Comparison of Leadership Development Between Students Attending Community Colleges Versus 4-Year Colleges

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A Comparison of Leadership Development Between Students Attending Community Colleges Versus 4-Year Colleges

by
Christopher L. Conzen

An Applied Dissertation Submitted to the Abraham S. Fischler College of Education in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

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Abstract


This applied dissertation was conducted in order to compare levels of socially responsible leadership, as reported in the Multi-Institutional Study of Leadership (MSL, Dugan & Associates 2012; Dugan, Komives & Associates, 2009), between students at community colleges and 4-year colleges. The problem this study addressed was the relatively limited knowledge about the leadership development of students attending community colleges (Basham & Mathur, 2010; Cloud, 2010). Students who have the ability to engage in on-campus activities have a greater opportunity to become involved in any one of a variety of leadership positions and activities such as student-organization officers, student employment, retreats, and trainings. Engaged students, therefore, are more easily able to translate leadership involvement into specific skills that can be included on their resumes and marketed to future colleges or potential employers.

An adapted version of the MSL scale (Dugan & Associates 2012; Dugan, Komives & Associates, 2009), an instrument created to observe the effects of postsecondary education on the leadership development of college students, was administered to over 300,000 students at approximately 250 institutions. Specifically, the instrument investigates college experiences and their influences on leadership-related outcomes of students such as complex cognitive skills, social perspective-taking, and leadership efficacy.

Results revealed significant differences between students attending community colleges and those from 4-year colleges with regard to several values of leadership development: change, citizenship, controversy with civility, and consciousness of self. It can be concluded that students attending community colleges, when compared to those from 4-year colleges, have significantly higher scores for change, controversy with civility, and consciousness of self. In comparison, students from 4-year colleges have higher citizenship scores.
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Chapter 1: Introduction

The problem this study addressed was the relatively limited knowledge about the leadership development of students attending community colleges (Basham & Mathur, 2010; Cloud, 2010). Students who have the ability to engage in on-campus activities have a greater opportunity to become involved in any one of a variety of leadership positions and activities such as student-organization officers, student employment, retreats, and trainings. Engaged students, therefore, are more easily able to translate leadership involvement into specific skills that can be included on their resumes and marketed to future colleges or potential employers.

Background and Justification

The development of students as leaders has increasingly become a part of the mission statements of colleges and universities across the country (Astin & Astin, 2000; Zimmerman-Oster & Burkhardt, 2000). McIntire (1989) asserted that the implementation of leadership-development programs and activities is a mandate for student-affairs professionals. Pascarella and Terenzini (2005) further purported that leadership skills can be acquired and learned by students through engagement with training and extracurricular activities during college years. The number of leadership-development programs for students has increased tremendously, with over 800 colleges and universities reporting some type of related activity (Cress, Astin, Zimmerman-Oster & Burkhardt, 2001).

Leaders of community colleges, however, face numerous challenges in attempting to offer leadership development opportunities to students. In an applied research study, Miller, Pope, and Steinman (2005) found that the traditional students attending community colleges are transient. Students often spend time on campus to attend classes and then leave once classes are complete (Miller et al., 2005). As a result, students limit
their opportunity to engage in extracurricular activities. Contributing to the limited opportunities for students to become engaged is that community colleges are often without residence halls; this factor provides challenges for students to connect with peers outside of curricular activities (Miller et al., 2005). In addition, students who might have an interest in extracurricular involvement are often attempting to balance responsibilities of part-time and full-time employment (Orozco & Cauthen, 2009).

The Research Problem

Students attending community colleges, when compared with students from 4-year universities, are generally less than likely to join campus based leadership activities (Miller et al., 2005). Approximately 59% of students from community colleges, compared to 27% of students from 4-year universities, are enrolled on a part-time basis (National Center for Education Statistics, 2010). Students attending community colleges are also more likely than students from 4-year universities to work at least 20 hours each week at locations outside the campus (Orozco & Cauthen, 2009). After balancing academic responsibilities, employment, and family obligations, students attending community colleges are left with little time to engage in leadership development opportunities on campus. This study analyzed the differences in leadership development between students from community colleges and 4-year colleges as measured by self-reported responses to the Multi-Institutional Study of Leadership scale (Dugan & Associates, 2012; Dugan, Komives, & Associates, 2009).

Role of the Researcher

At the onset of this study, the researcher was a student-affairs professional at the smallest of three campuses of a large, multicampus, public community college in the Northeast. The researcher has the responsibility, therefore, of providing students with
opportunities for cocurricular and extracurricular involvement. The development and implementation of leadership training for students is one of the responsibilities that falls within this area of involvement. When implementing the present study, the researcher had 13 years of experience in the area of student involvement. Related experiences included the facilitation of both credited and noncredited leadership courses, as well as conducting leadership retreats and conferences for external entities. This experience provided the framework for the data analysis that was conducted in this study.

**Deficiencies in the Evidence**

Scholars have conducted only limited research studies regarding the offering of leadership development on community college campuses. As Miller et al. (2005) asserted, “Much of the work that has been done on involvement within 4-year college students has justification for replication in the two-year college setting” (p. 601). As Townsend, Donaldson, and Wilson (2005) found in an analysis of 2,321 articles in five postsecondary education journals published over a 13-year span, only 8% of articles mentioned community colleges.

**Audience**

This study would be of benefit to leadership educators who want to understand the leadership capacity of students attending community colleges as opposed to their counterparts from 4-year universities, specifically as leadership relates to social responsibility. Understanding the differences in levels of socially responsible leadership allows leadership educators at community colleges to specifically target activities that would be most effective in the limited span of availability that students attending community colleges have to participate in leadership-development activities.
Definition of Terms

Community college. Dugan (2011) described a community college as a 2-year, publicly funded institution of higher education. Students who graduate from a community college earn associate degrees (Marti, 2009).

Socially responsible leadership. This concept involves the capacity to participate in leadership activities across identified core values that represent a student’s capacity and knowledge (Higher Education Research Institute [HERI], 1996). The related core values operate at three levels and are further broken into seven sublevels.

Purpose of the Study

The research purpose was to analyze the differences in leadership development between students from community colleges and 4-year colleges as measured by self-reported scores on the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). By conducting the study, the researcher explored whether significant differences existed, in terms of leadership-development scores, between students from community colleges and 4-year colleges as measured through the MSL scale (Dugan & Associates 2012; Dugan et al., 2009).
Chapter 2: Literature Review

The major functions of leadership are to create a vision for the future, to establish tactical priorities, and to cultivate an environment wherein every individual trusts one another (Buschlen & Dvorak, 2011). Effective leadership is a process, as it involves many different individuals and various strategies. The nature of postsecondary education is in flux, as the continuous 4-year enrollment in colleges and universities is no longer typical (Dugan, 2011). Because the number of high school students taking courses online increases each year (Picciano, Dziuban, & Graham, 2014), a smaller percentage of incoming college students has leadership experience when entering college.

In the field of education, leadership pertains to related activities in public institutions with the purpose of upholding the greater good (Cleveland-Innes, 2012). Hence, effective leadership is nonexistent without gaining an understanding of the role of education in society (Cleveland-Innes, 2012). The concept of leadership is also expansive, with innumerable definitions existing across many years of published books and articles (Grogan, 2013).

The theoretical lens through which leadership is often viewed has shifted dramatically over time (Astin & Astin, 2000; Dugan 2006a, 2006b; Dugan & Komives, 2010; Dugan et al., 2011). Historically, leadership has been viewed both as trait-based and positional in nature (Rost, 1991). Rost (1991) marked the most significant shift in the leadership paradigm by describing leadership as a trait that involves collaboration and a common purpose. In other words, leadership is less about power and position and more about transforming the organizational culture (Rost, 1991).

The leaders of postsecondary education in the 21st century need to produce change and movement within the institution (Aud, 2010). In higher education, leadership
requires a vision and the ability to communicate goals (Bettinger & Baker, 2011).

Another activity central to leadership is to assign tasks that are aligned with the skills and abilities of the individuals within the organization (Northouse, 2010).

Among the primary roles of higher educational institutions is the responsibility to produce educated graduates who are civically engaged (Rosenthal, Pittinsky, Purvin, & Montoya, 2007). This expectation has typically involved leadership development as a fundamental objective (Rosenthal et al., 2007). In response to the pressure on administrators of higher educational institutions to develop student leaders, an increased focus on leadership and social change is necessary (Wilson, 2012). The increased focus on leadership is reflected in a number of cocurricular programs (Wilson, 2012).

The first and second sections of the following literature review include the general topic of student involvement and engagement in school activities. The third section emphasizes leadership models in postsecondary education. The social change model of leadership, the fourth section of the review, involves the theoretical foundation for the study. The fifth section explores the identity of students attending community colleges in relation to their ability to assume social leadership roles and responsibilities. The concluding section summarizes the research findings of scholars and researchers while also identifying the research gap in the current literature.

**Student Involvement and Engagement in School Activities**

The definition of student engagement is the “participation in educationally effective practices, both inside and outside the classroom, which leads to a range of measurable outcomes” (Harper & Quaye, 2009, p. 2). Another definition of student engagement was noted in the literature. For example, Krause and Coates (2008) described the concept as the “extent to which students are engaging in activities that higher
education research has shown to be linked with high-quality learning outcomes” (p. 493). A more recent definition was provided by Kuh (2009), who described student engagement as “the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities” (p. 683). Krause (2011) further explained that the concept of student engagement can involve experiences beyond formal curriculum and might occur in settings other than the classroom. Kahu (2011) also reviewed and critiqued the four dominant perspectives on the research about student engagement:

- the behavioural perspective, which foregrounds student behaviour and institutional practice;
- the psychological perspective, which clearly defines engagement as an individual psychosocial process;
- the sociocultural perspective, which highlights the critical role of the sociopolitical context; and,
- finally, the holistic perspective, which takes a broader view of engagement. (p. 780)

Researchers have explored the topic of student engagement, as well as ways to identify the factors linked with higher levels of engagement; however, the notion of student engagement itself is weakly theorized (Picciano et al., 2014). Kahn (2014) provided a theoretical basis for student engagement by drawing on a realist social theory and suggesting student engagement is molded by reflexivity and coreflexivity. As such, the engagement of students within institutions of postsecondary education is theorized to be a form of agency (Kahn, 2014). Engagement, therefore, is spread out among different parties within the learning environment in which the influence of the environment is mediated by reflexivity (Kahn, 2014). Kahn’s study provided an explanation for why particular strategies, tagged as having a high impact, result in higher student-engagement levels within educational settings.

