An Examination of Efficacy and Resilience in College Students: Influences on Socially Responsible Leadership

Paula Berry Atkins
AN EXAMINATION OF EFFICACY AND RESILIENCE
IN COLLEGE STUDENTS: INFLUENCES ON
SOCIALLY RESPONSIBLE LEADERSHIP

by

Paula Berry Atkins, BA, SSP, MSCP

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We hereby recommend that the dissertation prepared by

Paula Berry Atkins

Entitled An Examination of Efficacy and Resilience in College Students: Influences on Socially Responsible Leadership

be accepted in partial fulfillment of the requirements for the degree of

Doctor of Education, Education Leadership Concentration

Dr. Richard Shrubb, Supervisor of Dissertation Research

Dr. Dustin Hebert,
Head of Curriculum, Instruction, and Leadership

Members of the Doctoral Committee:
Dr. Bryan McCoy
Dr. Donna Johnson

Approved:

Don Schillinger
Dean of Education

Ramu Ramachandran
Dean of the Graduate School

GS Form 13a
(01/19)
ABSTRACT

My study explored socially responsible leadership and its relationship to leader efficacy and resilience in college students. The investigation also examined the role of gender and race in these relationships. The study employed the Multi-Institutional Study of Leadership (MSL), which assesses student and educational outcomes relevant to the values underlying the Social Change Model of Student Leadership. The MSL utilizes the Socially Responsible Leadership Scale (Tyree, 1998) as a foundation but also includes measures of leader efficacy and resilience. Utilizing archival data from the 2015 administration of the MSL, my sample (N=840) included equal numbers of males and females equally distributed across seven broad racial groups. The results of the analysis revealed positive relationships between socially responsible leadership capacity, leader efficacy, and resilience. Differences in socially responsible leadership capacity exists between racial groups, but not between genders. Neither gender nor race modified the relationships between leader efficacy, resilience, and socially responsible leadership capacity.
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DEDICATION

“No one can make you feel inferior without your consent.”
~Eleanor Roosevelt

“She stood in the storm, and when the wind did not blow her way, she adjusted her sails.”
~Elizabeth Edwards
TABLE OF CONTENTS

ABSTRACT ........................................................................................................................................ iii
DEDICATION ........................................................................................................................................ v
LIST OF TABLES ................................................................................................................................. ix
LIST OF FIGURES ............................................................................................................................ x
ACKNOWLEDGMENTS ........................................................................................................................ xi
CHAPTER 1 INTRODUCTION ............................................................................................................... 1
  Background of the Problem .............................................................................................................. 2
  Assumptions, Limitations, Delimitations ......................................................................................... 6
  Statement of the Research Problem ................................................................................................. 7
  Significance of the Study ................................................................................................................ 8
  Presentation of Methods and Research Questions ........................................................................ 9
  Definition of Key Concepts ........................................................................................................... 11
CHAPTER 2 LITERATURE REVIEW .................................................................................................. 12
  Theoretical Framework .................................................................................................................. 13
  Social Responsibility and Leadership ............................................................................................ 20
  Socially Responsible Leadership in College Students ................................................................... 22
  Role of Efficacy .............................................................................................................................. 24
  Leadership Efficacy in College Students ....................................................................................... 27
  Gender and Racial Influences ....................................................................................................... 31
CHAPTER 5 DISCUSSION..................................................................................73
  Practical Implications..................................................................................70
  Implications for Future Research.................................................................80
REFERENCES ..................................................................................................82
APPENDIX A HUMAN USE APPROVAL LETTER ............................................100
LIST OF TABLES

Table 1  Social Change Model Values .................................................................16

Table 2  Demographics of Sample .................................................................50

Table 3  Descriptives and Coding for Model Variables .................................62

Table 4  Summary of Correlations Between Socially Responsible Leadership, Leadership Efficacy, and Resilience .......................................................64

Table 5  Summary of Means and Confidence Intervals for Gender and Race ........65

Table 6  Summary of Univariate Analysis of Variance ....................................66

Table 7  Summary of Comparisons Between Racial Groups on Socially Responsible Leadership .................................................................67

Table 8  Summary of Moderated Regression Analyses ...................................68

Table 9  Summary of Hierarchical Regression Analysis ..................................70
LIST OF FIGURES

Figure 1  Social Change Model of Leadership ................................................................. 19
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Tha goal, Agam ort!
CHAPTER 1

INTRODUCTION

In recent years, corporate misconduct by executives placing profits over public welfare increased in the public’s attention. Reports range from a food manufacturer who knowingly permitted the distribution of contaminated peanuts products (Clinton, 2017), to a drug manufacturer’s dishonesty about the addiction potential of pain medications (Johnson, 2019). Further, political leaders and others in positions of power have engaged in reckless communications, resulting in increased incivility and divisiveness in the public sector (Bandura, 1995; Brown, 2018). On a more global scale, the Network of Global Agenda Council’s annual report expressed concern over multiple global challenges, such as climate change, water crises, data fraud, and income/gender inequalities, and called for more significant collective action to address these complex and interconnected global challenges (World Economic Forum, 2019). The National Task Force on Civic Learning and Democratic Engagement issued a parallel assertion by acknowledging the necessity of developing college students as “informed, engaged, open-minded, and socially responsible people committed to the common good” (A Crucible Moment, 2012, p. 13). My increased awareness of the disintegration of ethical decision making, uncivil discourse, and global challenges encouraged me to explore how college students, those most likely to assume leadership roles or otherwise serve as change agents in the coming years, can be equipped with the skills and instilled with the desire to be
socially responsible and civically engaged. This introductory chapter reviews the background, formulates a problem statement, and establishes the significance of the research. I also present the research questions and related hypotheses and, briefly describe the research methodology utilized to explore the questions.

**Background of the Problem**

As society and our global environment experience rapid and significant change, leadership will need to adapt to meet the resulting challenges and innovations (Dugan, 2017; Fullan, 2001; Optlka, 2017). For example, advances in technology, conflicting demands of multiple stakeholders, and the interconnectedness of our global society require a keen understanding of the change process, working together, and accepting differing perspectives (Dugan, 2017; Fullan, 2001; Optlka, 2017). Modern theories of leadership reflect these concepts, as evidenced in their relational, principle-centered, authentic, and collaborative approaches (Dugan, 2017; Komives, Lucas, & McMahon, 2007; Northhouse, 2007; Rost, 1991). In addition to a rapidly changing society, recent years have seen economic and moral challenges within the global context. These challenges contribute to a lack of confidence in national and global leadership to make progress on issues of societal concern (Cone Communications CSR Report, 2017). In response, organizational researchers urge a reconsideration of leadership and the role of a leader (Voegtlin, Patzer & Scherer, 2012; Witt & Stahl, 2015; World Economic Forum, 2019). With these challenges on multiple fronts, there is a vital need to reexamine college student leadership development from within the framework of prosocial interests.

I am interested in socially responsible leadership as defined by the Social Change Model of Student Leadership (SCM), primarily for its focus on positive social change.
However, several other reasons point to its utility in addressing the current leadership challenges and the leadership development of college students. According to the National Center for Educational Statistics (National Center for Educational Statistics, 2017, Table 306.10), 29% of college students identify with a racial or ethnic group other than White/Caucasian, representing a 45% increase since 2000. Indeed, these students are not only the most racially diverse but also the most socially diverse as defined by the integration of differing ethnicities and blended genders within their social contacts (Magid, 2014). In addition to holding an inclusive attitude, this generation of students reflects an affinity to engage in issues of social justice (Cone Communications CSR Report, 2017; Seemiller & Grace, 2016; Seemiller & Grace, 2017). Socially responsible leadership provides an inclusive model that values the diverse perspectives reflected in the current college student population and needed for resolving complex, societal issues.

