related Fields (ex. nursing, physical therapy, health technology) 12= Humanities (ex. English, Literature, Philosophy, Religion, History) 13= Liberal/ General Studies 14= Mathematics 15= Multi/ Interdisciplinary Studies (ex. international relations, ecology, environmental studies) 16= Parks, Recreation, Leisure Studies, Sports Management 17= Physical Sciences (ex. physics, chemistry, astronomy, earth science) 18= Pre-Professional (ex. pre-dental, premedical, pre-veterinary) 19= Public Administration (ex. city management, law enforcement) 20= Social Sciences (ex. anthropology, economics, political science, psychology, sociology) 21= Visual and Performing Arts (ex. art, music, theater) 22= Undecided 99= Asked but not answered</td>
<td>DEM4</td>
<td>Which of the following best describes your primary major? (Select the category that best represents your field of study)</td>
<td>1=Agriculture 2= Architecture/ Urban planning 3= Biological/ Life Sciences (ex. biology, biochemistry, botany, zoology) 4= Business (ex. accounting, business administration, marketing, management) 5= Communication (speech, journalism, television/radio) 6= Computer and Information Sciences 7= Education 8= Engineering 9= Ethnic, Cultural Studies, and Area Studies 10= Foreign Languages and Literature (ex. French, Spanish) 11= Health-Related Fields (ex. nursing, physical therapy, health technology) 12= Humanities (ex. English, Literature, Philosophy, Religion, History) 13= Liberal/ General Studies 14= Mathematics 15= Multi/ Interdisciplinary Studies (ex. international relations, ecology, environmental studies) 16= Parks, Recreation, Leisure Studies, Sports Management 17= Physical Sciences (ex. physics, chemistry, astronomy, earth science) 18= Pre-Professional (ex. pre-dental, premedical, pre-veterinary) 19= Public Administration (ex. city management, law enforcement) 20= Social Sciences (ex. anthropology, economics, political science, psychology, sociology) 21= Visual and Performing Arts (ex. art, music, theater) 22= Undecided</td>
</tr>
</tbody>
</table>
| ENV3a | As part of a class | 1=None  
2=1-5  
3=6-10  
4=11-15  
5=16-20  
6=21-25  
7=26-30  
8=31 or more | ENV3a | As part of a class | 0=None  
1=1-5  
2=6-10  
3=11-15  
4=16-20  
5=21-25  
6=26-30  
7=31 or more |
| ENV3b | As part of a work study experience | 1=None  
2=1-5  
3=6-10  
4=11-15  
5=16-20  
6=21-25  
7=26-30  
8=31 or more | ENV3b | As part of a work study experience | 0=None  
1=1-5  
2=6-10  
3=11-15  
4=16-20  
5=21-25  
6=26-30  
7=31 or more |
| ENV3c | With a campus student organization | 1=None  
2=1-5  
3=6-10  
4=11-15  
5=16-20  
6=21-25  
7=26-30  
8=31 or more | ENV3c | With a campus student organization | 0=None  
1=1-5  
2=6-10  
3=11-15  
4=16-20  
5=21-25  
6=26-30  
7=31 or more |
| ENV3d | As part of a community organization unaffiliated with your school | 1=None  
2=1-5  
3=6-10  
4=11-15  
5=16-20  
6=21-25  
7=26-30  
8=31 or more | ENV3d | As part of a community organization unaffiliated with your school | 0=None  
1=1-5  
2=6-10  
3=11-15  
4=16-20  
5=21-25  
6=26-30  
7=31 or more |
| ENV3e | On your own | 1=None  
2=1-5  
3=6-10  
4=11-15  
5=16-20  
6=21-25  
7=26-30  
8=31 or more | ENV3e | On your own | 0=None  
1=1-5  
2=6-10  
3=11-15  
4=16-20  
5=21-25  
6=26-30  
7=31 or more |
ENV6b  Held a leadership position in a college organization(s)? (ex. officer in a club or organization, captain of athletic team, first chair in musical group, section editor of newspaper, chairperson of committee)?  
1=Never  
2=Once  
3=Sometimes  
4=Many Times  
5=Much of the Time  

