The Relationship between Involvement in Religious Student Organizations and the Development of Socially Responsible Leadership Capacity

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THE RELATIONSHIP BETWEEN INVOLVEMENT IN RELIGIOUS STUDENT ORGANIZATIONS AND THE DEVELOPMENT OF SOCIALLY RESPONSIBLE LEADERSHIP CAPACITY

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D I S S E R T A T I O N

____________________________________________________

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Studies in Higher Education at the University of Kentucky

By

William Jared Black

Lexington, Kentucky

Co-Directors: Dr. Willis A. Jones, Assistant Professor of Educational Policy Studies and Evaluation and Dr. John R. Thelin, Professor of Educational Policy Studies and Evaluation

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ABSTRACT OF DISSERTATION

THE RELATIONSHIP BETWEEN INVOLVEMENT IN RELIGIOUS STUDENT ORGANIZATIONS AND THE DEVELOPMENT OF SOCIALLY RESPONSIBLE LEADERSHIP CAPACITY

This study of 76,365 students from 82 U.S. institutions explored the relationship between involvement in a religious student organization and student capacities for socially responsible leadership, based on the Social Change Model of Leadership (SCM). Results from t-tests found students involved in both religious and secular student organizations reported statistically significantly higher scores on all eight measures of socially responsible leadership than students involved in only religious student organizations.

Hierarchical multiple regression models explained between 26% and 29% of the variance in student reported levels of overall socially responsible leadership. Compared to students involved in no organizations, involvement in religious only, secular only, and both religious and secular organization types were found to be negative yet statistically insignificant predictors of socially responsible leadership. The highest predictors of socially responsible leadership were precollege capacities for socially responsible leadership, number of years in school, and collegiate student organization involvement frequency.

KEYWORDS: Religious student organizations, socially responsible leadership capacity, college student involvement, student organizations, leadership development, religion.

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Student’s signature
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THE RELATIONSHIP BETWEEN INVOLVEMENT IN RELIGIOUS STUDENT ORGANIZATIONS AND THE DEVELOPMENT OF SOCIALLY RESPONSIBLE LEADERSHIP CAPACITY

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TO OWEN, JAMES, AND LEVI

And whatever you do or say, do it as a representative of the Lord Jesus, giving thanks through him to God the Father.

Colossians 3:17
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CHAPTER ONE: INTRODUCTION

One of the most common objectives of colleges and universities, dating back to America’s earliest colonial colleges, is to develop students into the next generation of leaders (Astin & Astin, 2000; Thelin, 2011). In particular, institutions of higher learning strive to develop leaders that can make a positive impact on society. This type of leadership is known as socially responsible leadership and is often considered an objective of a college education (Association of American Colleges and Universities [AACU], 2007). In order to develop socially responsible leadership, numerous colleges and universities have created both curricular and co-curricular programs.

For the last century, numerous scholars have attempted to define, research, and create theories on leadership (Northouse, 2010). Throughout this time, leadership research has evolved. Early conceptualizations describe leadership from a more industrial, hierarchical perspective. This perspective focuses solely on the leader and his or her traits, style, and ways he or she can enhance productivity. Modern conceptualizations of leadership adopt a more postindustrial, non-hierarchical perspective. This perspective considers not only the leader, but his or her followers and the situation or context in which they are leading. This perspective considers leadership more as a collective process among the leader, followers, and the situation to determine ways to enhance productivity. Additionally, many modern conceptualizations of leadership call on leaders to not only lead, but lead in ways that promote the common good.

Most research and theories on leadership have been developed for other populations such as those in business and other organizational contexts, not for college
students specifically. However, in recent years, theories and models of leadership development have been created specifically with college students in mind. In particular, the Social Change Model of Leadership (SCM), developed by the Higher Education Research Institute (HERI, 1996), is a model commonly used in research on college student leadership development. The SCM is a model centered on developing a specific type of leadership within college students, known as socially responsible leadership.

According to Wagner (2009), socially responsible leaders strive to make a positive difference in their communities, often in the form of social change. Colleges and universities are not only called to produce socially responsible leaders, but also called to promote specific types of social change, such as the promotion of religious pluralism and interfaith dialogue. For example, the Obama Administration called on institutions of higher education to participate in interfaith dialogue and service programs. To accomplish this, religious and non-religious student organizations within the colleges and universities are called upon to come together and participate in community service. This process not only benefits the community, but allows people of different faiths to interact, learn, and understand one another (U.S. Department of Education, Center for Faith-Based and Neighborhood Partnerships, 2013).

One reason why institutions of higher education and outside agencies like the Obama administration look to religious student organizations at colleges and universities to participate in social change related activities is because religious student organizations have a long history of valuing leadership and social change. For example, language pertaining to both leadership development and social change can be found in many
religious student organization mission statements, including those of InterVarsity Christian Fellowship and Hillel International (Hill, 2003; Hillel International, 2015b).

In order to develop students into the next generation of leaders, colleges and universities have used both curricular and co-curricular approaches. From a curricular approach, which generally involves programs found inside the classroom, institutions have offered a range of options, from individual courses on leadership to majors and minors in leadership studies. From a co-curricular approach, which generally involves programs found outside the classroom, institutions have encouraged involvement in student clubs and organizations, participation in leadership education and training programs, or engaging in community service – all of which have contributed positively to a students’ leadership development (Astin & Astin, 2000; Dugan & Komives, 2007; Haber & Komives, 2009; Rosch, 2007).

It is important to note, however, that not all students develop or make sense of leadership in the same ways. When considering student development, it is critical to consider the various inputs, or precollege characteristics, that each student brings to the academy. In general, inputs can include demographic characteristics such as race, gender, or socioeconomic status, as well as other characteristics such as precollege leadership experiences, entrance exam scores, or whether they are a first-generation college student. Research has demonstrated that students from different backgrounds conceptualize and develop leadership in different ways. For example, a few studies have found that women and students of color are more likely to view leadership as group-centered and collaborative (Arminio, et al., 2000; Curnow, 2013; Liu & Sedlacek, 1996). Students of color – including African-American students, Latino students, and Asian-
Pacific students – have been found to use involvement in race-based student organizations as a way to facilitate their own racial identity development, which, in turn, has resulted in confidence to join and lead in predominately white organizations (Arminio, et al., 2000; Harper & Quaye, 2007; Sutton & Terrell, 1997; Yamasaki, 1995). Similarly, students that identify as LGBT have used LGBT-related student organizations to help facilitate their own sexual orientation or gender identity development, which led to increased confidence in leadership abilities (Renn & Bilodeau, 2005a, 2005b). This research has generally found that when students develop in their unique identities, they also develop in their leadership capacities.

Examining involvement in student organizations is important because it is a popular activity among college students. According to some estimates, around 50% of all college students are involved in a student organization at one point during college (National Survey of Student Engagement [NSSE], 2006). Numerous studies have been conducted that examine the impact of student organization involvement on leadership development because student organizations provide the student-student interaction that has been found critical to student leadership development (Astin, 1993). Specific to socially responsible leadership, research has been conducted that examines student involvement in organizations such as fraternities and sororities, service organizations, and political organizations. Results have shown a positive relationship between involvement in these organizations and socially responsible leadership development (Chowdhry, 2010; Dugan, 2008a; Hogendorp, 2012).

One type of student organization worth examining is the religious student organization. As previously mentioned, many religious student organizations value
leadership development and social change. To achieve this, religious student organizations are often involved in activities that have been linked to socially responsible leadership development, such as community service and interfaith dialogue. Considering this context, it seems natural to hypothesize that a positive relationship may exist between involvement in a religious student organization and growth in socially responsible leadership development. However, no research has been conducted to explore this relationship, resulting in a gap in the literature. The aim of this study will be to fill this gap in the literature by examining the relationship between involvement in a religious student organization and socially responsible leadership development.

Statement of Purpose and Objectives

The objective of this study is to examine the relationship between college student involvement in a religious student organization and the development of socially responsible leadership. In particular, this study seeks to find whether involvement in a religious student organization is correlated with higher self-reported scores on the socially responsible leadership scale. To that end, students involved in only religious student organizations will be compared to those involved in both religious and secular student organizations, those involved in secular student organizations only, and those not involved in any organizations. Further, this study will explore whether involvement in a religious student organization will significantly predict students’ scores on the socially responsible leadership scale, after controlling for student inputs and other collegiate experiences.

Research Questions

This study was guided by the following research questions:
1. Is there a statistically significant difference in self-reported capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate in both religious and secular student organizations?

2. Is there a statistically significant difference in self-reported capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate only in secular student organizations?

3. Is there a statistically significant difference in self-reported capacities for socially responsible leadership among students who participate only in religious student organizations and students who do not participate in student organizations?

4. How much variance in self-reported overall socially responsible leadership capacity during college is explained by students’ involvement in a religious student organization above and beyond a students’ inputs (demographic characteristics, precollege experiences, capacities for socially responsible leadership prior to entering college) and other collegiate experiences?

**Summary of Research Design and Methodology**

The research questions of this study were explored by analyzing secondary data collected by the Multi-Institutional Study of Leadership (MSL). In 2012, the MSL conducted its third national study with results published in 2015. In the 2012 study, approximately 91,178 undergraduate students were surveyed across 82 campuses. The MSL was specifically designed to collect data on student demographics, precollege experiences, collegiate experiences, and socially responsible leadership.
To assess growth in socially responsible leadership, the MSL compared students’ current levels of socially responsible leadership to their levels of socially responsible leadership prior to college. The levels of socially responsible leadership prior to college were determined by asking students seven retrospective questions on a Socially Responsible Leadership Quasi-Pretest within the larger MSL study. Responses to these questions were then compared to students’ current levels of socially responsible leadership, as measured by the Socially Responsible Leadership scale (SRLS). Originally introduced by Tyree (1998) as a 104-item survey instrument, the SRLS has undergone multiple item reductions while retaining its reliability and validity (Dugan, 2015). For the 2012 administration of the MSL study, the researchers used a 39-item version of the SRLS.

This study is conceptually grounded in Astin’s (1993) Input-Environment-Outcome model. This model holds that the characteristics a student brings with them to college (inputs) and the experiences students have during college (environment) will have an impact on what they take away from college (outcome). For this study, students in four involvement subgroups (those involved in religious organizations, secular organizations, both religious and secular organizations, and no organizations) will be examined. Students involved in religious student organizations will be compared to students involved in each of the other three involvement subgroups based on their levels of socially responsible leadership capacity, as well as take into consideration differences in student inputs (demographic characteristics and precollege experiences) and environments (collegiate experiences).
For question 1, 2, and 3, $t$-tests were utilized to determine if statistically significant differences exists between students involved in only religious student organizations and students involved in only secular student organizations, students involved in both religious and secular student organizations, and students that do not participate in any student organizations. If statistically significant differences were found, effect sizes were measured by performing a Cohen $d$. Finally, for research question 4, hierarchical multiple regression was used to determine how much variance in self-reported overall socially responsible leadership development is explained by students’ involvement in a religious student organization above and beyond a student’s inputs (demographic characteristics, precollege experiences, capacities for socially responsible leadership prior to entering college) and other collegiate experiences.

**Definition of Terms**

This study sought to explore the relationship between involvement in a religious student organization and the development of self-reported socially responsible leadership capacity. This section will define each of these terms.

**Religious student organization.** While there are numerous ways college students can become involved in religiously themed organizations, such as parish-based youth groups or independent Bible studies, the scope of this study will examine student involvement in a campus-based religious student organization. Specifically, on the MSL survey, students were asked to mark “Yes” or “No” to the types of student groups they were involved in during college. Of the 23 student group options, one was “Religious (ex. Fellowship of Christian Athletes, Hillel).”
Students were categorized into four subgroups based on student organizational involvement. Students who only marked “Yes” to religious and no other organizations were categorized as involved in “Religious organizations only.” Students who marked “Yes” to religious and at least one other (i.e. secular) type of student organization were categorized as involved in “Both religious and secular organizations.” Students that marked “Yes” to at least one secular type of student organization and no religious organizations were categorized as involved in “Secular organizations only.” Students that marked “No” to all of the student organization options were categorized as “No organizations.” Only students that marked “Yes” or “No” to all 23 types of student organizations were included in analysis. Students that left one or more of the options unanswered were dropped from analysis.

**Socially responsible leadership.** There are countless definitions of leadership and numerous ways to conceptualize and measure it. This study, however, focuses on one type of leadership: socially responsible leadership. Socially responsible leadership is defined as “an approach to leadership that maintains a sense of responsibility for the welfare of others as the group goes about its business” (Wagner, 2009, p. 33). In other words, socially responsible leaders are not only interested in being productive in their work, but doing their work in a way that positively impacts others and their communities. This positive impact often comes in the form of social change initiatives, which usually involves improving the lives of others or caring for the environment. Examples of work conducted by socially responsible leaders might include advocating for marginalized groups, improving education, or serving the community.
Socially responsible leadership falls within the postindustrial paradigm of leadership concepts, which generally views leadership as a collaborative process aimed at promoting the common good. This contrasts with the industrial paradigm of leadership concepts, which generally views leadership as leader-centric, hierarchical, and focused on productivity (Northouse, 2010). Komives, Wagner, and Associates (2009) frame socially responsible leadership in this context by defining it as “a purposeful, collaborative, values-based process that results in positive social change” (p. xii).

Socially responsible leadership is theoretically grounded in the Social Change Model of Leadership (SCM) (Higher Education Research Institute [HERI], 1996), which holds that students develop seven individual and one overarching leadership values across three interrelated domains or perspectives. For this study, socially responsible leadership was measured by the Multi-Instructional Study of Leadership using an adapted version of Tyree’s (1998) Socially Responsible Leadership Scale (SRLS).

**Leadership capacity.** This study will use the working definition of leadership capacity used by the Multi-Institutional Study of Leadership, which defines leadership capacity as “the knowledge, skills, and attitudes associated with the ability to engage in leadership” (Dugan, Kodama, Correia, & Associates, 2013, p. 6). Leadership capacity is distinct from other conceptualizations of leadership, such as leadership efficacy (confidence in being successful in leadership), leadership motivation (desire to engage in leadership), or leadership behaviors (leadership capacity in action). This study will seek to determine if a relationship exists between involvement in a religious student organization and the development of self-reported capacities for socially responsible leadership.
Significance

This study is significant for several reasons. For example, the results of this study can help inform researchers, college administrators, student organization advisors, campus ministers, leadership educators, and other interested stakeholders on the relationship between involvement in a religious student organization and the development of socially responsible leadership. Each of these particular stakeholders can use the findings of this study to influence future research, institutional investment, advising practices, and program development.

Previous studies have been conducted that study the relationship between student organization involvement and socially responsible leadership. However, many of these studies have examined involvement in a student organization broadly (i.e. either involved in an organization or not) (Dugan, 2006, 2008b; Haber & Komives, 2009; Rosch, 2007; Page, 2010); examined students that held a formal leadership position (Dugan, 2006; Page, 2010); or focused on limited types of student organizations, such as fraternities and sororities (Dugan, 2008a; Gerhardt, 2008; Wiser, 2013); service, advocacy, and identity-based organizations (Chowdhry, 2010); and political organizations (Hogendorp, 2012). This study is significant because it specifically examines religious student organizations, a population not yet examined in this context.

This study also contributes to the broader knowledge pertaining to outcomes related to involvement in a religious student organization. For example, studies have been conducted on the relationship between involvement in a religious student organization and student spiritual development (Bryant, 2007; Bryant, Choi, & Yasuno, 2003) social adjustment to college (Bryant, 2007; Fiesta, Strange, & Woods, 2002),
persistence and academic success (Addison, 1996; Sax & Gilmartin, 2002; Bryant, 2007),
self-esteem, mental health, and constructive social activities (Bryant, 2007; Hammermeister & Peterson, 2001; Smith & Faris, 2002), and cross-racial interaction and developing interracial friendships (Park, 2012; Park & Bowman, 2015; Park & Kim, 2013). However, while some studies have attempted to link religiosity or spirituality to socially responsible leadership development (Gehrke, 2008; Stonecipher, 2015), this is the first study to examine the relationship between involvement in a religious student organization and the development of capacities for socially responsible leadership.

One significant contribution of this study is a better understanding of the relationship between involvement in a religious student organization when considering various student backgrounds, including demographics, precollege experiences, and self-reported capacities for socially responsible leadership. This study acknowledges that some students develop and conceptualize leadership differently than other students and seeks to understand that phenomenon in the context of religious student organization participation.

Finally, this study adds to the growing literature on the development of socially responsible leadership among college students. As it has been established, leadership has been considered as an essential educational outcome of higher education and in particular, leadership that focuses on making society and communities better (i.e. socially responsible leadership) (Astin & Astin, 2000; Zimmerman-Oster & Burkhardt, 1999). To achieve this goal, institutions of higher education have used several approaches, such as promoting student involvement in clubs and organizations. This study is significant because the results shed light on colleges and universities’ ability to develop socially
responsible leaders, specifically through religious student organizations. Additionally, this study not only focuses on students solely involved in religious student organizations, but compares students across four involvement categories: (a) those involved in religious student organizations only; (b) those involved secular organizations only; (c) those involved both religious and secular organizations; and (d) those not involved in any organizations. Separating students into these four categories provides a more accurate picture of the relationship between religious student organization involvement and socially responsible leadership development.

**Chapter Overview**

Over the course of this chapter, the need for further research on the relationship between involvement in religious student organizations and the development of self-reported socially responsible leadership capacities has been introduced. The following chapters will discuss the relevant literature, methodology, results, and implications of this study. In particular, Chapter Two will review the relevant literature involving religious student organizations, leadership development, and college student involvement. In Chapter Three, contextual information pertaining to the survey instrument, the conceptual framework, and the methods and procedures used to answer the research questions will be described. Chapter Four of this study will articulate the findings of the research and Chapter Five will conclude the study by providing an in-depth discussion on what the findings mean and how those results might impact future practice and research.

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CHAPTER TWO: LITERATURE REVIEW

Many institutions of higher education list leadership development as a key part of its mission. In particular, many institutions seek to develop socially responsible leadership in its students. To accomplish this, many institutions utilize both curricular and co-curricular strategies. One particular co-curricular strategy is encouraging involvement in student clubs and organizations. This study will explore if involvement in a particular type of student organization – the religious student organization – is related to a student’s development of socially responsible leadership. Over the course of this chapter, relevant literature will be reviewed on religious student organizations, leadership theories, college student leadership development, and college student involvement.

Trends in College Student Religious Organization Involvement

The history of American higher education is rooted in religious tradition, specifically Christianity. However, over the last three centuries, the relationship between religion and American higher education has changed in many ways. Once central to the curriculum, religion has been pushed to the co-curriculum and private lives of students (Glanzer, Hill, & Ream, 2014; Reuben, 1996). It might be assumed that as colleges and universities became more secular in curriculum, religion no longer has a presence on the college campus, but that is not the case. In fact, according to Finder (2007) the college campus has “more religious life now than there had been in 100 years” (as cited in Maryl & Oeur, 2009, p. 260). Religion still has a significant presence on the college campus and it is not just limited to Christian groups. According to Schmalzbauer (2013), campus religious life is experiencing revitalization and renewal in almost all religious areas,
including evangelical Protestant groups, mainline Protestant groups, Catholic groups, Jewish Groups, minority religion groups, and even non-religious and secular groups.

The growth in interest and participation in religious student organization on the college campus can be attributed to several reasons. First, many students are trading involvement in formal religious activities, such as attending church, for informal involvement, such as attending on-campus Bible studies or religious student organization meetings. Second, students are actively using religious student organizations as a way to explore and define their own spirituality and religious beliefs. A third reason is attributed to increases in enrollment of women and minorities in higher education, both of which have reported higher levels of religious interest. Finally, many universities have started to support religious and spiritual involvement as part of a student’s holistic development. This section will outline each of these reasons in more detail.

**Formal and Informal Religious Involvement**

While many students do experience decline in formal religious participation, such as prayer and going to church (Bryant, Choi, & Yasuno, 2003), this decline in participation does not impact a student’s interest or beliefs. Through student surveys Maryl and Oeur (2009) found that students show high levels of self-reported religious belief but a smaller amount of students are actually invested in participating. In other words, students are interested in religion but are not participating in traditional religious activities. While student participation in formal church activities may decline during college, Hill (2009) suggests that students may be opting for alternative religious activities, such as joining an on-campus Bible study or worshiping with a religious
student organization, and trends in religious student organization participation tend to support those claims.

Among the fastest growing groups on campus are evangelical parachurch organizations, such as InterVarsity Christian Fellowship (IVCF) and Campus Crusade for Christ (Cru). Using contemporary campus ministry approaches and an on-campus presence strategy (Cawthon & Jones, 2004), these groups have increased to all-time high levels. IVCF has grown from two campuses in 1938 to serving over 40,000 students on 649 campuses students nationwide (InterVarsity Christian Fellowship, 2015). Cru has grown from one chapter in 1951 to having movements on 1,140 college campuses (Cru, 2015; DeMoss, 2015)

But evangelical parachurch organizations are not the only groups growing. Catholic and Jewish groups have also experienced growth. In a study conducted at Georgetown University, “there are 1,351 Catholic campus ministry organizations in the United States, three-fourths of which are found on non-Catholic campuses” (Schmalzbauer, 2013, p. 118). Similarly, in 2014, the Jewish Hillel Foundation added chapters at 18 colleges and universities and now serve over 550 campuses worldwide (Hillel News, 2014) and Jewish Chabad Houses are considered the “fastest growing Jewish presence on campus” (Schmalzbauer, 2013, p. 120). These organizations have invested significant resources in off-campus student unions and residential facilities, which have contributed to an increase in participation.

Interest and participation in minority religious groups has also grown, including an increased campus presence of Muslim Student Associations, Hindu Students Councils, Sikh Student Associations, Pagan Groups, Mormon Groups, and others (Schmalzbauer,
Even nonreligious groups have experienced increased participation, such as the Secular Student Alliance.

The only religious groups experiencing declines are groups under the mainline Protestant umbrella. For example, Lutheran Campus Ministries has dropped from having a presence on 600 campuses in 2004 to 400 campuses today (Cawthon & Jones, 2004; Evangelical Lutheran Church in America, 2015; Schmalzbauer, 2013). One explanation for this decline is that mainline groups are often off-campus and utilize a traditional worship style (Cawthon & Jones, 2004). Not all mainline Protestant groups are in decline, however. Mainline Protestant groups that have experienced increases in participation have utilized contemporary campus ministry approaches (Cawthon & Jones, 2004).

**Religious and Spiritual Exploration**

One of the main reasons religion is so vibrant on the college campus today is because students are interested in religion and spirituality. The Higher Education Research Institute (HERI, 2004) found that 75% of college freshmen are searching for meaning and purpose in their lives, and nearly the same amount believe the college experience can help them achieve that goal. Other findings from HERI’s (2004) research found that almost 50% of students find it “essential” or “very important” to find ways to grow spiritually and 80% of students attend at least one religious activity per year, believe in God, and reported to have an interest in spirituality. The same study also found that more than 66% of college freshmen pray.

There could, however, be a difference between the ways in which college students make sense of spirituality and religion. In another study conducted by HERI, the number
of freshman students selecting “none” as their religious preference is more than ever at 27.5% (Eagan, et al., 2014). Additionally, according to a Pew Research Study, the Christian share of the United States population fell from 78.4% to 70.6% between 2007 and 2014, while the share of “Unaffiliated” (i.e. atheist and agnostic) jumped from 16.1% to 22.8% (Pew Research Center, 2015) These data show that religious affiliation is in decline in the United States, however, those who are religious still make up a large majority.

This combination of growth in spirituality and decline in religious affiliation supports the notion that “spirituality can stand apart from religion, leading some individuals to classify themselves as spiritual, but not religious” (Bryant, Choi, & Yasuno, 2003, p. 724). Some scholars suggest that students are not rejecting religion, but rather engaging in a process of refining and reinterpreting previously held beliefs (Pascarella & Terenzini, 2005). Additionally, through this process, students often adopt a “spiritual but not religious” philosophy (Constantine, Miville, Warren, Gainor, & Lewis-Coles, 2006), are searching for a self-authored view of their beliefs different from their parents (Bryant, 2004, 2005), searching for meaning and purpose in their life (HERI, 2004), and suspending religious development in favor of focusing on transitioning to college and developing friendships (Clydesdale, 2007). However, as mentioned previously, religious involvement on campus is at record levels. It is likely college students are choosing religious involvement in campus organizations (rather than formal religious participation with a specific church or religion) as a means to explore their spirituality.
Women and Minorities

One explanation for the amount of interest and growth in religious involvement on campus is the fact that the makeup of the student body is much different today than it was even 50 years ago. Today, there are more minorities and women enrolled in higher education, an arena that was historically reserved for white males. According to Sherkat (2007) African Americans and women are found to be more religious than males and Anglo Americans, and at many institutions women exceed men in enrollment. This would suggest that the simple presence of minorities and women will cause the overall campus to have an increased level of religious interest. In support of this claim, much of the growth in evangelical parachurch organizations can be attributed to an increase in Asian American enrollment. According to Schmalzbauer (2007), the number of Asian Americans in InterVarsity Christian Fellowship (IVCF) has increased by 267% since the late 1970s, and the total membership of racial and ethnic minorities in IVCF sits around 35%.

University Support for Religion and Spirituality

Finally, most colleges and universities today value diversity and strive to be more inclusive as part of its mission, especially in Student Affairs offices. One aspect of diversity is religion. Over the last few decades, the American college campus has shifted from secular to now a “post-secular” campus (Jacobsen & Jacobsen, 2008; Sommerville, 2006). In other words, rather than shying away from religion, there is evidence that institutions are actually supporting religious life on campus. For example, many student affairs professionals argue for spiritual development as part of a holistic student development (Braskamp, Trautvetter, & Ward, 2006; Chickering, Dalton, & Stamm,
To that end, institutions are providing support in terms of programming, space, and staff.

From a programmatic standpoint, institutions are encouraging the formation of diverse religious and non-religious student groups and engagement in interfaith dialogue (Glanzer, Hill, & Ream, 2014). To support interfaith dialogue, institutions have implemented curricular and co-curricular programs. One example of a curricular program is an interdisciplinary minor in Interfaith Studies at Nazareth College. An example of a co-curricular program is the “Religious Pluralism Training for Resident Assistants and Orientation Leaders” at Dominican University (Interfaith Youth Core, 2010).

In terms of space, many campuses are beginning to construct multi-faith chapels to accommodate the growing religious diversity on the college campus for diverse religious student bodies (Johnson & Laurence, 2012; Mahoney, Schmalzbauer, & Youniss, 2001). These multi-faith spaces are found at both private and public institutions, such as Illinois Wesleyan University and Portland State University respectively (Illinois Wesleyan University, 2015; Samuelson, 2013). By providing these spaces, colleges and universities demonstrate inclusiveness and encourage students to explore or practice various faiths.

In addition to programs and space, some universities are intentional about providing support staff for students of various faiths. Universities are hiring chaplains or ministers of various faiths or even hiring “multi-faith” chaplains who can serve the broader student population on their respective campus. Institutions that have hired multifaith chaplains or chaplains for various faiths include Bates College and the
University of Southern California (Fischer, 2015; University of Southern California, n.d.). Through these institutional support efforts, students are provided opportunities to explore their religion and search for meaning. Further, Bryant (2006) suggests that college students are becoming aware of faiths other than Christianity and are adapting elements of those faiths.

**The Relationship between Religious Organization Involvement and Social Change**

Higher education institutions are looked upon to develop socially responsible leaders (Astin & Astin, 2000). By supporting co-curricular programs like student organizations, higher education institutions provide opportunities for students to develop capacities for socially responsible leadership. One type of student organization that is frequently involved in service-related activities is the religious student organization.

Socially responsible leadership is defined as “an approach to leadership that maintains a sense of responsibility for the welfare of others as the group goes about its business” (Wagner, 2009, p. 33). In other words, socially responsible leaders strive to make a positive difference in their communities and in the world. In particular, socially responsible leaders work toward social change, which involves solving issues to societal problems, such as eliminating poverty, taking care of the environment, or improving education. Ways in which individuals demonstrate socially responsible leadership include, but are not limited to, “service, community building, raising awareness, educating the public about issues, or advocating for policy change” (Wagner, 2009, p. 8).

One objective of many religious student organizations is to work toward positive social change. Many religious organizations participate in community service and other activities that benefit the common good. For example, Hillel International, a student
organization that serves the Jewish student population, has been involved in service efforts including bone marrow donation and disaster relief service. After Hurricane Katrina, Hillel International sent over “3,000 students and professionals to contribute thousands of hours of hands-on service” (Hillel International, 2015). Additionally, mainline Protestants groups are more likely to engage in social activism, especially on issues like “racial justice, equality for women, food stamps, rights for the disabled, reproductive choice and so forth” (Thomas, 2010). Within the mainline United Methodist Church is the General Board of Higher Education and Ministry (2016), which strives to “raise up a new generation of thoughtful, articulate Christians who care about making the world a better place” (para. 2) and “has stressed social justice and interfaith dialogue” (Schmalzbauer, 2013, p. 125). It is clear that promoting social change is a core objective of many religious organizations.