Further, the model acknowledges that not all individuals want to rise to a position of power, but have the desire to influence others and commit to social change (Dugan, 2017; Haber-Curran & Sulpizio, 2017; HERI, 1996). Finally, facilitating and initiating change requires confidence and perseverance; that is, enacting change demands taking risks and persisting through challenges. These skills require levels of coping our current students appear to lack (CCMH, 2018; Coiro, Bettis, & Compas, 2017; Galante, Dufour, Vainre, Wagner, Stochl, Benton, Lathia, Howarth, & Jones, 2018; Maykrantz & Houghton, 2018). However, emerging leadership literature investigates concepts which reflect these skills, such as efficacy and resilience (Haber-Curran, Miguel, Shankman & Allen, 2018; Hannah, Avolio, Luthans, & Harms, 2008; Machida & Schaubroeck, 2011; McCormick, 2001; Robbins, Kaye & Catling, 2018).
The literature on college student leadership suggests that both efficacy and resilience may be related to the development of socially responsible leadership; although the associations are not clear. For example, early studies into leadership development suggest perceived leadership efficacy positively relates to leadership behavior (Chan & Drasgow, 2001; Dugan & Komives, 2010; McCormick, Tanguma, & Lopez-Forment, 2002). However, authors assert these relationships are complex and influenced by multiple factors (Machida & Schaubroeck 2011; Machida-Kosuga 2017; Murphy & Johnson, 2016; Quigley, 2013). They distinguish between different types of efficacy, such as efficacy about learning, during learning, and performance. These authors further describe contextual and individual differences that influence efficacy development.

According to Ledesma (2014), studies examine resilient leaders in various fields, such as medicine, nursing, management, and education. Additionally, Cassidy (2015), Hartley (2012), Pidgeon, Rowe, Stapleton, Magyar, and Lo (2014) and Strayhorn (2014) studied resilience in college students and its relationship to student outcomes. These studies show positive relationships between resilience, academic persistence, and well-being. However, I found no studies with emphasis on the influence of resilience on leadership development in college students. The concept of resilience is especially relevant given the perceived lack of emotional coping in college students (CCMH, 2018; Coiro et al., 2017; Galante et al., 2018; Maykrantz & Houghton, 2018). In addition to a need for improving coping, college students may benefit from resilience as it relates to the commitment of the current generation of students to social change beyond immediate solutions. According to Seemiller and Grace (2017), students are interested in understanding the underlying problems and persisting toward sustainable change. Even if
not in a traditional leadership role, students must learn to cope with challenges and persist when confronting difficulties to enact change. Because of the attitudes of current college students, the perceived benefit of meeting current leadership challenges with a prosocial view, and the relationship between efficacy and resilience, there is a need to gain a greater understanding of the nature of these relationships.

The literature also indicates that gender and race may influence leader development (Arminio, Carter, Jones, Kruger, Lucas, Washington, Young, & Scott, 2000; Diaz, 2018; Eagly & Chin, 2010; Garcia, Huerta, Ramirez, & Patron, 2017; Haber, 2011; Haber, 2012; Haber-Curran & Sulpizio, 2017; McKenzie, 2018); however, the evidence is equivocal. Early studies described the differences between men’s and women’s approaches to leadership, with men characterized as hierarchical and directive and women as more democratic and collaborative (Arminio et al., 2000; Eagly & Chin, 2010; Haber, 2011; McKenzie, 2018; Wisner, 2011). Beyond acknowledging differences in leadership behaviors between men and women and among racial groups, these studies also reflect the degree to which socialization, culture and social identity influence one’s understanding of and approach to leadership (Arminio et al., 2000; Clauss-Ehlers, Yang, & Chen, 2006; Diaz, 2018; Eagly & Chin, 2010; Eklund, Barry, & Grunberg, 2017; Garcia et al., 2017). In an extensive review of major leadership theories, Ayman and Korabik (2010) demonstrate how leadership can vary according to gender and culture; these concepts moderate the leadership outcomes. As college campuses and student circles of influence become increasingly diverse, there is a need to further investigate the influence of gender and race in leadership development with specific regard to efficacy and resilience (Magid, 2014; NCES, 2017).
My investigation attempted to address these issues by examining the role of efficacy and resilience in leader development, specifically concerning socially responsible leadership capacity. Additionally, I examined the moderating effects of gender and race upon these relationships. The findings are discussed within the context of their contribution to socially responsible leadership development within the post-secondary educational environment.

**Assumptions, Limitations, Delimitations**

Several assumptions, limitations, and delimitations clarified the scope of this study. In approaching this study about college student leadership, I made several assumptions.

- All students have the capacity for leadership but may not develop or express these skills in the same manner.
- Leadership skills are teachable, incorporating attitudes, personality traits, and behaviors.
- Positive change for the well-being of individuals and society is the purpose of socially responsible leadership.
- Student experiences during the college years are instrumental in developing leadership capacity.
- Leadership development is an integral component of student development, and colleges and universities have a responsibility to develop the leadership capacity of all college students intentionally.

Additionally, several external and uncontrollable factors limit the study.
• The use of simple race classifications limits the interpretations of this study. Not disaggregating by racial subgroups may overgeneralize the findings.

• All measures utilized were self-report and subject to response bias.

• The correlational research design does not allow for a determination of causality and, therefore, limits the interpretation of the findings.

• The use of a disproportionate stratified sampling technique potentially inflates findings related to race and, therefore, limits the interpretation of the findings.

Finally, I intentionally delimited the scope of the study in several ways.

• I used binary gender categories.

• I used broad racial groups.

• I focused only on college students.

**Statement of the Research Problem**

Historically, colleges have attended leadership development as part of their mission to prepare college students for active and responsible civic engagement (Astin & Astin, 2000; CAS Professional Standards, 2015; Komives, 2013). However, the current environment characterized by corporate misconduct, uncivil discourse, and failures to effectively address global issues has resulted in a lack of confidence in leadership and a call to reconsider leadership’s role in social change (Voegtlin et al., 2012; Witt & Stahl, 2015; World Economic Forum, 2019). Developing efficacy and resilience may be essential to building a leader capacity for social responsibility and preparing students for barriers encountered with civic engagement and social change. However, there is limited empirical research into non-traditional leadership skills in college students. The purpose
of this study is to explore socially responsible leadership and two characteristics, efficacy and resilience. I believe these characteristics enhance socially responsible leadership and are required to confront the complex ethical dilemmas and global challenges facing leaders of today and the future.

Significance of the Study

Given the interconnected and turbulent global environment, focus on the singular needs of the organization or self-interests is no longer sustainable and global thought leaders have called for an acceleration of the movement toward responsible leadership (Voegtlin et al., 2012; Witt & Stahl, 2015; World Economic Forum, 2019). Colleges and universities are in a unique position to prepare future leaders with the skills and desire necessary to persevere in the current environment and become socially responsible and civically engaged (A Crucible Moment, 2012; Astin & Astin, 2000; Komives, 2013; CAS Professional Standards, 2015). My study explored the capacity for socially responsible leadership, specifically regarding the influences of efficacy, resilience, gender, and race. While the literature addresses efficacy and leader development, less is known about the influences of resilience on leader development. This research fills the gap in the literature on the influences of resilience in socially responsible leadership development and extends the investigation into these constructs to inform student-leader development practices within the college setting. This topic is vital to post-secondary institutions and relevant to policymakers in higher education because we must prepare students for active and responsible civic engagement. While this mission is frequently cited as integral to colleges and universities (Astin & Astin, 2000; Komives, 2013; CAS Professional Standards, 2015), it is becoming increasingly important as global environments become
more interconnected, as civic discourse becomes more polarized, and confidence in
global leadership declines (A Crucible Moment, 2012; Cone Communication CSR
Report, 2017; Shahid, 2015). Further, efficacy and resilience skills are known to be
teachable and should be incorporated not only within leadership development programs
but also infused into academic programs and campus culture.