Falalah and Rosmala (2012) conducted studies to investigate the use of social media in postsecondary education environments. One study involved 300 respondents
participating from three private universities. Results revealed that respondents not only used the free availability of social networking during office hours, but also about 60% of the respondents used access to distribute and communicate information to support teaching activities (Falahah & Rosmala, 2012). College instructors use social media for different purposes such as to (a) provide assignments, (b) make announcements, (c) negotiate class rescheduling, and (d) post or announce examinations (Everson, Gundlach, & Miller, 2013; Falalah & Rosmala, 2012).

In another study involving social media, Everson et al. (2013) examined the usage of social networking sites in the instruction of statistics; findings revealed that social media is effective in increasing engagement. Graham (2014) conducted a study to examine whether social media could be used to facilitate increased student engagement at the university level. Results of Graham’s study indicated that social-media platforms could be used for this form of learning. Social media reinforces the willingness and enthusiasm of students to learn (Picciano et al., 2014). Graham warned, however, that students must also be guided and nurtured when using this form of learning.

Junco (2012) examined that social media, particularly Facebook, affects college students. Through the study, Junco investigated a large group of respondents (N = 2,368) in order to examine the link between the usage and participation in Facebook and student engagement. Junco measured student engagement in three ways; the first was through a 19-item scale that was derived from the National Survey of Student Engagement (The Trustees of Indiana University, 2015). The second method was to determine the amount of time students spent in class preparation (Junco, 2012). The third way involved the time spent in cocurricular activities (Junco, 2012).

Findings of the study revealed that Facebook has a significant negative
relationship with student engagement and has a significant positive relationship with time spent on cocurricular activities (Junco, 2012). Students who spent a majority of their time on Facebook had lower student engagement scores. Junco (2012) also concluded that no significant association existed between the time spent studying and the time engaged on Facebook. As a whole, however, activities that were related to Facebook were more accurate predictors of student engagement in campus activities (Junco, 2012).

Other researchers have examined the effects of Facebook on student engagement. Barcyzk and Duncan (2013), for example, queried students ($N = 106$) who were studying at two large public universities. Participants answered that usage of Facebook had enhanced their senses of social learning and connectedness. Findings reflected that increased enhancement was more apparent with the older students (Barcyzk & Duncan, 2013). Moreover, Facebook was also found to increase the engagement of students, especially in Facebook groups where they collaborated with one another (Barcyzk & Duncan, 2013).

The need for college instructors to communicate with students of the next generation while also providing relevant educational experiences in the classroom was also noted in the research. Manuguerra and Petocz (2011) investigated the use of new approaches in postsecondary education by examining whether the Apple iPad could bring potential change to the current situation. The study included both those who are studying on and off campus. Through the study, the authors observed how instructors used an iPad in teaching activities for a 15-month period. Results of the study revealed that instructors can utilize the device to develop student engagement with learning (Manuguerra and Petocz, 2011).

Another social-media platform examined by many researchers is Twitter. Junco,
Heiberger, and Loken (2011) investigated whether the use of Twitter for the purposes of education can have an impact on the grades and engagement of college students. The study was performed throughout a semester, and 125 students participated (Junco et al., 2011). These students were majoring in prehealth professions and were taking their preliminary seminar courses. Participants were divided into two groups; the experimental group contained 77 students, and the control included 55 students (Junco et al., 2011).

In the experimental group, Twitter was used for both academic and nonacademic discussion. A 19-item scale, derived from the National Survey of Student Engagement (The Trustees of Indiana University, 2015), was used to quantify engagement. Junco et al. (2011) also analyzed samples of exchanges on the social-media platform. Results from the analysis of variance (ANOVA) revealed that members of the experimental group, compared to students in the control group, experienced significantly larger gains in student engagement (Junco et al., 2011). Moreover, respondents in the experimental group earned higher grade-point averages over the semester. One of the most significant findings of this study, based on the analyses of Twitter discussions, was that both faculty members and students were very involved in the learning process as compared to the traditional classroom activities (Junco et al., 2011).

Scenario-based learning is about using the act of creating a scenario in order to teach or serve as a learning mechanism to reflect authentic situations (Ireland, Nickson, Sorin, Caltabiano, & Errington, 2013). Scenario-based learning additionally incorporates contextualized knowledge. In an applied research study, Ireland et al. (2013) examined the efficacy of using scenario-based learning at a public university. The researchers focused on the power of scenario-based learning and reported on the most unlikely part of the process (Ireland et al., 2013).
A two-stage process was used in the study (Ireland et al., 2013). The first stage included peer review, scenario-engagement, and strategic conversations. The second stage included the generation of resource materials for the use of the academic staff. The staff utilized teaching vignettes with participants acting in mock scenarios. Students in mock scenarios became engaged in their roles in the scene, which was not scripted and not expected to happen (Ireland et al., 2013). The researchers noted that this was a critical moment for processing that involved both teaching and learning (Ireland, et al., 2013).

Family support also has a role in student engagement (Grogan, 2013). Gill, Hayes, and Senior (2015) examined whether gender and the support of family affect mature student engagement in postsecondary education. Gill et al. noted abundant studies about the effect of familial motivational and support groups in student engagement. However, these studies focused on the engagement of female students only.

The researchers aimed to determine the ways in which family support affects mature male populations. Through the study, Gill et al. (2015) emphasized that the familial impact on postsecondary education engagement is associated with gendered roles in the family. The literature reflects that females face more barriers and challenges due to their child caring responsibilities as opposed to males who could balance their academic and career lives with their personal and domestic lives (Gill et al., 2015; Grogan 2013).

Edgar (2014) also examined the variation in student motivation and engagement, while considering gender and age, across the 4 years of a physiotherapy program. Approximately 233 college students responded to the Motivation and Engagement Scale–University/College. Results indicated differences in student engagement between the two genders (Edgar, 2014). Males had lower scores on task management, planning, and persistence (Edgar, 2014). Males also had higher scores for disengagement. Females had
higher scores for anxiety (Edgar, 2014).

In a related study about gender and student engagement, Tison, Bateman, and Culver (2011) explored two probable causes for the confusion regarding the link between engagement and gender at the postsecondary level. Multilevel analyses were conducted from a Southeastern university’s data acquired from the administration of the National Survey for Student Engagement (The Trustees of Indiana University, 2015). Findings suggested that the link between student engagement and gender is associated with the type of activity and institutional level.

Sontam and Gabriel (2012) also examined student engagement using the setting of a sizeable community college. Specifically, the researchers observed probable individual variations in student engagement and investigated the manner in which the variations were related to achievement. The data collected was based on the self-reported grade-point averages of the students. Findings indicated differences in student engagement based upon gender as well as race and ethnicity (Sontam & Gabriel, 2012).

Moreover, female students displayed greater student engagement compared to males (Sontam & Gabriel, 2012). African American students, when compared to students from other ethnic and racial backgrounds, were found to have higher levels of student engagement (Sontam & Gabriel, 2012). As also noted in the findings of Sontam and Gabriel (2012), Strayhorn (2012), drawing on the retention theory developed by Tinto, Goodsell-Love, and Russo (1993) as well as Astin’s (1993) input-environment-outcome model, concluded that African American males were more engaged with their studies than other ethnic and racial minorities.

In more current studies, Wood and Ireland (2014) examined factors that led to the engagement of African American males with faculty members in the community college.
The researchers collected data that were obtained from the 2011 administration of the Community College Survey of Student Engagement (The University of Texas at Austin, 2015), with a 3-year cohort consisting of 11,384 male African American respondents from 260 community colleges. Wood and Ireland highlighted the importance of improving reading skills, engaging in learning communities, developing study skills, and preparing for college to strengthen faculty-student interactions. Wirt and Jaeger (2014) investigated the predictors of faculty-student interactions of students from community colleges and similarly emphasized the importance of faculty-student relations in community colleges.

There are two theories that assess both student engagement and faculty-student interaction. One is Astin’s (1985) student involvement theory; the second is Pace’s (1979) student-development model. Through inferential and descriptive analysis, results indicated that age, grade-point average, grants, scholarships, participation in orientation programs, and engagement in learning communities were effective determinants of successful faculty-student interaction (Astin, 1985; Pace, 1979).

Studies have also explored the relationship between student engagement and age. Gibson and Slate (2010) examined data from 40,000 cases obtained from the Community College Survey of Student Engagement (The University of Texas at Austin, 2015), because the information was connected to the generational status and age of students. The researchers found substantial variances among first-year students attending community colleges among various age groups (Gibson & Slate, 2010). Another variance was found between first-generation students and others (Gibson & Slate, 2010).

The topics of distance education and student engagement have also caught the interest of many researchers such as Sun and Rueda (2012), who investigated potential
links among learning and motivational factors such as interest, self-regulation, and self-efficacy. Behavioral, cognitive, and emotional student engagement within a distance education environment was also examined (Sun & Rueda, 2012). From the schools of engineering and gerontology, 203 online students participated in the study. Respondents completed an online survey that evaluated the extent of their computer self-efficacy, engagement in distance education, self-regulation, and situational interest.

Through the study, Sun and Rueda (2012) concluded that online activities are directly associated to an increase in emotional engagement. However, these online activities do not necessarily lead to increases in cognitive or behavioral engagement (Sun & Rueda, 2012). Dixson (2012) aimed to discover what activities and interactions would lead to greater student engagement levels. The author created a scale to measure student engagement and conducted a survey among 186 students from six Midwest schools (Dixson, 2012). Results indicated no particular activities that would automatically help to increase student engagement in class. However, the findings suggested that multiple communication channels, as well as student-student and student-instructor interactions, are related to higher levels of student engagement (Dixson, 2012).