It is worth noting that a student’s religiosity plays a key role in their willingness to participate in a religious student organization and community service. According to Ozorak (2003), religious students tend to have more intrinsic motivation than students who are not religious, and intrinsically motivated students are more likely to be involved in service than extrinsically motivated students. Ozorak (2003) also found that students who viewed themselves as called to imitate a caring God were more likely to participate in service to others.

In addition to these findings, religious students are more likely to involve themselves in activities that resist the secular nature of the college environment, such as joining an evangelical campus group (Bramadat, 2000). Further, research has demonstrated that an association exists between college students who are involved in
religious organizations and possess higher levels of personal spirituality with increased participation in community service (Astin & Sax, 1998; Serow, 1989; Serow & Dreyden, 1990).

One reason why religious students participate in volunteer service is because religious organizations provide structured opportunities for members to engage in such activities. Scholars contend that involvement in campus religious organizations and other forms of organized religion practically guarantees opportunities for students to participate in volunteering (Ozorak, 2003; Serow, 1989; Serow & Dreyden, 1990; Wuthnow, 1991). In 2005, approximately 30.2% of all college students participated in volunteering, with nearly a quarter (23.4%) of those serving with a religious organization (Dote, Cramer, Dietz, & Grimm, 2006).

Research on institutional context also plays a role between religion and volunteering. According to Cruce and Moore (2007), students at private religious colleges are more likely to volunteer than students at public and nonreligious private colleges. Even further, Serow and Dreyden (1990) find that religiously oriented students at the private colleges were more likely than either non-religious students on their own campuses or religiously oriented students at the state university to do community service. These findings are consistent with those of Hammond and Hunter (1984), which found that students from religious backgrounds are more likely to choose more insulated (i.e. less secular) institutions when choosing a college.

Finally, an association exists between church attendance and frequency of volunteer service. According to Wilson and Janoski (1995), young adult Catholics who attend church weekly are more likely to volunteer than are infrequent attendees and
young adult liberal Protestants who attend church once or twice a month are more likely to volunteer than are those who never attend.

Colleges and universities have played a key role in advancing various social change efforts, including issues pertaining to multiculturalism, the LGBTQ community, and environmentalism (Interfaith Youth Core, 2010). In recent years, religious organizations within institutions of higher education have been encouraged to address another social issue: religious pluralism and interfaith dialogue. Two agencies that have specifically been supportive of higher education’s role in addressing interfaith dialogue include the Interfaith Youth Core and the White House under the Obama Administration.

In 2011, the White House Office of Faith-based and Neighborhood Partnerships launched the President’s Interfaith and Community Service Campus Challenge. This initiative called for institutions of higher education to develop or strengthen interfaith programs of community service. The goal of this initiative is to bring groups of people with different religious (or non-religious) backgrounds together to make a positive impact in their community. Not only would this benefit the community, but it would provide an opportunity for groups to grow in their understanding of people from different religious backgrounds. After the first two years of the initiative, over 242 colleges across the United States participated, involving over 100,000 students and 450 chapters of religious and secular student organizations. Projects included addressing issues like poverty, the environment, health care, and education (U.S. Department of Education, Center for Faith-Based and Neighborhood Partnerships, 2013).
The Relationship between Religious Organization Involvement and Leadership Development

Religious organizations, like most other collegiate clubs and organizations, provide opportunities for students to develop leadership skills. In fact, some religious clubs and organizations state leadership development as one of their key objectives. According to their website, one of InterVarsity Christian Fellowship’s Core Values is Leadership Development, stating “We develop women and men to serve as leaders at every level of InterVarsity and ultimately for the Kingdom of God, honoring God’s gifts and calling in them” (Hill, 2003).

Also, many religious clubs or campus ministries aim to encourage and develop students for future leadership and service to the church and the outside world. For example, Reformed University Fellowship (RUF, 2016) strives to gather “student groups and equip them for a lifetime of service both in the church and in the world,” (para. 1) and Hillel International (2016) “encourages students of all backgrounds to form deep, personal connections to Jewish life, learning and Israel, through Jewish exploration, leadership, and a sense of belonging” (para. 1). Other groups, like Campus Crusade for Christ (Cru), offer a number of online leadership training resources to its members (Cru, 2017).

Some studies show that religious organizations do help in the leadership development process. Magolda and Ebben (2006) found that religious student organization leaders employ leadership skills to help recruit and educate new members, as well as advance their mission of evangelism and to help students grow in their lives as Christians. When measuring the impact of involvement in a campus religious
organization on career development, Duffy and Lent (2008) suggest that students that received support “through religious communities” may be associated with increases in leadership-related skills such as “decision-making, goal setting and information seeking” (p. 368).

Some of this leadership potential may be rooted in a student’s level of religiosity or spirituality. Miles and Neumann (2007) found that students who perceived themselves as more religious scored higher in leadership ability than those who perceived themselves as less religious. Interestingly, while women scored higher in religiosity, they scored lower in self-reported leadership ability. The authors contend that effective leadership requires personal characteristics such as nurturing and caring, which may be correlated with those higher in religiosity. Additionally, the authors suggest that those high in religiosity may view leadership as a calling and seek leadership position as a way of “going beyond themselves” (Miles & Neumann, 2007, p. 8). In terms of spirituality, research has found that spiritual growth also enhances student leadership development (Astin, Astin, & Lindolm, 2011). Within the context of socially responsible leadership, student spirituality was the second-highest predictor of leadership traits in each of the three socially responsible leadership domains - individual, group, and society/community (Cook, 2012; Komives, Mackie, & Smith, 2012).

In recent years, colleges and universities have been called to develop its students into interfaith leaders, especially through the religious student organizations on their campuses. According to the report by the Interfaith Youth Core (2010), “America is the most religiously diverse country in the world” and our world is “in a time of religious conflict when issues of religious identity are headling the nightly news” (p. 3).
Additionally, the InterFaith Youth Core (2010) identify America’s institutions of higher education as “uniquely positioned to equip a new generation of leaders with the skills to constructively engage religious diversity” (p. 3). In particular, colleges and universities are looked upon to “help students develop as interfaith leaders - citizens who are prepared to engage, serve, and lead with others in a religiously diverse society” (Rockenbach, Mayhew, Kinarsky, & Interfaith Youth Core, 2014, p. 4).

Based on the literature, it is evident that religious student organizations at American colleges and universities are engaged in activities related to social change, the central purpose of socially responsible leadership. While we see that religious organizations are involved in activities related to socially responsible leadership, researchers have not tested how successful these organizations are at actually developing socially responsible leadership capacities in its students. The aim of this study is to test this unexplored area in the literature.

Definitions and Conceptualizations of Leadership

As it has been established, leadership education is considered a central outcome of higher education (Roberts, 2007). However, leadership can be defined and conceptualized in numerous ways. In this section, relevant scholarly literature pertaining to general definitions, approaches and theories of leadership will be reviewed.

General Definitions of Leadership

The term leadership is not easily defined. According to simple dictionary search, there are four ways to define leadership, which include (a) the position or function of a leader, a person who guides or directs a group; (b) ability to lead, (c) an act or instance of leading; guidance; direction; and (d) the leaders of a group (leadership, n.d.).
From this basic definition, leadership can be considered in several ways. The term leadership can refer to a single leader, or even a group of leaders. Additionally, it can be considered as the direction or guidance a leader gives. The focus of this section, however, is centered more on the part (b) definition of leadership: the ability (or capacity) to lead. Nevertheless, even when the term leadership is narrowed in scope to a leader’s ability or capacity to lead, defining leadership ability or capacity is still a difficult and complex task.

According to Bass (1990), “there are as many definitions of the term leadership as there are those who have studied it” (Dugan, 2011, p. 60). Additionally, scholars have attempted to view leadership from various perspectives, including that of the leader, the follower, the context of the situation, and many others. Attempts to measure leadership have been approached in qualitative, quantitative, historical, and mixed-methods approaches, as well as in terms of “small groups, therapeutic groups, or large organizations” (Northouse, 2010, p. 1). Northouse (2010) claims that leadership is a “complex process having multiple dimensions” (p. 1). Put simply, leadership is not easily defined because it can be viewed, measured, or observed from numerous, or even countless, perspectives.

Despite the challenges in defining and operationalizing the term leadership, Northouse (2010) has attempted to establish four components that are central to leadership, which are “(a) leadership is a process, (b) leadership involves influence, (c) leadership occurs in groups, and (d) leadership involves common goals” (p. 3). In order for leadership to be effectively performed, each of these four components must exist.
The four components of leadership are interrelated and linked closely together. In order for leadership to exist, all four components must be apparent. In terms of process, leaders must realize that leadership does not occur automatically, but rather occurs through interactions and relationships with followers. Through this interaction, leaders are able to influence followers to willingly act or behavior in desirable ways. By acting in these desirable ways, followers can help the leader achieve the common goals of the group. While leaders may have the ability to lead himself or herself or even a single individual, the context of this leadership discussion is centered on the leadership of groups.

With these four components in mind, Northouse (2010) attempts to define leadership as “a process whereby an individual influences a group of individuals to achieve a common goal” (p. 12).

**Leadership Theory**

As it has been established, leadership as a concept is not easily defined because not only have numerous scholars and commentators attempted it, but leadership itself can also be viewed from countless perspectives. Similarly, the concept of effective leadership is equally debated. Numerous scholars have provided several approaches and theories that attempt to establish what makes an effective leader and how to perform effective leadership.

According to Dugan (2011), “leadership theory is complex, socially constructed, and continuously evolving” (p. 36). This implies that past leadership theories have influence on current leadership theories and should not be discredited when new leadership theories are developed. Additionally, “any one theory offers an incomplete
picture when studied in isolation” (Dugan, 2011, p. 36). With that established, no single leadership approach or theory should be considered the most effective. According to Dugan (2011), most of the scholarly literature pertaining to the approaches to effective leadership can be described within two broad approaches: industrial and postindustrial. This section will examine the most influential scholarly literature pertaining to these two approaches and the various leadership theories it contains.

**Industrial paradigm of leadership.** Industrial approaches to leadership, according to Dugan (2011), include “trait-based, behavioral, situational, and expectancy-based theories” (Dugan, 2011, p. 37). These approaches to leadership are focused primarily on the development of the leader, with specific attention on developing skills within leaders that can enhance productivity. Within the larger umbrella of industrial leadership are several leadership theories and approaches, which include the great man theory, trait-based, style, and situational/contingency approaches to leadership.

**Great man theory of leadership.** In some of the earliest studies on leadership, much of the scholarship examined leaders that would be considered role models for learning leadership. The term Great Man Theory has been originally associated with the nineteenth-century Scottish historian Thomas Carlyle, (1841) who declared, “The history of the world is but the biography of great men” (p. 127). In essence, characteristics often attributed to men, such as masculinity and dominance, were considered key factors for effective leadership (Mann, 1959). This led to further research that argued that effective leaders possessed specific innate traits.

**Trait theory of leadership.** As one of the first advancements in the study of leadership, trait-based theories assume that leaders possess a universal set of traits or
characteristics that make them effective leaders. In early trait-based research, these traits were assumed to be innate within the leader and not something that could be developed. While many scholars have attempted to determine a definite list of traits for effective leadership with differing results (Kirkpatrick & Locke, 1991; Lord, DeVader, & Alliger, 1986; Mann, 1959; Stogdill, 1948, 1974; Zaccaro, Kemp, & Bader, 2004), contemporary research on trait-based leadership is focused on five major leadership traits, which are intelligence, self-confidence, determination, integrity, and sociability (Northouse, 2010). In response to the trait approach, several “skills approaches” (Katz, 1955; Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2000) have been advanced arguing that some leadership skills can be developed.

**Style Approach of leadership.** While earlier studies focused on the traits of a leader, the style approach focuses more on the behavior of the leader (Northouse, 2010). One of the defining elements of the style approach is that it is “composed of two general kinds of behaviors: task behaviors and relationship behaviors” (Northouse, 2010, p. 69). This approach is grounded in three different lines of research: the Ohio State University studies, the University of Michigan studies, and the work of Blake and Mouton on the Managerial Grid (Northouse, 2010).

In general, task behaviors involve a leader’s concern for achieving objectives while relationship behaviors include a leader’s concern for maintaining positive relationships with followers. For each of these two types of behaviors, leaders will fall on a low-high spectrum, meaning leaders will either be low task and low relationship, high task and high relationship, or any combination in between. The goal of the style approach is to identify the best balance between task and relationship orientation in order
to achieve the most effective leadership style. Although some scholars claim that the most effective leadership calls for a high task and high relationship style approach (Blake & McCanse, 1991; Misumi, 1985), this approach does not account for the particular needs of the followers or the situation in which leadership is needed.

**Situational approach of leadership.** The situation and contingency approaches to leadership recognizes that different situations call for different styles of leadership. The situation approach was originally developed by Hershey and Blanchard (1969) and revised several times (Blanchard, Zigarmi, & Nelson, 1985; Blanchard, Zigarmi, & Zigarmi, 1985; Hershey & Blanchard, 1977, 1988). In the situation approach, leaders must be able to accurately diagnose both the development level and the amount of support their followers require. Followers low in competency will require more development (i.e. task-oriented) guidance while followers low in motivation will require more supportive (i.e. people-oriented) guidance. This approach calls for leaders to adapt their style to the needs of the individual followers, whether it is developmental or supportive in nature.

**Contingency theory of leadership.** First advanced by Fiedler (1964), the contingency theory approach to leadership attempts to match the leadership style of the leader with the situation. The basic premise and goal of this theory is to match leaders with situations. To determine a leader’s style, the leader uses a personality-like measurement scale called the Least Preferred Coworker (LPC) scale. Those who score high on the LPC scale are more relationship-oriented while those who score low on the LPC scale are more task-oriented. To measure the situation, three variables are considered: climate of leader-member relations (good or poor), organization’s task
structure (high or low), and position power of the leader (strong or weak). When all three variables are considered in total, the situation is then determined to be favorable or unfavorable.

As summarized by Northouse (2010), the most favorable situations “are those having good leader-follower relations, defined tasks, and strong leader-position power” (p. 113). In contrast, unfavorable situations have poor leader-follower relations, unstructured tasks and weak leader-position power. Those leaders who score as low LPC’s (those more task-oriented) are considered to perform effectively in the extreme situations (most favorable and least favorable) while high LPC’s (those more relationship-oriented) are considered to perform effectively in the middle or more moderate situations.

The style approach and the contingency theory are considered industrial approaches because, while follower and situation are considered, ultimately the focus is on the leader and how he or she must adapt or in which context he or she must be placed.

**Postindustrial paradigm of leadership.** Postindustrial approaches to leadership, according to Dugan (2011), include themes of “transformational influence, reciprocal relationships, complexity, and authenticity” (p. 40). These approaches, in contrast to industrial approaches, focus on the mutual development of the leader, the follower, and the situation altogether. Rather than focusing solely on leader development, these approaches incorporate both leader and group development in order to enhance productivity or address group problems. There are several approaches and theories that are categorized within the postindustrial approach. This section will briefly examine the leadership theories categorized within the postindustrial paradigm.
Transformational theory of leadership. One of the most popular approaches to leadership receiving scholarly attention is the transformational approach, an approach first advanced by Burns (1978) and Bass (1985). In fact, over the course of ten years, one-third of the research published in *Leadership Quarterly* were on transformational or charismatic leadership (Lowe & Gardner, 2001). According to Northouse (2010), “transformational leadership is the process whereby a person engages with others and creates a connection that raises the level of motivation and morality in both the leader and the follower” (p. 172).

Transformational leadership differs from transactional leadership. An example of transactional leadership might include a manager offering bonuses to employees who surpass their sales goals. An example of transformational leadership might include a manager changing the company’s hiring process to actively include candidates from more diverse backgrounds. This process promotes positive change by encouraging a higher set of moral values in both the leader and the followers. In simple terms, transformational leadership aims to not only achieve great things but also inspire people to adopt greater standards.

Authentic theory of leadership. One of the most recent theories of leadership to emerge is authentic leadership, which was born out of failures in leadership in the public and private sectors, such as corporate scandals at companies like Enron. As a result of these leadership failures, society has demanded “genuine, trustworthy, and good leadership” (Northouse, 2010, p. 237). There is not a single definition of authentic leadership, however, it has been defined in three distinct ways: intrapersonally, developmentally, and interpersonally.
From the intrapersonal perspective, the focus is on the leader and his or her self-knowledge, self-regulation, and self-concept (Shamir & Eilam, 2005). The authors contend that leaders exhibiting authentic leadership are original, genuine, and lead with conviction based on their intrapersonal self-awareness.

From the developmental perspective, authentic leadership is not a fixed trait but rather developed over the course of a leader’s lifetime through major life events (Avolio & Gardner, 2005; Gardner, Avolio, & Walumba, 2005; Walumba, Avolio, Gardner, Wernsing, & Peterson, 2008). Through major events in a leader’s lifetime, authentic leadership is developed in the form of “positive psychological qualities and strong ethics” (Northouse, 2010, p. 207).

Finally, from an interpersonal perspective, authentic leadership is created through a collective process between the leader and the follower (Eagly, 2005). In particular, authentic leadership is achieved when the leader demonstrates strong ethics and achieves buy-in from followers. The followers play a key role in creating authentic leadership because the leader must align his or her message to the beliefs and values of his or her followers (Northouse, 2010).

Overall, leaders who base their actions on their true values and convictions are considered to be performing authentic leadership (Rosch & Anthony, 2012). Additionally, Northouse (2010) claims that authentic leaders are “more transparent, morally grounded, and responsive to people’s needs and values” (Northouse, 2010, p. 237).
Student Leadership Development in Higher Education

According to Astin and Astin (2000), “Higher education plays a major part in shaping the quality of leadership in modern American society” (p. 1). This notion is echoed by Roberts (2007), who identifies “leadership learning as the primary purpose of higher education,” (as cited in Osteen & Coburn, 2012, p. 5), and points to higher education as responsible for ensuring this outcome in students.

Astin and Astin (2000) suggest three major reasons why higher education plays a role in leadership development, which are to prepare future leaders, improve the current quality of leadership, and to promote civic engagement and social change.

One major reason why higher education plays a role in leadership development is the fact that higher education prepares the next “generation of leaders in government, business, science, law, medicine, the clergy, and other advanced professions” (Astin & Astin, 2000, p. 1). Specifically, the authors recommend future leaders be equipped with the knowledge, skills, and abilities to approach the “problems and challenges we face today,” which include “global warming, religious and ethnic conflict” and “the decline of citizen interest and engagement in the political process,” to name a few (p. 1).

A second major reason why higher education should be involved in leadership development is that the “quality of leadership in this country is eroding” (p. 2). The authors offer examples of “shaky race relations” and “declining civic engagement,” among others (p. 2). The authors are suggesting that the current quality of leadership is weak and needs to be improved. Therefore, not only does higher education play a role in developing the next generation of leaders, but goes further to remedy and improve the current state of leadership in America.
The third major reason why higher education should be involved in leadership
development is the role it plays in promoting civic engagement and social change. The
authors suggest that not only can higher education develop the next generation of public
officials, but it can also improve the “critically important civic work performed by those
individual citizens who are actively engaged in making a positive difference in the
society” (p. 2). This approach not only encourages democratic and civic participation, but
also promotes leadership that makes a difference, including social change efforts. Social
change efforts are centered on solving societal problems. Many problems in society are
rooted in economic, political, social, and cultural imbalances. A few examples, among
many, include “a widening gap between the rich and poor” and “an education system that
is failing children who live in less affluent school districts” (Wagner, 2009, p. 10). Higher
education plays a role in developing leaders committed to social change.

Models and Theories of College Student Leadership Development

The beginning of this chapter discussed general leadership definitions and
theories that have been advanced by leadership scholars. While these theories are
applicable to college student leadership development, these definitions and theories are
g geared toward a broader audience, including business leadership, non-profit leadership,
and educational leadership, to name a few. There are, however, leadership definitions and
theories that have been created and advanced specifically for the college student
population. This section will discuss those definitions and theories in more detail.

Servant Leadership. The first model or theory that is commonly used in higher
education leadership development is the Servant Leadership theory. This theory was not
originally created for the college student population, but was adapted for college student
use. According to Dugan and Komives (2011), this theory is used “extensively in higher education and particularly at faith-based institutions” (p. 43). Dugan and Komives (2011) describe Greenleaf’s (1977) Servant Leadership theory as a bridge between industrial and postindustrial approaches to leadership, discussed earlier. This theory is inherently industrial because it focuses on the leader and encourages him or her to be more service-oriented toward his or her organization and members. However, it also has elements of a postindustrial theory because it focuses on the follower and the organization.

The Leadership Challenge. Like the Servant Leadership model, The Leadership Challenge was also not developed with college students in mind, but later adapted for college student use. This theory, developed by Kouzes and Posner (1987) is rooted in the transformational leadership work of Burns (1978). It suggests that there are five learnable leadership practices – model the way, inspire a shared vision, challenge the process, enable others to act, and encourage the heart. Posner (2004, 2009) demonstrated that these five skills could be developed through “a variety of educational interventions” (Dugan & Komives, 2011, p. 44).

Relational Leadership Model. One model that was designed specifically for college students is the Relational Leadership Model (Komives, Lucas, & McMahon, 1998; Komives, Lucas, & McMahon, 2007). This model emphasizes the notion of reciprocal relationship where both leader and follower are engaged in accomplishing positive change. The Relational Leadership Model includes five components, which are purposefulness, inclusiveness, empowerment, ethical practices, and process orientation. According to Dugan and Komives (2011), “it is among the few models that explicitly include ethics as a necessary and inherent dimension to leadership” (p. 44).
**Leadership Identity Development Model.** A fourth model for college students is the Leadership Identity Development (LID) model (Komives, Longerbeam, Owen, Mainella, & Osteen, 2006). A central component of this model is helping college students discover their own leadership identity. The goal of this model is to help college students better understand what leadership is and who can be a leader. This developmental model aims to help college students transition from an assumption that leadership is limited to position or hierarchy to a belief that leadership is available to all, including themselves.

**Social Change Model of Leadership Development.** The Social Change Model of Leadership Development is another model designed specifically for college students and is the basis for the dependent variables of this study. Advanced by the Higher Education Research Institute (HERI, 1996), the Social Change Model is “designed to emphasize clarification values, the development of self-awareness, trust, and the capacity to listen and serve others, and through collaborative work to bring about change for the common good” (HERI, 1996, p. 11). Through this model, students develop capacities for socially responsible leadership and become socially responsible leaders.

As defined earlier, socially responsible leadership is “an approach to leadership that maintains a sense of responsibility for the welfare of others as the group goes about its business” (Wagner, 2009, p. 33). In other words, socially responsible leaders strive for social change, which can make a positive difference in their communities and in the world.

The Social Change Model of Leadership holds six assumptions regarding leadership. These assumptions include (a) leadership is concerned with effecting change
on behalf of others and society; (b) leadership is collaborative; (c) leadership is a process rather than a position; (d) leadership should be value-based; (e) all students are potential leaders (not just those in formal positions); and (f) service is a powerful vehicle for developing student leadership skills (HERI, 1996, p. 10).

Given these six assumption, the Social Change Model has two central objectives, which are to (a) facilitate social change and promote the common good; and (b) increase student learning and development, specifically in leader self-knowledge and the ability to work with others.

Through this model, students develop across three interrelated domains or perspectives, known as Individual, Group, and Society/Community. Distributed among these three domains are seven values and an eighth overarching value, known as the 8 C’s. The Individual domain contains three of the eight C’s: Consciousness of self, Congruence, and Commitment. The Group domain contains three more of the eight C’s: Collaboration, Common purpose, and Controversy with civility. The third domain is Society/Community and contains only one of eight C’s: Citizenship. The eighth value, Change, is an overarching value developed across all three domains. The dynamics of this development is illustrated in Figure 1. This section will briefly describe each of the 8 C’s within each of the three domains. Each of these values will be discussed in the following section and can be reviewed in Table 1.

**Individual values.** The first domain of the Social Change Model involves “Individual Values.” The Social Change Model argues that leaders must develop certain areas of self-awareness in order “to relate authentically to others in group settings and to make the personal commitments essential to working toward positive change” (Komives,
Wagner, & Associates, 2009, p. 296). The values that fall within the Individual Values domain include *Consciousness of self*, *Congruence*, and *Commitment*.

*Consciousness of self.* The first value under the Individual Values umbrella is *Consciousness of self.* The researchers who developed the SCM defined *Consciousness of self* as “being aware of the beliefs, values, attitudes, and emotions that motivate one to take action” (HERI, 1996, p. 22). This value is centered on the notion that leaders who first understand themselves can then understand and lead others. The researchers suggest that *Consciousness of self* is a foundational element of the leadership development process and aids in the development of the other values of the SCM.

*Congruence.* The second value under the Individual Values umbrella is *Congruence*, which is defined as “thinking, feeling, and behaving with consistency, genuineness, authenticity, and honesty toward others” (HERI, 1996, p. 36) Going a step beyond *Consciousness of self*, a leader who demonstrates *Congruence* is not only aware of his or her beliefs, values, attitudes, and emotions, but lives in a manner that is consistent with them. *Congruence* is an important element of leadership as it “instills trust and trusting relationships support working collaboratively with others” (Cilente, 2009, p. 64).

*Commitment.* The third and final value under the Individual Values umbrella is *Commitment*. HERI (1996) defined *Commitment* as

Involving the purposive investment of time and physical and psychological energy in the leadership development process: helping the group to find a common purpose and to formulate effective strategies for realizing that purpose, sustaining the group during times of controversy, and facilitating the actual realization of the group’s goals (p. 40).

*Commitment* is related to the leader’s passions and intrinsic motivations. Leaders demonstrating *Commitment* act on their passions and work toward change, not for
external rewards but because it provides a “deep sense of fulfillment that seems essential and natural to one’s being” (Kerkhoff & Ostick, 2009, p. 368). Commitment is essential to the leadership process because it can be viewed as the “fuel that powers organizational drive” (Kerkhoff & Ostick, 2009, p. 368).

**Group values.** The second domain is centered on “Group Values” because the Social Change Model recognizes that “leadership is inherently a relational process” (Komives, Wagner, & Associates, 2009, p. 192). In other words, echoing Northouse’s (2010) definition of leadership, leadership is a process that must occur within the context of a group that has a shared purpose. The three values that fall within the Group Values domain are Collaboration, Common purpose, and Controversy with civility.

**Collaboration.** The first value within the Group Values domain is Collaboration. The researchers define Collaboration as “working together toward common goals” (HERI, 1996, p. 48). Going beyond simple cooperation and compromise, Collaboration seeks to embrace the diverse perspectives and strengths of the individual group members in order to generate creative solutions while sharing responsibilities.

**Common purpose.** Common purpose, the second value within the Group Values domain, means “to work with others within a shared set of aim and values” (HERI, 1996, p. 55). The aim of Common purpose is to connect the values of the individual group members in order to shape the group’s goals and future. Developing Common purpose is critical because it “provides the basis for collaborative work within the group” (Teh, 2009, p. 256).

**Controversy with civility.** When defining Controversy with civility, the authors specifically aimed to distinguish it from “conflict.” To best understand the term
Controversy with civility, it is important to break the term into two parts. Controversy refers to the inevitable disagreements or disputes that occur within groups due to the differing viewpoints, perspectives, or opinions of the individual members. Civility refers to a commitment made by the individual members of the group “to seek a satisfactory resolution ‘with civility’” (Alvarez, 2009, p. 267). It is important that both controversy and civility exist within a group. Without controversy, the best ideas may not be able to surface and without civility, groups fail to ensure a respectful, collaborative environment.

**Society/Community values.** The “Society/Community Values” domain highlights the notion that membership within any group comes with responsibility to serve the good of the group. In particular, Society/Community Values “examine the importance of people coming together in community to address their shared needs and address shared problems” (Komives, Wagner, & Associates, 2009, p. 147). Citizenship is the only value within the Society/Community Values domain.

**Citizenship.** Within the Social Change Model, Citizenship “implies active engagement of the individual (and the leadership group) in an effort to serve that community, as well as a “citizens mind” – a set of values and beliefs that connects an individual in a responsible manner to others” (HERI, 1996, p. 65). Going beyond politics, government, or voting, citizenship implies involvement in a community that strives to enhance the quality of life within that community. Citizenship also means active engagement and caring for others within all communities large and small, from our local neighborhoods to the globe.

**Change (Overall Socially Responsible Leadership).** The final value is Change, which the Social Change Model defines as “the ultimate goal of the creative process of
leadership – to make a better world and a better society for self and others” (HERI, 1996, p. 21). Through the development of the other seven C’s, Change can occur. Bonous-Hammarth (1996) succinctly summarizes this notion by stating that the Social Change Model

Seeks to develop a conscious and congruent person who can collaborate with others, who can become a committed participant in the shaping of the group’s common purpose, who can help to resolve controversy with civility and be a responsible citizen” (p. 4).

College Student Involvement

Researchers have studied extensively the impact of the college experience on various student outcomes (Pascarella & Terenzini, 2005). Often, the college experience consists of how involved or engaged a student is with his or her college education, whether it be inside or outside the classroom (Astin, 1999; Kuh, 2009). This study will add to the existing research by exploring the relationship between involvement in a religious student organization and the development of socially responsible leadership capacity. In order to contextualize this study, this section will review the relevant literature pertaining to the relationship between student involvement and college outcomes, with specific attention to involvement in student organizations.