**Presentation of Methods and Research Questions**

This non-experimental, quantitative study explored the concepts of leader efficacy
and resilience and their relationship to socially responsible leadership in college students.
Additionally, the study explored the role of gender and race in these relationships. The
study utilized the Multi-Institutional Study of Leadership (MSL), an extensive data set
designed to explore leadership development within the context of the higher education
environment, to investigate these constructs. The MSL instrument uses a modified
version of the Socially Responsible Leadership Scale (SRLS; Tyree, 1998) as its
foundation. However, it also incorporates other measures of variables of interest, such as
leader efficacy and resilience. The most recent administration (2015) yielded data on
approximately 96,000 students from 94 different institutions. I utilized a stratified
sampling technique to result in a final sample (N=840) with equal numbers of
participants across genders and seven broad racial groups: (a) White/Caucasian, (b)
Middle Eastern/North African, (c) African American/Black, (d) American Indian/Alaska
Native, (e) Asian American, (f) Native Hawaiian/Pacific Islander, and (g)
Latino/Hispanic.

There were five variables in this investigation, with each participant contributing
data to each variable. The outcome variable was the capacity for socially responsible
leadership, as measured by the SRLS. The primary independent variables included a self-reported level of leadership efficacy, as measured by the Leader Efficacy Scale (LES) and a self-reported level of resilience, as measured by the Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003). We treat gender and race as moderator variables and explore four research questions and related hypotheses:

- **Research Question 1**: Is there a significant and positive relationship between leader efficacy and socially responsible leadership?

  - **Hypothesis 1**: There is no relationship between leadership efficacy and socially responsible leadership.

- **Research Question 2**: Is there a significant and positive relationship between resilience and socially responsible leadership?

  - **Hypothesis 2**: There is no relationship between resilience and socially responsible leadership.

- **Research Question 3**: Does socially responsible leadership differ by gender or broad racial group?

  - **Hypothesis 3**: There are no differences in socially responsible leadership by gender.

  - **Hypothesis 4**: There are no differences in socially responsible leadership by the broad racial group?

- **Research Question 4**: Does gender or race modify the relationships between leader efficacy, resilience, and socially responsible leadership capacity?

  - **Hypothesis 5**: Gender does not influence the relationship between leader efficacy and socially responsible leadership.
• **Hypothesis 6**: Gender does not influence the relationship between resilience and socially responsible leadership.

• **Hypothesis 7**: Race does not influence the relationship between leader efficacy and socially responsible leadership.

• **Hypothesis 8**: Race does not influence the relationship between resilience and socially responsible leadership.

**Definitions of Key Concepts**

*Socially Responsible Leadership*: Initially developed by Tyree (1998) to describe the process of leadership advocated by the Social Change Model at the time, she developed the Socially Responsible Leadership Scale (SRLS).

*Resilience*: The ability to move through or grow in the face of challenges or barriers; it is associated with leadership development in that resilience addresses the tough challenges and critical decisions individuals face in a diverse and continuously changing global environment.

*Efficacy*: Individuals’ beliefs in their ability to succeed in a specific task; it is related to leadership development in that it considers influences such as behaviors, environment, cognition, and affective states.

*Social Change Model of Student Leadership*: A conceptual framework developed by the Higher Education Research Institute (HERI, 1996) and which defines leadership as a collaborative process based on values and positive social change.
CHAPTER 2

LITERATURE REVIEW

In his book, *The New Leadership Paradigm*, Richard Barrett (2010) calls for a new way of thinking about leadership. He asserts a need to shift the focus from self-interest to societal interests; that is, those interests commonly shared among multiple individuals that address the turbulence and unpredictability of today’s economic, social, and political environment (Barrett, 2010). This model is evident in recent theories of leadership that are relational, principle-centered, and require shared values, authenticity, collaboration, and resilience (Dugan, 2017; Komives et al., 2007; Northouse, 2007; Rost, 1991). Similarly, organizational researchers urge a reconsideration of the role of a leader in response to recent economic and moral challenges within the global context (Voegtlin et al., 2012; Witt & Stahl, 2015; World Economic Forum, 2019). As higher education has historically addressed leadership, these institutions should respond to changing leadership needs and play a significant role in preparing students for an ever-changing and challenging environment. However, recognizing and developing leadership behavior consistent with more recent models is not fully understood (Dinh, Lord, Gardner, Meuser, Liden, & Hu, 2014; Hannah et al., 2008). It remains unclear whether all students develop as leaders in the same manner (Ayman & Korabik, 2010; Eagly & Chin, 2010; Eklund et al., 2017; Quigley, 2013). Emerging leadership literature investigates characteristics beyond traditional leadership behaviors and is consistent with transformational
approaches, such as efficacy and resilience (Haber-Curran et al., 2018; Hannah et al., 2008; Machida & Schaubroeck, 2011; McCormick, 2001; Robbins et al., 2018). These authors highlight the complexities of interpersonal development and the influences these concepts have on student and leadership development. Increasing diversity on campuses and in the workforce requires continued understanding of and investigations into gender and cultural influences on leadership (Buschlen & Johnson, 2014; Haber, 2012; Haber-Curran et al., 2018; Kim & Hargrove, 2013; Huszczo & Endres, 2017; Ospina & Foldy, 2009; Posner, 2014). This necessity becomes increasingly essential as the college student population shifts not only in terms of demographics but also in terms of the diversity of students’ interpersonal contacts and their perceptions of leadership (Cone Communications CSR Report, 2017; Magid, 2014; & Seemiller & Grace, 2017). After establishing a theoretical framework that guides this research, I reviewed the student leadership literature specifically as it relates to efficacy and resilience in leadership development. Further, I explored whether gender and race influence the relationship between efficacy, resilience, and the capacity for socially responsible leadership.

**Theoretical Framework**

Society is undergoing rapid changes in social diversity and advances in technology. Related issues have become more complex and global. In response to these changes, effective leadership and leadership development must also incorporate new dimensions and complexities (Dugan, 2017; Fullan, 2001; Optlka, 2017). Recently, perceptions of leaders and leadership development have significantly shifted. This shift is especially evident in college students currently enrolling on college campuses (Seemiller & Grace, 2017). Their conceptualization of leadership as *transformational* emphasizes
ethics and social change. Transformational leadership incorporates concepts of collaboration, values-orientation, and shared responsibility (Dugan, 2017; Komives, Wagner, & Associates, 2017; Northouse, 2007). As college is a critical period of development, models of student leadership have emerged that reflect this transformational conceptualization within a developmental framework so that students acquire skills to effectively confront the complex social challenges and ethical decision-making within the global environment (Astin & Astin, 2000; Branson, 2010; Dugan, 2017; Komives, 2013). Consistent with the new leadership paradigm, these models focus on developing increased personal and social awareness as well as outcomes such as civic engagement and social responsibility.

Several prominent transformational models implemented on college campuses include the Social Change Model of Leadership Development (Higher Education Research Institute [HERI], 1996), Emotionally Intelligent Leadership (Allen, Shankman, & Miguel, 2012), the Five Leadership Practices (Posner & Kouzes, 2002), and the Relational Model of Leadership (Komives, et al., 2007; Uhl-Bien, 2006). These models respond to the call for a new approach to leadership and are all similar in their emphasis on self-awareness, collaboration, and positive change. Although these models are similar, my study, which investigated the interactions between efficacy, resilience, gender, and race on leadership development, utilized the Social Change Model of Leadership (SCM) as a theoretical framework. I selected the SCM as the framework to understand college student leadership development for several reasons.