In another study, Young and Bruce (2011) examined correlations of student engagement within an online classroom community. These researchers also compared engagement and community throughout various postsecondary education disciplines. Respondents \((n = 1,410)\) answered an online survey consisting of 23 items that measure community and engagement. Results indicated that students in health science and education courses, compared to sciences and arts students, espoused higher levels of engagement (Young & Bruce, 2011).
Leadership Development of College Students

The research objective of the current study was to analyze the differences in leadership development between students at community colleges and 4-year colleges. Moreover, the researcher wanted to provide more information about the types of leaders that were developed through these efforts. At the onset of the study, it was anticipated that different factors influence the leadership development of students. These factors are discussed in the next sections of the chapter. The influence might include the motivation of the students to become leaders, the maturational development of the students, and the unique capabilities of each student that may strengthen students in leadership roles.

These studies provided significant insights to why student leadership is a topic worthy to be investigated and determined that much remains to be learned from future efforts. Researchers also indicated that student leadership has many benefits for school stakeholders (Posner, 2012; Soria, Fink, Lepkowski, & Snyder, 2013). The current emphasis of research is to determine the factors hindering promotion, effective implementation, and maintenance of student-leadership programs.

A number of researchers recommended that student-leadership programs should be studied extensively (Archard, 2009; Neumann, Dempster, & Skinner, 2009). Neumann et al. (2009) observed that students who are appointed to leadership positions change in the manner in which they relate to others. Often, the changes affect students’ personal maturation (Neumann et al., 2009). Student leaders understand better who they are and have a high level of self-esteem. Neumann et al. also characterized student leaders as more probable to cultivate skills and processes that are essential in their learning to help them develop into mature individuals and become responsible and productive citizens of society.
College Student Leadership Framework

The next generation of leaders has always been one of the core values of postsecondary education (Komives et al., 2011). However, it was only in the previous decades that college and university leaders have begun to enhance the leadership capacity of their students through different programs and activities. As the demand for emphasis on student leadership development increased, researchers focused on a research framework that would support these efforts (Komives et al., 2011). The framework of the student-leadership program started with an industrial paradigm grounded on individual achievement to the modern postindustrial paradigm. This paradigm focuses on transformational influence of leaders to followers, give-and-take relationships between leaders and followers, authenticity of leadership, and care for the followers. Currently, there are theories designed to model and enhance the leadership development of college students (Komives et al., 2011).

Early theories. In the early part of the 1990s, scholars recognized that the leadership theories developed from an industrial paradigm were nothing more than good management. Komives et al. (2011) stated that the reason leadership was conceptualized in this manner was because of the goals of the institutions and organizations at that time which were designed to increase efficiency and production. However, postindustrial theories of leadership value the human relations of leaders and followers. This emphasis is characterized by the importance of the leadership process which does not use coercion to achieve the goals of the leaders or management (Komives et al., 2011). Greenleaf’s (1977) and Kouzes and Posner’s (1987) publications involving leadership were originally developed for the business sector but were also used by college-leadership programs (Komives et al., 2011).
The relational leadership model was among the first leadership models specifically designed for college students. The model contains five main elements: purposefulness, inclusiveness, empowerment, ethical practices, and a process orientation (Komives et al., 2011). In this model, leadership is about the relational process of people who want to attempt to accomplish positive change. This model is still an emerging theory being used by student-affairs administrators (Komives et al., 2011).

Middlehurst, Goreham and Woodfield (2009) investigated how leadership in institutions of postsecondary education compared to leadership in other organizations. Middlehurst et al. considered that no particular characteristics would set apart leadership in postsecondary education from other institutions. However, the researchers believed that some characteristics of leadership are emphasized in postsecondary education when compared to other organizations. Examples include the decentralized aspect of postsecondary education leadership, the culture of autonomy of the different department heads and faculty, and collegiality among the members of the institution (Middlehurst et al., 2009). Potential conflicts among individuals who may want to maintain the status quo of an organization and individuals who want to build an unstructured process may also exist (Middlehurst et al., 2009).

Researchers have explored the most effective leadership styles in postsecondary education (Grogan, 2013; Komives, Dugan, Owen, Slack, Wagner & Associates, 2011). The literature, however, does not include a consistent definition of the term effective leadership. Several authors only presented the behaviors and attitudes of effective leaders. For example, a leader must form and foster an environment “for academics and others to fulfill their potential and interest in their work” (Bryman, 2009, p. 66).

At present, over 1,000 colleges and universities have programs aimed toward
leadership development (Rosch, Anderson, & Jordan, 2013). This is a 20% increase in programs to develop leaders, in a period of less than 10 years. This is partially caused by the shifting perspectives in the workplace from a constricted environment to a more flexible structure wherein the foundation is composed of trusting relationships as well as social and emotional competence (Rosch et al., 2013).

A number of approaches to leadership, such as servant leadership, have emerged; each has a unique focus adapted for use by student-affairs professionals (Astroth, Goodwin, & Hodnett, 2011; Ekundayo, Damhoeri, & Ekundayo, 2010; Greenleaf, 1977; Hays, 2008; Paul, Smith, & Dochney, 2012). Another approach involves relational leadership (Fairhurst & Uhl-Bien, 2012; Giessner & van Quaquebeke, 2010; Komives, Lucas, & McMahon, 2007). A third approach pertains to emotionally intelligent leadership (Facca & Allen, 2011; Haber, Allen, Facca, & Levy Shankman, 2012; Osteen, 2011). The fourth approach to leadership involves social change (HERI, 1996) and is commonly known as the social change model of leadership.

Greenleaf’s (1977) concept of servant leadership is recognized as the first of the postindustrial leadership models. This concept involves a servant leader who does not present himself with the intention to lead, but rather an intention to serve, making this unique among leadership models. The roots of servant leadership can be found from the trait-theory category of leadership studies postulating that effective leaders should exemplify a cluster of desirable characteristics that changes across contexts depending on the situation. In the current context, modern leaders should have good character, values, and excellent performance (Greenleaf, 1977).

According to van Dierendonck (2011), servant leadership is “demonstrated by empowering and developing people; by expressing humility, authenticity, interpersonal
acceptance, and stewardship; and by providing direction” (p. 1259). Mittal and Dorfman (2012) further stated that servant leadership is founded in the human desire to bond with others and to contribute to the progress of society. Servant leadership was also differentiated by Mittal and Dorfman by providing different characteristics, such as empathy and humility, making servant leadership unique from other leadership frameworks.

According to Hays (2008), the instructor being a servant is both possible and desirable, as this stance offers productive experiences and promotes learning in ways that are impossible through other ways of teaching. Hays’ principle of servant leadership revolved around 10 main attributes, which he identified as awareness, commitment to growth, empathy, healing, listening, persuasion, foresight, conceptualizing, stewardship, and focus on community building. By enforcing servant leadership, Hays explained that results would promote sensitivity to diversity, more relevant lessons, empowered students, and richer relationships between students and instructors. In support, Ekundayo et al. (2010) emphasized that servant leadership is essential to postsecondary education. Wheeler (2012) similarly postulated that servant leadership is a better way to lead colleges and universities due to its emphasis on the common good, empowerment, involvement, and service to the individual and society.

Beck (2014) conducted a mixed methods research study examining the precursors to servant leadership. The study involved two phases; Phase 1 consisted of a quantitative data collection, and Phase 2 involved the collection of qualitative data. In the Phase 1 quantitative survey using the Servant Leadership Questionnaire (Liden, Wayne, Zhao, & Henderson, 2008), 499 leaders and 630 raters participated. Researchers selected 12 leaders from Phase 1 to participate in the interviews in Phase 2 (Liden et al., 2008). Four
major themes were obtained from the study: “(a) the longer a leader is in a leadership role, the more frequent the servant leader behaviors; (b) leaders who volunteer at least 1 hour per week demonstrate higher servant leader behaviors; (c) servant leaders influence others through building trusting relationships; and (d) servant leaders demonstrate an altruistic mindset” (Liden et al., 2008, p. 309).

Studies conducted on the applications of servant leadership appear to be promising. Paul et al. (2012) were able to find a positive relationship between servant leadership and positive academic advising behaviors. Servant leadership was also found to provide a systematic teaching approach that was ethical in character and teachable to individuals from various educational and organizational institutions (McMahone, 2012). Servant leadership appears to be applicable not just to instructors who lead classes but to school administrators, as well (Paul, et al. 2008).

In an article by Astroth et al. (2011), the old model of leadership, based on power, no longer appears to be relevant in society and especially in postsecondary educational institutions. Astroth et al. argued that, as higher educational systems remain focused on individual accountability and performance, the concepts of team and organization are underscored. Through servant leadership, criteria for school leaders should no longer focus only on professional responsibilities but also on visionary skills (Astroth et al., 2011).

According to the relational leadership model, four types of relationships dictate a set of appropriate behaviors: authority ranking, communal sharing, equality matching, and market pricing (Giessner & van Quaquebeke, 2010). The model suggests that it is in the matching of these relationships, between leader and follower, that good leadership is achieved (Giessner & van Quaquebeke, 2010). Relational leadership means that
leadership is not a trait or a behavior; it is simply produced out of interactions among individuals who are acting within the same context, thereby making leaders and followers relational beings (Fairhurst & Uhl-Bien, 2012).

On the other hand, emotionally intelligent leadership stresses effective leadership along with emotional intelligence; both are essential to organizational and personal success (Facca & Allen, 2011). Emotionally intelligent leadership covers three main dimensions: context, the self, and others. Emotionally intelligent leadership is connected to relational leadership, as those who ascribe to emotionally intelligent leadership view effective leadership as a relational process. It is clear, however, that the foundation of the model is emotional intelligence (Facca & Allen, 2011).

One of the ways to enhance emotional intelligence is through reflection (Knoeppel & Rinehart, 2010). In order to reflect, however, the professional must know when to be meditative and contemplative. Leaders in postsecondary education must evaluate the outcome of the shared vision of the whole organization and determine whether the vision meets the needs of the students, faculty, and staff, or whether remaining challenges must be addressed (Knoeppel & Rinehart, 2010).