Student Engagement

In order to better understand student involvement, it is important to first understand the broader context of student engagement. According to Kuh (2009), student engagement is the amount of time and energy a student puts forth toward his or her college experience and generally includes three dimensions: time on task, quality of effort, and involvement. Time on task involves the amount of time a student devotes toward certain educational activities and quality of effort involves the amount of energy a
student exerts toward certain educational activities. Similar to quality of effort, involvement includes the “amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1999, p. 518). The involvement dimension includes the psychological and behavioral elements of engagement (Kuh, 2009).

Student engagement can include both curricular and co-curricular dimensions. Curricular engagement includes the amount of time, effort, and involvement a student devotes to academics, such as number of hours per week dedicated to studying, meeting with a faculty member, or participating in class discussions or projects. Co-curricular engagement generally consists of the amount of time, effort, and involvement a student devotes to non-academic or social dimensions of the college experience, such as becoming involved in a student club or organization, service learning, or attending a campus-wide lecture or musical event. Both curricular and co-curricular engagement have been linked to several desirable outcomes. In particular, positive correlations have been found between highly engaged students and gains in cognitive abilities (Astin, 1993; Kuh, 1993, 1995; Pascarella, Seifert, & Blaich, 2009; Pascarella & Terenzini, 2005), psychosocial development, self-esteem, locus of control (Bandura, Millard, Peluso, & Ortman, 2000; Chickering & Reisser, 1993), moral and ethical development (Jones & Watt, 1999; Liddell & Davis, 1996) and general academic achievement and persistence to graduation (Berger & Milem, 1999).

**Astin’s (1984) Theory of Student Involvement**

One of the most influential theories on student development is the Theory of Student Involvement, advanced by Alexander Astin (1984). According to the theory, a positive relationship exists between the quality and quantity of student involvement to
student learning and development. Involvement includes both academic and social dimensions and both contribute to learning and development. An example of a highly involved student is one that is involved in student organizations, meets with faculty members, and spends considerable time studying. Students that are less involved spend less time and energy on academic or social dimensions of the college experience. Astin (1999) summarized his theory by stating “the greater the student’s involvement in college, the greater will be the amount of student learning and personal development” (Astin, 1999, pp. 528-529). Put simply, the more time and effort a student puts into his or her college experience, the more he or she will get out of it.

**Astin’s (1993) Input-Environment-Outcome (I-E-O) Model**

While it is important to explore how involvement during college affects student development, it is also important to examine how precollege characteristics might relate to that development. Precollege characteristics might include a student’s race, gender, socioeconomic status, standardized test scores, or any other characteristic that a student brings with them to college. Research suggests that students with different precollege characteristics may develop in different ways. This idea has been conceptualized by Astin (1993) as the Input-Environment-Outcome (I-E-O) model and serves as the conceptual framework for this study.

According to the I-E-O model, Astin (1993) suggests that students bring certain precollege characteristics with them to college known as “Inputs.” While in college, students experience various forms of academic and social engagement, such as living on-campus, involvement in a student organization, and interacting with faculty. These experiences form the “Environment.” Finally, Astin (1993) suggests that based on the
students Inputs and Environment, the student will experience change or development in various ways, for example cognitive development, attitudes, or self-concept. These changes or developments are considered “Outcomes.”

For this study, specific Inputs, Environments, and Outcomes will be explored. Particularly, this study will explore the relationship between involvement in a religious student organization (Environment) and the development of socially responsible leadership capacity (Outcome), while controlling for differences in demographic characteristics, precollege experiences, and capacities for socially responsible leadership prior to college (Inputs).

**Student Involvement and Leadership Development**

In a longitudinal study of approximately 4,000 students over four years, Astin (1993) found that “by almost every indication, increases in Leadership appear to be associated with the college experience” (p. 123). In other words, almost all aspects of the college experience are correlated with positive increases in a student’s leadership development. In the study, Astin (1993) was able to isolate college experiences from other non-college influences and determined that age or maturation was not a factor in developing leadership skills. Astin (1993) also determined a positive correlation between years spent in college and increases in leadership skills, implying that the longer a student is in college, the more he or she will develop in leadership capacity. In support of this finding, Pascarella and Terenzini (2005) suggest that what the student experiences during college is more powerful predictor of leadership development than the college itself.

According to Astin (1993), the strongest effect on leadership skill formation was linked to student-student interaction. Types of student-student interaction varied from
interaction in intramural sports, fraternity and sorority membership, and working on group projects. Students that had very little student-student interaction or worked off campus experienced a negative impact in leadership development. The same negative correlation was related to number of hours watching television, number of hours spent commuting, and if faculty have a strong research orientation.

Not only do most aspects of the college experience positively impact leadership development, these increases are applicable across all student subpopulations. Astin (1993) found that leadership skills increased without any attribution to a student’s precollege characteristics, such as “students’ initial evaluations of their leadership skills and their academic abilities, race-ethnicity, gender, socio-economic status, and other relevant factors” (Pascarella & Terenzini, 2005, pp. 230-231). However, the only input that was correlated with a negative impact on leadership development is if the student reported a religious choice of “none.” Other than a religious choice of “none,” Astin’s (1993), research demonstrated that the outcome of leadership could be developed regardless of student’s inputs.

**Student Organization Involvement and Leadership Development**

There are several outcomes and benefits related to involvement in a student organization. These outcomes and benefits include gains in cognitive abilities such as critical thinking skills (Inman & Pascarella, 1998; Prendergast, 1998; Whitt, Edison, Pascarella, Nora, & Terenzini, 1999), stronger consideration by employers (Albrecht, Carpenter, & Sivo, 1994; Reardon, Lenz, & Folsom, 1998), and a better chance at securing employment upon graduation (Sagen, Dallam, & Laverty, 1997). Research has also shown a positive correlation between involvement in a student organization and
dimensions of psychosocial development (Foubert & Grainger, 2006). Students involved in a student organization are also more likely to achieve academically and persist to graduation (Astin, 1993; Braxton, Sullivan, & Johnson, 1997), and more likely to participate in community service (Berger, 1998; Pierson, 2002). This section, however, will focus more narrowly on the relationship between student organization involvement and leadership development.

As discussed in the I-E-O section of this chapter, almost every aspect of the college experience contributes to a student’s leadership development, and specifically, student-student interaction is considered the largest factor in forming leadership skills (Astin, 1993). Student-student interaction on the college campus occurs in various forms in both the academic and social arena of the college experience. One of the many social dimensions of the college experience includes involvement in a student organization.

According to a report published by the National Survey of Student Engagement (NSSE, 2006), an estimated 50% of college students are involved in a student-based group at some point during the college experience. Student organizations can take on many forms and can be broadly defined. Examples of student organizations might including academic organizations, fraternities and sororities, identity-based organizations, political organizations, religious organizations, or sports-related organizations, to name a few. Research has consistently demonstrated that involvement in a student organization can have a positive impact on student leadership development, especially if a student is elected to a student office or a member of a fraternity or sorority (Astin, 1993; Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001; Kezar & Moriarty, 2000; Kimbrough & Hutcheson, 1998; McGovern, 1997; Sermersheim, 1996; Smart, Ethington, Riggs, &
Thompson, 2002; Zimmerman-Oster & Burkhardt, 1999). In particular, according to Logue, Hutchens, and Hector (2005), students who held a position in a student organization increased in leadership concepts such as motivation, encouragement, and interaction styles.

As mentioned, student organizations can come in many forms and can be broadly defined. While differences exist in how student organizations are defined, structured, or operated, nearly all co-curricular and student organizational programs provide the student-student interaction necessary to develop leadership skills in students. This section will review the literature pertaining to the major co-curricular and student organizational settings that achieve that end.

**Campus recreation programs.** One of the most popular co-curricular and student organizational programs on the college campus is campus recreation. According to Dugan and Komvies (2007), approximately 40% of all students surveyed in the Multi-Institutional Study of Leadership were involved in intramural sports, more than any type of organization. Campus recreation can take on many forms, including fitness programs, outdoor programs, and intramural sports. Not only do students participate in these programs for recreational purposes, but these programs may employ or utilize student staff to operate the recreation facilities, serve as fitness instructors or personal trainers, and organize intramural competitions. These opportunities help student staff “connect employment with their personal development” (Smist, 2011, p. 289). Additionally, outdoor programs, which might include adventure challenge courses and ropes courses, “foster leadership development of participants and facilitators” (Smist, 2011, p. 289). While contemporary research has shown a positive relationship between campus
recreation involvement and leadership development, prior research on the impact of intramural sports on leadership development has produced mixed results (Cornelius, 1995).

**Intercollegiate athletics and club sports.** In addition to campus recreation, there are more formal competitive sports that exist at the club and intercollegiate or varsity level. A commonly assumed educational outcome of involvement in intercollegiate athletics is the development of leadership skills. Literature on leadership development within intercollegiate athletics and club sports often focuses on the student leaders or team captains (Dupuis, Bloom, & Loughead, 2006; Holmes, McNeil, Adorna, & Procaccino, 2008; Loughead, Hardy, & Eys, 2006). Experiences in intercollegiate athletics and club sports have both shown mixed-results in leadership development (Cornelius, 1995; Ryan, 1989; Shulman & Bowen, 2001). Interestingly, after graduation, some studies suggest there is no difference between those who were involved in intercollegiate athletics and those who were not in relation to holding future business leadership positions (Shulman & Bowen, 2001).

**Fraternities and sororities.** One of the most recognizable student organizations on the college campus is the fraternity and sorority. Numerous authors have found that involvement in fraternities and sororities contributes positively to a student’s leadership development (Hunt & Rentz, 1994; Pike, 2000; Sax & Astin, 1998). In particular, the context of involvement in a fraternity or sorority brings opportunities to develop leadership in ways other than simple membership, such as holding a leadership position (antonio, 2000; Astin & Cress, 1998; Smart, Ethington, Riggs, & Thompson, 2002), and participating in leadership programs or classes (Astin & Cress, 1998; Cress, Astin,
Zimmerman-Oster, & Burkhardt, 2001; Kezar & Moriarty, 2000; Whitt, 1994), which may be sponsored by the fraternity’s host institution or national organization.

**Residence life.** Living on campus can promote numerous educational outcomes in students. Astin (1993) finds that leaving home and living on campus has a larger than average positive impact on a student’s leadership development. Similar to campus recreation, students not only participate in residence life by living on campus, but they may also be employed or utilized as peer student leaders, commonly known as a Resident Assistant, and help operate and plan programming within the residence hall. This type of involvement may provide opportunities for further leadership development. For students who are not Resident Assistants, there are still opportunities for involvement in the residence hall, including residential governing bodies and program committees (Smist, 2011).

**Community involvement.** One co-curricular area that can contribute to leadership development is community engagement, which includes community service, volunteering, and service-learning programs. Many institutions have service-oriented student organizations and some even have offices with support staff dedicated to involving students in service-oriented programming. There are mixed-results, however, in determining how, or in some ways if, these levels of community engagement produce leadership. Some scholars suggest that simple community service or volunteering may not produce leadership (Astin & Astin, 2000; Vogelgsang & Astin, 2000), while others find that intentional, reflective, service-learning programs can (Dugan & Komives, 2010; Eyler & Giles, 1999). Other researchers found that regardless of cultural or social identity, involvement in community service and volunteering was linked to increased
leadership ability among all student populations (Astin, Vogelgsang, Ikeda, & Yee, 2000).

**Cultural and social identity organizations.** Student organizations can provide a space for students of certain identities to assemble. For example, student organizations may serve and support a specific student population based on race, gender, religion, or sexual orientation. Numerous scholars have found an association between involvement in ethnic-racial student organizations and leadership development (Antonio, 1998, 2000; Harper & Quaye, 2007; Kimbrough, 1995; Kimbrough & Hutcheson, 1998; Trevino, 1992). Further, Dugan and Komives (2010) find that when students interact across differences, those interactions are “among the most potent predictors of gains in socially responsible leadership” (as cited in Smist, 2011, p. 291). Additionally, Zimmerman-Oster and Burkhardt (1999) state that some of the most successful leadership development programs incorporate “intercultural awareness, understanding, and acceptance” (Smist, 2011, p. 291).

**Student governance.** Leadership development has been considered a central learning outcome of student government programs. For example, The American Student Government Association (ASGA, 2016) is a national association with a mission to teach Student Government leaders how “to become more effective, ethical, and influence leaders on their campuses” (para. 1).

Astin (1977) found that students that were actively involved in student government interacted frequently with peers which contributed to changes in student attitudes and behaviors. Research conducted by Kuh and Lund (1994) found that student leaders involved in student government gained practical experience related to teamwork
and leadership and that participation in student government was positively correlated with gains in leadership related qualities such as confidence, sense of purpose, autonomy, and vocational competence. Further, in a qualitative study examining the experiences of eight student government presidents, Hellwig-Olson (2000) found that student government presidents identified leadership development, increased levels of confidence, and networking as skills gained due to their experience.

**Student Subpopulations and Leadership Development**

As mentioned, research by Astin (1993) found that the college experience is positively correlated with leadership development regardless of student’s background or precollege characteristics. However, it is important to note that while all students benefit in their leadership development by attending college, students from different backgrounds develop in different ways. Ostick and Wall (2011) identify several different student subpopulations that should be considered in college student leadership development. These subpopulations include cultural and social identities such as race, gender, sexual orientation, students with disabilities, and spirituality and religion. This section will discuss, in general, how students within different student subpopulations develop leadership in the context of student organizations. It should be noted that these findings are only starting points and may not be applicable to all students who identify with a particular subpopulation.

**Students of color.** Arminio et al (2000) conducted 106 interviews that captured the leadership experiences of students of color, including students that identified as African American, Asian American, and Latino/a. In the study, the researchers found several themes consistent among students of color. According to Arminio et al (2000),
many students of color perceive the term “leader” negatively and prefer the term “involved.” Many of these students correlate “leader” with “enemy” or an individual that has oppressed their group in the past. By adopting the label of “leader,” students feel that they would be alienated by their peers due to buying into the “system.” Additionally, many students of color found the term “leader” exclusive rather than inclusive of the other members of the group, suggesting that students of color may perceive leadership from a collectivist rather than individualist perspective.

The authors also found that African American student leaders felt challenged with the “lofty and contradictory expectations” of being a student leader (Arminio, et al., 2000, p. 501). For example, students of color felt they could not achieve the high expectations assigned to them by peers or balance comfortable membership in both same-race and mixed-race groups.

Arminio et al (2000) also found that students of color had a difficult time finding a leadership role model on campus. Instead, students of color identified role models in family members, church members, or renowned figures. In the event students of color were able to identify an on-campus role model, that role model was often an older student.

In many instances, students of color often participated in same-race groups in order to “get into their culture” (Arminio, et al., 2000, p. 503) and fulfill a need for racial or ethnic identity. Students of color also expressed participating in mainstream or predominately White organizations to gain “traditional leadership experience” (Arminio, et al., 2000, p. 503).  

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Finally, many students of color feel a strong group responsibility for involvement, rather than personal responsibility. When deciding to seek a leadership position, the student did so to benefit the group, rather than for personal benefit. In addition to Arminio et al.’s (2000) study, Tingson-Gatuz (2009) found that students of color who serve as leaders of an ALANA (African American, Latino, Asian Pacific American, and/or Native American) student organization credit their peers, through peer mentoring, in encouraging them to assume leadership positions.

**African-American students.** One particular type of student organization is the Black Greek Organization (BGO), which has historically served African-American students. While Kimbrough (1995) showed that African-American students acknowledged the leadership skills these organizations could development, Harper and Quaye (2007) also found that those students often used both predominately Black and mainstream student organizations to help develop their personal racial identity, help with racial uplift, and advocate for the interests of racial/ethnic students. These findings are consistent with those of Arminio et al (2000) mentioned previously.

Sutton and Terrell (1997) also found that African-American students involved in a leadership position in a fraternity led to involvement in other student organizations. Not only do same-race organizations help develop peer-connections among African-Americans, Barker and Avery (2012) found that institution-sponsored Black Male Leadership Programs (BMLPs) also encouraged academic and social engagement. For African-American women, holding a leadership position was a significant predictor of leadership ability, while non-positional leadership positions and volunteering were
significant for African-American men (Kezar & Moriarty, 2000; Moriarty & Kezar, 2000).

**Asian Pacific American students.** It would be unwise to assume all students who identify as Asian Pacific American would have similar experiences or needs. In fact, according to Hune (2002), there are 57 groups included under the Asian Pacific American term. There is, however, some research that attempts to understand how students within this subpopulation develop leadership.

Similar to African-American students, Yamasaki (1995) found that Japanese-American students expressed a need for developing their ethnic identity as a reason for joining a Japanese-related student organization. Yamasaki (1995) also found, however, that these students were involved in activities aimed at their student population, which potentially hinders their involvement in the broader campus or societal context. Ko (2012) found that students involved in a Asian American Pacific Islander (AAPI) organization were able to develop in all ten areas of Astin and Astin’s (2000) ten principles of transformative leadership. Kwon (2009) also discovered that while universities provided the support needed for Asian American college students to perform leadership, similar support was not evident in a societal context.

In their study comparing Asian-Pacific American (APA) and Latino students, Liu and Sedlacek (1996) found that APA students were less likely than Latino students to believe they possessed leadership skills and APA students were more interested in being involved in a campus organizations than Latino students. In a later study, however, Kuo (2009) found that APA and White students were more likely to become involved in leadership when they felt socially connected to the campus community. These same
students were found to be challenged in their leadership when involved in leadership training, racial/cultural workshops, and on-campus student organizations.

**Latino/a students.** One interesting finding advanced by McKinney (2010) is that Hispanic students who held leadership positions were found to possess elements of peer influence, self-confidence, self-efficacy, and extraversion. Refering back to Liu and Sedlacek’s (1996) study, the authors found that Latino students were more comfortable working in a group setting (e.g. group projects) than APA students.

**LGBT students.** As with other subpopulations, leadership identity and personal identity often go hand-in-hand. For students who identify as LGBT (Lesbian, Gay, Bisexual, Transgender, etc.) this is also generally true. According to research advanced by Renn and Bilodeau (2005a, 2005b) LGBT leadership experiences, including leading LGBT-related student organizations, contributes to both a student’s sexual orientation identity development and leadership identity development.

**Women.** The highest predictor of leadership ability for women was having active membership in a student organization (Kezar & Moriarty, 2000; Moriarty & Kezar, 2000). Women, according to Haber-Curran (2013), also tend to perceive leadership as externally focused, with more attention given to the organization and its members. Haber-Curran (2013) also finds that women student leaders find it challenging to balance task and people-oriented styles and finding balance between being a leader and a friend.

In one particular case study, Curnow (2013) found women involved in the Students Working for Ethical Purchasing and Trade (SWEPT UP) student organization were resistant to normative aggressive masculine leadership styles in favor of a more collaborative style. The women in the study expressed frustration with the notion that in
order to be an effective and successful leader, they must adopt a masculine leadership approach. In terms of institutional profile, Langdon (1997) found that there was no positive benefit to attending a women’s college over a co-ed institution for women’s leadership development; however, more experiences for women were correlated with positive development of leadership, which might be more available at women’s colleges than co-ed colleges.

**Student Involvement and Socially Responsible Leadership Development**

Over the course of this chapter, relevant literature has been reviewed pertaining to student involvement and leadership development, broadly defined. Limitations exist in the collection of literature on student involvement and leadership development, including different conceptualizations of leadership. The current study focuses on the relationship between involvement in a religious student organization and the development of self-reported socially responsible leadership capacities. The focus of the following section will be to review other studies that have examined the relationship between student involvement and socially responsible leadership.

Socially responsible leadership is defined as “an approach to leadership that maintains a sense of responsibility for the welfare of others as the group goes about its business” (Wagner, 2009, p. 33). In other words, socially responsible leaders strive for social change, which can make a positive difference in their communities and in the world. Socially responsible leadership is the intended outcome of the Social Change Model of Leadership (SCM), which measures growth over eight “C’s”, which consists of seven individual values (*Consciousness of self, Congruence, Commitment, Collaboration,*
Common purpose, Controversy with civility, Citizenship) and one overarching value (Change).

The Multi-Institutional Study of Leadership (MSL) has conducted national surveys and obtained data from over 300,000 student participants at more than 250 colleges and universities since it began in 2006 (Multi-Institutional Study of Leadership [MSL], 2016a). Socially responsible leadership is one of the outcomes measured by the MSL. The current study uses the most recent MSL data collected in 2012.

Astin’s (1993) Input-Environment-Outcome (I-E-O) model is central to the MSL study. In past MSL data analyses, it has been found that precollege characteristics (Inputs) and college experiences (Environment) can both be strong influencers on student growth in socially responsible leadership (Dugan & Komives, 2007, 2010). Specifically, Dugan and Komives (2007) found that precollege leadership or involvement experiences, years in college, being female, belonging to a marginalized group, having a faculty mentor, engaging in socio-cultural discussions, involvement in a student club or organization, participating in community service, holding a positional leadership role, and participating in formal leadership programs all correlated with positive gains in one or more of the eight C’s of socially responsible leadership. The study also determined that college students scored highest in Commitment and lowest on Change (Dugan & Komives, 2007).

In terms of involvement in a student club or organizations, breadth of involvement can have an impact on socially responsible leadership development. According to Dugan and Komives (2007), while involvement has a positive impact on development, too much involvement can actually have a negative impact on
development. For those who held positional roles, gains were made in all eight C’s of socially responsible leadership.

Dugan (2006a) was able to determine that different types of involvement contributed to socially responsible leadership at different levels and among different populations. The research found community service to be the most influential factor in developing socially responsible leadership and sorority women scored higher than fraternity men on six of the eight values (with the exception of Collaboration and Controversy with civility).

Fraternity and sorority members were found to score highest in Commitment and lowest in Change (Dugan, 2008a). Rosch (2007) found that participation in campus-registered student organizations and community service had a stronger impact on the socially responsible leadership development than on-campus employment or participation in formal, campus-based leadership programs. Rosch (2007) also determined that class standing was a predictor in socially responsible leadership growth, but was no longer a predictor once involvement was considered. This is consistent with other studies that found that years in school correlated with increases in leadership ability (Astin, 1993; Dugan & Komives, 2007).

Page (2010) studied the impact of participating in student activism on socially responsible leadership development. According to the study, more passive activism, such as maintaining an awareness of current events and issues, correlated with growth in all eight areas of the SCM. More intense or participatory activism, such as participating in a rally or protest, significantly contributed to Citizenship.
Chowdhry (2010) found that students that were involved in at least one service or advocacy student organization scored higher on perceived sense of civic responsibility and frequency of engagement in social change behaviors than students involved solely in identity-based organizations or no organizations at all. This study might suggest that students who already possess an interest in social change may gravitate to organizations that have social change-related missions, such as service or advocacy groups.

When measuring how specific types of involvement impact development of socially responsible leadership, Gerhardt (2008) found that “students involved in fraternities and sororities and students involved with three or more categories of student groups were significantly higher than the mean scores of students not involved in any groups” (p. 86). In a study similar to Chowdhry (2010) as well as this study, Hogendorp (2012) found that students involved a political student organization experienced gains in socially responsible leadership, however, the highest scores came from students involved in both political and non-political student organizations.

**Chapter Summary**

Despite higher education being viewed as a primarily secular arena, religion still has a strong presence on today’s college campus, particularly within religious student organizations. In fact, nearly all types of religious student groups are experiencing growth and interest, including evangelical Protestant groups, mainline Protestant groups, Catholic groups, Jewish Groups, minority religion groups, and even non-religious and secular groups (Schmalzbauer, 2013).

Similar to other types of student organizations, many religious student organizations list leadership development as a core value or learning objective for its
members (Hill, 2003; Hillel International, 2015a; Reformed University Fellowship, 2015b) Additionally, most religious student organizations are involved in social change related activities, such as community service and other activities that benefit the common good (GBHEM, 2015; Schmalzbauer, 2013; Thomas, 2010). With a focus on leadership development and social change, involvement in a religious student organization may be associated with students developing capacities for socially responsible leadership. Socially responsible leadership development is an educational outcome that some scholars have called on institutions of higher education to achieve (Astin & Astin, 2000). Socially responsible leadership is “an approach to leadership that maintains a sense of responsibility for the welfare of others as the group goes about its business” (Wagner, 2009, p. 33). Therefore, socially responsible leaders strive for social change, which can make a positive difference in their communities and in the world.

Using the Social Change Model of Leadership (HERI, 1996), many scholars have studied the development of socially responsible leadership among college students of various backgrounds, including differences in gender, race, and precollege leadership experiences. Additionally, scholars have studied students involved in various co-curricular contexts, including students organizations like fraternity and sororities (Dugan, 2008a), service and advocacy organizations (Chowdhry, 2010), and political organizations (Hogendorp, 2012). However, the relationship between involvement in a religious student organization and socially responsible leadership development has not been examined. The focus of this study will be to examine this gap in the literature.
### Value Definitions for the Social Change Model of Leadership Development

<table>
<thead>
<tr>
<th>Value</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual Domain</strong></td>
<td></td>
</tr>
<tr>
<td>Consciousness of Self</td>
<td>Awareness of the beliefs, values, attitudes, and emotions that motivate one to take action.</td>
</tr>
<tr>
<td>Congruence</td>
<td>Thinking, feeling, and behaving with consistency, genuineness, authenticity, and honesty towards others; actions are consistent with most deeply-held beliefs and convictions.</td>
</tr>
<tr>
<td>Commitment</td>
<td>The psychic energy that motivates the individual to serve and that drives the collective effort; implies passion, intensity, and duration, and is directed toward both the group activity as well as its intended outcomes.</td>
</tr>
<tr>
<td><strong>Group Domain</strong></td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td>To work with others in a common effort; constitutes the cornerstone value of the group leadership effort because it empowers self and others through trust.</td>
</tr>
<tr>
<td>Common Purpose</td>
<td>To work with shared aims and values; facilitates the group’s ability to engage in collective analysis of issues at hand and the task to be undertaken.</td>
</tr>
<tr>
<td>Controversy with Civility</td>
<td>Recognizes two fundamental realities of any creative group effort: that differences in viewpoint are inevitable, and that such differences must be aired openly, but with civility. Civility implies respect for others, a willingness to hear each other’s views, and the exercise of restraint in criticizing the views and actions of others.</td>
</tr>
<tr>
<td><strong>Community/Societal Domain</strong></td>
<td></td>
</tr>
<tr>
<td>Citizenship</td>
<td>The process whereby an individual and the collaborative group become responsibly connected to the community and the society through the leadership development activity. To be a good citizen is to work for positive change on the behalf of others and the community.</td>
</tr>
<tr>
<td>Change</td>
<td>Change serves as the “hub” of the model reflection the process of engaging in leadership to contribute to a better world.</td>
</tr>
</tbody>
</table>

Figure 1. Social Change Model of Leadership Development
CHAPTER THREE: METHODOLOGY

In the previous two chapters, context was given to describe the current research problem and relevant literature pertaining to the issue was reviewed. In this chapter, research questions will be presented, the conceptual framework will be explained, and the methodologies aimed at answering the research questions will be outlined. In particular, this chapter will outline the research design of the study and provide a broad overview of the Multi-Institutional Study of Leadership (MSL), including detailed information on the Socially Responsible Leadership Scale survey instrument and the data collection methods used by the MSL researchers. In addition to a broad MSL overview, information on the specific sample of MSL data used for this study will be described, including detailed information on each of the measures and variables used for analysis. Finally, the process for analyzing the data for the study will be described, including how the sample data was cleaned and prepared for analysis and the specific analytical procedures used to explore each research question.

Research Questions

The objective of this dissertation study was to examine the relationship between student involvement in a religious student organization and the development of socially responsible leadership capacity. Using data collected in the 2012 Multi-Institutional Study of Leadership, this study sought to find whether involvement in a religious student organization is correlated with higher scores on the Socially Responsible Leadership Scale (SRLS). Students in four involvement categories were examined: (a) those involved in religious student organizations only, (b) those involved in secular organizations only,
(c) those involved in both religious and secular organizations, and (d) those not involved in any organizations.

This study was guided by the following research question:

1. Is there a statistically significant difference in self-reported capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate in both religious and secular student organizations?

2. Is there a statistically significant difference in self-reported capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate only in secular student organizations?

3. Is there a statistically significant difference in self-reported capacities for socially responsibility leadership among students who participate only in religious student organizations and students who do not participate in any student organizations?

4. How much variance in self-reported overall socially responsible leadership capacity during college is explained by students’ involvement in a religious student organization, above and beyond a students’ inputs (demographic characteristics, precollege experiences, capacities for socially responsible leadership prior to entering college) and other collegiate experiences?

**Research Design**

This study utilized a quantitative, cross-sectional research design. This study was a secondary analysis of the most recent available data collected in the Multi-Institutional Study of Leadership (MSL) study administered in 2012. The MSL survey uses Astin’s (1993) Input-Environment-Outcome (I-E-O) model as its conceptual framework as it
seeks to determine how various student inputs and college environments relate to certain educational outcomes.