The SCM resulted from the collaboration of student affairs practitioners who believed the primary purpose of leadership was positive social change (HERI, 1996). In
contrast to traditional leadership models, the SCM approaches leadership as less leader-centric, with a focus on building trusting relationships resulting in social change (Dugan, 2017; HERI, 1996; Komives et al., 2017). Unlike the Five Leadership Practices (Posner & Kouzes, 2002), a model adapted from the business sector, SCM was explicitly designed to explain a model of leadership relevant to college students interested in facilitating positive social change (HERI, 1996; Komives et al., 2017). Indeed, “change” is of central interest to the model and encompasses seven other components, as defined in Table 1. Since its origin in 1996, the model has significantly influenced leadership development education and is among the most widely utilized model in institutions of higher education with leadership education programs (Caza & Rosch, 2014; Dugan, 2017). According to a national report, over 80% of institutions of higher education utilize the SCM as a theoretical framework for leadership development (Owen, 2012).

Several critical assumptions from research on leaders as effective change agents serve as the foundation of the model (HERI, 1996). In contrast to traditional leadership, which is generally seen as value-neutral, SCM assumes individuals are motivated by common values that influence their choice of issues/problems to confront as well as their selection of resolutions. As such, it is incumbent upon leaders to be self-aware of and acknowledge the impact of their thinking processes in effectively making decisions and advancing shared goals (Hoy & Tarter, 2008).
Table 1

**Social Change Model Values**

<table>
<thead>
<tr>
<th>Individual Domain</th>
<th><strong>Consciousness of Self</strong>: Awareness of one’s own beliefs, values, attitudes, and emotions and their influence upon your motivation to act.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Congruence</strong>: Consistency between actions, values, emotions, and beliefs. Acting with genuineness and authenticity toward others.</td>
</tr>
<tr>
<td></td>
<td><strong>Commitment</strong>: Motivation and investment in individual and collective goals.</td>
</tr>
<tr>
<td>Group Domain</td>
<td><strong>Collaboration</strong>: Utilization of diverse perspectives and talents to generate energy, creativity, sustainable solutions, and actions.</td>
</tr>
<tr>
<td></td>
<td><strong>Common Purpose</strong>: Shared aims and values, as well as responsibility, authority, and accountability.</td>
</tr>
<tr>
<td></td>
<td><strong>Controversy with Civility</strong>: Recognition that diverse perspectives bring both conflicting perspectives and opportunities to create novel solutions to problems.</td>
</tr>
<tr>
<td>Community/Societal Domain</td>
<td><strong>Citizenship</strong>: Recognition of everyone’s connection to the community and interdependence between the individual and the group.</td>
</tr>
<tr>
<td>The “Hub”</td>
<td><strong>Social Change</strong>: Emphasis on creating a better and sustainable community through individual and collective action.</td>
</tr>
</tbody>
</table>

*Note.* Adapted from Dugan, 2017; HERI, 1996

The original framers of the SCM purposefully designed the model to enhance the leadership qualities of all students. In this sense, the model assumes inclusivity. A focus on inclusivity is especially relevant for some students, such as women or students of color, who may not be readily perceived as leaders due to long-standing stereotypes and assumptions about leadership (Eagly & Chin, 2010; Haber-Curran et al., 2018; Haber-
Curran & Sulpizio, 2017). Alternately, and as suggested by McCormick et al. (2002) and Shertzer and Schuh (2004), some students may not see themselves as leaders, may not have the necessary self-assurance to seek leadership positions, or may avoid leadership opportunities. Additionally, the model characterizes leadership as a group-oriented, collaborative process; that is, leadership is more defined by leader development and action within the social context rather than a position or a title (Dugan, 2017; HERI, 1996). For example, a student without a traditional leadership role may initiate action either within or outside of a formal organization to effect positive change on campus.

SCM promotes social justice, equity, citizenship, and service to others (Dugan, 2017; HERI, 1996). This commitment is consistent with quality standards for leadership development in higher education (CAS Professional Standards, 2015). It is especially relevant as society becomes more diverse, and the global environment faces challenges of increasing gender and income inequality, water and food crises, and forced migration (World Economic Forum, 2019). While an early study of student leadership perceptions found student leaders lacked interest in some of these constructs (Ricketts, Bruce & Ewing, 2008), a later investigation found students believed they should serve their community and be flexible for change (Caza & Rosch, 2014). Further, in a study of current college students’ attitudes, Seemiller and Grace (2017) found student interest in engaging with social justice and positive, sustainable change. A recent assessment of perceptions of corporate social responsibility also indicates the younger generation, especially African Americans, expect investment in social issues and leadership focus on change in the broader society (Cone Communication CSR Report, 2017). Finally, and perhaps most importantly in college student development, the model assumes leadership
capacity can be learned and is adaptable, depending upon the context and student experience (Buschlen & Dvorak, 2011; Caza & Rosch, 2014; Dugan, 2017; Dugan, Bohle, Gebhardt, Hofert, Wilk, & Cooney, 2011; Fischer, Wielkiewicz, Stelzner, Overland, & Meuwissen, 2015).

The SCM does not provide instruction in specific leader behavior. Rather, the primary goals for SCM are twofold: to enhance student self-knowledge and leadership competency as well as to facilitate positive social change for both the institution and the community (HERI, 1996). These two goals are similar in the Relational Model of Leadership; however, the emphasis of each of the models is different (Komives et al., 2007). In the Relational Model of Leadership, the primary focus is on interactions, the development of a cohesive group to implement change (Komives et al., 2007). As such, the process takes primary importance rather than the actual change or outcome.

Similarly, Emotionally Intelligent Leadership places prominence on self-awareness and how this self-knowledge impacts our awareness of and interactions with others (Allen et al., 2012). The Relational Model of Leadership and Emotionally Intelligent Leadership certainly desire positive change resulting from relationship building and self-awareness. However, the SCM is an action-oriented model in that enacting positive social change is the goal (Dugan, 2017; HERI, 1996).

SCM’s primary focus is on the process of change. The framers asserted the process of change emanated from each individual and moved outwardly to influence groups and communities. It consists of seven interdependent values within three distinct categories (HERI, 1996). The first category of individual values includes the consciousness of self, congruence, and commitment. Secondly, group values include
collaboration, common purpose, and controversy with civility. Finally, society/community value is civic responsibility. Although not a distinct domain as conceptualized by the other three categories, “The Hub” refers to the overarching value of Social Change, which incorporates all others. Table 1 provides definitions for each of these values.

While the model assumes the change process begins with the individual and moves outward to groups and the community, the model also intends for these categories to interact dynamically for the creation of positive social change. Figure 1 illustrates the interactions and reciprocal influence of the three distinct categories and seven interdependent values. As SCM is grounded in the concept of positive social change, change is believed to be a foundational value encompassing all other values rather than a distinct domain.

Adapted from HERI, 1996

Figure 1 Social Change Model of Leadership
In summary, my investigation into the relationships between leader efficacy, resilience, and socially responsible leadership capacity utilized the Social Change Model of Leadership as a theoretical framework. In addition to its being explicitly developed for undergraduate students, SCM is an appropriate lens to consider leadership development as it aligns well with the missions of institutions of higher education (Astin & Astin, 2000; Komives, 2013; CAS Professional Standards, 2015), but also with transformational leadership theories (Barrett, 2010; Northouse, 2007; Rost, 1991), and the leadership perceptions of the current generation of college students (Seemiller & Grace, 2017). SCM emphasizes self-awareness, shared values, and civic responsibility. It assumes leadership is an intentional process devoted to positive social change, beginning within the individual and moving outward toward the broader community. While the concepts and values reflected in the SCM are not new, it is an appropriate frame for college student leadership development, especially in times of corporate irresponsibility and challenges in collectively resolving global economic, environmental, and societal issues.