Emotionally intelligent leadership is also among the most commonly employed models in establishing leadership-development programs for college students (Shankman, Allen, & Haber-Curran 2015). Shankman et al. (2015) reviewed the model’s effectiveness in leadership education. Their findings suggested that the model has already been used in a number of leadership-development programs in educational institutions in the United States and abroad (Shankman et al., 2015). These programs use a variety of methods in establishing the main facets of the model (Shankman et al., 2015). In Osteen’s (2011) guide for college students, for example, facilitating leadership involved an
inventory along with a facilitation and activity guide, workbook, and development guide. On the other hand, it is important to take note that the model calls for more studies to substantiate the relationships, moderators, interactions, and possible outcomes across variables for increased understanding of the model (Shankman et al., 2015).

Similar to the underlying concepts of servant leadership espoused by Mittal and Dorfman (2012) and Paul et al. (2012), Barbuto, Gottfredson, and Searle (2014) stated that servant leadership is an approach involving the desire to serve subordinates. Based on findings from 75 civic leaders and 401 followers, Barbuto et al. investigated whether emotional intelligence is a precursor for the various dimensions of servant leadership. Analysis of the observations from the sample group revealed that emotional intelligence is a “good predictor of a leader’s servant-leader ideology (or approach toward leadership) but may not be a good predictor of servant-leader behaviors as rated by the leaders’ followers” (Barbuto et al., 2014, p. 320).

**The Social Change Model of Leadership**

The definition of the social change model of leadership is “a purposeful, collaborative, values-based process that results in positive social change” (Komives, Wagner, & Associates, 2009, p. 9). A working group consisting of leadership scholars explored the common characteristics of postindustrial leadership approaches (HERI, 1996). The group decided that the goal of leadership was oriented toward the creation of positive change (Dugan, 2006b; Dugan et al., 2011; HERI, 1996; Komives et al., 2009). The social change model of leadership, as described by Komives et al. (2009), is based on six conventions that are summarized as follows:

1. Leadership promotes positive change for and through others, and is concerned with social responsibility.
2. Leadership is a combined effort.

3. Leadership is a continuing progression, as opposed to a mere position.

4. Leadership is all-encompassing and available to all types of individuals.

5. Leadership is principled.

6. Leadership significantly involves service and engagement to the community.

Change occurs through the interaction of seven critical core values functioning at three levels (HERI, 1996). The levels and corresponding values include the individual, group, and society (HERI, 1996). Consciousness of self is the first critical core value of the social change model. This value requires self-awareness of the beliefs, principles, behaviors, and emotions that collectively serve as the motivation for action. Consciousness also includes being mindful of current behavior, emotional states, and perceptual lenses (HERI, 1996).

The second critical core value is congruence. Congruence is being consistent, genuine, authentic, and honest with one’s beliefs and actions. This value requires awareness of one’s beliefs, principles, thoughts, feelings, and behaviors toward others (HERI, 1996).

Commitment is the third critical core value of the social change model. When exhibiting commitment, one invests, in terms of time and intensity, in an individual and an idea. In the social change model, commitment refers to being committed to serve others and their goals or passions (HERI, 1996).

The fourth of the seven critical core values is collaboration. Collaboration is working in an effective unit with others. This value includes being accountable and responsible for each other. Related efforts increase the group’s efficiency and effectiveness through the use of different skills, abilities, and points of view to implement
creative solutions (HERI, 1996).

Common purpose is the fifth critical core value. This value is obtained by sharing united objectives and principles with others. This core value is accomplished by engaging with others in working toward a group purpose or vision (HERI, 1996).

The sixth critical core value of the social change model is controversy with civility. Realizing that there are two central realities in any innovative undertaking is imperative. The first reality is differing points of view are unavoidable; the second is that dissimilarities should be broadcasted in an open but civil manner (HERI, 1996).

The final critical core value of the social change model is that of citizenship. To accomplish a citizenship goal, it is necessary to have faith in a process in which an individual or group is connected to a greater community or society through a particular activity. Citizenship involves acknowledging that community members are interdependent and knowing that the welfare of other individuals is a responsibility of each person (HERI, 1996).

While early notions of leadership indicate that leadership is innate, current researchers argue that leadership can be learned (Dugan 2006). As a result, educational institutions have included leadership-development programs for their students (Buschlen & Dvorak, 2011). Multiple studies have identified the social change model as the most widely used approach in the training and instruction of leadership (Dugan, 2006a, 2006b; Dugan & Komives, 2007, 2010). Methods for training include retreats, 1-day sessions, and short- and long-term noncredit leadership instruction (Cress et al., 2001).

Cress et al. (2001) found that participation in purposeful leadership activities had a positive correlation with educational and personal development. While the social change model informed the practice for many institutions, a formal curriculum grounded
in the model was not developed until 2009 (Komives et al., 2009). The model has also been the subject of numerous research studies, including the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). The measurement of the levels of socially responsible leadership is a core component of the MSL.

In a study conducted by Buschlen and Dvorak (2011), the development of student leadership among college students who underwent a leadership-development course on the social change model of leadership was investigated. The research involved college students who completed the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009) for socially responsible leadership before and after the course (Buschlen & Dvorak, 2011). Findings of the study reflected that leadership skills improved for those who attended the course. Reasonably, college students have a tendency to relate more with postindustrial leadership values that are more related to the values encompassed in the social change model of leadership (Buschlen & Dvorak, 2011).

Dugan (2006b) also explored the same model of leadership among college men and women. Dugan found that female college students, when compared to male college students, tend to be more at an advantage in this model. Dugan et al. (2011) also found evidence suggesting that facets of the social change model significantly contributed to college students’ leadership capacities. The study conducted by Dugan et al. explored the effects of participation in leadership programs on the capability of students to espouse leadership styles that are socially responsible. Results of the regression analysis on 8,916 college students from 99 colleges and universities revealed that mentorship, group-based experiences, sociocultural conversations with fellow students, and involvement in community services significantly accounted for students’ leadership capacities. Increased leadership capacities, however, are all dependent on the extent to which educators
promote andragogical strategies and high-impact learning.

According to Lane and Chapman (2011), the foundation of the social change model is the notion that people are able to perform more effectively if they build on their identified talents. In their study, Lane and Chapman investigated the link between the social change model of leadership, hope, and strengths of self-efficacy. The sample group included 157 undergraduate students attending a private educational institution. Students were enrolled in a 10-week cocurricular leadership seminar. Findings suggested a significant association between the values and strengths of self-efficacy within the social change model (Lane & Chapman, 2011). This suggests values of the model also contribute to students’ sense of self-efficacy concerning their talents.

Campbell, Smith, Dugan, and Komives (2012) reported that mentorship programs have aided leadership development of college students. The study utilized data from the MSL (Dugan & Associates, 2012; Dugan et al., 2009) with more than 110,000 participants from 101 institutions (Campbell et al., 2012). Findings revealed that the leadership capacity of a college student is influenced by the mentorship process as well as the type of mentor the college student has been assigned (Campbell et al., 2012).

Dugan et al. (2011) investigated the differential outcomes of leadership experiences on college students’ capacity for socially responsible leadership. Results revealed that individual leadership influences a small, although significant, portion of student outcomes (Dugan et al., 2011). Parker and Pascarella (2013) also examined the diverse experiences of college students on the development of leadership that focuses on social responsibility. The Parker and Pascarella study used data from a longitudinal research study involving multiple institutions with 1,946 college students. Findings were parallel to the prior research supporting the positive effects of diversity on college
students, because these different experiences have a positive impact on their leadership development (Parker & Pascarella, 2013).

Rosch et al. (2013) measured the observation skills of student leaders. Undergraduate students \((N = 144)\) were assessed regarding their capacity for leadership, using the Socially Responsible Leadership Scale (National Clearinghouse for Leadership Programs, 2015). The study was created to assess variations in evaluating the capacity between student leaders and individuals who witnessed their general behaviors. Rosch et al. found that there were considerable disparities between self and observer interscale correlations as well as a high degree of subscale intercorrelations within observer reports.

**Factors Affecting Leadership Capacity**

Scholars interested in students’ leadership development examined the factors influencing students’ capacity to engage in leadership (Dugan, 2011). Previous studies revealed several factors. This section discusses the most relevant findings regarding the factors affecting the leadership capacity of students.

**Individual characteristics.** Researchers have focused in what way the specific characteristics of an individual enhance their leadership capacity. According to Komives et al. (2011), leadership knowledge and experience is the indicator supported by the majority of the studies that explored college student-leadership programs. The more the students were exposed to leadership opportunities before they entered college, the more engaged the students became in leadership activities. Dugan (2011) and Komives et al. (2011) also revealed that gender differences exist in leadership capacities, as women are more relational than men. Women also emphasize the importance of collaboration.

In terms of race or ethnic groups, quantitative researchers have reported no differences in overall leadership capacity of individuals (Dugan, 2011; Komives et al.,
2011). However, gender differences in leadership emerged in certain constructs of the social change model (Gleason, 2012). Dugan and Komives (2010) also found that students who identified as Latino or Asian Pacific American had higher scores on the collaboration scale, while students who identified as African American/Black or multiracial had higher scores on the change scale. Kodama and Dugan (2013) reported that the factors of race and ethnicity frame the leadership education of college students. The researchers used data obtained from 8,510 college students and revealed that it is important to have race and ethnicity as a focus of the exploration of college student leadership development in order to fully maximize advancements in knowledge (Kodama & Dugan, 2013).

Self-efficacy of students and its effect on their leadership capacity has also been explored. Hu (2011) used data from three-wave longitudinal surveys of two cohorts of the Gates Millennium Scholarship recipients and nonrecipients. Through the study, Hu found that individuals who have received scholarship awards have enhanced student governance efficacy, increasing the likelihood of the student holding leadership positions.

**External factors.** Research has also suggested a number of environmental and external factors that have an impact on the college student’s leadership development. For example, Komives et al. (2011) found that “the essential developmental influences that fostered the development of a leadership identity included adult influences, peer influences, meaningful involvement, and reflective learning” (p. 596). However, this research suggests these external factors are influenced by the adults who are involved in the lives of the students. These adults served as role models as well as sources of motivation and affirmation (Komives et al., 2011). Many of the values of the college students were instilled by their parents, educators, relatives, and other important adult
members of their lives (Dugan & Komives, 2010). In college-student leadership, the influence of faculty members was said to be very influential as they served as models and mentors (Komives et al., 2011). Zhang, Fallon, and Russo (2014) also emphasized the role of faculty members in developing student leaders.