The MSL study measures various inputs students bring with them to college, various environments students experience during college, and various outcomes students achieve. Inputs measured in the MSL study that were examined in this study included demographic characteristics, precollege experiences, and student self-reported capacities for socially responsible leadership prior to entering college. Environments measured in the MSL study that were examined in this study included collegiate student organization involvement type, collegiate student organization involvement frequency, collegiate positional leadership, and collegiate leadership training. Finally, the primary outcome measured in the MSL study that was examined in this study is student self-reported capacities for socially responsible leadership during college.

Socially responsible leadership is “an approach to leadership that maintains a sense of responsibility for the welfare of others as the group goes about its business” (Wagner, 2009, p. 33). It is also defined as “a purposeful, collaborative, group process that ultimately is concerned with fostering social responsibility and positive social change for the common good, measured by the Socially Responsible Leadership Scale” (Hogendorp, 2012, p. ii). In short, socially responsible leadership is a type of leadership that is concerned with helping others and making world a better place.

**Multi-Institutional Study of Leadership**

The Multi-Institutional Study of Leadership (MSL) is an international research program that examines developmental and educational influences on socially responsible leadership (Dugan, 2015) and is one of the largest studies of college student leadership to
date (MSL, 2016a). Over the last decade, the MSL has administered the MSL survey on five different occasions, surveying over 300,000 student participants at over 300 institutions of higher education in five countries (Dugan, 2015). The MSL was originally created by a team of researchers at the University of Maryland in partnership with the National Clearinghouse for Leadership Programs. The mission of the project was to “address questions regarding students’ educational needs and to identify elements of the higher education environment that contributed most significantly to leadership outcomes” (MSL, 2016a). At the time of this study, the MSL is operated at Loyola University Chicago under the leadership of Principal Investigator John Dugan. The MSL survey seeks to understand the input and environmental factors that contribute to various collegiate outcomes, including the development of socially responsible leadership.

**Rationale for Using MSL Data**

This MSL dataset was selected for the current study because it was the best available dataset to address the research questions for several reasons. First, the dataset contained a large number of student participants (n=77,927) which provided significant power for data analysis. Second, one of the primary aims of the MSL survey is to determine the particular student inputs and college environments linked to socially responsible leadership development. To that end, student participants answered numerous questions related to student inputs used in this study, including gender, race/ethnic background, class standing, religious affiliation, precollege capacities for socially responsible leadership, precollege involvement in clubs and service, precollege positional leadership, and precollege leadership training. In terms of college environments, variables used in this study that were collected in the MSL survey include
collegiate organizational involvement frequency, collegiate positional leadership, collegiate leadership training, and the primary independent variable of interest – collegiate organizational involvement type. Specific to collegiate organizational involvement type, the MSL collected data on student involvement in 23 categories of student organizations, including religious student organizations. All of these particular input and environment variables have been associated with gains in socially responsible leadership (Dugan & Komives, 2007) and served as predictor variables in research question 4.

Third, as part of the MSL survey, student participants completed the Socially Responsible Leadership Scale (SRLS), a survey specifically designed to measure and operationalize the construct of socially responsible leadership as defined by the Social Change Model of Leadership (SCM) (HERI, 1996). The results of this survey provided the necessary dependent variable data for analysis. At the time of this study, no other survey or dataset contained all the variables of interest for the research questions of this study.

While there are many strengths to using the MSL data for this study, limitations with the survey also exist. For example, the survey attempted to estimate student development over time by using a cross-sectional survey design rather than a longitudinal design. To make these estimations, retrospective questions were asked of participants to estimate precollege socially responsible leadership capacity. Additionally, student participants gave self-reported answers to measure their own capacities for socially responsible leadership. While these approaches can be considered limitations, research
has demonstrated that they still can yield reliable results (Turrentine, 2001; Posner, 2012), as discussed in a later section of this chapter.

Another limitation to the survey was the number of items (over 400) and time of completion (20-25 minutes). The survey collected numerous items related to student inputs, college environment, and educational outcomes beyond those related to this study. It is possible that the survey was too broad in scope and unable to collect the most accurate data related to the research questions. Finally, while only completed surveys were used in this study, many participants did not complete the survey (~20,000). This may be due to the amount of time it took to complete the survey (20-25 minutes), an amount that has been found to have a negative impact on survey completion (Crawford, Couper, & Lamias, 2001).

**Instrumentation and Psychometrics**

The complete MSL survey questionnaire contained more than 400 different items and scales that measured various Input-Environment-Outcome variables. However, the Socially Responsible Leadership Scale (SRLS) within the MSL will be the focus of this section.

The SRLS is a widely-used instrument used to assess educational gains in socially responsible leadership among college students. The SRLS was first developed by Tyree (1998) to operationalize the constructs of socially responsible leadership and included 104 items. Each item of the SRLS measured either one of the seven individual values (*Consciousness of self, Congruence, Commitment, Collaboration, Common purpose, Controversy with civility, Citizenship*) or the overarching value of *Change* of the Social Change Model of Leadership.
Over the last few years, Tyree’s (1998) version of the SRLS has been modified in other studies. Dugan (2006a, 2006b) used a 103-item version of the SRLS with consistent reliability levels as Tyree’s scale. In the same year, the Multi-Institutional Study of Leadership (MSL) launched its first large-scale study using a 68-item version of the scale, known as SRLS-R2. This 68-item version of the scale was found to be just as reliable as the original, with exception to the value of Citizenship. To address this, a 71-item version of the scale (known as SRLS-R3) was created and used on the MSL’s second national study in 2009.

In 2012, the MSL launched its third national study and reduced the number of items again to 39. The data from that 2012 MSL study are used in this study (Dugan & Associates, 2012). In addition to a reduction in items, one significant change to the 2012 SRLS was removing the overarching value of Change from direct measurement. Instead, each of the 39-items only measured one of the seven individual values of the Social Change Model of Leadership. The overarching value of Change was removed from direct measurement because it was determined that the overall score across the seven individual measures of the SRLS was a more accurate measure of a students’ overall capacity for socially responsible leadership, which is what the Change value is ultimately trying to determine (Dugan, 2015). On the 39-item SRLS instrument, the values of Controversy with Civility, Congruence, and Common Purpose were each measured with five items while the remaining values of Consciousness of Self, Collaboration, Commitment, and Citizenship were each measured with six items.

As previously mentioned, the MSL study used a cross-sectional research design. A cross-sectional study is “when a survey is given at one point in time and only once to a
particular sample of respondents” (Nardi, 2014, p. 127). One limitation to a cross-sectional design is its lack of control to assess change over time (Pascarella, 2001). However, in order to create some degree of control and to understand student growth in socially responsible leadership, the MSL utilized quasi-pretests by asking retrospective questions to gauge students’ development before entering college. The MSL (2016b) chose this data collection method because previous research has found it to accurately measure student gains and reduce response shift bias (Howard, 1980; Rohs, 2002; Rohs & Langone, 1997). Response shift is the difference between pre and post self-report ratings when the pre and post tests are given at two separate points in time.

The MSL study also relied on student self-reports to collect data. In this case, students evaluate themselves. While concerns pertaining to self-reports exist, such as the chance of participants answering in ways that are socially desirable or lacking item clarity, some self-report studies on the topic of leadership have been found to be generally accurate (Turrentine, 2001; Posner, 2012). To address the potential issue of participants responding in socially desirable ways, the MSL used the Crowne-Marlowe Scale of Social Desirability (Crowne & Marlowe, 1960) in pilot studies and found no concerning relationships. In terms of item clarity, the MSL conducted pilot studies and qualitative interviews with a diverse sample of students and was able to confirm student comprehension of the survey items (Dugan, 2015).

With any survey instrument, it is important to review the validity and reliability of the SRLS. For content validity, the instrument seeks to specifically measure leadership capacity. Dugan (2012) defines leadership capacity as “the integration of an individual’s knowledge, attitudes, and skills reflecting his or her overall ability” (p. 92). Using an
expert-review process, it was determined that the instrument was in fact measuring leadership capacity rather than other leadership concepts, such as leadership efficacy, leadership motivation, or leadership behaviors (Dugan, 2015).

To establish appropriate internal reliability, Cronbach’s alpha statistics were computed after the data was prepared. The Cronbach’s alpha statistic provides a measure of internal consistency of a scale as a function of its reliability (Tavakol & Dennick, 2011). The Cronbach’s alpha can range between 0 and 1, with 0.70 or higher suggesting the scale has an acceptable level of internal reliability (Cronbach, 1970). For socially responsible leadership, each of the eight measures had its own Cronbach’s alpha statistic, which were as follows: Overall socially responsible leadership (i.e. Change) (0.964); Consciousness of self (0.810), Congruence (0.857), Commitment (0.862), Collaboration (0.849), Common purpose (0.858), Controversy with civility (0.820), and Citizenship (0.895). These data are available in Table 2. These Cronbach’s alpha statistics demonstrated that all eight measures had excellent internal reliability. Details on how these figures were derived is included in the Measures and Variables section of this chapter. Individuals interested in learning more about the Multi-Institutional Study of Leadership (MSL) should visit the MSL website at leadershipstudy.net.

**MSL 2012 Data Collection**

In order to gain access to a large sample of the college student population, the MSL used a two-step sampling strategy for data collection. In step one, institutions were recruited to participate in the survey. In step two, institutions that agreed to participate recruited their own students to take the survey. This sampling strategy created a multilevel data set where individual participants (students) are nested within their
respective institutions. Actions were taken to account for the nested nature of this data. This section will outline the sampling process in more detail.

**Sampling Strategies.** For the 2012 data collection, the MSL used purposeful sampling to select the participating institutions. In step one, the MSL recruited institutions through promotions on its website and social media platforms as well as email listservs with various partners across the country. The MSL also promoted the study through professional associations like NASPA – Student Affairs Administrators in Higher Education, the American College Personnel Association (ACPA), and the International Leadership Association (ILA). The MSL has many institutions who participate in multiple cycles and those institutions were aware of the 2012 study through regular MSL communication. The MSL did not select or invite any specific institutions to participate nor did institutions have to meet any set criteria. The study was open to any institution that wished to participate. Institutions from the United States, Canada, Mexico, and the West Indies participated in the study, however, only institutions from the United States were included in the 2012 dataset. A total of 82 institutions from 27 states and Washington, DC comprised of the final sample and are listed in Appendix A.

In step two, after the institutions were recruited and selected, student participants were then recruited to participate in the study. Participating institutions were directed by the MSL to survey 4,000 full and part-time undergraduate students (freshman, sophomore, junior, and senior) that were at least 18 years old. Institutions with enrollments greater than 4,000 used a simple random sample of 4,000 students from the general student population. Institutions with less than 4,000 had all students participate. These specifications were generated from a power analysis with desired confidence
internal of 95% and +3 margin of error. Student participants were oversampled by 70% in order to achieve an acceptable response rate.

A total of 276,297 students were invited to participate via email. Of this total, 91,178 responded, yielding a response rate of 33%, which is within the acceptable response rate range of 30-40% for surveys (Crawford, Couper, & Lamias, 2001). Students voluntarily participated and were permitted to stop at any time. The 91,178 students that responded included both completed and partially completed surveys. Surveys were considered “partially complete” if the student stopped at some point before finishing the survey. Surveys were considered “complete” if the student participated to the end of the survey. A “complete” survey does not necessarily mean the student answered all survey questions. The survey took approximately 20-25 minutes to complete (Prewitt, 2015).

Data was collected between January and April 2012, and each institution chose a three-week window catered to their academic calendar. Each emailed invitation to the student provided the outline of the study, information on confidentiality and consent, and a link to the survey. Students were contacted up to four times and were able to opt out at any time. The survey was web-based and administered by Survey Sciences Group, LLC (SSG), an independent research organization. Each institution was responsible for recruiting students and offering incentives and the SSG was responsible for conducting a random drawing, if applicable. The MSL also offered a monetary prize at the national level to increase responses (MSL, 2016b). All employees of SSG are trained in procedures for confidentiality and all data was saved on SSG internal servers that are
password protected. Personal identifiers were not collected in the web-based survey (MSL, 2016b).

**Current study sample.** For this study, only completed studies were provided by the Multi-Institutional Study of Leadership (MSL), which consisted of 77,927 participants. In order to account for the nested nature of the data (77,927 students within 82 institutions), a variable was requested to be added to the data set that linked each student to their respective institution. In compliance with their Institutional Review Board approval to secure confidentiality, the MSL did not disclose which variable corresponded with which institution. Institutions were randomly assigned a value between 1 and 82. In addition to adding an institutional variable, the MSL also added a variable which identified students who responded to 100% and 90% of the survey’s core scale questions. Descriptions of the core questions can be found in Appendix C.

**Data Preparation**

For this study, only completed studies (77,927) were provided by the Multi-Institutional Study of Leadership (MSL). From the 77,927, the sample was further cleaned to include only undergraduate students (freshmen, sophomores, juniors, and seniors) for several reasons. First, while the MSL study specifically targeted undergraduate students, some students marked their class standing as “graduate” or “unclassified.” In order to ensure only undergraduate students were analyzed, students identifying as “graduate” or “unclassified” were excluded. Second, nearly all previous research on college student development of socially responsible leadership has focused on undergraduate students (Dugan & Komives, 2007). This study aims to contribute to the existing literature by analyzing similar student populations. Finally, undergraduate
students are usually the primary participants in the types of student organizations considered in this study.

In addition to retaining only undergraduate students, only those who answered 90% of the survey’s core questions were kept for analysis. Establishing this 90% threshold not only captured the most serious participants, but also allowed for easier comparison among the participants. The final major data cleaning decision involved including only those participants that marked “Yes” or “No” to involvement in all 23 types of student organizations. Students that left one or more of the 23 involvement questions blank were excluded. The final sample used for analysis was 76,365. It should be noted that responses to each variable varied, which resulted in some variables having less than 76,365 observations.

The number of students within each of the four groups, and detailed in Table 5, were as follows: 370 (0.48%) students in religious organizations only, 52,623 (68.9%) in secular organizations only, 13,635 (17.9%) in both religious and secular organizations, and 9,737 (12.8%) were not involved in any organizations. Finally, as Allison (2002) notes, there must be case-wise deletion of missing data for dependent variables prior to all statistical calculations. For this study, list-wise deletion was used for missing variables during all analysis (Allison, 2002). Therefore, in some instances, participants were automatically dropped from analysis by SPSS statistical software if they did not answer all of the questions under examination. For the hierarchical multiple regression analysis in research question 4 particularly, 75,967 students were examined after listwise deletion. More detailed information on each variable can be found in the Measures and Variables section of this chapter.
Conceptual Framework

The conceptual framework used for this study is based on Astin’s (1993) Input-Environment-Outcome model. The I-E-O model offers a general concept of how college students develop during college, taking into consideration the variables that students bring with them to college (inputs), the experiences students have during college (environment), and how those inputs and environments impact certain educational changes in the student (outcomes). An illustration of the I-E-O model can be found in Figure 2.

Inputs can include a range of items, including fixed variables such as race or gender and variable items such as the number of leadership positions held before entering college. Environment variables can include anything a student experiences during the college experience, including student organizational involvement or interactions with faculty. Outcomes include any educational or developmental changes a student experiences after exposure to a particular environment. Outcomes might include growth in cognitive abilities or leadership capacity.

Astin’s (1993) I-E-O model is a popular conceptual framework because it assumes a linear relationship among the Input-Environment-Outcome variables. However, some research has demonstrated that the relationship between the variables is more dynamic or complex (Pascarella & Terenzini, 2005). One of the major strengths of the I-E-O model is that controls can be made for student inputs, such as race, gender, or class standing, allowing for stronger understandings of the relationship between collegiate environments on educational outcomes.
Inputs

For this study, specific inputs, environments, and outcomes were considered. In research question 4 specifically, input measures found to have a unique impact or association with socially responsible leadership were considered. Input measures found to have a unique relationship with socially responsible leadership include demographics (gender, race, class standing), precollege experiences (precollege involvement in clubs and service, precollege positional leadership, precollege leadership training), and capacities for Socially Responsible Leadership before entering college (Dugan & Komives, 2007). Data on all of these variables were collected in the 2012 MSL survey and selected for analysis in research question 4 of this study. An additional input variable selected for analysis for this study was religious affiliation. While previous research has not determined a unique relationship with religious affiliation and socially responsible leadership, religious affiliation was chosen because of its influence on involvement in a religious student organization (Bramadat, 2000).

Environment

The primary independent variable of interest for this study was an environmental variable related to student organizational involvement type and specifically involvement in religious student organizations. As noted, the objective of this study was to examine the relationship between involvement in a religious student organization and the development of socially responsible leadership capacity. Involvement in a religious student organization was determined to be a critical environmental variable to examine for two major reasons.
First, religious student organizations are often engaged in activities linked to higher scores in socially responsible leadership. These activities are primarily related to social change, such as community service. For example, as noted in a previous chapter, approximately 30.2% of all college students participated in volunteering in 2005, with 23.4% of those serving with a religious organization (Dote, Cramer, Dietz, & Grimm, 2006). After Hurricane Katrina, Hillel International, a student organization serving the Jewish student population, sent over 3,000 students and professionals to assist with relief efforts (Hillel International, 2015). In 2016, InterVarsity Christian Fellowship (IVCF) reported that 3,873 students had participated in a domestic or international missions program (InterVarsity Christian Fellowship, 2016).

Second, many religious student organizations identify student leadership development as a key objective. For example, Campus Crusade for Christ (Cru) offers numerous online leadership training resources to help students in their ministries (Cru, 2017). Hillel International, through its Senior Jewish Educator and Intern outreach program, found that it was able to increase Jewish student engagement in Jewish-related activities. In turn, more Jewish students reported viewing themselves as Jewish leaders, even among students who had little or no prior involvement (Zwilling & Sacks, 2012). Finally, in its 2015-16 annual report, IVCF stated that it had developed “8,016 student leaders through training events around the country” (InterVarsity Christian Fellowship, 2016, p. 14).

With a commitment to social change efforts and leadership development, many religious student organizations are participating in activities related to socially responsible leadership. Considering these contexts, one might believe that students
involved in religious student organizations have higher self-reported capacities for socially responsible leadership than students involved in other types of student organizations. However, that assumption had not been tested. To test that assumption, students were separated into four involvement categories and compared. The four categories were (a) those involved in only religious student organizations, (b) those involved in only secular student organizations, (c) those involved in both religious and secular student organizations, and (d) those involved in no organizations.

Finally, in addition to student organizational involvement type, research question 4 examined additional environmental variables linked to having a unique impact or association with socially responsible leadership. These unique environmental variables were college student organization involvement frequency, college positional leadership, and college leadership training (Dugan & Komives, 2007). Data on all of these variables were collected in the 2012 MSL survey and selected for analysis in research question 4.

**Outcome**

The dependent variable in this study was also the outcome variable in the I-E-O model. The dependent variable was a student’s self-reported capacities for socially responsible leadership during college, as measured by the Socially Responsible Leadership Scale (SRLS). In research questions 1, 2, and 3 all seven individual values *(Controversy with civility, Congruence, Common purpose, Consciousness of self, Collaboration, Commitment, and Citizenship)* and the overarching value *(Change)* served as dependent variables. In these three research questions, mean scores on each of these values for students involved in only religious student organizations were compared against mean scores for students in the three other involvement categories.
In research question 4, only the overarching value (Change) served as the dependent variable. This question explored how much variance in overall socially responsible leadership during college (Change) was explained by involvement in a religious student organization above and beyond other predictor variables. A table description of the I-E-O variables used in this study is illustrated in Table 3.

Measures and Variables

The measures and variables used in this study were selected based on Astin’s (1993) Input-Environment-Outcome (I-E-O) model. The dependent variables under consideration were student self-reported capacities for socially responsible leadership during college, as measured by the Socially Responsible Leadership Scale (SRLS). The independent variables under consideration involved a combination of input and environment variables and include demographic characteristics, precollege experiences, capacities for socially responsible leadership prior to entering college, and other collegiate experiences. The primary independent variable of interest was a students’ collegiate student organizational involvement type.

Dependent Variables

The dependent variable under examination for all four research questions was the development in self-reported capacities for socially responsible leadership during college. Socially responsible leadership is measured across eight values, which include seven individual values (Controversy with civility, Congruence, Common purpose, Consciousness of self, Collaboration, Commitment, and Citizenship) and one overarching value (Change). These eight values serve as the “outcome” variable in Astin’s Input-
Environment-Outcome model. To determine the value of these dependent variables, the Socially Responsible Leadership scale (SRLS) was used.

**Socially Responsible Leadership scale.** In order to operationalize a student’s capacity for socially responsible leadership, students responded to a 39-item version of the Socially Responsible Leadership scale (SRLS) within the MSL study, starting on question 21. Participants were asked to “Please indicate your level of agreement with the following items: For statements that refer to a group, think of the most effective, functional group of which you have been a part. This might be a formal organization or an information study group. For consistency, use the same group in all your responses.” Participants responded to each of the 39-items with 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, or 5=Strongly Agree. Each of the 39-items sought to measure one of the seven individual values of the Social Change Model of Leadership. The values of Controversy with civility, Congruence, and Common purpose each had 5 items while the remaining values of Consciousness of self, Collaboration, Commitment, and Citizenship each had 6 items. Mean scores were computed for overall socially responsible leadership (Change) and for each of the seven individual values to determine capacities for that specific value.

Overall socially responsible leadership (Change) consisted of all 39 items on the SRLS survey, which were as follows: SRLS1, 3, 4, 5, 9, 10, 13, 14, 16, 19, 22, 23, 24, 27, 28, 29, 30, 32, 33, 34, 40, 41, 42, 47, 48, 51, 52, 53, 54, 58, 59, 60, 61, 62, 63, 67, 69, 66, 71 (the item names from the 71-item version from the 2009 MSL study were kept for the 39-item version, hence why the numbers are not listed 1-39). The Cronbach alpha of these items was 0.964, indicating excellent internal reliability of these 39 items. These
39 questions were added together and then divided by the total number of items present in the scale (i.e. 39). Using this coding format allowed the average of the composite scale to be interpreted as a function of the original measurement metric of the scale (i.e., a scale of 1 to 5). This mean scale was designed to determine overall capacities for Socially Responsible Leadership during college (i.e. the overarching value of Change). Higher scores (i.e. scores closer to 5) meant students possessed higher self-reported capacities for socially responsible leadership during college.

Similarly, overall scores for each of the seven individual values were derived by adding together the items tied to that respective value and dividing by the total number of items tied to that value. All seven values were measured on a scale of 1 to 5, where higher scores (i.e. scores closer to 5) meant students possessed higher self-reported capacities for that particular value.

The six items for Consciousness of self were SRLS4, 9, 22, 34, 41, 59 and produced a Cronbach’s alpha of 0.810. The five items for Congruence were SRLS13, 27, 32, 52, and 63 with a Cronbach’s alpha of 0.857. The six items for Commitment were SRLS23, 24, 28, 51, 53, and 54 with a Cronbach’s alpha of 0.862. The six items for Collaboration were SRLS10, 29, 30, 42, 48, and 60 and had a Cronbach’s alpha of 0.849. The five items for Common purpose were SRLS14, 19, 58, 61, and 67 and produced a Cronbach’s alpha of 0.858. The five items for Controversy with civility were SRLS1, 3, 5, 16, and 62 with a Cronbach’s alpha equal to 0.820. Finally, the six items for Citizenship were SRLS33, 40, 47, 66, 69, and 71 and had a Cronbach’s alpha of 0.895. In this case, all seven individual measures had excellent internal reliability since all scores were above the acceptable Cronbach alpha score of 0.70 (Cronbach, 1970).
For this study, research questions 1, 2, and 3 considered all eight values as dependent variables, while research question 4 will only consider the overarching value (Change) as a dependent variable. More details on this will be provided in the analytical procedures section of this chapter.

**Primary Independent Variable**

The primary independent variable of interest was a students’ collegiate student organizational involvement type. On question 17 of the MSL study, participants were asked “Have you been involved in the following kinds of student groups during college? (Respond to each item).” Participants then responded to a list of 23 different types of student organizations, marking 1=Yes or 2=No to each item. This question was used to separate students into four categories based on their involvement in certain types of student organizations. From the 23 student organization variables, four categorical variables were created and students were placed in the appropriate variable: religious organizations only, secular organizations only, both religious and secular organizations, and no organizations. From these four new variables, one categorical variable was created for the purpose of the analyses for research questions 1, 2 and 3, where 1=religious organization only, 2=both religious and secular organizations, 3=secular organizations only, and 4= no organizations. Students that left at least one of the 23 options unanswered were excluded from analysis. A detailed description of each of the 23 types of student organizations is listed in Table 4.

In research questions 1, 2, and 3, mean SRLS scores on each of the eight dependent variables were compared between students involved only in religious organizations and the three other involvement subgroups. Research question 4 attempted
to explain how much variance in self-reported overall socially responsible leadership capacity (*Change*) is explained by involvement in each of these four involvement subgroups above and beyond and students’ inputs and other collegiate experiences.

**Other Independent Variables**

In research question 4 of this study, five sets of other independent variables were considered. Each set of independent variables was chosen because each has been found to have a unique impact on or interaction with socially responsible leadership (Dugan & Komives, 2007) and influence involvement in a religious student organization. The five sets of independent variables included four sets related to student characteristics. These variables involved demographic characteristics, precollege experiences, capacities for socially responsible leadership prior to entering college, and other collegiate experiences. These independent variables comprised of both “input” and “environment” variables in Astin’s Input-Environment-Outcome model.

**Demographic characteristics.** The first set of independent variables that this study examined included four input variables that involve particular demographic characteristics: gender, racial/ethnic background, class standing, and religious affiliation.

**Gender.** Question 31 of the Multi-Institutional Study of Leadership (MSL) study asked participants “What is your gender?” Participants were able to choose Female, Male, or Transgender. Options were coded as follows: 1=Female, 2=Male, 3=Transgender. For this study, only Female and Male genders were considered. Participants who identified as Transgender were excluded as they only comprised 0.2% of the observations. With such a low percentage, the Transgender category would not
have adequate power to produce meaningful results. In the analysis, gender was a nominal (categorical) variable with male serving as the reference group.

**Racial/ethnicity.** Question 34a of the MSL study asked participants about their racial/ethnic identity by asking “Please indicate your broad racial group membership (Mark all that apply).” Possible choices and their corresponding codes included 1=White/Caucasian, 2=Middle Eastern, 3=African American/Black, 4=American Indian/Alaska Native, 5=Asian American/Asian, 6=Latino/Hispanic, 7=Multiracial, 8=Race/Ethnicity not included above. In the event a participant marked more than one race/ethnic background, those participants were placed in the “Multiracial” group. If a participant did not mark any of the race/ethnic background options, that participant was placed in the “Race/Ethnicity not included above” group. In the analysis, race was a nominal (categorical) variable with White/Caucasian serving as the reference group.

**Class standing.** The third demographic characteristic was class standing, which was question 3. Participants responded to the question “What is your current class level? (Choose one)” with the following options 1=Freshman/First-Year, 2=Sophomore, 3=Junior, 4=Senior (4th year and beyond), 5=Graduate Student, 6=Unclassified. For this study, Graduate Students and those selecting Unclassified were excluded from analyses because involvement in collegiate student organizations generally consists of undergraduates. In the analysis, class standing was a nominal (categorical) variable with Freshman/First-Year serving as the reference group.

**Religious affiliation.** The fourth input characteristic was religious affiliation, which was question 37. Participants were asked “What is your current religious preference (Please select one)” and selected one option from a list of 22 choices. Each of
the 22 options were later sorted into three distinct categories: Christian, Non-Christian, and No Religion.

The Christian group consisted of the following thirteen preferences: 3=Baptist, 5=Catholic, 6=Church of Christ, 7=Eastern Orthodox, 8=Episcopalian, 12=LDS (Mormon), 13=Lutheran, 14=Methodist, 15=Presbyterian, 16=Quaker, 17=Seventh Day Adventist, 19=UCC/Congregational, 20=Other Christian. Preferences were determined to be “Christian” if the preference was an organized religion that considers Jesus Christ to be the central figure of the movement.

The Non-Christian group consisted of the following six preferences: 4=Buddhist, 9=Hindu, 10=Islamic, 11=Jewish, 18=Unitarian/Universalist, 21=Other Religion. Preferences were determined to be “Non-Christian” if the preference was an organized religion that does not consider Jesus Christ to be the central figure of the movement.

Finally, the No Religion group consisted of the following three preferences: 1=Agnostic, 2=Atheist, and 22=None. Preferences were determined to be “No Religion” if the preference was not an organized religion. In the analysis, religious affiliation was a nominal (categorical) variable, with No Religion serving as the reference group.

Precollege experiences. The second set of independent variables used in this study included three input variables that involved precollege college experiences: precollege involvement in clubs and service, precollege positional leadership, and precollege leadership training.

Precollege involvement in clubs and service. Five different variables for precollege involvement in clubs and services were measured on the MSL Study, with two on question 10 and three on question 11. On question 10, participants were asked
“Looking back to when you were in high school, how often did you engage in the following activities: (Select one response for each).” The two activities under examination were “Student clubs and organizations (e.g. student government, band, debate club)” and “Organized sports (ex. Varsity, club sports).” Participants answered either 0=Never, 1=Sometimes, 2=Often, or 3=Very Often. Answers left blank were treated as missing (0).