**Social Responsibility and Leadership**

Characteristics and behaviors reflected in the Social Change Model were referred to as socially responsible leadership by Tyree (1998) and connect leadership theory with social responsibility. These concepts align with responsible leadership and define a shift in organizational goals away from self-interest to commonly shared interests (Oplatka, 2017; Voegtlin et al., 2012). Interest in responsible leadership has been rejuvenated in recent years within organizational literature and is, in part, attributable to the complexities of interconnected global environments and technological advances. Interest also increased in response to corruption, irresponsibility, and dishonest behavior within
the global environment (Oplatka, 2017; Voegtlin et al., 2012; Witt & Stahl, 2015; World Economic Forum, 2019). The obligation to promote socially responsible leadership development in higher education takes on new urgency in the light of on-going global challenges, such as climate change and income inequality, which are anticipated to worsen without collaborative effort (World Economic Forum, 2019).

Additionally, Oplatka (2017) acknowledges society’s interconnectedness and the reality of consequences resulting from poor leader behavior. Consequently, and consistent with Branson’s (2010) concept of ethical decision-making, Oplatka (2017) advocated for the inclusion of an ethic of “care for others” in responsible leadership. In developing an ethic of care, leaders support all members, both cognitively and emotionally, and encourage ethical, value-based decision-making. Overall, these authors assert a need for a different leadership purpose. That is responsible for leadership results in more than internal management and profit. Responsible leadership also values collaborative efforts and benefits broader outcomes, either within a community or global context (Oplatka, 2017; Voegtlin et al., 2012; Witt & Stahl, 2015).

Responsible leadership does not ignore a unique or central figure; however, the perception or role of the leader necessarily shifts (Dugan, 2017; Gronn, 2016; Pearce, Wassenaar, & Manz, 2014). Rather than controlling or directing, a leader within the responsible leadership framework influences the social context and develops others’ capacity through embracing diverse perspectives, sharing decision-making, and empowering members to act (Dugan, 2017; Grenda & Hackman, 2013; Hairon & Goh, 2015; Harris, 2004). Additionally, the leader influences the interactions of others by communicating his or her values. According to Dugan (2017), this transparency results in
the development of coherence and stability within the system. Dugan further asserts such activity re-invigorates the team and thereby provides continuous motivation, shared vision, and positive change. As a result, leadership is not the result of an individual’s actions, but the contributions of multiple members through collaboration and shared meaning.

**Socially Responsible Leadership in College Students**

Numerous studies have investigated socially responsible leadership capacity relative to the social change model and various student outcomes (Buschlen & Dvorak, 2011; Buschlen & Johnson, 2014; Dugan, 2006; Dugan & Komives, 2007; Dugan & Komives, 2010; Dugan, Komives, & Segar, 2008; Rosch, Collier, & Thompson, 2015; Soria, Fink, Lepkowski, & Snyder, 2013). In early studies of socially responsible leadership in college students, college students highly identified with all values associated with socially responsible leadership as defined by the Social Change Model (Dugan, 2006; Dugan & Komives, 2007; Dugan & Komives, 2010; Dugan et al., 2008). While college students identified with social responsibility, inconsistencies exist between the studies. According to some researchers, differences exist among different populations. For example, in several studies, women demonstrated higher levels across all values (Dugan, 2006; Dugan & Komives, 2007; Dugan et al., 2008). Buschlen and Johnson (2014) reached a similar conclusion in another study investigating differences in socially responsible leadership by gender and age. While they found no differences by age, Buschlen and Johnson (2014) determined differences between males and females, with females exhibiting greater capacity across all measures. Additionally, researchers
document differences among racial groups (Dugan & Komives, 2007; Kodama & Dugan, 2013; Rosch et al., 2015).

In addition to descriptive studies, researchers have examined influences on the development of socially responsible leadership capacity (Buschlen & Dvorak, 2011; Buschlen & Johnson, 2014; Dugan & Komives, 2010; Soria et al., 2013). Dugan and Komives (2010) investigated whether college experiences impacted leadership development. Their extensive investigation utilized the Multi-Institutional Study of Leadership and yielded results from over 14,000 students. They concluded that college experiences make a difference in capacity for socially responsible leadership. Specifically, their investigation revealed that faculty interactions with students, engagement in community service, and socio-cultural conversations with peers significantly and positively influenced socially responsible leadership capacity. Utilizing the multi-institutional Student Experience in the Research University survey, Soria and her colleagues (2013) reached a similar conclusion. They compared the frequency in which students participated in a leadership position within a student organization and their engagement in social change. The researchers found that participation in a leadership position influenced students’ engagement with social responsibility.

Further, Buschlen and Dvorak (2011) investigated the influence of formal leadership programming on leadership development. They utilized a quasi-experimental design (N=260) in which some students were enrolled in a formal leadership course and a non-equivalent group served as a control. Students enrolled in the course showed greater gains in leadership development than the control group. Based on these results, the researchers determined that exposure to training increased students’ knowledge of the
values and skills associated with socially responsible leadership (Buschlen & Dvorak, 2011).

As a whole, these studies demonstrate a connection between the values associated with the Social Change Model and socially responsible leadership. They also point out the importance of college experiences to leadership development and challenge the notion that leadership results from innate, universal characteristics. Finally, these studies support the need to intentionally design leadership opportunities to meet the needs of different students. However, beyond leadership behaviors and related student outcomes, emerging leadership literature also investigates concepts reflecting skills necessary for today’s leaders to enhance their social responsibility and navigate social change (Haber-Curran et al., 2018; Hannah et al, 2008; Machida & Schaubroeck, 2011; McCormick, 2001; Robbins, Kaye & Catling, 2018; Soria et al., 2013). For example, efficacy and resilience are related concepts that play a crucial role in motivating change, confronting adversities, and persisting through difficulties (Anderson, Krajewski, Goffin, & Jackson., 2008; Bandura, 1995; Schwarzer & Warner, 2013; Southwick, Bonanno, Masten, Panter-Brick, & Yehuda, 2014). As suggested by the increase in complexities of and challenges to leadership, developing efficacy and resilience may be essential to building capacity for social responsibility and civic engagement. The remaining sections discuss these concepts and their contribution to leadership development and socially responsible leadership capacity in college students.

**Role of Efficacy**

According to Bandura (1995), efficacy is an individual’s beliefs about his or her capabilities to effect change. Rather than a simple response to the environment, this
process is dynamic and multifaceted. Bandura’s theory includes cognitive, motivational, and affective processes (Bandura, 1995). Through an interactive process, efficacy beliefs influence how individuals feel, think, and make decisions, showing critical importance to behavior. Indeed, Bandura (1995) asserts individuals’ beliefs about their capacity to act influence behavior more than their ability level. According to Bandura (1995), efficacy develops from four sources: (a) mastery experience, (b) vicarious experience, (c) social persuasion, and (d) emotions and physiological states.

The primary source of efficacy derives from successful performance outcomes, which Bandura (1995) refers to as mastery experiences. Mastery experiences increase our beliefs in our ability to accomplish a specific task, whereas failures decrease efficacy beliefs. While mastery experiences are direct experience, vicarious experiences also influence efficacy. Bandura (1995) demonstrated that efficacy beliefs increase through simply observing someone like oneself completing a task. Additionally, when others, especially someone valued, acknowledge a person’s abilities or skills, his or her efficacy beliefs increase. Bandura (1995) referred to this source as social persuasion, which is evident in mentoring relationships. Finally, Bandura asserted that an individual’s emotions and physiological states influence efficacy beliefs. For example, experiencing positive emotions enhances confidence, self-assessment, and resulting efficacy beliefs.

Conversely, a negative affective state decreases an individual’s confidence and subsequent self-assessment and beliefs about abilities. Each of these four sources contributes to internal thought processes and self-evaluations, which influence not only an individual’s beliefs but also actions. Overall, higher degrees of perceived efficacy relate to positive outcomes due to greater levels of engagement, higher levels of
motivation, increased persistence when facing difficulties, a greater sense of personal accomplishment, and enhanced well-being (Bandura, 1995; Schwarzer & Warner, 2013). In this regard, efficacy relates to resilience.