Another important factor in students’ leadership development is the process of having meaningful involvement (Dugan & Komives, 2010). Students who were engaged with activities in organizations practiced their leadership skills and developed abilities to interact with different people. These activities developed the students’ interpersonal skills. Additionally, there are also opportunities to engage in meaningful discussions with peers. Being members of clubs or organizations had a significant impact on the specific outcomes of the social change model that includes having a common purpose and collaboration with other individuals (Dugan & Komives, 2010).

Salisbury, Pascarella, Padgett, and Blaich (2012) examined that work affects the development of leadership skills through an analysis of Wabash National Study data, which were obtained from 2,931 freshman students across 19 institutions. After taking into account the influence of precollege factors, findings revealed that college engagements have a significantly positive influence on leadership development (Salisbury et al., 2012). Moreover, the researchers also concluded that off-campus employment has a considerable effect on the leadership skills of college students. This correlation was true even if activities that were based off-campus weakened the impact of peer interaction and cocurricular engagement on the students’ leadership skills (Salisbury et al., 2012).

**Students Attending Community Colleges**

Leadership is a significant issue among colleges and universities; related concerns
have led to the establishment of various leadership-development programs for college students across a vast number of colleges and universities in the country (Rosch et al., 2013). As discussed in the previous sections of this review of the literature, a significant pool of research has emerged to assess the effectiveness of related development programs. However, it appears that the landscape of research into leadership-development programs for community colleges primarily involves administrative leadership and not student function (Rosch et al., 2013).

According to Basham and Mathur (2010), leaders of community colleges face the daunting challenge of the continuously increasing number of enrollees who are not fully prepared to start studying in a community college. Related factors cause the completion rate to steadily decline. It is apparent that the responsibilities of school administrators stretch far beyond that of their counterparts in the more established postsecondary institutions (Basham & Mathur, 2010). As a result, leadership programs in the community college setting have become intended for the school leader who is suggested to master the discipline of community college leadership through course work, dissertation writing, and the development of interpersonal competencies that would enable them to engage in executive coaching in areas most in need of improvement (Campbell, Syed, & Morris, 2010).

As of 2008, 43% of all undergraduate students in the United States enrolled in community colleges (National Center for Education Statistics [NCES], 2010). Higher proportions of ethnic and racial minority students also attend community colleges (NCES, 2010). Community colleges are typically commuter institutions, with only around 20% of colleges having residence halls and, furthermore, less than 20% of students living on campus (Epstein, 2007). Community college student populations
traditionally have a higher median age than found at 4-year colleges; however, educators have noted an increase in students between the ages of 18 and 24 (Marti, 2009; NCES, 2010; Torres, Gross, & Dadashova, 2010). Students attending community colleges tend to be less academically prepared than those entering 4-year colleges, with 60% requiring some type of remediation (Bailey, 2009). The open-access nature of the community college results in a broad population diversity that does not exist at the same level in 4-year institutions (Bahr, 2013; Marti, 2009; Miller, Pope, & Steinman, 2004; Townsend et al., 2005).

**Multi-Institutional Study of Leadership**

The prime objective of the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009) is to explore the influences of postsecondary education on students’ leadership development and investigate how college experiences affect students’ leadership outcomes. Some of the leadership-related outcomes include, but are not limited to, complex cognitive skills, leadership efficacy, and social perspective-taking. The MSL was first administered in 2006 and was later revalidated in 2009, 2010, and 2011 using additional data collections. To date, students at more than 150 institutions have been part of the study (Dugan & Associates, 2012; Dugan et al., 2009).

The social change model of leadership development (HERI, 1996) was the foundation for the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). The guiding principles involved in the social change model include change for the common good and social responsibility. According to HERI (1996), related principles can be attained by developing eight core values: change, citizenship, collaboration, commitment, common purpose, congruence, consciousness of self, and controversy with civility. Each of these values is present at both micro and macro levels such as individual, group, and
societal planes (Komives et al., 2009).

Several studies have used the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009) to determine the leadership development and related capacities of college students. Dugan et al. (2011) examined the relationships between social perspective-taking and the individual, group, and societal domains of socially responsible leadership. Dugan et al. used data from the MSL and conducted a quantitative study with a cross-sectional design. The total sample was 101 U.S. institutions representing 31 states and the District of Columbia (Dugan et al., 2011). The researchers utilized the scale and an adapted version of Astin’s (1993) college impact model. Results revealed that social perspective-taking was a significant moderator of individual-leadership values (commitment, congruence consciousness of self) and on group-leadership values (collaboration, common purpose, controversy with civility) after the precollege leadership capacity of students had been controlled (Dugan et al., 2011). Another finding was that social perspective-taking had no direct effect on the societal domain. This would mean that positive group experiences could have an influence on an individual’s leadership development (Dugan et al., 2011).

Dugan, Kodama, and Gebhardt (2012) examined the effects of race and ethnic identity on leadership development that is socially responsible. Dugan et al. also used data from the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). Participants included 8,510 students from 101 educational institutions across the United States. Results supported the additive value of the inclusion of measures involving collective racial esteem (Dugan et al., 2012). In a similar study, Kodama and Dugan (2013) also provided evidence that a generic approach was mostly based on the experience of White students rather than considering the different races and ethnic backgrounds of the
students.

Researchers also explored mentorship using the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). Campbell et al. (2012) stated that limited knowledge exists involving the role of mentorship in assisting college students in their leadership development. The study utilized the MSL to explore the issue. Results revealed that leadership capacity is influenced by the mentorship process as well as the type of mentor such as faculty, staff, employer, or peer (Campbell et al., 2012). The researchers recommended that college student leadership-development programs include mentoring programs.

**Research Gap**

Based on the studies discussed in this review, it appears that the definition of leadership has shifted from a concept of power to one of relationships and competencies (Rost, 1991). Researchers have thus focused on the development of new models of leadership that are postindustrial, thereby producing models such as (a) servant leadership (Astroth et al., 2011; Ekundayo et al., 2010; Greenleaf, 1977; Hays, 2008; Paul et al., 2012), (b) relational leadership (Fairhurst & Uhl-Bien, 2012; Giessner & van Quaquebeke, 2010; Komives et al., 2007), (c) emotionally intelligent leadership (Facca & Allen, 2011; Haber et al., 2012; Osteen, 2011), and (d) the social change model of leadership (HERI, 1996; Komives et al., 2009).

Among the cited models of leadership associated with postsecondary education, this review focused on the social change model of leadership (HERI, 1996; Komives et al., 2009). Studies that assessed this model of leadership appear to support each other, as the use of the model in the development of leadership programs was found to be beneficial (Buschlen & Dvorak, 2011; Dugan et al., 2011; Lane & Chapman, 2011).
This current study focused on students attending community colleges, as studies have identified leadership as one of their most significant issues (Basham & Mathur, 2010; Campbell et al., 2010; Owen, 2012; Rosch et al., 2013; Sirkis, 2011). The trends in research on community colleges have focused more on the problems related to (a) low levels of completion (Basham & Mathur, 2010), (b) inadequate academic readiness (Campbell et al. 2010), and (c) social issues (Sirkis, 2011). Conversely, concerns regarding student engagement and leadership have focused instead on instructors and administrators in the community college setting (Basham & Mathur, 2010; Campbell et al., 2010; Sirkis, 2011).

**Research Question**

The research purpose was to analyze the differences in leadership development between students from community colleges and 4-year colleges as measured by self-reported scores on the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). The central research question that guided the study was as follows: Do significant differences exist between scores of students attending community colleges versus 4-year colleges on the MSL scale?
Chapter 3: Methodology

The present researcher conducted this quantitative survey study to analyze the differences in leadership development between students from community colleges and 4-year colleges as measured by self-reported scores on the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). Muijs (2011) defined quantitative research as a grounded inquiry that incorporates socially environmental features within a social reality that is comparatively constant across time and settings. Quantitative researchers assume an objective social reality and view research participants and their settings with an objective viewpoint (Muijs, 2011). Additionally, quantitative researchers use numerical data as a representation for the social environment and to employ statistical methods for data analysis (Creswell, 2014).

This chapter presents the methodology of the present study. The text includes a description of the respondents who provided the unit of analysis and describes the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009), procedures, and data analyses central to the study. At the end of this chapter, a summary is presented to highlight key points involving the methodology and research design of the study.

Unit of Analysis

A preexisting data set, consisting of combined responses to the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009) collected during Years 2009 and 2012, was used in this study. The data set incorporated responses provided by 7,648 students, 46.0% of whom were females. Respondents were college students at multiple postsecondary institutions across the United States. Each respondent was enrolled in either a community college, which involves 2 years of instruction, or a 4-year college. Over one half (53.3%) of respondents were enrolled in community colleges.
Of the 7,648 respondents, 16.1% had earned a high school diploma or general educational development certificate. Approximately 13.7% had completed some college course work yet not graduated. The data reflect varying levels of college completion: (a) 18.6% held a baccalaureate degree, (b) 12.6% held a master’s degree, and (c) 8.3% held an associate’s degree. The majority of respondents (72.7%) were full-time students.

To communicate ethnicity and race, respondents were asked to mark all applicable selections. Options on the MSL (Dugan & Associates, 2012; Dugan et al., 2009) were White/Caucasian, African American, Latino, Asian American, Middle Eastern, American Indian, Multiracial, and Others. Among the possible classifications, 59.7% of the respondents identified themselves as White/Caucasian (see Table 1). In terms of income, 9.6% of respondents reported earning between $55,000 and $74,999 per year. Based upon respondents’ answers to the related question, this income group was the largest of all groups (see Table 2).