On question 11, participants were asked “Looking back to before you started college, how often did you engage in the following activities: (Select one response for each).” Three activities were examined, which were “Performed community service,” “Participated in community or work-related organizations (ex. Church group, scouts, professional associations)” and “Worked with others for change to address societal problems (ex. Rally, protest, community organizing).” For each of these three activities, participants answered either 0=Never, 1=Sometimes, 2=Often, or 3=Very Often. Answers left blank were treated as missing (0).

To determine overall precollege involvement in a clubs and service, an overall variable was computed by calculating the mean of the five activities for each participant. In the analysis, precollege involvement in clubs and service was a continuous (scale) variable, with higher scores (i.e. scores closer to 3) meaning students were more involved in precollege clubs and service.

**Precollege positional leadership.** Two different variables were used to measure precollege positional leadership, with one on question 10 and the other on question 11. Question 10 asked participants “Looking back to when you were in high school, how often did you engage in the following activities: (Select one response for each).” The
activity under examination was “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).” Participants could answer 0=Never, 1=Sometimes, 2=Often, or 3=Very Often. Answers left blank were treated as missing (0).

Question 11 asked participants “Looking back to before you started college, how often did you engage in the following activities: (Select one response for each).” The activity examined was “Took leadership positions in community organizations or work-related groups (ex. Union leader, PTA president).” Answer options were 0=Never, 1=Sometimes, 2=Often, or 3=Very Often. Answers left blank were treated as missing (0).

To determine overall precollege positional leadership, an overall variable was computed by calculating the mean for the two activities for each participant. In the analysis, precollege positional leadership was a continuous (scale) variable, with higher scores (i.e. scores closer to 3) meaning students were more involved in precollege positional leadership.

**Precollege leadership training.** Question 11 was used to measure precollege leadership training by asking “Looking back to before you started college, how often did you engage in the following activities: (Select one response for each).” The specific activity being examined was “Participated in training or education that developed your leadership skills” and participants could choose among the following answers: 0=Never, 1=Sometimes, 2=Often, or 3=Very Often. Since the frequency of precollege leadership training was not of interest, and in order to maintain consistency with collegiate leadership training, student responses were later recoded to create a dichotomous, nominal Yes/No variable. Students selecting “0=Never” were coded as “No” and
students selecting 1=Sometimes, 2=Often, or 3=Very Often were coded as “Yes.” Students that were coded as “No” served as the reference group.

**Socially Responsible Leadership scale Quasi-Pretest.** The third set of independent variables included an input variable that involved student self-reported capacities for socially responsible leadership prior to entering college. Seven variables were measured by the Socially Responsible Leadership Scale Quasi-Pretest, which was Question 12 of the study. Participants were asked “Looking back to before you started college, please indicate your level of agreement with the following items:” and to respond to seven different items using 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, or 5=Strongly Agree. Each of the seven items corresponded with one of the seven individual values of the Social Change Model of Leadership (SCM). The only value that was not directly measured was the overarching value of Change since it was determined that the overall mean score for all of the other seven individual values was a better measurement for Change (Dugan, 2015). To determine overall capacities for socially responsible leadership prior to entering college (i.e. Change), a mean variable was computed for the seven individual values. In the analysis, precollege capacities for socially responsible leadership was a continuous (scale) variable where higher mean scores (i.e. scores closer to 5) meant students possessed higher capacities for socially responsible leadership prior to entering college.

The first item of question 12, “Hearing differences in opinions enriched my thinking,” served as a pretest for the Controversy with Civility value. The second item, “I knew myself pretty well” was a pretest for the Consciousness of Self value. “I enjoyed working with others toward common goals” was the third item and served as a pretest for
the Collaboration value. The fourth item was “I held myself accountable for responsibilities I agreed to” and was a pretest for the Commitment value. The pretest for the Common Purpose value and fifth item of question 12 was “I worked well when I knew the collective values of a group.” The sixth item was “My behaviors reflected my beliefs” and served as a pretest for the Congruence value. Finally, the seventh value “I valued the opportunities that allowed me to contribute to my community” was a pretest for the Citizenship value. In addition to these seven values, a question regarding Resiliency was also asked on question 12 but was not kept in the analysis since it was unrelated to socially responsible leadership.

Collegiate Experiences. The fourth set of independent variable included other environment variables beyond collegiate student organizational involvement type, including collegiate student organization involvement frequency, collegiate positional leadership, and collegiate leadership training.

Collegiate student organization involvement frequency. The second environmental measure was collegiate student organization involvement frequency. This measure sought to determine how frequently students were involved in their student organizations. On question 16 of the MSL study, participants were asked “Since starting college, how often have you: Been an involved member in college organizations?” Participants then selected among the following options: 0=Never, 1=Once, 2=Sometimes, 3=Many times, or 4=Much of the time. In the analysis, collegiate student organization involvement frequency was treated as a continuous (scale) variable where higher scores (i.e. scores closer to 4) meant students were more frequently involved in their student organizations.
**Collegiate positional leadership.** The third environmental measure was collegiate positional leadership. This measure sought to determine if students held leadership positions in their student organizations rather than simple membership. This measure also used question 16 of the MSL study, which asked “Since starting college, how often have you: Held a leadership position in a college organization(s)? (ex. officer in a club or organization, captain of athletic team, first chair in a musical group, section editor of newspaper, chairperson of committee)?” Participants selected among the following options: 0=Never, 1=Once, 2=Sometimes, 3=Many times, or 4=Much of the time. In the analysis, collegiate positional leadership was treated as a continuous (scale) variable in which higher scores (i.e. scores closer to 4) meant students more frequently held leadership positions in their student organization.

**Collegiate leadership training.** The fourth and final environmental measure was collegiate leadership training. This measure sought to determine if students participated in leadership training or education during college. On question 20, participants were asked “Since starting college, have you ever participated in a leadership training or leadership education experience of any kind (ex. Leadership conference, alternative spring break, leadership course, club president’s retreat)?” Students responded either 0=No or 1=Yes. During analyses, collegiate leadership training was treated as a nominal (categorical) variable where students that answered “No” served as the reference group.

**Analytical Procedures**

In this section, the process for how data was analyzed for each research question will be outlined, including specific analytical procedures that were used.

**Research Question #1.**
The first research question of this study was:

_is there a statistically significant difference in self-reported capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate in both religious and secular student organizations?_

The null hypothesis was:

_There is no statistically significant difference in capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate in both religious and secular student organizations._

Using the 39-item Socially Responsible Leadership Scale (SRLS), socially responsible leadership is measured across eight different values, which include seven individual values (Consciousness of self, Congruence, Commitment, Collaboration, Common purpose, Controversy with civility, Citizenship) and one overarching value (Change). Each item on the 39-item scale corresponded to one of the seven individual values. Mean scores were computed for each of the seven individual values to determine capacities for that specific value. Finally, an overall score of all 39-items was computed to determine overall capacity for socially responsible leadership, known as the eighth overarching value of Change (Dugan, 2015). For all eight values, higher mean scores (i.e. scores closer to 5) indicated higher self-reported capacities for socially responsible leadership during college.

This research question sought to determine if statistically significant differences exist on these eight scores between two groups: 1) students involved in only religious
student organizations and 2) students involved in both religious and secular student organizations. In order to determine if the means between these two groups are reliably different than a matter of chance, eight t-tests were performed for statistical significance. The t-test is an appropriate procedure to use when two groups are being compared on a continuous dependent variable. In this case, the two groups were 1) students involved in religious student organizations and 2) students involved in both religious and secular student organizations, and each of the eight values (dependent variables) were continuous variables. When determining statistical significance, confidence levels of $\alpha=0.05$, 0.01, and 0.001 were used. By setting the alpha level at 0.05, for example, the level of confidence is raised to 95%, reducing the chance of making a Type I error to 5%. A Type I error is when the null hypothesis is rejected (suggesting significance) when in reality it is true (not significant). Conversely, a Type II error is when a test fails to reject the null hypothesis (suggesting no significance) when in reality it is false (it is significant).

While it is helpful to determine if a statistical significance exists between the means of the two groups, it is equally important to determine the size or strength of that significance, known as effect size. If the differences between the two group’s means were found to be statistically significant, a Cohen’s $d$ procedure was used to determine the effect size, which measures the distance between the mean scores of the two groups, measured in standard deviations. Effect sizes are considered small if the Cohen’s $d$ is 0.2, medium if 0.5, and large if 0.8 (Cohen, 1969, 1988).

**Research Question #2.**

The second research question of this study was:
Is there a statistically significant difference in self-reported capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate only in secular student organizations?

The null hypothesis was:

There is no statistically significant difference in capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate only in secular student organizations.

The objective of this research question was to compare the mean scores on the eight values between students involved in only religious student organizations and students involved in only secular student organizations. The analytical procedures for this research question were identical to those in research question 1. Eight separate t-tests were performed to determine if the mean scores were reliably different (statistically significant) between the two groups on each of the seven individual values and the overarching value of socially responsible leadership. In the event a statistically significant difference existed, a Cohen d was performed to determine the effect size. The effect size measured, in standard deviations, the strength of the significance.

Research Question #3.

The third research question of this study was:

Is there a statistically significant difference in self-reported capacities for socially responsibility leadership among students who participate only in religious student organizations and students who do not participate in student organizations?

The null hypothesis was:
There is no statistically significant difference in capacities for socially responsible leadership among students who participate only in religious student organizations and students who do not participate in student organizations.

This research question compared the mean scores on the eight values between students involved in only religious student organizations and students who do not participate in any student organizations. The analytical procedures for this research question were identical to those in research question 1 and 2. Eight separate $t$-tests were performed to determine if the mean scores were reliably different (statistically significant) between the two groups on each of the seven individual values and the overarching value of socially responsible leadership. If a statistically significant difference was found, a Cohen $d$ was performed to determine the effect size. The effect size measured, in standard deviations, the strength of the significance.

**Research Question #4.**

The fourth and final research question in this study was:

*How much variance in self-reported overall socially responsible leadership capacity during college is explained by students’ involvement in a religious student organization involvement, above and beyond a students’ inputs (demographic characteristics, precollege experiences, capacities for socially responsible leadership prior to entering college) and other collegiate experiences?*

The null hypothesis was:

*Involvement in a religious student organization does not explain any variance in overall socially responsible leadership development above and beyond a students’ inputs*
(demographic characteristics, precollege experiences, capacities for socially responsible leadership prior to entering college) and other collegiate experience.

Before running the analysis with predictor variables, caution was given due to the nested nature of the data. As previously stated, the dataset consists of 76,365 participants nested within 82 institutions. This is problematic because with nested data the assumption of independence is violated, meaning student differences in socially responsible leadership could be explained in part by the institutions they attend (Ethington, 1997). However, it is common within the field of higher education research to conduct ordinary least squares (OLS) regression despite working with nested data if the intraclass correlation coefficient (ICC) is below a certain threshold (Astin & Denson, 2009; Cole, 2011; Cox, McIntosh, Terenzini, Reason, & Quaye, 2010; Mayhew, Seifert, & Pascarella, 2012; Singer, 1998). The ICC can describe how much variance in the dependent variable is explained between institutions (Raudenbush & Bryk, 2002).

For this study, an unconditional multilevel model with no predictor variables was performed to determine the ICC. The unconditional model is also known as a null or empty model. High ICC’s, such as 5% or above (Heck & Thomas, 2008), means there is significant variance explained at the school level and therefore multilevel analytical procedures like hierarchical linear modeling are appropriate. Low ICC’s (e.g. below 5%) means there is not much variance explained at the school level and therefore multilevel analytical procedures may not be necessary. The null model for this research question produced a very low ICC of 0.8%, meaning hardly any variance was explained at the school level. With such a low ICC, hierarchical multiple regression, a form of ordinary least squares (OLS) regression, was used to determine the best predictors of overall
socially responsible leadership. In particular, this research question sought to discover how much variance in overall socially responsible leadership development is explained by students’ involvement in a religious student organization above and beyond a student’s inputs (demographic characteristics, precollege experiences, capacities for socially responsible leadership prior to entering college) and other collegiate experiences.

As stated, hierarchical multiple regression was used to explore this question. Multiple regression is an appropriate analytical procedure when multiple independent variables are used to predict a continuous dependent variable. Going a step further, hierarchical multiple regression helps control for certain predictor variables by using a process called blocking. In this process, variables are put into groups called blocks. From there, each block is entered into the regression equation and the unique contribution it makes in predicting the outcome variable is determined above and beyond the blocks already considered in the model.

In this study, a total of three blocks were used. In other forms of multiple regression, such as stepwise, backward, or forward regression, regression models are constructed by finding the most fitting predictor variables through empirical means or processes. However, in hierarchical multiple regression, blocks and variables are selected based on theory and knowledge of the researcher. In this case, Astin’s (1993) Input-Environment-Outcome model was used as the framework to determine the blocks and variables. Block 1 contained student input variables, Block 2 contained student environmental variables, and Block 3 contained the primary independent variable of interest: student organizational involvement type. Each block contained the variables of the previous block, plus the new variables under consideration.
In the analysis, the $R^2$ statistic described how much variance in a dependent variable is explained by the regression model under examination. Standardized ($\beta$) coefficients described how much variance in the dependent variable is explained by each individual predictor variable within a model. For each model and predictor variable, a corresponding significance value was reported to determine whether or not the model or variable is statistically significant. The threshold for statistical significance will be if the $p$-value is less than $\alpha=0.05$, 0.01, or 0.001.

**Block 1.** In Block 1, the model contained variables related to student inputs, including the demographic characteristics (gender, race, class standing, and religious affiliation), precollege club and leadership experiences, and precollege capacities for socially responsible leadership. The aim of Block 1 was to determine if student inputs alone could predict for any variance in overall socially responsible leadership capacity during college.

Since the demographic variables are nominal (categorical) variables, dummy variables were used to determine and compare the differences against a predetermined reference group. For gender, additional dummy variables were not necessary since there were only two options, male and female. Male served as the reference group. For race, dummy variables were created for each race, with “White/Caucasian” serving as the reference group. The White/Caucasian group was chosen as the control group because it was the largest race represented.

For class standing, dummy variables were created for Sophomore, Junior, and Senior class standings, with “Freshman/First Year” serving as the reference group. The “Freshman/First Year” group was chosen as the reference group because previous
research has found that more years in college is positively associated with increases in leadership development (Astin, 1993).

Finally, for religious affiliation, dummy variables were created for those that identify with a Christian religion and for those that identify with a Non-Christian religion, with students identifying with “No Religion” serving as the reference group. The “No Religion” group was chosen as the reference groups since it was practical to compare students with a religious identity to students with no religious identity.

**Block 2.** Block 2 built onto Block 1 by adding student collegiate experiences to consideration. The aim of Block 2 was to determine if student collegiate experiences could predict for any variance in overall socially responsible leadership capacity during college above and beyond what is already considered in the model (in this case, student inputs). Three particular collegiate experiences were considered: collegiate organizational involvement frequency, collegiate positional leadership, and participating in collegiate leadership training. For collegiate leadership training, students were examined as either “Yes” they did participate or “No” they did not, with “No” serving as the reference group.

**Block 3.** Finally, Block 3 built onto Block 2 by adding the four involvement subgroups to consideration, which were religious only, secular only, both religious and secular, and no organizations. Since the four involvement subgroups were nominal (categorical) variables, dummy variables were used to determine differences among them. Specifically, dummy variables were created for religious, secular, and both religious and secular subgroups. Involvement in no organizations served as the control group since it is practical to compare the relationship of involvement against the
relationship of non-involvement. Block 3 determined if involvement subgroup could predict for any variance in socially responsible leadership capacity above and beyond what was already considered in the model (in this case, student inputs and collegiate experiences).

Prior to reporting the results of the hierarchical multiple regression models, statistics on multicollinearity and correlation among the predictor variables were calculated. Experts differ on what is considered high correlation. Some consider high correlation to be present when the correlation coefficient (r) between two or more predictor variables is greater than 0.70 (Leech, Barrett, & Morgan, 2005), while others have suggested 0.80 or 0.90 (Pallant, 2007). High correlations could potentially produce inaccurate results (Leech, Barrett, & Morgan, 2005). In three instances, correlations between two variables were above 0.64 (precollege positional leadership and precollege involvement in clubs and service, 0.703; collegiate positional leadership and collegiate organizational involvement frequency, 0.645; and involvement in both religious and secular organizations and involvement in secular organizations only, -0.694). These data are listed in Table 7.

In addition to correlation coefficients, other measures of multicollinearity were examined, including the Variance Inflation Factor (VIF) and tolerance statistics. The Variance Inflation Factor (VIF) measures how much a particular independent variable is inflated due to correlation with other independent variables in the model. Ideally, the VIF should be below 10. VIF’s over 10 indicate multicollinearity. In this study, VIF scores ranged from 1.001 to 2.61. Tolerance statistics, which are the inverse of the VIF, should be above 0.10. Tolerances statistics ranged from 0.363 to 0.999. While some
variables bordered on high correlation, measures were within suggested ranges (Tabachnick & Fidell, 2007). No variables were dropped from analysis due to multicollinearity. A list of tolerance and VIF statistics are found in Table 6.

**Chapter Summary**

This chapter presented the research questions of the current study and the methodologies used to explore them. In addition to providing important background information on the Multi-Institutional Study of Leadership (MSL) and the process in which the researchers collected the data, information was provided on the specific sample of MSL data used for this study, including detailed information on each of the measures and variables used for analysis.

For question 1, 2, and 3, *t*-tests were utilized to determine if statistically significant differences existed between students involved in only religious student organizations and students involved in the three other involvement groups. If statistically significant differences were found, Cohen *d* effect sizes were calculated. Finally, for research question 4, hierarchical multiple regression was used to determine how much variance in overall socially responsible leadership development is explained by students’ involvement in a religious student organization involvement above and beyond a student’s inputs (demographic characteristics, precollege experiences, capacities for socially responsible leadership prior to entering college) and other collegiate experiences.
Tables and Figures

Table 2. *Internal Consistency Values (Cronbach α).*

<table>
<thead>
<tr>
<th>Scale</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change (Overall SRL)</td>
<td>0.964</td>
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<tr>
<td>Consciousness of self</td>
<td>0.810</td>
</tr>
<tr>
<td>Congruence</td>
<td>0.857</td>
</tr>
<tr>
<td>Commitment</td>
<td>0.862</td>
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<tr>
<td>Collaboration</td>
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<tr>
<td>Common purpose</td>
<td>0.858</td>
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<tr>
<td>Controversy with civility</td>
<td>0.820</td>
</tr>
<tr>
<td>Citizenship</td>
<td>0.895</td>
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</table>
Table 3. Astin’s I-E-O Model Variables Used For This Study

<table>
<thead>
<tr>
<th>Input Measures</th>
<th>Environment Measures</th>
<th>Outcome Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic Characteristics:</strong></td>
<td><strong>Collegiate Experiences:</strong></td>
<td><strong>Socially Responsible Leadership during college</strong></td>
</tr>
<tr>
<td>- Gender</td>
<td>- Collegiate student organization involvement type (<em>Religious only, Secular only, Both religious and secular, None</em>)&lt;sup&gt;a&lt;/sup&gt;</td>
<td><strong>Overarching Value</strong></td>
</tr>
<tr>
<td>- Racial/ethnic background</td>
<td>- Collegiate student organization involvement frequency</td>
<td></td>
</tr>
<tr>
<td>- Class standing</td>
<td>- Collegiate positional leadership</td>
<td></td>
</tr>
<tr>
<td>- Religious preference</td>
<td>- Collegiate leadership training</td>
<td></td>
</tr>
<tr>
<td><strong>Precollege Experiences:</strong></td>
<td><strong>Socially Responsible Leadership before college</strong></td>
<td></td>
</tr>
<tr>
<td>- Precollege involvement in clubs and sports</td>
<td><strong>Individual Values</strong></td>
<td></td>
</tr>
<tr>
<td>- Precollege positional leadership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Precollege leadership training</td>
<td><strong>Society/Community Values</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Socially Responsible Leadership before college</strong></td>
<td></td>
<td></td>
</tr>
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</table>
Table 4. Typology and Examples of Student Organizations

<table>
<thead>
<tr>
<th>Type</th>
<th>Examples</th>
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</thead>
<tbody>
<tr>
<td>Academic/Departmental/Professional</td>
<td>Pre-Law Society, an academic fraternity, Engineering Club</td>
</tr>
<tr>
<td>Arts/Theater/Music</td>
<td>Theater group, Marching Band, Photography Club</td>
</tr>
<tr>
<td>Campus-Wide Programming</td>
<td>Program board, film series board, multicultural programming committee</td>
</tr>
<tr>
<td>Identity-Based</td>
<td>Black Student Union, Korean Student Association</td>
</tr>
<tr>
<td>International Interest</td>
<td>German Club, Foreign Language Club</td>
</tr>
<tr>
<td>Honor Societies</td>
<td>Omicron Delta Kappa [ODK], Mortar Board, Phi Beta Kappa</td>
</tr>
<tr>
<td>Media</td>
<td>Campus Radio, Student Newspaper</td>
</tr>
<tr>
<td>Military</td>
<td>ROTC, cadet corps</td>
</tr>
<tr>
<td>New Student Transitions</td>
<td>Admissions ambassador, orientation advisor</td>
</tr>
<tr>
<td>Resident Assistants</td>
<td></td>
</tr>
<tr>
<td>Peer Helper</td>
<td>Academic tutors, peer health educators</td>
</tr>
<tr>
<td>Advocacy</td>
<td>Students Against Sweatshops, Amnesty International</td>
</tr>
<tr>
<td>Political</td>
<td>College Democrats, College Republicans, Libertarians</td>
</tr>
<tr>
<td>Religious</td>
<td>Fellowship of Christian Athletes, Hillel</td>
</tr>
<tr>
<td>Service</td>
<td>Circle K, Habitat for Humanity</td>
</tr>
<tr>
<td>Multi-Cultural Fraternities and Sororities</td>
<td>National Pan-Hellenic Council [NPHC] groups such as Alpha Phi Alpha Fraternity Inc., or Latino Greek Council groups such as Lambda Theta Alpha</td>
</tr>
<tr>
<td>Social Fraternities or Sororities</td>
<td>Panhellenic or Interfraternity Council groups such as Sigma Phi Epsilon or Kappa Kappa Gamma</td>
</tr>
<tr>
<td>Sports-Intercollegiate or Varsity</td>
<td>NCAA Hockey, Varsity Soccer</td>
</tr>
<tr>
<td>Sports-Club</td>
<td>Club Volleyball, Club Hockey</td>
</tr>
<tr>
<td>Sports-Intramural</td>
<td>Intramural Flag Football</td>
</tr>
<tr>
<td>Recreational</td>
<td>Climbing Club, Hiking Club</td>
</tr>
<tr>
<td>Social/Special Interest</td>
<td>Gardening Club, Sign Language Club, Chess Club</td>
</tr>
<tr>
<td>Student Governance</td>
<td>Student Government Association, Residence Hall Association, Interfraternity Council</td>
</tr>
</tbody>
</table>

Note: Type names and examples derived from Item 17 on the 2012 MSL Student Survey.
Table 5. *Number of Participants Per Involvement Group*

<table>
<thead>
<tr>
<th>Involvement Group</th>
<th>n</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Religious&lt;sup&gt;a&lt;/sup&gt;</td>
<td>370</td>
<td>0.48</td>
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<tr>
<td>Secular&lt;sup&gt;b&lt;/sup&gt;</td>
<td>52,623</td>
<td>68.91</td>
</tr>
<tr>
<td>Both Religious and Secular&lt;sup&gt;c&lt;/sup&gt;</td>
<td>13,635</td>
<td>17.86</td>
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<tr>
<td>None&lt;sup&gt;d&lt;/sup&gt;</td>
<td>9,737</td>
<td>12.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>76,365</td>
<td>100.00</td>
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</table>

*Note.*
<sup>a</sup>Religious is defined as participations involved in religious student organizations only.
<sup>b</sup>Secular is defined as participants involved in secular student organizations only.
<sup>c</sup>Both Religious and Secular is defined as participants involved in both religious and secular student organizations.
<sup>d</sup>None is defined as participants not involved in any student organizations.
Table 6. Tolerance and Variance Inflation Factor (VIF) Statistics

<table>
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<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
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<td>Tolerance</td>
<td>VIF</td>
<td>Tolerance</td>
<td>VIF</td>
<td>Tolerance</td>
<td>VIF</td>
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<td>Precollege Capacities for SRL</td>
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<td>1.131</td>
<td>0.883</td>
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<tr>
<td>Precollege Positional Leadership</td>
<td>0.491</td>
<td>2.038</td>
<td>0.470</td>
<td>2.126</td>
<td>0.470</td>
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<tr>
<td>Precollege Involvement Clubs/Service</td>
<td>0.461</td>
<td>2.170</td>
<td>0.449</td>
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<td>Female</td>
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<td>Middle Eastern</td>
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<td>0.976</td>
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<td>0.976</td>
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<td>African American/Black</td>
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<td>1.022</td>
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<td>American Indian/Alaskan Native</td>
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<tr>
<td>Asian American/Asian</td>
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<td>1.061</td>
<td>0.941</td>
<td>1.063</td>
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<tr>
<td>Latino/Hispanic</td>
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<td>0.978</td>
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<td>0.977</td>
<td>1.024</td>
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<td>0.973</td>
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<td>0.973</td>
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<td>Sophomore</td>
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<td>Junior</td>
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<td>Senior</td>
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<td>Precollege Leadership Training</td>
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<td>Collegiate Leadership Training</td>
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<td>Collegiate Positional Leadership</td>
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<td>2.019</td>
<td>0.492</td>
<td>2.032</td>
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<td>Collegiate Org Involvement Frequency</td>
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<td>Both Religious and Secular</td>
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<td>0.382</td>
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</table>
Table 7. Hierarchical Multiple Regression Intercorrelations Matrix

|                          | Prevalence Depression | Prevalence Personality | Perfectionism | Otherness | Autism Spectrum | Multiple Regression | School | Parent | Broader Leadership | Broader Organizational | Broader included Organizations only | Broader included Organizations
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1. College for HBCU (100)</td>
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<td>0.23***</td>
<td>0.23***</td>
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<td>0.23***</td>
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<td>0.23***</td>
<td>0.23***</td>
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<tr>
<td>2. Prevalence Depression</td>
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<td>0.23***</td>
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<td>0.23***</td>
<td>0.23***</td>
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<tr>
<td>3. Prevalence Personality</td>
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<td>0.23***</td>
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<td>0.23***</td>
<td>0.23***</td>
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<td>0.23***</td>
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<tr>
<td>4. Prevalence Perfectionism</td>
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<td>0.23***</td>
<td>0.23***</td>
<td>0.23***</td>
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<tr>
<td>5. Prevalence Otherness</td>
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<td>0.23***</td>
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<td>0.23***</td>
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<td>0.23***</td>
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<tr>
<td>6. Prevalence Autism Spectrum</td>
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<td>0.23***</td>
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<td>0.23***</td>
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<td>0.23***</td>
<td>0.23***</td>
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<tr>
<td>7. Prevalence Multiple Regression</td>
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<td>0.23***</td>
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<tr>
<td>8. Prevalence School</td>
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<td>0.23***</td>
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<tr>
<td>9. Prevalence Parent</td>
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<td>0.23***</td>
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<td>0.23***</td>
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<tr>
<td>10. Prevalence Broader Leadership</td>
<td>1.00</td>
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<td>0.23***</td>
<td>0.23***</td>
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<td>0.23***</td>
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<td>0.23***</td>
<td>0.23***</td>
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<tr>
<td>11. Prevalence Broader Organizational</td>
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<tr>
<td>12. Prevalence Broader included Organizations only</td>
<td>1.00</td>
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<td>0.23***</td>
<td>0.23***</td>
<td>0.23***</td>
<td>0.23***</td>
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<td>13. Prevalence Broader included Organizations</td>
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<tr>
<td>14. Prevalence Otherness</td>
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<td>15. Prevalence Autism Spectrum</td>
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<td>0.23***</td>
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<tr>
<td>16. Prevalence Multiple Regression</td>
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<td>17. Prevalence School</td>
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<tr>
<td>18. Prevalence Parent</td>
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<td>0.23***</td>
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<td>0.23***</td>
<td>0.23***</td>
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<tr>
<td>19. Prevalence Broader Leadership</td>
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<tr>
<td>20. Prevalence Broader Organizational</td>
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<td>21. Prevalence Broader included Organizations only</td>
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*p < .05, **p < .01, ***p < .001
Figure 2. Astin’s (1993) Inputs-Environment-Outcomes Model.
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*Figure 3. Hierarchical Multiple Regression Variable Blocks*
CHAPTER FOUR: RESULTS

This chapter will present detailed information pertaining to the sample used in analysis. First, descriptive statistics will be provided to offer an overall picture of the data used in this study. Second, means and standard deviations related to all eight values of socially responsible leadership will be provided for the entire sample and then by each of the four involvement subgroups. Third, t-test results from research questions 1, 2, and 3 will be outlined, followed by the results of the hierarchical multiple regression used in research questions 4. The chapter will conclude with a summary of the results.