ENV6b  Held a leadership position in a college organization(s)? (ex. officer in a club or organization, captain of athletic team, first chair in musical group, section editor of newspaper, chairperson of committee)?  
0=Never  
1=Once  
2=Sometimes  
3=Many Times  
4=Much of the Time  

ENV6c  Been an involved member in an off-campus community or work-based organization(s) (ex. Parent-Teacher Association, church group, union)?  
1=Never  
2=Once  
3=Sometimes  
4=Many Times  
5=Much of the Time  

ENV6c  Been an involved member in an off-campus community or work-based organization(s) (ex. Parent-Teacher Association, church group, union)?  
0=Never  
1=Once  
2=Sometimes  
3=Many Times  
4=Much of the Time  

ENV9a  Talked about different lifestyles/customs  
1=Never  
2=Sometimes  
3=Often  
4=Very Often  

ENV9a  Talked about different lifestyles/customs  
0=Never  
1=Sometimes  
2=Often  
3=Very Often  

ENV9b  Held discussions with students whose personal values were very different from your own  
1=Never  
2=Sometimes  
3=Often  
4=Very Often  

ENV9b  Held discussions with students whose personal values were very different from your own  
0=Never  
1=Sometimes  
2=Often  
3=Very Often  

ENV9c  Discussed major social issues such as peace, human rights, and justice  
1=Never  
2=Sometimes  
3=Often  
4=Very Often  

ENV9c  Discussed major social issues such as peace, human rights, and justice  
0=Never  
1=Sometimes  
2=Often  
3=Very Often
<table>
<thead>
<tr>
<th>Question</th>
<th>Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV9d</td>
<td>1=Never 2=Sometimes 3=Often 4=Very Often</td>
</tr>
<tr>
<td></td>
<td>Held discussions with students whose religious beliefs were very different from your own</td>
</tr>
<tr>
<td>ENV9e</td>
<td>1=Never 2=Sometimes 3=Often 4=Very Often</td>
</tr>
<tr>
<td></td>
<td>Discussed your views about multiculturalism and diversity</td>
</tr>
<tr>
<td>ENV9f</td>
<td>1=Never 2=Sometimes 3=Often 4=Very Often</td>
</tr>
<tr>
<td></td>
<td>Held discussions with students whose political opinions were very different from your own</td>
</tr>
<tr>
<td>PRE3a-d</td>
<td>See 2009 questions 1=Never 2=Sometimes 3=Often 4=Very Often</td>
</tr>
<tr>
<td></td>
<td>Student clubs and organizations (e.g., student government, band, debate club)</td>
</tr>
<tr>
<td>PRE3e</td>
<td>Organized sports (ex. Varsity, club sports) 1=Never 2=Sometimes 3=Often 4=Very Often</td>
</tr>
<tr>
<td></td>
<td>Organized sports (ex. Varsity, club sports)</td>
</tr>
<tr>
<td>PRE3f</td>
<td>Leadership positions in student clubs, groups, or sports (ex. officer in a club or organization, captain of athletic team, first chair in musical group, section editor of newspaper) 1=Never 2=Sometimes 3=Often 4=Very Often</td>
</tr>
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<td></td>
<td>Leadership positions in student clubs, groups, or sports (ex. officer in a club or organization, captain of athletic team, first chair in musical group, section editor of newspaper)</td>
</tr>
<tr>
<td>PRE4a</td>
<td>Performed community service 1=Never 2=Sometimes 3=Often 4=Very Often</td>
</tr>
<tr>
<td></td>
<td>Performed community service</td>
</tr>
<tr>
<td>PRE4c</td>
<td>Participated in community organizations (ex. church group, scouts)</td>
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<td>-------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>PRE4d</td>
<td>Took leadership positions in community organizations</td>
</tr>
<tr>
<td></td>
<td>Working with others for change to address societal problems (ex. rally, protest, community organizing)</td>
</tr>
<tr>
<td>PRE5b</td>
<td>I had low self esteem</td>
</tr>
</tbody>
</table>