Efficacy provides a mechanism by which individuals persist during challenges. As efficacy increases, personal resources are directed to goal setting, thereby supporting effort and persistence (Bandura, 1995; Huszczo & Endres, 2017). In this respect, efficacy shows a relationship to resilience in that an individual’s beliefs influence motivation, effort, and persistence (Anderson et al., 2008; Bandura, 1995), as well as learning orientation (Burnette, Pollack, & Hoyt, 2010; Murphy & Johnson, 2016). Additionally, consistent with reported protective factors of resilience, efficacy beliefs may buffer against adverse effects encountered by negatively stereotyped groups (Blackmon, Coyle, Davenport, Owens, & Sparrow, 2016; Brown, 2008; Burnette et al., 2010; Chan & Drasgow, 2001; Hendricks & Payne, 2007). Developing strong efficacy beliefs appears critical to college student leadership development in its focus on preparing students for complex challenges and ethical dilemmas.

Several characteristics of efficacy are essential to acknowledge, especially in developing leadership skills in college students. First, efficacy is believed to be domain-specific (Bandura, 1995; Burnette et al., 2010; Chemers, Watson, & May 2000; Hannah et al., 2008). Thus, individuals’ beliefs about their capabilities in one behavior or skill do not necessarily generalize to other areas. For example, students may have high efficacy beliefs regarding their academic skills, showing persistence in challenging tasks and reaching high levels of academic achievement. However, the same students may also have low levels of efficacy beliefs about their ability to lead others and make choices not
to engage in leadership opportunities based upon that self-assessment. Additionally, efficacy beliefs are responsive to training and intervention (Buschlen & Dvorak, 2011; Dugan & Komives, 2010; Murphy & Johnson, 2016). Because efficacy influences an individual’s beliefs about his or her capabilities, influences actions, and is teachable, efficacy has applications to leadership development.

When applied to leader development, efficacy has been defined in terms of performance outcomes (Chemers et al., 2000; Dugan & Komives, 2010; Hannah et al., 2008; Hannah, Avolio, Walumbwa, & Chan, 2012), and also with a recognition of the influence of internal processes (Burnette et al., 2010; Chan & Drasgow, 2001; Chemers et al., 2000; Hendricks & Payne, 2007; Hannah et al., 2008). That is more than a set of skills to be learned. Leader development appropriately attends not only to specific skills, but also to a complex interaction of cognitive processes, personal experiences, and environmental influences. However, empirical studies connected to leader efficacy development are limited (Dugan & Komives, 2010), and it remains unclear as to how efficacy beliefs influence leadership development in general, specifically with college students. The next section will review investigations into leader efficacy in college students as it relates to leadership development and motivation for social change.

**Leadership Efficacy in College Students**

Limited empirical studies exist exploring efficacy and leadership capacity, despite the theoretical relationship between the concepts (Dugan & Komives, 2010; Haber-Curran et al., 2018; Kodama & Dugan, 2013). In an early investigation of student leadership development, McCormick et al. (2002) explored the role of efficacy beliefs. Utilizing efficacy as a foundation, the researchers asserted that an individual’s perceived
ability to lead (leader efficacy), would predict leadership behavior. The participants (N=223 college upperclassmen) rated their perceived ability to perform specific leadership tasks (no confidence to 100% confident). The students also recorded the frequency with which they sought leadership opportunities and the number of leadership experiences in which they engaged. The results revealed a significant and positive relationship between leader efficacy and leadership behavior, both in terms of the frequency with which students attempted a leadership role and the number of leadership roles assumed. The results aligned with Bandura’s assertions of efficacy beliefs and supported the researchers’ hypothesis that perceived leader abilities influence leadership behaviors.

In another early study of student leadership development, Shertzer and Schuh (2004) investigated student perceptions of leaders and leadership behaviors. Consistent with the McCormick et al. (2002) investigation, Shertzer and Schuh (2004) posited that these perceptions would influence student engagement with leadership opportunities. In conducting extensive interviews with both leaders and non-leaders, the researchers revealed rather traditional perceptions of leadership. That is, their perceptions characterized leaders as individuals in a specific position with a specific set of innate skills or qualities. Consistent with their hypothesis, Shertzer and Schuh (2004) also discovered differences in the beliefs between student leaders and those who did not identify as leaders. Themes that were positively associated with leadership engagement included support from others, taking advantage of opportunities, and background and environment.
In contrast, the researchers described discouraging beliefs in students who did not identify as leaders. For example, non-student leaders reported a lack of capability, lack of confidence, and lack of opportunity. The researchers explained some of these barriers in terms of a lack of time/experience at the university; however, they did not report age, classification, gender, or racial differences (Shertzer and Schuh, 2004). These results are consistent with other evidence on the role beliefs about leader capabilities play in leader behavior, specifically regarding decisions to engage (Caza & Rosch, 2014; Dugan & Komives, 2010; McCormick et al., 2002).

In a more recent study, Dugan & Komives (2010) explored various influences on socially responsible leadership capacity in college students and specifically included a measure of leader efficacy. The researchers utilized the Socially Responsible Leadership Scale and Leader Efficacy Scale, two of the same instruments utilized in my investigation. Results of the extensive survey (N=14,252) indicated a significant, positive relationship between leader efficacy and socially responsible leadership. Consistent with the findings of McCormick and his colleagues (2002), this positive association provides further evidence that leader efficacy contributes to leader development and supports the need to enhance leader efficacy within leader development programs intentionally.

Because change is central to the SCM, several studies have explored the relationship of efficacy to motivation for change as defined by the SCM. Ricketts et al. (2008) investigated student perceptions of leadership as defined by the Socially Responsible Leadership Scale (N=791 undergraduates). These students were all enrolled within a single college at a large land grant university. The participants were predominately female and traditionally aged. Results of the survey revealed that student
beliefs were associated with several individual SCM values, such as congruence, consciousness of self, and commitment.

Interestingly, the results further revealed a lack of alignment with group and community values. The researchers concluded that while students expressed openness in changing, they also lacked recognition of the need for change and showed disinterest in initiating change. These results have limitations as the researchers did not explore gender or racial differences.

While the previous study of student leadership perceptions (Ricketts et al., 2008) found student leaders lacked interest in some of these constructs as measured by SCM, a later investigation (Caza & Rosch, 2014) reports evidence to the contrary. Utilizing the Multi-Institutional Study of Leadership, Caza and Rosch (2014) found that students believed they should serve their community and be flexible for change. Caza and Rosch (2014) investigated college students’ pre-existing beliefs about leadership. Consistent with previous research (Bandura, 1995; Dugan & Komives, 2010; McCormick et al., 2002), Caza and Rosch’s study provided support to the importance of understanding how students’ experiences, backgrounds, and interests shape their beliefs and subsequent action. The survey consisted of the Socially Responsible Leadership Scale (SRLS) as well as measures of leader efficacy and previous leadership experience. The researchers conducted an exploratory factor analysis to reveal that undergraduate students, both with and without previous leadership experience, held specific beliefs about leadership. The beliefs fell into four primary categories, including serving the community, being open-minded, honoring personal values, and being comfortable with change. Although these findings conflict with those of Ricketts et al. (2008), they may be more reflective of the
perceptions of the current generation of college students and their significant commitment to social change (Seemiller & Grace, 2017). Further, Caza and Rosch’s investigation (2014) revealed a significant relationship between these beliefs and their leadership attitudes and behaviors. Although the researchers expressed interest in the influence of background and experiences, they explored neither gender nor racial differences.