Descriptive Statistics

This study utilized data collected in the 2012 administration of the Multi-Institutional Study of Leadership Survey. The total number of students invited to participate in the 2012 MSL study was 276,297 and the number that responded was 91,178, which consisted of both completed and partially completed survey. Surveys were considered “partially complete” if the student stopped at some point before finishing the survey. Surveys were considered “complete” if the student participated to the end of the survey. A “complete” survey does not necessarily mean the student answered all survey questions. For this study, only completed studies (77,927) were provided by the Multi-Institutional Study of Leadership (MSL). After further data cleaning procedures were completed (as described in the previous chapter), the final sample use for analysis was 76,365.

General Descriptive Statistics of the Sample

For this dataset, the mean age was 21.46 (SD = 5.014), with traditionally aged students (under 24) comprising of a large majority of the sample (88.6%, n=67,640)
compared to non-traditionally aged students (24 or over) (11.3%, n=8,594). Full-time students were overwhelmingly represented with 95.9% of the sample (n=73,250) and part-time students at 4.1% (n=3,113). First-generation students made up 14.4% of the sample (n=10,975) with non-first generation students making up the bulk of the sample at 84.6% (n=64,586).

In terms of institutional characteristics, more students participated from private institutions (56.9%, n=43,488) than public institutions (43.1%, n=32,877). With institutional size, more students from medium sized institutions participated in the study (52.0%, n=39,709), followed by large institutions (36.6%, n=27,913) then small institutions (11.4%, n=8,743).

For institutional classification, students from Baccalaureate/Associates institutions comprised of 1.0% of the sample (n=742), followed by students from Doctoral/Research institutions (8.5%, n=6,476), Baccalaureate institutions (12.9%, n=9,819), Research (High/Very High) institutions (37.2%, n=28,443), and Masters institutions (40.4%, n=30,885). In terms of institutional selectivity, most students came from Very Competitive institutions (39.7%, n=30,305), followed by Competitive institutions (24.5%, n=18,688), Most Competitive institutions (14.6%, 11,155), Highly Competitive institutions (14.0%, 10,696), Less-Competitive institutions (3.9%, n=2,965), and Non-Competitive institutions (2.3%, n=1,720).

In terms of institutional setting, most institutions were located in the city (62.1%, n=47,449), followed by suburb (19.5%, n=14,878), town (13.4%, n=10,197) and rural (5%, n=3,841). Most schools were not members of the Catholic coalition (67.1%, n=51,233) compared to those that were members (32.9%, n=25,132).
Descriptive Data Related to the Input Variables

**Demographic Characteristics.** The data provided in this section includes descriptive data related to the total sample in terms of the Input variables related to gender, race/ethnicity, class standing, and religious affiliation.

Women were overrepresented in the total sample (62.8%, n=47,922) compared to men (37.2%, n=28,443). These data pertaining to gender, including a breakdown by involvement subgroup, are listed in Table 8. In terms of race, the majority of the sample identified as White (71.5%, n=54,581), followed by Multiracial (8.8%, n=6,745), Asian American/Asian (8.0%, n=6,093), Latino/Hispanic (5.1%, n=3,915), African American/Black (4.3%, n=3,291), Race not included (1.3%, n=1,017), Middle Eastern (0.8%, n=611), and finally American Indian/Alaska Native (0.1%, n=112). Table 9 provides these data related to race/ethnicity, including the distribution by involvement subgroup.

As for student class standing, participation was distributed fairly evenly among the four classifications for the total sample with freshmen at 21.9% (n=16,688), sophomores at 22.2% (n=16,969), juniors at 25.4% (n=19,429) and seniors (4th year and beyond) at 29.7% (n=22,715). Class standing data, including the number in each involvement subgroup, are listed in Table 10. In terms of religious affiliation, the total sample primarily identified as Christian (65.4%, n=49,921), followed by No religion (21.1%, n=16,111), then Non-Christian (13.4%, n=10,265). Data related to religious affiliation for the total sample and by each involvement subgroup are provided in Table 11.
**Precollege experiences.** In addition to the Input variables related to demographics, descriptive statistics were examined for Input variables related to precollege experiences, including precollege involvement in clubs and service, precollege positional leadership, precollege leadership training, and precollege capacities for socially responsible leadership.

In terms of precollege involvement in clubs and service, the total sample reported relatively high levels of participation (M=2.49, SD=0.65). Table 12 outlines these descriptive data related to precollege involvement in clubs and service. As for precollege positional leadership, the total sample reported relatively high levels of positional leadership (M=2.30, SD=0.91). Data related to precollege positional leadership are listed in Table 13.

A large majority of the total sample participated in some level of precollege leadership training (74.4%, n=56,796) while the remaining 25.6% (n=19,558) did not. These data for precollege leadership training are provided in Table 14. Finally, the total sample reported relatively high levels of precollege capacities for socially responsible leadership (M=3.96, SD=0.55) as listed in Table 15.

**Descriptive Data Related to the Environment Variables**

The level of collegiate organizational involvement frequency was found to be relatively high among the total sample (M=3.21, SD=1.41), as outlined in Table 16. When determining how often students held a position in their student organization (collegiate positional leadership), the total sample reported a modest frequency (M=2.22, SD=1.51). These data are available in Table 17. A sizeable number of students participated in some form of collegiate leadership training (30.8%, n=23,497), however,
most students did not (69.2%, n=52,860). Data on collegiate leadership training are available in Table 18.

Finally, the number of students within each of the four groups were as follows:
370 (0.48%) students in religious organizations only, 52,623 (68.9%) in secular organizations only, 13,635 (17.9%) in both religious and secular organizations, and 9,737 (12.8%) were not involved in any organizations. These data are provided in Table 5 at the end of Chapter Three.

**Descriptive Data Related to the Outcome Variables**

Mean scores and standard deviations were calculated for all eight measures of socially responsible leadership for the full sample, without taking group membership into account. Among all students, the overall socially responsible leadership (Change) mean score was 4.21 (SD=0.47), indicating a relatively high level of overall socially responsible leadership (Minimum=1; Maximum=5).

Among the seven individual values, all students scored highest in *Commitment* (M=4.43, SD=0.49), followed by *Congruence* (M=4.27, SD=0.55), *Controversy with civility* (M=4.24, SD=0.52), *Common purpose* (M=4.23, SD=0.53), *Collaboration* (M=4.21, SD=0.53), *Consciousness of self* (M=4.11, SD=0.58), and *Citizenship* (M=4.00, SD=0.66). These data, as well as the breakdown by involvement subgroup, are also listed in Table 19.

**Religious Student Organizations**

Mean scores and standard deviations for all eight measures of socially responsible leadership were computed for students involved in religious student organizations only (n=370). Students involved in religious student organizations only were found to have a
mean overall socially responsible leadership (Change) score of 4.12 (SD=0.47), which suggests that the average respondent had a relatively high score (Minimum=1.03; Maximum=5).

Among the seven individual scales, it is Commitment (M=4.37; SD=0.52) that has the highest mean, followed by Congruence (M=4.30, SD=0.60), Common purpose (M=4.15, SD=0.54), Controversy with civility (M=4.14, SD=0.53), Collaboration (M=4.11, SD=0.55), Consciousness of self (M=3.98, SD=0.62), and Citizenship (M=3.86, SD=0.64).

Students involved in religious student organizations scored lowest on two of the eight measures of socially responsible leadership (Consciousness of self and Controversy with civility) compared to students in the other three subgroups.

**Both Religious and Secular Student Organizations**

For students involved in both religious and secular organizations (n=13,635), mean scores and standard deviations were computed for all eight measures of socially responsible leadership. Students in both religious and secular organizations were found to have a mean overall socially responsible leadership (Change) score of 4.31 (SD=0.45), which suggest that an average respondent had a relative high score (Minimum=1, Maximum=5).

For the seven individual scales, it is Commitment (M=4.48, SD=0.49) that has the highest mean, followed by Congruence (M=4.39, SD=0.54), Common purpose (M=4.32, SD=0.51), Collaboration (M=4.29, SD=0.51), Controversy with civility (M=4.28, SD=0.52), Citizenship (M=4.21, SD=0.59), and Consciousness of self (M=4.17, SD=0.57). Students in both religious and secular organizations scored highest on all
eight measures of socially responsible leadership compared to the students in the other three subgroups.

**Secular Student Organizations**

Students involved in only secular organizations (n=52,623) were found to have a mean overall socially responsible leadership (*Change*) score of 4.21 (SD=0.45), suggesting that the average respondent in this category had a relatively high score (Minimum=1, Maximum=5).

Results for the seven individual scales found *Commitment* (M=4.44, SD=0.48) having the highest mean, followed by *Congruence* (M=4.26, SD=0.54), *Controversy with civility* (M=4.25, SD=0.51), *Common purpose* (M=4.23, SD=0.52), *Collaboration* (M=4.22, SD=0.51), *Consciousness of self* (M=4.11, SD=0.57), and *Citizenship* (M=3.99, SD=0.64).

**No Student Organizations**

Finally, mean scores and standard deviations for all eight measures of socially responsible leadership were computed for students not involved in any student organizations (n=9,737). Students not involved in any student organizations were found to have a mean overall socially responsible leadership (*Change*) score of 4.09 (SD=0.52), which suggests that the average respondent had a relatively high score (Minimum=1, Maximum=5).

For the seven individual scales, it is *Commitment* (M=4.35, SD=0.55) that has the highest mean, followed by *Congruence* (M=4.18, SD=0.60), *Controversy with civility* (M=4.16, SD=0.57), *Collaboration* (M=4.09, SD=0.58), *Common purpose* (M=4.07,
SD=0.59), Consciousness of self (M=4.03, SD=0.63), and Citizenship (M=3.73, SD=0.71).

Students not involved in any student organizations scored lowest on six of the eight measures of socially responsible leadership (Congruence, Commitment, Collaboration, Common purpose, Citizenship, and overall Change) compared to students in the other three subgroups.

Research Question #1

The first research question of this study was:

Is there a statistically significant difference in self-reported capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate in both religious and secular student organizations?

The null hypothesis was:

There is no statistically significant difference in capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate in both religious and secular student organizations.

The objective of this research question is to compare the mean scores of all eight measures of socially responsible leadership between students involved in only religious student organizations and students involved in both religious and secular student organizations. In order to investigate the null hypotheses associated with the first research question, an independent samples t-test was used for each of the eight measures of socially responsible leadership. According to Ritchey (2008), the use of an
independent samples $t$-test is appropriate when the dependent variable is continuous in nature and the independent variable is a dichotomous nominal-level discrete variable. These criteria are satisfied under the current circumstances as the dependent variables (all eight measures of socially responsible leadership) is a continuous in nature and the independent variables are dichotomous (either in both religious and secular organizations or only religious organizations).

Students involved in both religious and secular organizations scored higher on all eight measures than students involved in only religious organizations and all eight measures were found to be statistically significant. This section will describe each significant relationship in more detail. Data from this section are provided in Table 20.

**Change (Overall SRL)**

Overall socially responsible leadership (i.e. Change) yields a statistically significant difference as a function of the independent variable; $t (13943) = -7.596, p = 0.000$. Levene’s test for homogeneity of variance shows that the data are homoscedastic ($F = 0.229; p = 0.632$), meaning the variability of the variable is considered equal across the range of values. It is the case that students in both religious and secular student organizations (M=4.31, SD=0.45) have a higher score on Change relative to students in only religious student organizations (M=4.12, SD=0.47). While a statistically significant difference exists, the effect size of these differences is trivial ($d=0.128$).

**Consciousness of Self**

Consciousness of self indicated a statistically significant difference between students who were involved in both religious and secular organizations compared to students who were only in religious organizations; $t (13985) = -6.327, p = 0.000$. 

Levene’s test for homogeneity of variance shows that the data are homoscedastic \((F = 0.902; \ p = 0.342)\). It is the case that students in both religious and secular student organizations \((M=4.17, \ SD=0.57)\) have a higher mean *Consciousness of self* score than students in only religious student organizations \((M=3.98, \ SD=0.62)\). While a statistically significant difference exists, the effect size of these differences is trivial \((d=0.105)\).

**Congruence**

The result for *Congruence* showed a statistically significant difference between students who were involved in both religious and secular organizations compared to students who were only in religious organizations; \(t (385.13) = -2.608, \ p = 0.009\). Levene’s test for homogeneity of variance shows that the data are heteroscedastic \((F = 8.696; \ p = 0.003)\), meaning the variability of the variable is considered unequal across the range of values. It is the case that students in both religious and secular student organizations \((M=4.39, \ SD=0.54)\) have a slightly higher score on *Congruence* relative to students in only religious student organizations \((M=4.30, \ SD=0.60)\). This statistically significant difference is considered to have a small effect size \((d=0.266)\).

**Commitment**

The value of *Commitment* indicated a statistically significant difference between students who were involved in both religious and secular organizations compared to students who were only in religious organizations; \(t (385.67) = -4.070, \ p = 0.000\). Levene’s test for homogeneity of variance shows that the data are heteroscedastic \((F = 4.388; \ p = 0.036)\). It is the case that students in both religious and secular student organizations \((M=4.48, \ SD=0.49)\) have a slightly higher score on *Commitment* relative to
students in only religious student organizations (M=4.37; SD=0.52). This statistically significant difference is considered to have a small-to-medium effect size (d=0.414).

**Collaboration**

_Collaboration_ yields a statistically significant difference between students who were involved in both religious and secular organizations compared to students who were only in religious organizations; \( t (13985) = -6.763, p = 0.000 \). Levene’s test for homogeneity of variance shows that the data are homoscedastic (\( F = 0.366; p = 0.545 \)). It is the case that students in both religious and secular student organizations (M=4.29, SD=0.51) have a higher score on _Collaboration_ relative to students in only religious student organizations (M=4.11, SD=0.55). While a statistically significant difference exists, the effect size of these differences is trivial (d=0.114).

**Common Purpose**

_Common purpose_ indicated a statistically significant difference between students who were involved in both religious and secular organizations compared to students who were only in religious organizations; \( t (13985) = -6.383, p = 0.000 \). Levene’s test for homogeneity of variance shows that the data are homoscedastic (\( F = 1.028; p = 0.311 \)). It is the case that students in both religious and secular student organizations (M=4.32, SD=0.51) have a higher score on _Common purpose_ relative to students in only religious student organizations (M=4.15, SD=0.54). While a statistically significant difference exists, the effect size of this difference is trivial (d=0.108).

**Controversy with Civility**

For _Controversy with civility_, a statistically significant difference was found between students who were involved in both religious and secular organizations
compared to students who were only in religious organizations; \( t (13987) = -5.410, p = 0.000 \). Levene’s test for homogeneity of variance shows that the data are homoscedastic \( (F = 2.668; p = 0.102) \). It is the case that students in both religious and secular student organizations (M=4.28, SD=0.52) have a higher score on *Controversy with civility* relative to students in only religious student organizations (M=4.14, SD=0.53). While a statistically significant difference exists, the effect size of this difference is trivial \( (d=0.091) \).

**Citizenship**

The measure of *Citizenship* was determined to have a statistically significant difference between students who were involved in both religious and secular organizations compared to students who were only in religious organizations; \( t (13983) = -11.277, p = 0.000 \). Levene’s test for homogeneity of variance shows that the data are homoscedastic \( (F = 0.390; p = 0.532) \). It is the case that students in both religious and secular organizations (M=4.21, SD=0.59) have a higher score on *Citizenship* relative to students in only religious student organizations (M=3.86, SD=0.64). While a statistically significant difference exists, the effect size of this difference is trivial \( (d=0.191) \).

These results suggest that involvement in both religious and secular student organizations is correlated with higher scores on all eight measures of socially responsible leadership capacity compared to those involved in only religious organizations. These results suggest that when students are involved in both religious and secular student organizations, they will have higher scores on all eight measures of socially responsible leadership than being involved in only religious student organizations.
Research Question #2

The second research question of this study was:

*Is there a statistically significant difference in self-reported capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate only in secular student organizations?*

The null hypothesis was:

*There is no statistically significant difference in capacities for socially responsible leadership among students who participate only in religious student organizations and students who participate only in secular student organizations.*

The aim of this research question is to compare the mean scores of all eight measures of socially responsible leadership between students involved in only religious student organizations and students involved in only secular student organizations. In order to investigate the null hypothesis associated with the second research question, an independent samples t-test was used for each of the eight measures of socially responsible leadership.

Students involved in secular organizations scored higher on seven of the eight measures than students involved in only religious organizations and all seven measures were found to be statistically significant. The one measure in which students involved in only religious student organizations scored higher (*Congruence*) was not statistically significant. This section will describe each significant relationship in more detail. Data from this section are provided in Table 21.
Change (Overall SRL)

Overall socially responsible leadership (i.e. Change) indicated a statistically significant difference between students who were only in secular organizations compared to students only in religious organizations; $t(52750) = -3.726$, $p = 0.000$. Levene’s test for homogeneity of variance shows that the data are homoscedastic ($F = 0.182; p = 0.670$). It is the case that students in only secular student organizations ($M=4.21$, $SD=0.45$) have a higher score on Change relative to students in only religious student organizations ($M=4.12$, $SD=0.47$). While a statistically significant difference exists, the effect size of this difference is trivial ($d=0.032$).

Consciousness of Self

The measure of Consciousness of self yields a statistically significant difference between students who were only in secular organizations compared to students only in religious organizations; $t(52906) = -4.558$, $p = 0.000$. Levene’s test for homogeneity of variance shows that the data are homoscedastic ($F = 0.752; p = 0.386$). It is the case that students in only secular student organizations ($M=4.12$, $SD=0.57$) have a higher score on Consciousness of self relative to students in only religious student organizations ($M=3.98$, $SD=0.62$). While a statistically significant difference exists, the effect size of this difference is trivial ($d=0.039$).

Commitment

Commitment indicated a statistically significant difference between students who were only in secular organizations compared to students only in religious organizations; $t(52926) = -2.535$, $p = 0.011$. Levene’s test for homogeneity of variance shows that the data are homoscedastic ($F = 2.872; p = 0.090$). It is the case that students in only secular
student organizations (M=4.44, SD=0.48) have a slightly higher score on *Commitment* relative to students in only religious student organizations (M=4.37; SD=0.52). While a statistically significant difference exists, the effect size of this difference is trivial ($d=0.022$).

**Collaboration**

For the measure of *Collaboration*, a statistically significant difference was found between students who were only in secular organizations compared to students only in religious organizations; $t(52913) = -4.014, p = 0.000$. Levene’s test for homogeneity of variance shows that the data are homoscedastic ($F = 0.189; p = 0.664$). It is the case that students in only secular student organizations (M=4.21, SD=0.51) have a higher score on *Collaboration* relative to students in only religious student organizations (M=4.11, SD=0.55). While a statistically significant difference exists, the effect size of this difference is trivial ($d=0.035$).

**Common Purpose**

*Common purpose* was found to have a statistically significant difference between students who were only in secular organizations compared to students only in religious organizations; $t(52927) = -3.033, p = 0.002$. Levene’s test for homogeneity of variance shows that the data are homoscedastic ($F = 0.176; p = 0.674$). It is the case that students in only secular student organizations (M=4.23, SD=0.52) have a higher score on *Common purpose* relative to students in only religious student organizations (M=4.15, SD=0.54). While a statistically significant difference exists, the effect size of this difference is trivial ($d=0.026$).
Controversy with Civility

For Controversy with civility, a statistically significant difference was determined between students who were only in secular organizations compared to students only in religious organizations; \( t (52928) = -4.133, p = 0.000 \). Levene’s test for homogeneity of variance shows that the data are homoscedastic \( (F = 1.278; p = 0.258) \). It is the case that students in only secular student organizations \((M=4.25, SD=0.51)\) have a higher score on Controversy with civility relative to students in only religious student organizations \((M=4.14, SD=0.53)\). While a statistically significant difference exists, the effect size of this difference is trivial \((d=0.036)\).

Citizenship

The measure of Citizenship was found to have a statistically significant difference between students who were only in secular organizations compared to students only in religious organizations; \( t (52912) = -3.841, p = 0.000 \). Levene’s test for homogeneity of variance shows that the data are homoscedastic \( (F = 0.051; p = 0.821) \). It is the case that students in only secular student organizations \((M=3.99, SD=0.64)\) have a higher score on Citizenship relative to students in only religious student organizations \((M=3.86, SD=0.64)\). While a statistically significant difference exists, the effect size of this difference is trivial \((d=0.032)\).

These results suggest that involvement in only secular student organizations is correlated with higher scores on seven of the eight measures of socially responsible leadership capacity compared to students involved in only religious organizations. These results suggests that when students are involved in only secular student organizations,
they will have higher scores on seven of the eight measures of socially responsible leadership than being involved in only religious student organizations.

**Research Question #3**

The third research question of this study was:

*Is there a statistically significant difference in self-reported capacities for socially responsible leadership among students who participate only in religious student organizations and students who do not participate in student organizations?*

The null hypothesis was:

*There is no statistically significant difference in capacities for socially responsible leadership among students who participate only in religious student organizations and students who do not participate in student organizations.*

This research question seeks to compare the mean scores of all eight measures of socially responsible leadership between students involved in only religious student organizations and students not involved in any student organizations. In order to investigate the null hypothesis associated with the third research question, an independent samples *t*-test was used for each of the eight measures of socially responsible leadership.

Students involved in only religious student organizations scored higher on six of the eight measures than students not involved in any student organizations, however, only three of those measures were found to be statistically significant (*Congruence*, *Common purpose*, and *Citizenship*). Students not involved in any student organizations scored higher on the remaining two measures but both measures were not significant. Data from this section are provided in Table 22.
**Congruence**

Results for *Congruence* indicated a statistically significant difference between students who were only in religious organizations compared to students not involved in any organizations; \( t(10089) = 3.845, p = 0.000 \). Levene’s test for homogeneity of variance shows that the data are homoscedastic \( (F = 0.215; p = 0.643) \). It is the case that students in only religious student organizations \( (M=4.30, SD=0.60) \) have a higher score on *Congruence* relative to students not involved in any organizations \( (M=4.18, SD=0.60) \). While a statistically significant difference exists, the effect size of this difference is trivial \( (d=0.077) \).

**Common Purpose**

For the measure of *Common purpose*, a statistically significant difference was found between students who were only in religious organizations compared to students not involved in any organizations; \( t(10084) = 2.475, p = 0.013 \). Levene’s test for homogeneity of variance shows that the data are homoscedastic \( (F = 3.168; p = 0.075) \). It is the case that students in only religious student organizations \( (M=4.15, SD=0.54) \) have a slightly higher score on *Common purpose* relative to students not involved in any organizations \( (M=4.07, SD=0.59) \). While a statistically significant difference exists, the effect size of this difference is trivial \( (d=0.049) \).

**Citizenship**

*Citizenship* was found to have a statistically significant difference between students who were only in religious organizations compared to students not involved in any organizations; \( t(404.07) = 3.689, p = 0.000 \). Levene’s test for homogeneity of variance shows that the data are heteroscedastic \( (F = 9.237; p = 0.002) \). It is the case that
students in only religious student organizations (M=3.86, SD=0.64) have a higher score on Citizenship relative to students not involved in any organizations (M=3.73, SD=0.71). This statistically significant difference is considered to have a small-to-medium effect size (d=0.368).

These results suggest that involvement in only religious student organizations is correlated with higher scores on three of the eight measures of socially responsible leadership capacity compared to involvement in no organizations. However, these results also suggest that no statistically significant differences exist between these two groups on five of the eight measures of socially responsible leadership, including overall socially responsible leadership (Change). These results suggest that when students are involved in only religious student organizations, they will have higher scores on three of the eight measures of socially responsible leadership than being involved in no student organizations.

**Research Question #4**

The fourth and final research question in this study was:

*How much variance in self-reported overall socially responsible leadership development is explained by students’ involvement in a religious student organization, above and beyond a students’ inputs (demographic characteristics, precollege experiences, capacities for socially responsible leadership prior to entering college) and other collegiate experiences?*

The null hypothesis was:

*Involvement in a religious student organization does not explain any variance in overall socially responsible leadership capacity during college above and beyond a*
students’ inputs (demographic characteristics, precollege experiences, capacities for socially responsible leadership prior to entering college) and other collegiate experience.

The purpose of this research question was to determine how much variance in a student’s overall capacities for socially responsible leadership during college (Change) is attributed to involvement in a religious student organization, above and beyond their other inputs and college experiences. To achieve this, hierarchical multiple regression was used. Multiple regression is an appropriate analytical procedure when multiple independent variables are used to predict a continuous dependent variable. Going a step further, hierarchical multiple regression helps control for certain predictor variables by using a process called blocking. By grouping variables into blocks, it can be determined how much of a unique contribution those variables make in predicting the outcome variable above and beyond the blocks already considered in the model. A total of 3 blocks were used, creating three distinct multiple regression models.

**Model 1 Results (Block 1)**

The first hierarchical multiple regression model involved a total of 17 variables, all of which were loaded into Block 1. The first model explained 26.5% ($R^2=.265$) of the total variance in overall capacities for socially responsible leadership during college (Change) and was found to be a statistically significant model: $F(17, 75949) = 1612.959$, $p < 0.001$. Data describing the first model in Block 1 are listed in Table 24 and Table 25.

Among the 17 variables, 11 were positive contributors to the model and six were negative contributors. Of the 11 positive, 10 were statistically significant, except for identifying as Multiracial ($\beta=0.001$). From highest to lowest, the statistically significant positive variables were precollege capacities for socially responsible leadership
being a Senior ($\beta=0.183$), precollege involvement in clubs/service ($\beta=0.084$), precollege positional leadership ($\beta=0.064$), being a Sophomore ($\beta=0.058$), identifying as female ($\beta=0.056$), identifying as a Christian ($\beta=0.027$), identifying with a Non-Christian religion ($\beta=0.021$) and precollege leadership training ($\beta=0.017$).

All six negative variables were related to race and only two were statistically significant: Asian American/Asian ($\beta=-0.068$) and Race/ethnicity not included ($\beta=-0.019$). The other four non-statistically significant variables were African American/Black ($\beta=-0.001$), Latino/Hispanic ($\beta=-0.003$), Middle Eastern ($\beta=-0.005$), and American Indian/Alaskan Native ($\beta=-0.006$). A list of all of these figures are provided in Table 23.

**Model 2 Results (Block 2)**

The second hierarchical multiple regression model included a total of 20 variables. These 20 variables included all 17 variables in Block 1 plus three new variables related to collegiate experiences added to Block 2. Model 2 produced an $R^2=.298$, which indicated that Model 2 explained 29.8% of the total variance in overall capacities for socially responsible leadership during college ($Change$). This reflects an $R^2$ Change between Model 1 and Model 2 of 0.033 (3.33% increase), which was determined to be a statistically significant change: $F(3,75946)=1173.162, p < 0.001$. The data describing the change in $R^2$ is listed in Table 24. Overall, Model 2 was determined to be a statistically significant model: $F(20,75946)=1610.468, p < 0.001$. Data outlining the statistical significance of Model 2 is found in Table 25.
Among the three variables added to the model, all three were found to be positive, statistically significant contributors to the model, the highest being collegiate organizational involvement frequency ($\beta=0.127$), followed by collegiate positional leadership ($\beta=0.063$) and collegiate leadership training ($\beta=0.045$). The addition of these variables to Model 2 had no impact on the variables examined in Model 1. Variables found to be positive (or negative) predictors in Model 1 remained positive (or negative) in Model 2. Variables found to be statistically significant (or insignificant) in Model 1 remained statistically significant (or insignificant) in Model 2. A table listing of these data are listed in Table 23.

**Model 3 Results (Block 3)**

The third and final hierarchical multiple regression model involved 23 variables, which consisted of the 20 variables in Block 2 and the addition of the three variables of interest related to organizational involvement type in Block 3. This third model produced an $R^2=0.298$, which means that variables in Model 3 explain 29.8% of the total variance in overall capacities for socially responsible leadership during college ($Change$). Model 3 was determined to be statistically significant model: $F(23,75943)=1403.151, p < 0.001$. These data are available in Table 25. The $R^2$ Change between Model 2 and Model 3 was 0.000, representing basically no change (0.00%). However, this change was determined to be statistically significant: $F(3,75943)=15.071, p < 0.001$. This finding is likely a product of the large sample size. While the difference between Models 2 and 3 are statistically significant, it is not practically significant. The data describing this change in $R^2$ are listed in Table 24.
Among the three organizational involvement types added to the model (with students involved in no organizations serving as the reference group), all three were found to be negative and statistically insignificant contributors to the model. The least negative contributor to the model was involvement in religious organizations only ($\beta=-0.004$), followed by involvement in both religious and secular organizations ($\beta=-0.019$) and involvement in secular organizations only ($\beta=-0.032$). The addition of these variables to Model 3 had no impact on the variables examined in Model 2. Variables found to be positive (or negative) predictors in Model 2 remained positive (or negative) in Model 3. Variables found to be statistically significant (or insignificant) in Model 2 remained statistically significant (or insignificant) in Model 3. A table listing of these data are listed in Table 23.