Table 1

<table>
<thead>
<tr>
<th>Ethnicity and race affiliation</th>
<th>f (n = 6,673)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/Caucasian</td>
<td>4,567</td>
<td>59.7</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>88</td>
<td>1.2</td>
</tr>
<tr>
<td>African American</td>
<td>642</td>
<td>8.4</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>164</td>
<td>2.1</td>
</tr>
<tr>
<td>Asian American/Asian</td>
<td>466</td>
<td>6.1</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>462</td>
<td>6.0</td>
</tr>
<tr>
<td>Multiracial</td>
<td>199</td>
<td>2.6</td>
</tr>
<tr>
<td>Other ethnicities and races</td>
<td>85</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Note. N = 7,648. Number of responses is less than 100% due to nonresponse of 975 students (Dugan & Associates, 2012; Dugan et al., 2009).

Instrument

An adapted version of the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009), an instrument created to observe how postsecondary education influences the
leadership development of college students, was administered as a component of a national study. The instrument was central to this present study, as it was designed to investigate college experiences and the influences of those experiences on leadership-related outcomes of students such as (a) complex cognitive skills, (b) leadership efficacy, and (c) social perspective-taking (Dugan & Associates, 2012; Dugan et al., 2009). The MSL was first administered in 2006 (Dugan, 2011), and further validation of the instrument was made in 2009, 2010, and 2011 (Dugan et al., 2011).

Table 2

Demographic Data: Socioeconomic Status

<table>
<thead>
<tr>
<th>Annual income</th>
<th>f(n =4,664)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $12,500</td>
<td>443</td>
<td>5.8</td>
</tr>
<tr>
<td>$12,500 – $24,999</td>
<td>532</td>
<td>7.0</td>
</tr>
<tr>
<td>$25,000 – $39,999</td>
<td>592</td>
<td>7.7</td>
</tr>
<tr>
<td>$40,000 – $54,999</td>
<td>561</td>
<td>7.3</td>
</tr>
<tr>
<td>$55,000 – $74,999</td>
<td>736</td>
<td>9.6</td>
</tr>
<tr>
<td>$75,000 – $99,999</td>
<td>608</td>
<td>7.9</td>
</tr>
<tr>
<td>$100,000 – $149,999</td>
<td>613</td>
<td>8.0</td>
</tr>
<tr>
<td>$150,000 – $199,999</td>
<td>258</td>
<td>3.4</td>
</tr>
<tr>
<td>$200,000 and over</td>
<td>321</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Note. N = 7,648. Number of responses is less than 100% due to nonresponse of 2,984 students (Dugan & Associates, 2012; Dugan et al., 2009).

The MSL scale (Dugan & Associates, 2012; Dugan et al., 2009) was developed on the basis of a core set of measures adapted from the Socially Responsible Leadership Scale (Tyree, 1998). The original MSL instrument consisted of 103 items across eight scales, with each measuring a value related to the social change model of leadership (HERI, 1996). The values include students’ capacities for (a) consciousness of self, (b) congruence, (c) commitment, (d) collaboration, (e) common purpose, (f) controversy with civility, (g) citizenship, and (h) change.

Through various revisions since its original development, the MSL scale (Dugan
& Associates, 2012; Dugan et al., 2009) has been reduced to 71 items using standard data reduction techniques as those described by DeVellis (2012). The original scales demonstrated reliability as measured by a Cronbach’s alpha of 0.87 for the initial two pilot tests and 0.91 during the final test. In subsequent versions of the MSL, reliability scale scores have ranged no further than 0.08 points from those of the pilot tests (Dugan, 2011).

The developer coded responses to the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009) in preparation for analysis. When only two response options existed, the codes consisted of 1 and 2. Likewise, when the selection choices increased in number, the codes ranged from 1 to the highest number of possible options. For those items with Likert-scale responses, the codes reflected the number of available options on the Likert scale. Coding enables statisticians to transform numerical responses in a consistent manner for entry into data-analysis software.

**Procedures**

**Design.** This quantitative survey study utilized a quasi-experimental comparative design to explore the central research question. The quasi-experimental design was appropriate, as the individuals contributing to the data set central to the study could not be randomly assigned to groups. Specifically, students enrolled in community colleges were not grouped with students enrolled in 4-year universities and vice versa. The comparative design was selected because the objective of the study was to analyze the differences in leadership development between students from community colleges and 4-year colleges. The dependent variable of the study was the aggregate score derived from the collective items comprising the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). The independent variable was type of college. A
comparative design was appropriate for this study because the data were gathered from constructed groups; the independent variables were not manipulated as in an experimental design (Krathwohl, 2004).

Collection and timeline. A preexisting data set, acquired from the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009), was used in conducting this study. The MSL, a survey of college students at multiple institutions across the United States, was administered in an electronic format in 2009 and 2012. Leaders of each participating institution selected a 3-week period for conducting the data collection. Students were selected at random and received electronic mailings with a description of the research and a link to the online scale. To complete the present study, the data were acquired from the MSL database once the researcher obtained approval from the Institutional Review Board of Nova Southeastern University and the institutional administrators in charge of the MSL database.

Data Analysis

Independent t tests were conducted to examine the differences between changes in mean MSL (Dugan & Associates, 2012; Dugan et al., 2009) scores between students from community colleges and 4-year colleges involving the variables reflecting leadership development. Multilevel statistical techniques were used to address individual and institutional effects. Covariance was then calculated in order to determine the relationships and interpretation among variables. In addition, the covariance was used to adjust the group differences that existed on the variables examined in the study. This collective approach ensured that the results were appropriately compared between the groups.

In addition, descriptive statistics were utilized to characterize the data.
Specifically, the means and standard deviations were computed for all variables. The mean statistic reflects the average performance of a group under review, while the standard deviation indicates the homogenous or heterogeneous nature of the scores (Creswell, 2014). All data analyses were conducted using SPSS Version 22 software, the most widely used statistical-analysis program within the social sciences. The program contains most statistical measures for data manipulation and has been in use for over three decades (Muijs, 2011).

Summary

This quantitative survey study was conducted to analyze the differences in leadership development between students from community colleges and 4-year colleges as measured by self-reported scores on the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). The unit of analysis consisted of a preexisting data set representing combined responses of 7,648 college students to the MSL scale collected during Years 2009 and 2012. Respondents were college students at multiple postsecondary institutions across the United States. Each respondent was enrolled in either a community college, which involves 2 years of instruction, or a 4-year college.

An adapted version of the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009), an instrument created to observe how postsecondary education influences the leadership development of college students, was central to this present study. The scale is designed to investigate college experiences and the influences of those experiences on leadership-related outcomes of students, such as (a) complex cognitive skills, (b) leadership efficacy, and (c) social perspective-taking (Dugan & Associates, 2012; Dugan et al., 2009). The MSL was developed on the basis of a core set of values adapted from the Socially Responsible Leadership Scale (Tyree, 1998). The values include students’
capacities for (a) consciousness of self, (b) congruence, (c) commitment, (d) collaboration, (e) common purpose, (f) controversy with civility, (g) citizenship, and (h) change (Tyree, 1998).

This study utilized a quasi-experimental comparative design to explore the central research question. The dependent variable of the study was the aggregate score derived from the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). The independent variable was type of college. A comparative design was appropriate for this study because the data were gathered from constructed groups; the independent variables were not manipulated as in an experimental design (Krathwohl, 2004).

Both inferential and descriptive statistics were calculated when analyzing the data. Independent t tests were conducted to examine the differences between changes in mean MSL (Dugan & Associates, 2012; Dugan et al., 2009) scores evident between students from community colleges and 4-year colleges. Multilevel statistical techniques were used to address individual and institutional effects. Covariance was then calculated in order to determine the relationships and interpretation among variables and to adjust the group differences that existed on the variables. Descriptive statistics, such as the means and standard deviations, were utilized to characterize the data. All data analyses were conducted using SPSS Version 22 software. Results from the collective analyses are presented in Chapter 4.
Chapter 4: Results

The purpose of this research study was to analyze the differences in leadership development between students from community colleges and 4-year colleges as measured by self-reported scores on the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). At the onset of the study, the researcher aimed to explore whether significant differences exist between community college and 4-year college student scores in terms of leadership development as measured through the MSL. The central research question that guided the study was as follows: Do significant differences exist between scores of students attending community colleges versus 4-year colleges on the MSL scale?

Descriptive Statistics

A total of 7,648 college students at multiple postsecondary institutions across the United States completed the MSL (Dugan & Associates, 2012; Dugan et al., 2009) in 2009 and then again in 2012. All respondents were enrolled at either community colleges, which involve 2 years of instruction, or 4-year colleges. The majority of respondents were full-time students, and 46.0% were females.

To determine ethnicity and race, respondents were asked to mark all selections that applied to them. Options on the MSL (Dugan & Associates, 2012; Dugan et al., 2009) were White/Caucasian, African American, Latino, Asian American, Middle Eastern, American Indian, Multiracial, and Others. Among these classifications, 59.7% of respondents identified themselves as White/Caucasian (see Table 1). Of the 7,648 respondents, 16.1% had earned a high school diploma or general educational development certificate. Approximately 13.7% had completed some college course work yet not graduated. The data reflect varying levels of college completion: (a) 18.6% held a baccalaureate degree, (b) 12.6% held a master’s degree, and (c) 8.3% held an associate’s
degree. The majority of respondents (72.7%) were full-time students.

In terms of income, 9.6% of respondents reported earning between $55,000 and $74,999 per year. Based upon respondents’ answers to the related question, this income group was the largest of all groups (see Table 2). These demographic characteristics are considered as independent variables for identified significant study variables.

Table 3 presents the descriptive statistics of study variables. The study variables included the measures of leadership development. The leadership development variables are (a) consciousness of self, (b) congruence, (c) commitment, (d) collaboration, (e) common purpose, (f) controversy with civility, (g) citizenship, and (h) change (HERI, 1996). Among the eight measures of leadership development, the highest score was observed for the variable of commitment ($M = 4.32, SD = 0.47$), while the lowest score was observed for the variable of change ($M = 3.79, SD = 0.48$).