**Gender and Racial Influences**

In addition to reporting a significant connection between leader perceptions and leader behavior, researchers also explore racial and gender differences in leader development as well as efficacy beliefs (Arminio et al., 2000; Baughman & Bruce, 2011; Caza & Rosch, 2014; Dugan & Komives, 2010; Dugan et al., 2008; Haber-Curran et al., 2018; Kodama & Dugan, 2013; McCormick et al., 2002; Shutzer & Shuh, 2004). For example, Arminio et al. (2000) conducted a qualitative study investigating leadership perceptions of students of color. Their study highlights how students of color experience leadership from a community orientation rather than from an individual activity. Arminio and his colleagues (2000) further reported women feeling significant pressure or conflict as leaders not only as women but also as women of color. Indeed, the researchers concluded that students of color resist identifying as a leader due to the tendency of a hierarchical/positional role to isolate them from their social group and to present difficulties in maintaining their cultural identity. Similarly, in another study exploring how students of color identify as leaders, Baughman and Bruce (2011) reported students of color strongly associate leadership with their social identity. The study indicated that
students of color engaged in leadership positions out of a sense of personal growth and motivation.

Kodama & Dugan (2013) explored differences among college students across racial groups. Using the MSL and the Leader Efficacy Scale (N=8510), the researchers found significant differences among broad racial groups, with students identifying as African American scoring higher on leader efficacy than any other group. By contrast, students identifying as Asian Pacific Americans scored lower on leader efficacy than any other group. Their racial identity explained between 39% and 44% of the variance in leader efficacy. Beyond the evidence of differences between racial groups, this study further identified different predictors of leader efficacy among the various racial groups. This finding is of interest in its suggestion that not all students, even those within the same racial group, develop as leaders in the same way or from the same influences.

McCormick and his colleagues (2002) found that women reported significantly lower levels of leader efficacy than men despite women engaging in leadership roles with equal frequency. These researchers considered gender an important influence in efficacy beliefs because of social roles and expectations. McCormick et al. (2002) explained their findings by asserting that the women’s interpretation of their experience, in part based upon social influences, may lower efficacy scores. These results align with Dugan and Komives (2010), who also found differences between genders when investigating influences on leadership development. However, these early studies contrast with more recent findings, which show a more complex picture of gender differences.

For example, more recent leader efficacy studies show minimal differences between genders (Diaz, 2018; Paustian-Underdahl, Walker, & Woeher, 2014; Tillapaugh
Haber-Curran, 2016). Diaz acknowledged that historically, females report lower leader efficacy and speculated the differences might be attributable to changes in how efficacy is measured. Diaz reported measures assessing characteristics aligning with more transformational leadership approaches might minimize differences between genders. This conclusion aligns with Paustian-Underdahl, Walker, and Woeher (2014), who reported that context minimizes differences between male and female leader effectiveness. Interestingly, when researchers compare self-ratings to ratings of others, differences emerge. That is, ratings by others show female leaders as more effective; whereas self-ratings reveal men as more effective. These authors’ conclusions align with others who assert that females tend to minimize their contributions or abilities, impacting their choices to engage in leadership opportunities and creating barriers to leadership attainment. Like other researchers (Haber-Curran et al., 2018; McCormick et al., 2002).

In summary, efficacy is defined as an individual’s beliefs about his or her capabilities to effect change. These perceptions are believed to be domain-specific and teachable. Efficacy influences an individual’s beliefs about his or her capabilities, motivations, and actions (Bandura, 1995). It has applications to leadership behavior; however, there are limited investigations into the relationship (Dugan & Komives, 2010; Haber-Curran et al., 2018; Kodama & Dugan, 2013). As efficacy is a complex and dynamic concept, it remains unclear as to how efficacy beliefs influence leadership development in general and specifically with college students. The role of gender and race also remains a question. It is vital to fully understand the relationship between perception, ability, and action to prepare students in assuming leadership roles. It is equally important to understand the influences of gender and race, primarily as these
concepts interact with leadership capacity and access to leadership opportunities. Doing so addresses equity and social change through informing campus stakeholders and increasing the accessibility of leadership development on campuses and enhances leaders’ capacity and range of responses to complex problems.

**Role of Resilience**

Another theme within the emerging approaches to leadership are characteristics which align with the concept of resilience; that is, adaptability to organizational and environmental changes in which collaboration, well-being, and growth are valued (Hannah et al., 2008; Luthans & Youseff-Morgan, 2017). Generally viewed as a process for effectively adapting to significant stressors, the concept of resilience remains complex and challenging (Richardson, 2002; Southwick et al., 2014). Research on the phenomenon of resilience began with inquiries into children who demonstrated appropriate development and well-being despite significant vulnerability to various risk factors (Masten, 2001). While the original research goal aimed to gather information about the psychological problems of children facing adversity, the results provided novel insights into the positive outcomes of these children. Since that time, differences in the conceptualizations of resilience have emerged and moved from a focus on deficits to one of protective factors and internal strengths (Southwick et al., 2014; Ungar, 2014). In a comprehensive exploration of resilience, Windle (2010) outlined the complexities of the concept and described varying perspectives when addressing the phenomenon as an understanding of healthy development. Observed from diverse perspectives, researchers refer to resilience as developing well despite an accumulation of adversities, developing
Richardson (2002) provided a historical context to defining resilience in his metatheory of resilience. In his analysis, Richardson described several conceptualizations of resilience inquiry, which have advanced our understanding. Initially, phenomenological descriptions of individual qualities (i.e., self-esteem, optimism) framed our understanding of resilience. However, eventually, our understanding expanded to incorporate how support systems create positive and resilient outcomes. Finally, Richardson described internal, motivational forces that promote engagement, prompt action, and influence positive outcomes. He concluded that resilience is more than a response to or simple recovery from difficult circumstances. Rather, it is a dynamic process of adaptation and growth that builds upon internal strengths (Richardson, 2002; Southwick et al., 2014; Ungar, 2014). Fredrickson and Joiner (2002) reached similar conclusions in a study of positive emotions, which has parallels to efficacy and resilience. According to their investigation, positive emotions broaden an individual’s thought or action options, encourage attempts at new opportunities, and result in increased resilience and well-being. Comparable to efficacy, this perspective results in an individual seeing adversity as temporary, within their control, and as more likely to move forward.

While much of the literature situates resilience in developmental and clinical psychology (Windle, 2010; Southwick et al., 2014), a review of the leadership literature reveals emerging interest between resilience and leadership. Although limited, research suggests that developing resilience can assist leaders in confronting challenges and
effecting organizational change (Forster & Duchek, 2017; Ledesma, 2014; Maulding, Peters, Roberts, Leonard, & Sparkman, 2012). In a comprehensive review of resilient leaders, Forster and Duchek (2017), described a complex and interactive process between psychological traits, situational factors, and behaviors that contribute to leadership development. The research revealed processes and characteristics consistent with socially responsible leadership. It also revealed characteristics in The Social Change Model, such as conscientiousness, social support, and proactivity. In another investigation of resilient leadership development, Howard and Irving (2013) identified similar competencies essential to leadership development and that align with features of resilience. For example, the researchers (2013) described overcoming obstacles, developing perseverance, focusing on character, and instilling hope as having an association with leadership development. Howard and Irving (2013) further associated these competencies with a positive impact on relationship building through empowerment, role-modeling, and trust. Finally, and consistent with previous reports, the researchers reported that resilience could be influenced or trained (Howard & Irving, 2013; Southwick et al., 2014).

Studies explore resilient leaders in various fields, such as medicine, nursing, management, and education (Ledesma, 2014). In a mix-methods investigation, Maulding et al. (2012) examined resilience in educational administrators. The researchers believed the ability to resist challenge was associated with creativity in problem-solving, intentionally seeking meaning in their work, as well as their perceived success. The results of the investigation revealed a positive association between resilience and perceived leadership capacity. The study also included qualitative responses from the
administrators resulting in several prominent themes consistent with the SCM and other research into resilience (Ledesma, 2014; O’Leary, 1998). For example, leadership characteristics identified in the qualitative study organized around three primary themes: a) relationship building, collaboration, and social supports, b) having a vision and being optimistic, and c) minimizing failure, being adaptable, and comfortable taking risks.