**Chapter Summary**

Over the course of this chapter, results related to the relationship between capacities for socially responsible leadership and involvement in a religious, secular, both religious and secular, and no student organizations were reported. Results of $t$-tests showed statistically significant differences between students involved in different types of student organizations, and results from hierarchical multiple regression demonstrated that involvement in a religious student organization had no correlation with socially responsible leadership. The following chapter will discuss the findings in depth and provide implications for future practice and research.
### Table 8. Gender Distribution for Full Samples and Four Involvement Subgroups

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Religious</th>
<th>Both Religious &amp; Secular</th>
<th>Secular</th>
<th>No Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>47,922</td>
<td>264</td>
<td>8,854</td>
<td>32,198</td>
<td>6,606</td>
</tr>
<tr>
<td>Male</td>
<td>28,443</td>
<td>106</td>
<td>4,781</td>
<td>20,425</td>
<td>3,131</td>
</tr>
<tr>
<td>Total</td>
<td>76,365</td>
<td>370</td>
<td>13,635</td>
<td>52,623</td>
<td>76,365</td>
</tr>
</tbody>
</table>

Note. Only Female and Male genders were considered. Participants who identified as Transgender were excluded as they only comprised 0.2% of the observations.
Table 9. Race/ethnicity Distribution for Full Sample and Four Involvement Subgroups

<table>
<thead>
<tr>
<th>Race/ethnicity</th>
<th>Total</th>
<th>Religious</th>
<th>Both Religious &amp; Secular</th>
<th>Secular</th>
<th>No Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Caucasian</td>
<td>5,4581</td>
<td>255</td>
<td>9,637</td>
<td>38,009</td>
<td>6,680</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>611</td>
<td>2</td>
<td>150</td>
<td>360</td>
<td>99</td>
</tr>
<tr>
<td>African American/Black</td>
<td>3,291</td>
<td>26</td>
<td>679</td>
<td>2,029</td>
<td>557</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>112</td>
<td>1</td>
<td>11</td>
<td>74</td>
<td>26</td>
</tr>
<tr>
<td>Asian American/Asian</td>
<td>6,093</td>
<td>36</td>
<td>1,208</td>
<td>4,249</td>
<td>600</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>3,915</td>
<td>25</td>
<td>509</td>
<td>2,631</td>
<td>750</td>
</tr>
<tr>
<td>Multiracial(^a)</td>
<td>6,745</td>
<td>19</td>
<td>1,187</td>
<td>4,655</td>
<td>884</td>
</tr>
<tr>
<td>Race not included(^b)</td>
<td>1,017</td>
<td>6</td>
<td>254</td>
<td>616</td>
<td>141</td>
</tr>
<tr>
<td>Total</td>
<td>76,365</td>
<td>370</td>
<td>13,635</td>
<td>52,623</td>
<td>9,737</td>
</tr>
</tbody>
</table>

Note. \(^a\)If a participant marked more than one race/ethnic background, those participants were placed in the “Multiracial” group.

\(^b\)If a participant did not mark any of the race/ethnic background options, that participant was placed in the “Race/Ethnicity not included above” group.
Table 10. *Class Standing Distribution for Full Sample and Four Involvement Subgroups*

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Religious</th>
<th>Both Religious &amp; Secular</th>
<th>Secular</th>
<th>No Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior</td>
<td>22,715</td>
<td>87</td>
<td>3,850</td>
<td>16,001</td>
<td>2,777</td>
</tr>
<tr>
<td>Junior</td>
<td>19,429</td>
<td>83</td>
<td>3,517</td>
<td>13,433</td>
<td>2,396</td>
</tr>
<tr>
<td>Sophomore</td>
<td>16,969</td>
<td>76</td>
<td>3,296</td>
<td>11,632</td>
<td>1,965</td>
</tr>
<tr>
<td>Freshman</td>
<td>16,688</td>
<td>117</td>
<td>2,901</td>
<td>11,208</td>
<td>2,462</td>
</tr>
<tr>
<td>Total</td>
<td>75,801</td>
<td>363</td>
<td>13,564</td>
<td>52,274</td>
<td>9,600</td>
</tr>
</tbody>
</table>

*Note.* Students who identified as Graduate or Unclassified were excluded. Due to case wise deletion, the total number of observations for this variable (n=75,801) differs from the starting sample (n=76,365).
### Table 11. Religious Affiliation Distribution for Full Sample and Four Involvement Subgroups

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Religious</th>
<th>Both Religious &amp; Secular</th>
<th>Secular</th>
<th>No Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian(^a)</td>
<td>49,921</td>
<td>333</td>
<td>11,437</td>
<td>32,225</td>
<td>5,926</td>
</tr>
<tr>
<td>Non-Christian(^b)</td>
<td>10,265</td>
<td>21</td>
<td>1,538</td>
<td>7,385</td>
<td>1,321</td>
</tr>
<tr>
<td>No Religion(^c)</td>
<td>16,111</td>
<td>16</td>
<td>648</td>
<td>12,965</td>
<td>2,482</td>
</tr>
<tr>
<td>Total</td>
<td>76,297</td>
<td>370</td>
<td>13,623</td>
<td>52,575</td>
<td>9,729</td>
</tr>
</tbody>
</table>

**Note.** Due to case wise deletion, the total number of observations for this variable (n=76,297) differs from the starting sample (n=76,365).

\(^a\)Preferences were determined to be “Christian” if the preference was an organized religion that considers Jesus Christ to be the central figure of the movement. The Christian group consisted of the following thirteen preferences: Baptist, Catholic, Church of Christ, Eastern Orthodox, Episcopalian, LDS (Mormon), Lutheran, Methodist, Presbyterian, Quaker, Seventh Day Adventist, UCC/Congregational, and Other Christian.

\(^b\)Preferences were determined to be “Non-Christian” if the preference was an organized religion that does not consider Jesus Christ to be the central figure of the movement. The Non-Christian group consisted of the following six preferences: Buddhist, Hindu, Islamic, Jewish, Unitarian/Universalist, Other Religion.

\(^c\)Preferences were determined to be “No Religion” if the preference was not an organized religion. The No Religion group consisted of the following three preferences: Agnostic, Atheist, and None.
Table 12. *Means and Standard Deviations for Precollege Involvement in Clubs/Service for Full Sample and Four Involvement Subgroups*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total (n=76,365)</th>
<th>Religious (n=370)</th>
<th>Both Religious &amp; Secular (n=13,635)</th>
<th>Secular (n=52,623)</th>
<th>No Organizations (n=9,737)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Precollege involvement in clubs/service</td>
<td>2.49</td>
<td>0.65</td>
<td>2.43</td>
<td>0.59</td>
<td>2.79</td>
</tr>
</tbody>
</table>

*Note.* Overall precollege involvement in a clubs and service was computed by calculating the mean of the five related activities for each participant. Precollege involvement in clubs and service was a continuous (scale) variable, with higher scores (i.e. scores closer to 3) meaning students were more involved in precollege clubs and service.
Table 13. *Means and Standard Deviations for Precollege Positional Leadership for Full Sample and Four Involvement Subgroups*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total (n=76,365)</th>
<th>Religious (n=370)</th>
<th>Both Religious &amp; Secular (n=13,635)</th>
<th>Secular (n=52,623)</th>
<th>No Organizations (n=9,737)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Precollege positional leadership</td>
<td>2.30</td>
<td>0.91</td>
<td>2.02</td>
<td>0.87</td>
<td>2.63</td>
</tr>
</tbody>
</table>

*Note.* To determine overall precollege positional leadership, an overall variable was computed by calculating the mean for the two activities related to precollege position leadership for each participant. Precollege positional leadership was a continuous (scale) variable, with higher scores (i.e. scores closer to 3) meaning students were more involved in precollege positional leadership.
Table 14. Participation in Precollege Leadership Training for Full Sample and Four Involvement Subgroups

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Religious</th>
<th>Both Religious &amp; Secular</th>
<th>Secular</th>
<th>No Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes(^a)</td>
<td>56,796</td>
<td>262</td>
<td>11,330</td>
<td>39,183</td>
<td>6,021</td>
</tr>
<tr>
<td>No</td>
<td>19,558</td>
<td>108</td>
<td>2,304</td>
<td>13,432</td>
<td>3,714</td>
</tr>
<tr>
<td>Total</td>
<td>76,354</td>
<td>370</td>
<td>13,634</td>
<td>52,615</td>
<td>9,735</td>
</tr>
</tbody>
</table>

Note. Due to case wise deletion, the total number of observations for this variable (n=76,354) differs from the starting sample (n=76,365).

\(^a\)Student responses were recoded to create a dichotomous, nominal Yes/No variable. Students selecting “Never” were coded as “No” and students selecting “Sometimes,” “Often,” or “Very Often” were coded as “Yes.”
<table>
<thead>
<tr>
<th>Variable</th>
<th>Total (n=76,317)</th>
<th>Religious (n=370)</th>
<th>Both Religious &amp; Secular (n=13,628)</th>
<th>Secular (n=52,588)</th>
<th>No Organizations (n=9,731)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precollege overall capacities for socially responsibly leadership&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.96 0.55</td>
<td>3.94 0.57</td>
<td>4.01 0.55</td>
<td>3.96 0.54</td>
<td>3.91 0.58</td>
</tr>
</tbody>
</table>

<sup>a</sup>To determine overall capacities for socially responsible leadership prior to entering college (i.e. Change), a mean variable was computed for the seven individual values. Precollege capacities for socially responsible leadership was a continuous (scale) variable where higher mean scores (i.e. scores closer to 5) meant students possessed higher capacities for socially responsible leadership prior to entering college.

Note. Due to case wise deletion, the total number of observations for this variable (n=76,317) does not equal the number of observations for capacities for socially responsible during college (n=76,365).
Table 16. Means and Standard Deviations for Collegiate Organizational Involvement Frequency for Full Sample and Four Involvement Subgroups

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total (n=76,365)</th>
<th>Religious (n=370)</th>
<th>Both Religious &amp; Secular (n=13,635)</th>
<th>Secular (n=52,623)</th>
<th>No Organizations (n=9,737)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collegiate organizational involvement frequency</td>
<td>3.21 1.41</td>
<td>2.31 1.27</td>
<td>3.94 1.09</td>
<td>3.36 1.30</td>
<td>1.40 0.78</td>
</tr>
</tbody>
</table>

*Note.* Collegiate student organization involvement frequency was treated as a continuous (scale) variable where higher scores (i.e. scores closer to 4) meant students were more frequently involved in their student organizations.
Table 17. *Means and Standard Deviations for Collegiate Positional Leadership for Full Sample and Four Involvement Subgroups*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total (n=76,365)</th>
<th>Religious (n=370)</th>
<th>Both Religious &amp; Secular (n=13,635)</th>
<th>Secular (n=52,623)</th>
<th>No Organizations (n=9,737)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Collegiate positional leadership</td>
<td>2.22</td>
<td>1.51</td>
<td>1.32</td>
<td>0.91</td>
<td>2.86</td>
</tr>
</tbody>
</table>

*Note.* Collegiate positional leadership was treated as a continuous (scale) variable in which higher scores (i.e. scores closer to 4) meant students more frequently held leadership positions in their student organization.
Table 18. Participation in Collegiate Leadership Training for Full Sample and Four Involvement Subgroups

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Religious</th>
<th>Both Religious &amp; Secular</th>
<th>Secular</th>
<th>No Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asked not answered</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Yes</td>
<td>23,497</td>
<td>51</td>
<td>6,734</td>
<td>15,974</td>
<td>738</td>
</tr>
<tr>
<td>No</td>
<td>52,860</td>
<td>319</td>
<td>6,900</td>
<td>36,642</td>
<td>8,999</td>
</tr>
<tr>
<td>Total</td>
<td>76,365</td>
<td>370</td>
<td>13,635</td>
<td>52,623</td>
<td>9,737</td>
</tr>
<tr>
<td>Variable</td>
<td>Total (n=76,365)</td>
<td>Religious (n=370)</td>
<td>Both Religious &amp; Secular (n=13,635)</td>
<td>Secular (n=52,623)</td>
<td>No Organizations (n=9,737)</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>-------------------------------------</td>
<td>--------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Change (Overall SRL)</td>
<td>4.21</td>
<td>0.47</td>
<td>4.12</td>
<td>0.47</td>
<td>4.31</td>
</tr>
<tr>
<td>Consciousness of Self</td>
<td>4.11</td>
<td>0.58</td>
<td>3.98</td>
<td>0.62</td>
<td>4.17</td>
</tr>
<tr>
<td>Congruence</td>
<td>4.27</td>
<td>0.55</td>
<td>4.30</td>
<td>0.60</td>
<td>4.39</td>
</tr>
<tr>
<td>Commitment</td>
<td>4.43</td>
<td>0.49</td>
<td>4.37</td>
<td>0.52</td>
<td>4.48</td>
</tr>
<tr>
<td>Collaboration</td>
<td>4.21</td>
<td>0.53</td>
<td>4.11</td>
<td>0.55</td>
<td>4.29</td>
</tr>
<tr>
<td>Common Purpose</td>
<td>4.23</td>
<td>0.53</td>
<td>4.15</td>
<td>0.54</td>
<td>4.32</td>
</tr>
<tr>
<td>Controversy with Civility</td>
<td>4.24</td>
<td>0.52</td>
<td>4.14</td>
<td>0.53</td>
<td>4.28</td>
</tr>
<tr>
<td>Citizenship</td>
<td>4.00</td>
<td>0.66</td>
<td>3.86</td>
<td>0.64</td>
<td>4.21</td>
</tr>
</tbody>
</table>
Table 20. *Independent Samples t*-Test and Cohen’s *d* Results, Religious Only vs Both Religious and Secular Organizations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Religious Organizations</th>
<th>Both Religious &amp; Secular Organizations</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change (Overall SRL)</td>
<td>4.12 0.47</td>
<td>4.31 0.45</td>
<td>-7.596</td>
<td>***</td>
<td>0.128</td>
</tr>
<tr>
<td>Consciousness of Self</td>
<td>3.98 0.62</td>
<td>4.17 0.57</td>
<td>-6.327</td>
<td>***</td>
<td>0.105</td>
</tr>
<tr>
<td>Congruence</td>
<td>4.30 0.60</td>
<td>4.39 0.54</td>
<td>-2.608</td>
<td>0.009**</td>
<td>0.266</td>
</tr>
<tr>
<td>Commitment</td>
<td>4.37 0.52</td>
<td>4.48 0.49</td>
<td>-4.070</td>
<td>***</td>
<td>0.414</td>
</tr>
<tr>
<td>Collaboration</td>
<td>4.11 0.55</td>
<td>4.29 0.51</td>
<td>-6.763</td>
<td>***</td>
<td>0.114</td>
</tr>
<tr>
<td>Common Purpose</td>
<td>4.15 0.54</td>
<td>4.32 0.51</td>
<td>-6.383</td>
<td>***</td>
<td>0.108</td>
</tr>
<tr>
<td>Controversy with Civility</td>
<td>4.14 0.53</td>
<td>4.28 0.52</td>
<td>-5.410</td>
<td>***</td>
<td>0.091</td>
</tr>
<tr>
<td>Citizenship</td>
<td>3.86 0.64</td>
<td>4.21 0.59</td>
<td>-11.277</td>
<td>***</td>
<td>0.191</td>
</tr>
</tbody>
</table>

*Note.* All *p*-values are for two-tailed tests.

*p* < .05, **p** < .01, ***p*** < .001
Table 21. *Independent Samples t-Test and Cohen’s d Results, Religious Only vs Secular Only Organizations*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Religious Organizations</th>
<th>Secular Organizations</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change (Overall SRL)</td>
<td>4.12 0.47</td>
<td>4.21 0.45</td>
<td>-3.726</td>
<td>**</td>
<td>0.032</td>
</tr>
<tr>
<td>Consciousness of Self</td>
<td>3.98 0.62</td>
<td>4.12 0.57</td>
<td>-4.558</td>
<td>**</td>
<td>0.039</td>
</tr>
<tr>
<td>Congruence</td>
<td>4.30 0.60</td>
<td>4.26 0.54</td>
<td>1.216</td>
<td>0.225</td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>4.37 0.52</td>
<td>4.44 0.48</td>
<td>-2.535</td>
<td>*</td>
<td>0.022</td>
</tr>
<tr>
<td>Collaboration</td>
<td>4.11 0.55</td>
<td>4.21 0.51</td>
<td>-4.014</td>
<td>**</td>
<td>0.035</td>
</tr>
<tr>
<td>Common Purpose</td>
<td>4.15 0.54</td>
<td>4.23 0.52</td>
<td>-3.033</td>
<td>**</td>
<td>0.026</td>
</tr>
<tr>
<td>Controversy with Civility</td>
<td>4.14 0.53</td>
<td>4.25 0.51</td>
<td>-4.133</td>
<td>**</td>
<td>0.036</td>
</tr>
<tr>
<td>Citizenship</td>
<td>3.86 0.64</td>
<td>3.99 0.64</td>
<td>-3.841</td>
<td>**</td>
<td>0.033</td>
</tr>
</tbody>
</table>

*Note. All p-values are for two-tailed tests.  
*p < .05, **p < .01, ***p < .001*
Table 22. *Independent Samples t-Test and Cohen’s d Results, Religious Only vs No Organizations*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Religious Organizations</th>
<th>No Organizations</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change (Overall SRL)</td>
<td>4.12 0.47</td>
<td>4.09 0.52</td>
<td>1.446</td>
<td>0.149</td>
<td></td>
</tr>
<tr>
<td>Consciousness of Self</td>
<td>3.98 0.62</td>
<td>4.03 0.63</td>
<td>-1.626</td>
<td>0.104</td>
<td></td>
</tr>
<tr>
<td>Congruence</td>
<td>4.30 0.60</td>
<td>4.18 0.60</td>
<td>3.845 ***</td>
<td>0.077</td>
<td>0.077</td>
</tr>
<tr>
<td>Commitment</td>
<td>4.37 0.52</td>
<td>4.35 0.55</td>
<td>0.641</td>
<td>0.522</td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td>4.11 0.55</td>
<td>4.09 0.58</td>
<td>0.436</td>
<td>0.663</td>
<td></td>
</tr>
<tr>
<td>Common Purpose</td>
<td>4.15 0.54</td>
<td>4.07 0.59</td>
<td>2.475 0.013*</td>
<td>0.049</td>
<td></td>
</tr>
<tr>
<td>Controversy with Civility</td>
<td>4.14 0.53</td>
<td>4.16 0.57</td>
<td>-0.866</td>
<td>0.387</td>
<td></td>
</tr>
<tr>
<td>Citizenship</td>
<td>3.86 0.64</td>
<td>3.73 0.71</td>
<td>3.689 ***</td>
<td>0.368</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* All p-values are for two-tailed tests.

*p < .05, **p < .01, ***p < .001
Table 23. *Summary of Hierarchical Multiple Regression Results*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.380</td>
<td>0.012</td>
<td>2.349</td>
</tr>
<tr>
<td>Precollege Capacities for Socially Responsible Leadership</td>
<td>0.364</td>
<td>0.003</td>
<td>0.366</td>
</tr>
<tr>
<td></td>
<td>0.429***</td>
<td>0.431***</td>
<td>0.430***</td>
</tr>
<tr>
<td>Precollege Positional Leadership</td>
<td>0.033</td>
<td>0.002</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>0.064***</td>
<td>0.020***</td>
<td>0.020***</td>
</tr>
<tr>
<td>Precollege Involvement in Clubs/Service</td>
<td>0.061</td>
<td>0.003</td>
<td>0.038</td>
</tr>
<tr>
<td></td>
<td>0.084***</td>
<td>0.051***</td>
<td>0.052***</td>
</tr>
<tr>
<td>Gender reference group: Male</td>
<td>0.054</td>
<td>0.003</td>
<td>0.056</td>
</tr>
<tr>
<td></td>
<td>0.056***</td>
<td>0.059***</td>
<td>0.058***</td>
</tr>
<tr>
<td>Race reference group: White/Caucasian</td>
<td>-0.028</td>
<td>0.017</td>
<td>-0.015</td>
</tr>
<tr>
<td></td>
<td>-0.005</td>
<td>-0.014</td>
<td>-0.015</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>-0.003</td>
<td>0.007</td>
<td>-0.001</td>
</tr>
<tr>
<td>African American/Black</td>
<td>-0.072</td>
<td>0.038</td>
<td>-0.055</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>-0.117</td>
<td>0.006</td>
<td>-0.124</td>
</tr>
<tr>
<td>Asian American/Asian</td>
<td>-0.007</td>
<td>0.007</td>
<td>0.006</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>0.001</td>
<td>0.005</td>
<td>0.002</td>
</tr>
<tr>
<td>Multiracial</td>
<td>-0.076</td>
<td>0.013</td>
<td>-0.067</td>
</tr>
<tr>
<td></td>
<td>-0.019***</td>
<td>-0.016***</td>
<td>-0.017***</td>
</tr>
<tr>
<td>Class Standing reference group: Freshman/First-Year</td>
<td>0.065</td>
<td>0.004</td>
<td>0.031</td>
</tr>
<tr>
<td>Sophomore</td>
<td>0.115***</td>
<td>0.078</td>
<td>0.073***</td>
</tr>
<tr>
<td>Junior</td>
<td>0.187</td>
<td>0.004</td>
<td>0.134</td>
</tr>
<tr>
<td>Senior</td>
<td>0.183***</td>
<td>0.004</td>
<td>0.004</td>
</tr>
<tr>
<td>Religious Affiliation reference group: No religion</td>
<td>0.027</td>
<td>0.004</td>
<td>0.023</td>
</tr>
<tr>
<td>Christian</td>
<td>0.027***</td>
<td>0.004</td>
<td>0.024***</td>
</tr>
<tr>
<td>Non-Christian</td>
<td>0.028</td>
<td>0.005</td>
<td>0.019</td>
</tr>
<tr>
<td>Precollege Leadership Training</td>
<td>0.018</td>
<td>0.004</td>
<td>0.014</td>
</tr>
<tr>
<td>Collegiate Leadership Training</td>
<td>0.14</td>
<td>0.004</td>
<td>0.013***</td>
</tr>
<tr>
<td>Collegiate Positional Leadership</td>
<td>0.046</td>
<td>0.003</td>
<td>0.045***</td>
</tr>
<tr>
<td>Collegiate Organizational Involvement Frequency</td>
<td>0.019</td>
<td>0.001</td>
<td>0.063***</td>
</tr>
<tr>
<td>Collegiate Student Organizational Involvement Type reference group: No organizations</td>
<td>0.042</td>
<td>0.001</td>
<td>0.127***</td>
</tr>
<tr>
<td>Religious Organizations only</td>
<td>-0.030</td>
<td>0.021</td>
<td>-0.004</td>
</tr>
<tr>
<td>Both Religious and Secular Organizations</td>
<td>-0.023</td>
<td>0.006</td>
<td>-0.019</td>
</tr>
<tr>
<td>Secular Organizations only</td>
<td>-0.032</td>
<td>0.005</td>
<td>-0.032</td>
</tr>
</tbody>
</table>
| Note. n=75,967. Dependent variable is self-reported capacities for overall socially responsible leadership during college (Change) *p < .05, **p < .01, ***p < .001
Table 24. Hierarchical Multiple Regression Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.515&lt;sup&gt;a&lt;/sup&gt;</td>
<td>0.265</td>
<td>0.265</td>
<td>0.40003</td>
<td>0.265</td>
<td>1612.959</td>
<td>17</td>
<td>75949</td>
<td>0.000</td>
</tr>
<tr>
<td>2</td>
<td>.546&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.298</td>
<td>0.298</td>
<td>0.39108</td>
<td>0.033</td>
<td>1173.162</td>
<td>3</td>
<td>75946</td>
<td>0.000</td>
</tr>
<tr>
<td>3</td>
<td>.546&lt;sup&gt;c&lt;/sup&gt;</td>
<td>0.298</td>
<td>0.298</td>
<td>0.39097</td>
<td>0.000</td>
<td>15.071</td>
<td>3</td>
<td>75943</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note. n=75,967

a. Predictors: (Constant), Precollege Capacities for SRL, Precollege Positional Leadership, Precollege Involvement Clubs/Service, Female, Middle Eastern, African American/Black, American Indian/Alaskan Native, Asian American/Asian, Latino/Hispanic, Multiracial, Race/ethnicity not included, Sophomore, Junior, Senior, Christian, Non-Christian, Precollege Leadership Training

b. Predictors: (Constant), Precollege Capacities for SRL, Precollege Positional Leadership, Precollege Involvement Clubs/Service, Female, Middle Eastern, African American/Black, American Indian/Alaskan Native, Asian American/Asian, Latino/Hispanic, Multiracial, Race/ethnicity not included, Sophomore, Junior, Senior, Christian, Non-Christian, Precollege Leadership Training, Collegiate Leadership Training, College Positional Leadership, Collegiate Organizational Involvement Frequency

c. Predictors: (Constant), Precollege Capacities for SRL, Precollege Positional Leadership, Precollege Involvement Clubs/Service, Female, Middle Eastern, African American/Black, American Indian/Alaskan Native, Asian American/Asian, Latino/Hispanic, Multiracial, Race/ethnicity not included, Sophomore, Junior, Senior, Christian, Non-Christian, Precollege Leadership Training, Collegiate Leadership Training, College Positional Leadership, Collegiate Organizational Involvement Frequency, Religious Organizations only, Both Religious and Secular Organizations, Secular Organizations only
<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>4387.981</td>
<td>17</td>
<td>258.117</td>
<td>1612.959</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>12153.869</td>
<td>75949</td>
<td>0.160</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>16541.850</td>
<td>75966</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Regression</td>
<td>4926.269</td>
<td>20</td>
<td>246.313</td>
<td>1610.468</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>11615.580</td>
<td>75946</td>
<td>0.153</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>16541.850</td>
<td>75966</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Regression</td>
<td>4933.181</td>
<td>23</td>
<td>214.486</td>
<td>1403.151</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>11608.669</td>
<td>75943</td>
<td>0.153</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>16541.850</td>
<td>75966</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. n=75,967

a. Predictors: (Constant), Precollege Capacities for SRL, Precollege Positional Leadership, Precollege Involvement Clubs/Service, Female, Middle Eastern, African American/Black, American Indian/Alaskan Native, Asian American/Asian, Latino/Hispanic, Multiracial, Race/ethnicity not included, Sophomore, Junior, Senior, Christian, Non-Christian, Precollege Leadership Training

b. Predictors: (Constant), Precollege Capacities for SRL, Precollege Positional Leadership, Precollege Involvement Clubs/Service, Female, Middle Eastern, African American/Black, American Indian/Alaskan Native, Asian American/Asian, Latino/Hispanic, Multiracial, Race/ethnicity not included, Sophomore, Junior, Senior, Christian, Non-Christian, Precollege Leadership Training, Collegiate Leadership Training, College Positional Leadership, Collegiate Organizational Involvement Frequency

c. Predictors: (Constant), Precollege Capacities for SRL, Precollege Positional Leadership, Precollege Involvement Clubs/Service, Female, Middle Eastern, African American/Black, American Indian/Alaskan Native, Asian American/Asian, Latino/Hispanic, Multiracial, Race/ethnicity not included, Sophomore, Junior, Senior, Christian, Non-Christian, Precollege Leadership Training, Collegiate Leadership Training, College Positional Leadership, Collegiate Organizational Involvement Frequency, Religious Organizations only, Both Religious and Secular Organizations, Secular Organizations only
CHAPTER FIVE: DISCUSSION

The aim of this study was to explore the relationship between college student involvement in a religious student organization and the development of socially responsible leadership capacity. Students in four categories (those involved in only religious organizations, those in both religious and secular organizations, those in only secular organizations, and those in no organizations) were compared on their scores on the Socially Responsible Leadership Scale (SRLS), as collected in the 2012 Multi-Institutional Study of Leadership survey. Further, student scores in these four categories were compared while taking into consideration certain inputs, precollege experiences, and other collegiate experiences known to impact socially responsible leadership. In this chapter, the findings outlined in Chapter Four will be expounded upon, limitations to the current study will be identified, implications for practice will be offered, and future research based on these findings will be proposed.

Discussion of Findings

This section will expound upon the major findings of this study. Key topics that will be discussed include differences in mean scores on all eight measures of socially responsible leadership among the four involvement groups and the various predictors of overall socially responsible leadership.

College Students Generally Score High

College students generally score high on all eight measures of socially responsible leadership during college, regardless of organizational membership. Mean overall socially responsible leadership (Change) scores for the total sample was 4.21 and mean scores on the seven individual measures ranged from 4.00 (Citizenship) to 4.43
(Commitment). On a scale of 1 to 5, with 5 being the highest, these scores indicate that college students score on the higher end of the spectrum.

Across all four involvement subgroups and the total sample, the highest value was Commitment (mean scores range from 4.35 to 4.48). This finding is consistent with previous studies that have found Commitment to be the highest value among college students (Dugan & Komives, 2007). This finding is important because Commitment is considered the “anchor for change, for without it all of the other C’s cannot be integrated” (Kerkhoff & Ostick, 2009, p. 365). By scoring highest in Commitment, it appears college students are already on track to be socially responsible leaders.