Table 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consciousness of self</td>
<td>7,317</td>
<td>3.95</td>
<td>0.53</td>
<td>1.0</td>
<td>5</td>
</tr>
<tr>
<td>Congruence</td>
<td>7,317</td>
<td>4.15</td>
<td>0.51</td>
<td>1.0</td>
<td>5</td>
</tr>
<tr>
<td>Commitment</td>
<td>7,323</td>
<td>4.32</td>
<td>0.47</td>
<td>1.0</td>
<td>5</td>
</tr>
<tr>
<td>Collaboration</td>
<td>7,316</td>
<td>4.06</td>
<td>0.48</td>
<td>1.0</td>
<td>5</td>
</tr>
<tr>
<td>Common purpose</td>
<td>7,314</td>
<td>4.03</td>
<td>0.48</td>
<td>1.0</td>
<td>5</td>
</tr>
<tr>
<td>Controversy with civility</td>
<td>7,319</td>
<td>3.85</td>
<td>0.47</td>
<td>1.0</td>
<td>5</td>
</tr>
<tr>
<td>Citizenship</td>
<td>7,310</td>
<td>3.81</td>
<td>0.58</td>
<td>1.0</td>
<td>5</td>
</tr>
<tr>
<td>Change</td>
<td>5,653</td>
<td>3.79</td>
<td>0.48</td>
<td>1.7</td>
<td>5</td>
</tr>
</tbody>
</table>

Note. $N = 7,648$. Data represent analyzed responses to the MSL (Dugan & Associates, 2012; Dugan et al., 2009).

Results of the Data Analyses

Independent $t$ tests were performed to examine the differences between changes in mean MSL (Dugan & Associates, 2012; Dugan et al., 2009) scores between students from community colleges and 4-year colleges involving the variables reflecting leadership development. According to the descriptive statistics, respondents from
community colleges, as opposed to those from 4-year colleges, had significantly higher scores for change, consciousness of self, and controversy with civility. Conversely, respondents from 4-year colleges had higher citizenship scores than those from community colleges (see Table 4).

Table 4

*Descriptive Statistics of Study Variables Based on the Type of College*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Community college</th>
<th>4-Year college</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>SE mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consciousness of self</td>
<td></td>
<td></td>
<td>3,745</td>
<td>3.98</td>
<td>0.56</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,572</td>
<td>3.93</td>
<td>0.49</td>
<td>0.01</td>
</tr>
<tr>
<td>Congruence</td>
<td></td>
<td></td>
<td>3,741</td>
<td>4.14</td>
<td>0.55</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,572</td>
<td>4.16</td>
<td>0.47</td>
<td>0.01</td>
</tr>
<tr>
<td>Commitment</td>
<td></td>
<td></td>
<td>3,751</td>
<td>4.32</td>
<td>0.51</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,572</td>
<td>4.31</td>
<td>0.44</td>
<td>0.01</td>
</tr>
<tr>
<td>Collaboration</td>
<td></td>
<td></td>
<td>3,744</td>
<td>4.07</td>
<td>0.53</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,572</td>
<td>4.05</td>
<td>0.43</td>
<td>0.01</td>
</tr>
<tr>
<td>Common purpose</td>
<td></td>
<td></td>
<td>3,742</td>
<td>4.03</td>
<td>0.52</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,572</td>
<td>4.02</td>
<td>0.42</td>
<td>0.01</td>
</tr>
<tr>
<td>Controversy with civility</td>
<td></td>
<td></td>
<td>3,747</td>
<td>3.93</td>
<td>0.52</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,572</td>
<td>3.77</td>
<td>0.40</td>
<td>0.01</td>
</tr>
<tr>
<td>Citizenship</td>
<td></td>
<td></td>
<td>3,738</td>
<td>3.78</td>
<td>0.62</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,572</td>
<td>3.85</td>
<td>0.53</td>
<td>0.01</td>
</tr>
<tr>
<td>Change</td>
<td></td>
<td></td>
<td>2,081</td>
<td>3.83</td>
<td>0.50</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,572</td>
<td>3.76</td>
<td>0.47</td>
<td>0.01</td>
</tr>
</tbody>
</table>

*Note. N = 7,648. Data represent analyzed responses to the MSL (Dugan & Associates, 2012; Dugan et al., 2009).*

As observed in Table 5, there were significant differences in the variables of change, citizenship, consciousness of self, and controversy with civility. To further analyze the data, ANOVA tests were conducted to assess whether demographic
characteristics differentiated the significant study variables. Table 6 presents the ANOVA test results based on type of college. As reflected in the analysis, enrollment status significantly differentiated the variables of change, citizenship, consciousness of self, and controversy with civility ($p < 0.05$).

Table 5

*Independent Samples t Test of Study Variables Based on the Type of College*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Levene’s test for equality of variances</th>
<th>$t$ Test for equality of means</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$F$</td>
<td>Sig.</td>
<td>$t$</td>
</tr>
<tr>
<td>Consciousness of self</td>
<td>36.14</td>
<td>0.000</td>
<td>4.23</td>
</tr>
<tr>
<td>Congruence</td>
<td>88.77</td>
<td>0.000</td>
<td>1.26</td>
</tr>
<tr>
<td>Commitment</td>
<td>82.49</td>
<td>0.000</td>
<td>1.43</td>
</tr>
<tr>
<td>Collaboration</td>
<td>112.00</td>
<td>0.000</td>
<td>1.65</td>
</tr>
<tr>
<td>Common purpose</td>
<td>128.17</td>
<td>0.000</td>
<td>1.53</td>
</tr>
<tr>
<td>Controversy with civility</td>
<td>192.22</td>
<td>0.000</td>
<td>1.16</td>
</tr>
<tr>
<td>Citizenship</td>
<td>83.63</td>
<td>0.000</td>
<td>4.98</td>
</tr>
<tr>
<td>Change</td>
<td>13.48</td>
<td>0.000</td>
<td>5.07</td>
</tr>
</tbody>
</table>

Note. $N = 7,648$. Data represent analyzed responses to the MSL (Dugan & Associates, 2012; Dugan et al., 2009).

Table 6

*Analysis of Variance: Significant Study Variables and Enrollment Status*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of squares</th>
<th>$df$</th>
<th>$MS$</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consciousness of self</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>11.392</td>
<td>3</td>
<td>3.797</td>
<td>13.532</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>2005.251</td>
<td>7146</td>
<td>0.281</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2016.643</td>
<td>7149</td>
<td>0.281</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controversy with civility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>43.039</td>
<td>3</td>
<td>14.346</td>
<td>64.673</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>1585.633</td>
<td>7148</td>
<td>0.222</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1628.672</td>
<td>7151</td>
<td>0.222</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizenship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>2.715</td>
<td>3</td>
<td>0.905</td>
<td>2.614</td>
<td>0.049</td>
</tr>
<tr>
<td>Within groups</td>
<td>2472.027</td>
<td>7139</td>
<td>0.346</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2474.742</td>
<td>7142</td>
<td>0.346</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>11.124</td>
<td>2</td>
<td>5.562</td>
<td>23.863</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>1277.979</td>
<td>5483</td>
<td>0.233</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1289.104</td>
<td>5485</td>
<td>0.233</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. $N = 7,648$. Data represent analyzed responses to the MSL (Dugan & Associates, 2012; Dugan et al., 2009).
Table 7 presents the ANOVA test results based on gender. Results of the analysis indicated that gender significantly differentiates the variables of controversy with civility and citizenship \((p < .05)\). Table 8 presents the ANOVA test results based on income. Based on the analysis, income significantly differentiates the variables of change, citizenship, consciousness of self, and controversy with civility \((p < .05)\).

Table 7

*Analysis of Variance: Significant Study Variables and Gender*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of squares</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consciousness of self</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>0.359</td>
<td>3</td>
<td>0.120</td>
<td>0.390</td>
<td>0.760</td>
</tr>
<tr>
<td>Within groups</td>
<td>1881.415</td>
<td>6135</td>
<td>0.307</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1881.774</td>
<td>6138</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Controversy with civility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>8.255</td>
<td>3</td>
<td>2.752</td>
<td>11.225</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>1503.696</td>
<td>6134</td>
<td>0.245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1511.951</td>
<td>6137</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citizenship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>4.716</td>
<td>3</td>
<td>1.572</td>
<td>4.006</td>
<td>0.007</td>
</tr>
<tr>
<td>Within groups</td>
<td>2404.960</td>
<td>6129</td>
<td>0.392</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2409.676</td>
<td>6132</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>1.320</td>
<td>2</td>
<td>0.660</td>
<td>2.474</td>
<td>0.084</td>
</tr>
<tr>
<td>Within groups</td>
<td>1199.193</td>
<td>4495</td>
<td>0.267</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1200.513</td>
<td>4497</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. \(N = 7,648\). Data represent analyzed responses to the MSL (Dugan & Associates, 2012; Dugan et al., 2009).

**Chapter Summary**

To conduct this study, the researcher employed archival data to gather responses from a wide range of respondents. The MSL scale (Dugan & Associates, 2012; Dugan et al., 2009) was used to measure the leadership development of respondents. Through this study, the researcher sought to observe whether significant differences exist, in terms of leadership development scores, between 4-year colleges and students attending community colleges as measured through the MSL scale. Based on the analyses, the type
of community college differentiates the variables of change, citizenship, consciousness of self, and controversy with civility.