Conversely, the two lowest values across all four involvement subgroups were either the Society domain value of Citizenship (mean scores range from 3.73 to 4.21) or the Individual domain value of Consciousness of self (mean scores range from 3.98 to 4.17). In terms of the Social Change Model, Citizenship is more than mere membership in a group or community, but rather implies an active engagement with that group or community (Bonnet, 2009). Consciousness of self is conceptualized as an awareness of self in areas like personality, talents, interests, and limitations and the ability to identify those areas in one’s actions (Fincher, 2009).

By scoring lower in Citizenship, it is implied that students are not as actively engaged with their communities. One reason why students score low in Citizenship might be because the meaning of the word “community” might differ from student to student. In the Socially Responsible Leadership Scale, students were asked six questions related to Citizenship, five of which asked how the student related to or interacted with their “community” or “communities.” When discussing community in the context of
*Citizenship*, Bonnet (2009) noted that community can comprise of various dimensions and is not limited to one place or context. Williams (2005) offered the concept of citizenship “as membership in a community of shared fate” (p. 209). This means that any context in which individuals have a shared fate or interest could be considered a community. In this case, community membership could be as large as the globe to as small as a floor of a residence hall. It might be the case that students scored lower because they did not view themselves as making valuable contributions on a larger scale, such as in their city or state, when in reality they may have been making valuable contributions on a smaller scale, such as on their campus or in their families. By offering a clearer definition of community, scores in *Citizenship* may have been different.

With lower scores in *Consciousness of self*, it is implied that students are less aware of their unique identities and actions. A reason why students might score low in *Consciousness of self* is that students, as young adults, are still in the process of achieving self-authorship, which Baxter Magolda (2008) defines as “the internal capacity to define one’s beliefs, identity, and social relations” (p. 269). Additionally, achieving self-authorship takes time and energy to develop and college environments often do not create the conditions necessary for it develop (Baxter Magolda, 2001, 2004). In other words, many students are still in the process of figuring out their personal identities and that process can continue past graduation. The implications regarding these lower scores in *Citizenship* and *Consciousness of self* should be considered with some degree of caution, however. While these were the two values students scored lowest, the scores are still relatively high overall.
Students in both Religious and Secular Organizations Score Highest

Students involved in both religious and secular organizations scored highest on all eight measures of socially responsible leadership during college than students in the other three involvement subgroups. Further, when comparing the mean scores of students in both religious and secular organizations to those in only religious organizations, students in both scored statistically significantly higher on all eight measures.

One reason for these high scores might be related to the compounding effect of involvement in multiple student organizations. In this case, we know that these students are involved in multiple student organizations: both religious and secular organizations. Research has well established that involvement in multiple student organizations is related to higher scores in socially responsible leadership (Chowdhry, 2010; Gerhardt, 2008; Hogendorp, 2012). By being involved in multiple organizations, these students are more likely to engage in student-student interaction found to be related to leadership development (Astin, 1993). Additionally, involvement in multiple organizations increases the chances of engaging in activities linked to the development of socially responsible leadership, such as holding leadership positions, engaging in socio-cultural discussions, and participating in community service (Dugan & Komives, 2007).

Students in Only Secular Organizations Also Score High

When comparing students involved only in secular organizations to students only in religious organizations, students in secular organizations scored statistically significantly higher on seven of the eight measures of socially responsible leadership during college. The only measure where students in only religious organizations scored
higher was on the value of Congruence (4.30) but the difference was not statistically significant.

One explanation for why students in only secular organizations scored higher than students in only religious organizations on seven of the eight measures might be related to the amount of involvement in student organizations, similar to those involved in both religious and secular organizations. When separating students into their respective groups, students who answered “Yes” to religious organizations and “No” to the other 22 organizations were placed in the “Religious Only” group. Conversely, students who answered “No” to religious organizations but “Yes” to at least one of the other 22 types (i.e. secular) of organizations were placed in the “Secular Only” group. With such a large number of students in the secular only group (n=52,623; 69%), it might be the case that many of those students were involved in multiple secular organizations, providing similar experiences and producing similar results to those students involved in both religious and secular organizations.

Also, it is possible that the nature of secular organizations might provide a richer environment for developing socially responsible leadership than religious organizations. These environments may provide increased interaction with more diverse peers and opportunities for socio-cultural discussions, both of which are linked to increased levels of socially responsible leadership (Dugan & Komives, 2007). Previous research on student organization involvement and socially responsible leadership has focused on secular organizations, such as identity-based organizations, advocacy organizations, political organizations, service organizations, and Greek-life organizations (Chowdhry,
2010; Dugan, 2006a, 2008a; Gerhardt, 2008; Hogendorp, 2012; Page, 2010), all of which have found positive relationships with capacities for socially responsible leadership.

**Students in No Organizations Score Lowest On Most Measures**

Students not involved in any student organizations scored lowest on six of the eight measures of socially responsible leadership during college than students in the other three involvement subgroups. These measures were overall socially responsible leadership (Change; 4.09), the Individual domain values of Congruence (4.18) and Commitment (4.35), the Group domain values of Collaboration (4.09) and Common purpose (4.07), and the Society domain value of Citizenship (3.73). Students involved in no organizations did not score highest on any of the eight measures.

The most likely explanation for this finding is that lack of student involvement leads to lower educational outcomes (Astin, 1984). Additionally, previous research has determined that student organization involvement serves as a major vehicle for student-student interaction and a lack of student-student interaction has been found to have a negative impact on leadership development (Astin, 1993; Pascarella & Terenzini, 2005).

It should be noted, however, that while students in no organizations scored lowest on most measures, their scores are still relatively high. Despite a lack of student organization involvement, these students might be involved in other areas on campus that are related to gains in socially responsible leadership, such as a formal leadership programs or service learning activities (Dugan & Komives, 2007). Additionally, the structural diversity of the institution may also play a role in developing socially responsible leadership capacities since more diverse campuses could potentially yield
more interactions with diverse others or encourage increased levels of socio-cultural discussions (Dugan & Komives, 2007; Park & Bowman, 2015).

**Students in Only Religious Organizations Score Low**

Students involved in only religious organizations score lowest on two of the eight measures of socially responsible leadership during college than students in the other three involvement subgroups (*Consciousness of self*, 3.98; and *Controversy with civility*, 4.14). Students involved in only religious organizations did not score highest on any of the eight measures.

*Consciousness of self* is a construct related to the beliefs, values, attitudes or emotions that motivate a student to take action. Interestingly, one might assume that students involved in only religious student organizations would have higher, rather than lower, scores in a construct related to beliefs or values. One possibility is that these students, more so than students in the other three groups, are engaging in a process of refining and reinterpreting previously held beliefs (Pascarella & Terenzini, 2005), which supports other research indicating that students are seeking to develop a belief system of their own, separate from that of their parents (Bryant, 2004, 2005).

*Controversy with civility* involves the ability to hear differing viewpoints in a respectful manner. While students involved in only religious organizations still score relatively high (4.14), they still score lower than members of the other three groups. One explanation for this is that sincerely held religious beliefs may prevent students from accepting or considering alternative points of view. According to Bryant (2011), student involvement in collegiate environments that reinforce religious beliefs, such as religious student organizations, is associated with lower levels of openness to diverse viewpoints.
When comparing students in only religious organizations to students in no organizations, students in only religious organizations scored higher on six of the eight measures of socially responsible leadership during college, but only three were statistically significant: *Congruence* (4.30), *Common purpose* (4.15), and *Citizenship* (3.56). However, effect sizes for *Congruence* ($d=0.077$) and *Common purpose* ($d=0.049$) were extremely small, indicating that while a statistical significance exists, it may not be practically significant.

The effect size for *Citizenship* ($d=0.368$), however, was small-to-medium. Individuals who score high in *Citizenship* have a strong sense of responsibility to do positive work for others and the broader community. One likely reason students in only religious organizations score higher than students in no organizations is because *Citizenship* is closely related to community service and missions. Scholars have found that involvement in campus religious organizations and other forms of organized religion practically guarantees opportunities for students to participate in volunteering, an essential component of *Citizenship* (Ozorak, 2003; Serow, 1989; Serow & Dreyden, 1990; Wuthnow, 1991). Overall, however, these findings imply that being involved in only religious organizations has no real difference than being involved in no organizations in relation to the development of socially responsible leadership, with *Citizenship* being the only exception.

One reason students in only religious student organizations score low in socially responsible leadership might be due to a lack of interaction with diverse peers or engagement in diverse socio-cultural conversations, both found to be positive predictors of socially responsible leadership (Dugan & Komives, 2007). Religious student
organizations tend to have homogenous group membership. Not only do group members share similar worldviews or ideologies, but they are often members of the same race or ethnic group (Christerson, Edwards, & Emerson, 2005; Park, 2013). As a result, research has demonstrated that involvement in religious student organizations, as well as identifying as Protestant or Jewish, is negatively related to close interracial friendship (Park, 2012; Park & Kim, 2013). Additionally, Christian students have been found to have the lowest amount of cross-racial interaction. According to Park & Bowman (2015), students who identify as Catholic and Protestant have lower cross-racial interaction than students of minority religious backgrounds. This combination of a same-race, same-religion environment may keep students in religious organizations from engaging diverse others, which reduces their opportunities for socially responsible leadership development.

Another possible explanation for low socially responsible leadership scores among students in only religious organizations might be related to a difference between the values of socially responsible leadership and the values of religious student organizations. As it has been established, social change efforts are central to socially responsible leadership (Wagner, 2009). Some social change efforts might include advocating for policies that tend to lean politically liberal, such as promoting reproductive choice, addressing global warming, or encouraging interfaith dialogue or religious pluralism. Some religious organizations, however, especially Catholic and evangelical Protestant groups, tend to lean more politically conservative on certain issues. For example, Dillon (1996) found that among Catholics, the frequency of church attendance was a strong indicator of beliefs and attitudes toward issues like abortion, pre-
marital sex, and institutionalized religion, with higher frequency of church attendance correlating with conservative, traditional views. From there, it might be assumed that students who are more religious share similar views on moral and socio-political issues. However, some research conflicts with this notion, as Bryant (2006) found that among different religions, there are a myriad of differing views along the political and theological spectrum. Despite the mixed results, some conflict might exist between the values of socially responsible leadership and the values of religious student organizations.

**Type of Student Organization Involvement Added Nothing to the Variance**

After running the hierarchical multiple regression, the variables in Model 1, which consisted of input variables (demographic characteristics and precollege experiences), explained 26.5% of the total variance in overall socially responsible leadership (Change). Model 2 added variables related to various collegiate experiences and explained 29.8% of the variance, an increase of 3.30%. In Model 3, the primary independent variables of interest (type of student organization involvement) were added to the model and added no change from Model 2 (0.00%), continuing to explain only 29.8% of the total variance. Interestingly, involvement in all three groups yielded negative and statistically insignificant results (religious organizations only, $\beta=-0.004$; both religious and secular organizations, $\beta=-0.019$; and secular organizations only, $\beta=-0.032$)

The findings are particularly interesting given previous research findings showing a positive relationship between involvement in certain types of student organizations and socially responsible leadership, including fraternity and sororities (Dugan, 2008a), service and advocacy organizations (Chowdhry, 2010), political organizations
(Hogendorp, 2012), and other types of organizations (Gerhardt, 2008). These data, while not statistically significant, imply that involvement in these groups leads to negative growth in socially responsible leadership compared to involvement in no organizations. Essentially, these data imply that it would be more advantageous (or at least neutral) for students to be involved in no student organizations than to be involved in these types of student organizations.

One explanation for why student organization type adds nothing to the variance in overall socially responsible leadership during college (Change) might be that frequent involvement and quality involvement may be better indicators of socially responsible leadership development than the type of involvement. In this study, various predictor variables were considered in the regression models. It was found that college student organization involvement frequency ($\beta=0.138$), collegiate positional leadership ($\beta=0.061$), and collegiate leadership training ($\beta=0.045$) explained a substantial part of the variance in socially responsible leadership, a finding consistent with prior research (Dugan & Komives, 2007). In other words, the data shows that more frequent involvement and holding a leadership position are stronger predictors of socially responsible leadership than the type of organization a student is involved in.

Finally, the results for all three models demonstrated that more than 70% of the variance in overall socially responsible leadership during college is unexplained. This means that factors beyond the examined variables explain a large majority of the variance. It should be noted that other published studies on socially responsible leadership examining similar variables have found comparable results with low variances (between 20%-30%) (Dugan & Komives, 2010; Haber & Komives, 2009; Soria, Nobbe,
& Fink, 2013). As stated in a previous chapter, leadership is “a complex process having multiple dimensions” (Northhouse, 2010, p.1). These low variances likely demonstrate the difficulties associated with defining and measuring leadership.

**Other Findings**

In addition to the variables of interest, other interesting findings were produced in this study. It was determined that precollege experiences were statistically significant predictors of overall socially responsible leadership, the largest being a students’ precollege level of overall socially responsible leadership ($\beta=0.430$). This finding is particularly interesting because it demonstrates that student inputs are more salient predictors of socially responsible leadership during college than collegiate environments, including student organizational involvement type. In other words, what a student experiences before college or brings with them to college is more influential on their capacities for socially responsible leadership than what the student experiences during college.

In this study, focus was primarily on students involved in religious student organizations. This study found that type of student organizational involvement, including religious student organizations, added nothing to the variance and was an insignificant predictor of socially responsible leadership during college. However, identifying with a religion was linked to statistically significantly higher scores than students that did not identify with a religion (Christian, $\beta=0.022$; Non-Christian, $\beta=0.013$). It might be the case that religious students are participating in religious student organizations, however, the student’s precollege religious identity is influencing their
capacities for socially responsible leadership during college, not their involvement in a religious student organization.

Additionally, the influence of student inputs was not limited to religious identity. Gender was determined to be a statistically significant predictor, as women were found to score statistically significantly higher than men ($\beta=0.058$). Also, precollege factors related to organizational involvement and leadership development were also statistically significantly positive predictors of socially responsible leadership during college, with precollege involvement in clubs and service being the highest ($\beta=0.052$), followed by precollege positional leadership ($\beta=0.020$) and precollege leadership training ($\beta=0.014$). Race/ethnic background was not a strong predictor for overall socially responsible leadership, with Asian American/Asian ($\beta=-0.072$) and Race/Ethnicity not included ($\beta=-0.017$) being the only exceptions and both were statistically significantly negative predictors.

While precollege factors were more salient predictors than collegiate environments in predicting socially responsible leadership during college, nearly all the collegiate environment variables under examination were statistically significantly positive predictors (collegiate organizational involvement frequency, $\beta=0.138$; collegiate positional leadership, $\beta=0.061$; and collegiate leadership training, $\beta=0.045$). This demonstrates that certain collegiate environments are associated with higher scores in socially responsible leadership during college. These findings imply that while precollege inputs are the strongest predictors, some college experiences are still beneficial. Additionally, this study found a positive association between the number of years a student stays in college and socially responsible leadership scores. In terms of
class standing, all other classifications scored statistically significantly higher than freshmen, with seniors scoring highest ($\beta=0.132$), followed by juniors ($\beta=0.073$), and sophomores ($\beta=0.028$).

**Limitations**

In any research study, limitations exist. In the case of this study, one of largest limitations is the number of students involved in only religious organizations (0.48%, n=370). This small number of students could present an issue of lower power, especially in comparison to the large number of students involved in the other three subgroups.

As noted, 76,365 students across 82 institutions were examined. However, when distributing the 370 students that were only involved in religious organizations across their respective institutions, eight of the 82 institutions had 0 students involved in only religious organizations, with the vast majority (75) having less than 10. Results pertaining to students involved in only religious student organizations (n=370) should be considered with greater caution than results pertaining to students in the other involvement groups. For a complete breakdown of the number of students per involvement group per institution, see Appendix B.

One limitation is that the definition of religious student organization may have been unclear to responders of the survey. As mentioned in Chapter Three, the survey question was “Have you been involved in the following types of student groups during college? (Respond to each item)” Since some religious student groups exist outside of the college environment (e.g. parish-based college ministries), some responders may not have associated the term “student groups” exclusively with campus-based religious organizations.
Another limitation is related to the MSL survey research design. As previously mentioned, this survey was cross-sectional in nature, meaning students took the survey at one single point in time, rather than multiple surveys over time (i.e. longitudinal). Additionally, students used self-reports to reflect on their precollege levels of socially responsible leadership and their current levels of socially responsible leadership during college. While some caution should be given to self-report data due to results skewing more positive, research on leadership and on student gains has found these approaches to be reliable (Howard, 1980; Posner, 2012; Rohs, 2002; Rohs & Langone, 1997; Turrentine, 2001).

It is also important to note that the results of this study should be framed in the context of differences and relationships, not causality. While it might be tempting to assume that involvement in two or more student organizations will cause students to development higher scores in socially responsible leadership capacities, this study simply demonstrates that significant differences or relationships exist. In order to determine causality, four areas of criteria must be met: (a) involvement in these organizations must have happened before the change occurred, (b) a co-variation relationship between involvement in these organizations and change in socially responsible leadership must be evident, (c) only these organizations can explain the change; all other plausible alternatives must be ruled out, and (d) there must be a logical and compelling reason as to why involvement in these organizations caused the change. In the case of this study, none of these four criteria are met.

Finally, issues related to effect size have also been addressed in previous research on socially responsible leadership. While most of the Cohen’s $d$ effect sizes in this study
were found to be trivial and the overall $R^2$ for the regression models were low, the findings could still be practical as leadership is a difficult concept to measure and define (Dugan, Komives, & Segar, 2008). The relationships among these variables could provide a basis for future research.

**Implications for Practice**

Research becomes useful when it can be applied. Among the many results of the this study, some stand out more than others and can be useful to researchers, administrators, and other interested stakeholders. This section will focus on ways this study can inform future practice.

First, it is evident through the $t$-tests that involvement in both religious and secular student organizations is related to higher scores on all eight values of socially responsible leadership compared to students in only religious student organizations. Second, it is evident through the regression models that student organizational involvement frequency and positional leadership are strong indicators of overall socially responsible leadership, more so than student organization type. It is possible that the reason why students who are involved in both religious and secular organizations score higher is because they are more frequently involved. It is reasonable to believe that involvement in two or more organizations creates more opportunities for frequent involvement.

From a student activities perspective, student organization advisors should encourage frequent involvement in student organizations. Whether students are involved in one or more organizations may be irrelevant. Additionally, the type of organization the student is involved in may also be irrelevant. The key factor is for students to be
frequently involved in their student organization, and if possible, hold leadership positions within those organizations. Student activities professionals and student organization advisors can help monitor student involvement and intervene and encourage where necessary. It is also important, however, that students find balance and not become too frequently involved. Research has found that students who are too involved in student organizations experience negative growth in socially responsible leadership (Dugan and Komives, 2007).

From an administrator perspective, barriers to involvement in student organizations should be eliminated as much as possible. For example, the creation of new student organizations to meet student interests and needs should not be a tedious process. If students are interested in creating student organizations that currently do not exist at their institution, the process should be easy and encouraged by administrators. If the end goal for administrators is to help facilitate socially responsible leadership development in students, student organization involvement should be a top priority.

According to the results of this study, non-religious, male students who identify with a minority race tend to score lower than all other students. If developing all students into socially responsible leaders is a goal of an institution, it may be worth creating concerted educational interventions toward students within this profile. Interventions might include specialized mentor programs and encouraging student organizational involvement.

**Future Research**

This study explored the relationship between involvement in a religious student organization and the development of self-reported capacities of socially responsible
leadership among college students during college. There are numerous ways in which future research can improve or expand upon the findings of this study.

In future studies, a longitudinal approach might be more useful in collecting data than the cross-sectional approach utilized by the MSL. As noted, students retrospectively assessed their own levels of socially responsible leadership prior to entering college, as well as assessed their current levels of socially responsible leadership. A longitudinal approach would allow students to provide data on their development over time rather than at one time.

Another area that could be beneficial is surveying community college or two-year college students. In this study, focus was primarily on four-year institutions. The number of students from Baccalaureate/Associate colleges examined in this study was very small (1.0%; n=742) and a deeper exploration of students in these areas might be worth considering. Additionally, it would be worth comparing two-year student levels of socially responsible leadership to that of four-year students.

In this study, all religious student organizations, regardless of religion, were included in the religious student organization category. This study did not attempt to separate the religious student organizations into various sub-groups or denominations, such as Muslim groups, Jewish groups, or Christian groups. As determined by the research, students that identify with both Christian and non-Christian religions score higher in socially responsible leadership than non-religious students. It might be interesting to untangle the various religious organizations to see which predict socially responsible leadership more than others.

In this study, students were separated into four categories: religious organizations
only, secular organizations only, both religious and secular organizations, or no
organizations. Students in secular organizations made up 68.9% of the sample (n=52,623)
and students in both religious and secular comprised of nearly a fifth of the sample
(n=13,635, 17.9%). As referred in Table 4, there are 23 types of student organizations,
22 of which are secular. Within this secular category are a various range of other types of
student organizations, such as fraternities and sororities, political organizations, identity
based organizations, and more. With so many different types of student organizations, it
is difficult to determine which types of organizations contribute more to socially
responsible leadership than others. While some studies have explored the impact of
particular types of student organizations on socially responsible leadership, such as
fraternities and sororities, service organizations, and political organizations (Chowdhry,
2010; Dugan, 2008a; Hogendorp, 2012), it might be interesting to compare each
individual type to religious student organizations. This could lead to a clearer
understanding of the relationship between involvement in a religious student
organizations and socially responsible leadership compared to non-religious student
organizations.

In terms of institutional sample, the 82 institutions surveyed came from U.S.
regions outside of the “Bible Belt.” Institutions within many states in the “Bible Belt”
were not examined. Garcia and Kruger (2010) define the Bible Belt as “a region in the
southeastern United States where the culture is characterized by relatively strong
evangelical Christian sentiment and high church attendance” (pp. 206-207). In the
MSL’s sampling of institutions, no institutions from the states of Kentucky, Tennessee,
Georgia, Alabama, Mississippi, Arkansas, or Oklahoma were represented, all states
considered to be in the Bible Belt. It might be the case that more students are religious in this region and therefore may be more involved in religious student organizations.

It is worth noting and recognizing the nested nature of the data. In general, multilevel analytical procedures such as hierarchical linear modeling are preferred when working with multilevel data (Raudenbush & Bryk, 2002). However, in the case of this study, hierarchical multiple regression (a form of ordinary least squares regression) was utilized because the intraclass correlation (ICC) – a measure that determines variance explained at the school level – was very low (less than 1%). In future research, it would be worth using multilevel procedures such as hierarchical linear modeling (HLM) to better account for the multiple levels.

Finally, this study utilized a quantitative research design and was able to determine that precollege characteristics explained most of the variance in socially responsible leadership during college, especially a student’s self-reported capacities for socially responsible leadership before college ($\beta=0.430$). While this finding demonstrates a strong statistical association between precollege and during college capacities for socially responsible leadership, it does not explain why that association exists. In future research, qualitative methods of research can account for unique human experiences not revealed in statistical data, providing a richer understanding of the ways in which capacities for socially responsible leadership are developed before college.

**Summary of Research**

Developing leaders continues to be one of the more common learning outcomes for institutions of higher education. Among the numerous ways institutions encourage leadership development, previous research has well established student organization
involvement as an effective strategy. One area that had not received attention was the relationship between involvement in a religious student organization and the development of self-reported socially responsible leadership capacities. The aim of this research was to fill that gap in the research.

Using cross-sectional survey data collected by the Multi-Institutional Study of Leadership in 2012, differences in socially responsible leadership capacities among 76,365 students from 82 institutions were examined using t-tests and hierarchical multiple regression. Results from the analysis revealed students who are involved in both religious and secular student organizations score statistically significantly higher on all eight capacities of socially responsible leadership than students only involved in religious student organizations. However, when considering student demographics, precollege characteristics, and other collegiate experiences, the type of student organization a student is involved in was found to be insignificant. With those factors considered, the highest predictors for socially responsible leadership were a student’s precollege capacities for socially responsible leadership, the number of years in college, and how frequent a student is involved in organizations during college.

Leadership is a difficult construct to define and measure, however, it is hoped that this study can build upon the growing body of research on college student capacities for socially responsible leadership and student organization involvement. Additionally, it is hoped that this research can be informative to scholars for future research and administrators for future practice.
## Appendix A.

### List of participating institutions

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175
Appendix B.
Number of Students Per Involvement Group Per Institution

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*Note.* In order to retain confidentiality, the Multi-Institutional Study of Leadership randomly assigned each participating institution a number between 1 and 82, therefore the specific institution is unidentified. A list of all 2012 MSL participating institutions can be found in Appendix A.
| **Appendix C.**  
Multi-Institutional Study of Leadership Survey Core Scale Questions |
| --- |
| **Socially Responsible Leadership:** measures the core values of the Social Change Model: consciousness of self; congruence, commitment, collaboration, common purpose, controversy with civility, and citizenship. A measure titled Omnibus SRLS represents students’ overall capacities for socially responsible leadership.  
**Example:** How confident are you that you can be successful at the following?: Working with a team on a group project |
| **Leadership Efficacy:** measures individuals’ internal beliefs in the likelihood that they can be successful in the leadership process.  
**Example:** Ability to put ideas together and to see relationships between ideas |
| **Cognitive Skills***: measures students’ self-reported growth in advanced cognitive skills, including critical thinking, self-directed learning, and making complex connections between topics.  
**Example:** Ability to put ideas together and to see relationships between ideas |
| **Campus Climate:** defined as the degree to which members of the campus community feel connected and appreciated, measured using two distinct factors: (1) Sense of belonging – degree of feelings of affiliation with the campus community, and (2) Non-discriminatory climate – degree to which students perceive and experience the campus environment as supportive versus hostile.  
**Example:** I feel valued as a person at this school (Belonging Climate)  
**Example:** I often do not feel supported on this campus (Discriminatory Climate) |
| **Socio-Cultural Discussions with Peers***: measures frequency with which students engage with their peers outside the classroom around a set of compelling social and cultural issues including diversity, human rights, and religious beliefs.  
**Example:** Held discussions with students whose political opinions were very different from your own |
| **Social Change Behaviors:** measures student activity in making a difference for the common good.  
**Example:** Been actively involved with an organization that addresses a social or environmental problem  
**Example:** Signed a petition or sent an email about a social, political, or environmental issue |
| **Mentoring:** identifies those who are mentors for college students.  
**Example:** Since starting college, how often have the following types of mentors assisted you in your growth or development? |
| **Social Perspective-Taking:** defined as the ability to take another person’s point of view (Underwood & Moore, 1982; Franzoi, Davis, & Young, 1985) and/or accurately infer the thoughts and feelings of others (Gehlbach, 2004).  
**Example:** Before criticizing somebody, I try to imagine how I would feel if I were in their place (Perspective-taking) |
| **Aspirations:** defined as “the degree to which [people] aspire to leadership positions and continued education within their careers” (Gray & O’Brien, 2007, p. 318) and represent a form of motivation for leadership.  
**Example:** I hope to become a leader in my career field |
| **Resiliency:** defined as the characteristics that enable one to persist in the midst adversity and positively cope with stress (Connor & Davidson, 2003).  
**Example:** I am not easily discouraged by failure |
Appendix D.
Permission to Use Social Change Model Figure

Jared Black

Greetings,

I am writing to request permission to use the attached figure for a dissertation research project. My dissertation research examines the impact of involvement in a religious student organization on student behaviors for socially responsible leadership, as defined by the Social Change Model of Leadership (SCM). By using this figure, I will be able to better describe the SCM, which serves as the theoretical framework for the study. At your convenience, please let me know if it will be permissible to use this figure.

Sincerely,

W. Jared Black
PhD Candidate
University of Kentucky
Department of Educational Policy Studies & Evaluation

Craig Ender Slack

Dear Jared, have permission to use the Social Change Model image for your dissertation. If you would like to use it for future projects please request permission again.

Craig G. Slack, Ph.D. | Assistant Director | Adelphi University – Center for Community and Leadership

Director | National Clearinghouse for Leadership Programs

Affiliate Assistant Professor | CHESS College of Education

University of Maryland

www.press.umd.edu | www.nclf.umd.edu

We promote positive social change through transformative learning and community engagement.

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REFERENCES


VITA

William Jared Black

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May ‘09  Bachelor of Business Administration (B.B.A.), Music Business
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PROFESSIONAL EXPERIENCE

Dec ’16 – Present  Dean of Students
Arizona Christian University, Phoenix, AZ

Jul ’15 – Nov ‘16  Director of Student Engagement
Arizona Christian University, Phoenix, AZ

Jul ’13 – May ’14  Graduate Assistant, Student Organizational Programs
University of Kentucky, Lexington, KY

Aug ’12 – May ’13  Management Intern, Memorial Union Campus Life Programming & Outreach
Arizona State University, Tempe, AZ

Jun ’09 – May ’11  Residence Director
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Aug ’14 – May ’15  Graduate Teaching Assistant
University of Kentucky, Lexington, KY

Jan ’13 – May ’13  Graduate Teaching Assistant
Arizona State University, Tempe, AZ

AWARDS

2014-15  Edgar L. and Marilyn A. Sagan Scholarship, University of Kentucky College of Education

2014-15  Paul A. Elfers Omega Scholarship, Phi Kappa Tau Foundation