Table 8

*Analysis of Variance: Significant Study Variables and Income*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of squares</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consciousness of self</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>12.610</td>
<td>11</td>
<td>1.146</td>
<td>3.756</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>1866.056</td>
<td>6114</td>
<td>0.305</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1878.666</td>
<td>6125</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Controversy with civility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>14.938</td>
<td>11</td>
<td>1.358</td>
<td>5.558</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>1493.521</td>
<td>6113</td>
<td>0.244</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1508.459</td>
<td>6124</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Citizenship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>25.751</td>
<td>11</td>
<td>2.341</td>
<td>5.997</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>2384.242</td>
<td>6108</td>
<td>0.390</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2409.993</td>
<td>6119</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Change</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>6.122</td>
<td>10</td>
<td>0.612</td>
<td>2.307</td>
<td>0.011</td>
</tr>
<tr>
<td>Within groups</td>
<td>1187.520</td>
<td>4475</td>
<td>0.265</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1193.642</td>
<td>4485</td>
<td></td>
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</tr>
</tbody>
</table>

*Note. N = 7,648. Data represent analyzed responses to the MSL (Dugan & Associates, 2012; Dugan et al., 2009).*

Further analyses were conducted to assess whether demographic characteristics were significant in differentiating the study variables. Based on the results of the analyses, enrollment status significantly differentiated the variables of change, citizenship, consciousness of self, and controversy with civility. Gender significantly differentiated the variables of controversy with civility and citizenship; income significantly differentiated the variables of change, citizenship, consciousness of self, and controversy with civility. The researcher selected a .05 significance level for all analyses.
Chapter 5: Discussion

The purpose of conducting this quantitative research design was to analyze the differences in leadership development between students from community colleges and 4-year colleges as measured by self-reported scores on the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009). The study utilized a preexisting data set. The data were collected from college students at multiple institutions across the United States. The MSL was administered online in 2009 and again in 2012.

Responses of a total of 7,648 college students were considered in the study, and approximately 7,300 completely responded to the MSL. Respondents were enrolled at either a community college or a 4-year college. Both descriptive and inferential statistics were used to answer the central research question that guided the study: Do significant differences exist between scores of students attending community colleges versus 4-year colleges on the MSL scale?

This concluding chapter includes a summary and discussion of the findings, as well as a discussion of the study’s conclusions and clinical implications. The researcher also discusses the study’s limitations and makes recommendations for future studies. The final component of the chapter is a summary of the discussed points.

Summary of Findings

The demographic characteristics of respondents were provided in Chapter 3 and reviewed in Chapter 4. Six characteristics were considered in this study: (a) type of school, (b) enrollment status, (c) gender, (d) race, (e) highest educational attainment, and (f) total income. There were more respondents attending community colleges, \( n = 4,073 \) (53.3%), as compared to 4-year colleges, \( n = 3,575 \) (46.7%). For enrollment status, the majority of the 7,648 respondents were full-time students, \( n = 5560 \) (72.7%). In terms of
gender, 46% were females and 34.3% were males; the remaining respondents did not report gender.

In regard to race, respondents were asked to mark all applicable categories; options were White/Caucasian, African American, Latino, Asian American, Middle Eastern, American Indian, Multiracial, and Others. Among these classifications, most of the respondents were identified to be White/Caucasian (n = 4,567, 59.7%). Of all respondents, 16.1% had earned a high school diploma or general educational development certificate. Approximately 13.7% had completed some college course work yet not graduated. The data reflect varying levels of college completion: (a) 18.6% held a baccalaureate degree, (b) 12.6% held a master’s degree, and (c) 8.3% held an associate’s degree. The majority of respondents (72.7%) were full-time students. In terms of income, 9.6% of respondents reported earning between $55,000 and $74,999 per year.

Leadership development includes eight variables involving students’ capacities for (a) consciousness of self, (b) congruence, (c) commitment, (d) collaboration, (e) common purpose, (f) controversy with civility, (g) citizenship, and (h) change (HERI, 1996). Among the eight measures of leadership development, the highest score was observed for the variable of commitment (M = 4.32, SD = 0.47), while the lowest score was observed for the variable of change (M = 3.79, SD = 0.48).

Based on independent t tests, there were significant differences in the variables of change, citizenship, consciousness of self, and controversy with civility. According to the descriptive statistics, respondents from community colleges, as opposed to respondents from 4-year colleges, had significantly higher scores for the variables of change, consciousness of self, and controversy with civility. Conversely, respondents from 4-year colleges had higher citizenship scores in comparison to respondents from community
colleges.

The researcher additionally conducted ANOVA tests to assess whether demographic characteristics differentiated the study variables. Initially, it was found that enrollment status significantly differentiated the variables of change, citizenship, consciousness of self, and controversy with civility ($p < 0.05$). Moreover, gender significantly differentiated the variables of controversy with civility and citizenship ($p < 0.05$). Furthermore, income significantly differentiated the variables of change, citizenship, consciousness of self, and controversy with civility ($p < 0.05$).

**Discussion of Findings**

Significant differences were found between scores of students attending community colleges and 4-year colleges on the variables of change, citizenship, consciousness of self, and controversy with civility. The data reflected that respondents from community colleges, as opposed to those from 4-year colleges, had significantly higher scores for the variables of change, consciousness of self, and controversy with civility. Respondents from 4-year colleges, however, had higher citizenship scores.

Based on the social leadership model, the leadership development variables of consciousness of self, together with controversy with civility, operate on individual levels of leadership development (HERI, 1996). The levels and corresponding values include the individual, group, and society (HERI, 1996). Change is measured through the interaction of seven core values functioning at three levels (HERI, 1996). Based on these levels, it can be concluded that leadership development among 4-year college students was more informed by values functioning on the societal level; by contrast, students attending community colleges scored significantly higher on values that function at the individual and group levels.
In addition, the significant difference between students attending community colleges and 4-year colleges on the study variable of consciousness of self is related to the study conducted by Facca and Allen (2011). According to Facca and Allen, one characteristic of an emotionally intelligent leader is consciousness of the self. While the emotionally intelligent leadership model is not directly related to leadership development as defined in the MSL scale (Dugan & Associates, 2012; Dugan et al., 2009), the model is one of the principles utilized in a college-leadership framework. Alternatively, Dugan and Komives (2010) argued that consciousness and change do not have a positive and influential role on leadership development among college students.

It was also found that enrollment status significantly differentiated the leadership development variables of change, citizenship, consciousness of self, and controversy with civility. This finding can be explained by the study of Orozco and Cauthen (2009). According to Orozco and Cauthen, community colleges, in comparison to 4-year colleges, are restricted with regard to avenues for leadership development because of a lack of facilities. In the present study, it was also found that gender significantly differentiated leadership development variables, controversy with civility, and citizenship. Dugan (2011) also found gender differences in leadership capacity and additionally concluded that women, because they are more relational than men, have an advantage in the realm of leadership. Women also emphasize the importance of collaboration (Dugan, 2011).

**Conclusions**

The aim of this research study was to analyze the differences in leadership development between students from community colleges and 4-year colleges as measured by self-reported scores on the MSL scale (Dugan & Associates, 2012; Dugan et al.,
2009). The study utilized a preexisting data set gathered from the MSL, a survey of college students at multiple institutions across the United States. The MSL was administered online in 2009 and 2012.

Results revealed significant differences between students attending community colleges and 4-year college students with regard to several values of leadership development: (a) change, (b) citizenship, (c) consciousness of self, and (d) controversy with civility. Based on results, it can be concluded that students attending community colleges, when compared to students from 4-year colleges, have significantly higher scores for change, consciousness of self, and controversy with civility. In comparison, 4-year college students have higher citizenship scores. Other factors, such as enrollment status, gender, and income, significantly differentiate the variables of leadership development.

**Implications**

The results of the current study are beneficial to leaders of both community colleges and 4-year colleges. Findings revealed significant differences among the leadership development variables between students of community colleges and 4-year colleges. As such, the results could be a point of reflection for the school leaders regarding whether they are producing the kind of leaders they want to produce. With the results of the study, school leaders and officials can reassess the existing program and further develop a program that focuses on enhancing all of the leadership development variables measured by the MSL (Dugan & Associates, 2012; Dugan et al., 2009): (a) consciousness of self, (b) congruence, (c) commitment, (d) collaboration, (e) common purpose, (f) controversy with civility, (g) citizenship, and (h) change.

Moreover, the results of the study are relevant to students at community colleges
and 4-year colleges. Findings reflect the discrepancy between community colleges and 4-year colleges. As reflected, students of community colleges scored higher on the individual and group level of leadership development. On the other hand, students of 4-year colleges scored higher on citizenship, a variable that is included in the societal level of leadership development. Thus, it is evident that 4-year colleges produce leaders who are prepared for a larger scale of leadership. Students from community colleges may use the results of this study as evidence to improve the leadership program provided by their schools. Finally, the results may also be used by researchers of leadership development for both community colleges and 4-year colleges by further examining promising factors affecting leadership development such as enrollment status, income, and gender.

**Limitations**

There were several limitations in the current study. The first limitation was the research instrument. The MSL is a self-report scale (Dugan & Associates, 2012; Dugan et al., 2009). As such, there is a higher risk of bias in how the students might choose to respond (Creswell, 2014). The composition of the study population was the second limitation; because participation in the MSL study was voluntary, the sample respondents were not equally segregated. The researcher addressed this concern by including only the responses of the students who completed the survey. Another limitation was that a larger number of students attending community colleges, in comparison to the number of students of 4-year colleges, participated in the MSL. The fourth limitation of the study was the use of archival data acquired by administering the MSL at multiple institutions across the United States in 2009 and 2012. This limitation was addressed by ensuring that the archival data would adequately answer the central research question guiding the study.
Recommendations

Several ways exist to improve the current research study. Initially, the researcher recommends using primary data and not archival data. While archival data are reliable, using such data creates risk in regard to the representativeness of the data. The researcher also recommends using alternative instruments to measure the leadership qualities of students from community colleges and 4-year colleges. It is also recommended by the researcher to utilize a different research methodology to draw more concrete conclusions on the differences between students from the two institutional levels in terms of leadership development. One recommendation would be to perform a study using a qualitative method to complement the findings of the current quantitative study. Instead of using survey reports, future researchers may conduct interviews to substantiate the quantitative findings of the current study.

Concluding Summary

This concluding chapter initially provided a summary of findings derived from the current study. Accordingly, the alignment of the findings with the existing literature is discussed in the earlier part of this chapter. Through the data analysis, it was found that there are significant differences between students at community colleges and 4-year colleges with regard to several values of leadership development: change, citizenship, consciousness of self, and controversy with civility. It was additionally found that other factors, such as enrollment status, gender, and income, differentiate students of community colleges and 4-year colleges.

The results were discussed in one section, which was followed by a discussion indicating the conclusions generated in this study. Implications of the current study were also presented. The researcher additionally identified the limitations of the current study.
in this chapter as well as recommendations for future studies. This final chapter of the applied dissertation study then was concluded with a summary.
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