**Resilience in College Students**

There is also interest in resilience within higher education outcomes. For example, a review of literature revealed investigations into academic outcomes, substance abuse in college students, coping skills in college students, and prevention of mental health barriers (Blackmon et al., 2016; Cassidy, 2015; Debb, Colson, Hacker, & Park, 2018; Dinsmore, Johnson, & Hoff, 2011; Hartley, 2012; Hartley, 2011; Khan, Din, & Anwar, 2017; Martin, 2013; Pidgeon et al., 2014; Steinhardt and Dolbier, 2008; Strayhorn, 2014). However, I found no studies with an emphasis on the potential influence of resilience on leadership development in college students.

In an investigation of academic resilience, Cassidy (2015) expanded upon efficacy studies, which showed efficacy to be a better predictor of performance than previous achievement (Burnette et al., 2010; Chan & Drasgow, 2001; Hendricks & Payne, 2007). Cassidy (2015) hypothesized a positive relationship between resilience and efficacy. He further predicted different outcomes for students reporting low resilience versus high resilience. Cassidy recruited 435 British undergraduate students (80% female) to participate in the study. Each participant completed two self-report scales, the General Academic Self-Efficacy Scale and the Academic Resilience Scale. As predicted,
the results revealed a positive relationship between academic efficacy and academic resilience.

Further, the results revealed significant differences between low and high resilient students. However, Cassidy reported no differences between age groups or genders. He did not explore the differences between racial groups.

In a similar investigation into academic resilience in college students, Strayhorn (2014) investigated the role of “grit,” a concept comparable to resilience, in the academic success of African American college students (N=140). Utilizing the Short Grit Scale, Strayhorn (2014) found a positive relationship between the self-reported level of grit and student grades ($r=.38$). Thus, students who reported higher levels of “grit” also earned higher grades. This positive association remained true after controlling for several potential confounding variables, such as background, prior experiences, and academic achievement. Debb et al. (2018) found similar results when exploring resilience in African American students and their persistence in college. Their study revealed not only a positive relationship between resilience and persistence but also that African American students demonstrated higher resilience than the general population (Debb et al., 2018).

Like Cassidy’s (2015) assumptions regarding resilience, Pidgeon et al. (2014) predicted differences between college students who expressed high versus low levels of resilience. These researchers investigated the relationships between resilience, perceived social support, and campus connectedness. Pidgeon and her colleagues recruited college students recruited from Australia, the United States, and China (N=214) to complete four self-report measures regarding resilience, social support, campus connectedness, and psychological distress. Approximately three-quarters of the students were female, and the
students ranged in age from 18-59 years old. As predicted, results showed significant differences between students reporting low versus high levels of resilience, with the high resilience group showing significantly higher levels of social support and campus connectedness and lower levels of psychological distress. The researchers were further interested in differences between students located in different universities in different countries; however, an analysis of variance revealed no differences. Pidgeon et al. (2014) concluded that resilience is positively associated with perceived social support as well as campus connectedness. This relationship between campus connectedness and resilience is relevant to my study because the campus environment is central to the Social Change Model of Leadership. Although sample size and convenience sampling limit generalizations, Pidgeon et al. (2014) contribute to the understanding of resilience in college students and the role the campuses play in promoting resilience.

**Gender and Racial Influences**

As highlighted in the previous studies, there are investigations into resilience in college students. However, limited studies specifically explore resilience in women or students of color and none focus on the role of resilience in leader development (Arminio et al., 2000; Blackmon et al., 2016; Brown, 2008; Debb et al., 2018; Dugan & Komives, 2010; Strayhorn, 2014). This area of study is relevant, given the barriers to leadership that remain in place in these populations. Additionally, there is some evidence suggesting that certain racial groups populations show greater levels of resilience and could serve as models in more expansive, inclusive campus initiatives (Debb et al., 2018; Huszczzo & Endres, 2017)
Brown (2008) investigated resilience by specifically exploring the importance of racial socialization and social supports as protective factors for African American college students. She posits that racial socialization refers to interpersonal interactions between African Americans. According to Brown (2008), these interactions incorporate attitudes about their cultural heritage and connect to adaptive responses to societal challenges. She further asserts that the connection to cultural heritage and feelings of support contributes to an individual’s well-being, coping, and positive outcomes or resilience. In Brown’s study (N=153 African American first-year undergraduate students), participants responded to several different self-report scales measuring support, racial socialization, and resilience. Results indicated a positive association between resilience and racial socialization messaging, especially coping with antagonism and cultural pride. The results also show a positive association between resilience and perceived social support. Although this is a limited sample and a correlational design, Brown’s study adds to the understanding of resilience as a developmental process and the behaviors underlying resilience. Her findings support the importance of relationships, a sense of belonging, and cultural adherence, which are consistent with findings in the larger body of resilience literature and have applications to leadership development on college campuses (Southwick et al., 2014; Ungar, 2014).

In another investigation into the influences on resilience, Blackmon et al. (2016) conducted an exploratory investigation into the antecedents of culture and race-specific coping using college students (N=191). Consistent with Brown’s (2008) findings, the study revealed the importance of messaging from African American parents about what it means to be an ethnic minority within the larger community. According to Blackmon and
his colleagues (2016), this messaging instills cultural pride, provides race-specific
coping, and serves as a protective factor in facing racism and other racial barriers.
Additionally, the researchers found differences in coping between men and women, with
women preferring religious and emotional supports and men preferring active coping and
planning. The authors attributed these results regarding gender preferences in coping with
differences in socialization patterns.

Another investigation relevant to my study explored the relationship between
resilience, ethnic identity, and gender (Clauss-Ehlers, Yang, & Chen, 2006). Like other
researchers who suggest resilience results from interactions with the environment
(Blackmon et al., 2016; Brown, 2008; Southwick et al., 2014; Ungar, 2014), Clauss-
Ehlers and her colleagues (2006) explored the influence of cultural values and social
support. They were especially interested in the resilience process for young women of
color. Clauss-Ehlers et al. (2006) recruited 200 college females and equally distributed
the proportion of women among four distinct racial groups. Additionally, all participants
reported experiencing at least one stressful event during their lifetime. Participants
completed several self-report scales measures measuring stressors, perceived support,
insight into personal development, ethnic identity, and agreement between masculine and
feminine personality characteristics. Results showed both a connection to an ethnic
identity and androgynous attributes positively correlated with resilience. Consistent with
Brown’s findings (2008), Clauss-Ehlers and her colleagues (2006) concluded that young
women who are connected to their culture not only have increased knowledge of but also
actively engage with a supportive social network. As a result, the researchers
hypothesized that these women are protected against social stressors. Additionally, the
researchers suggested that the increased balance between male and female attributes may help buffer against stereotypical responses to adversity, such as aggression (male) and passivity (female).

In sum, resilience is generally defined as a process for effectively adapting to significant stressors (Richardson, 2002; Southwick et al., 2014) and has shown to influence positive outcomes for college students (Blackmon et al., 2016; Brown, 2008; Cassidy, 2015; Dinsmore et al., 2011; Hartley, 2012; Martin, 2013; Pidgeon et al., 2014; Strayhorn, 2014). However, the existing literature provides little guidance on the potential influence of resilience on leader development in college students. It is important to understand the resilience process for all students, especially as it relates to the diverse populations seen on college campuses. Resilience is a malleable characteristic (Southwick et al., 2014) and shows promise in protecting against social and environmental stressors as well as reinforcing an internal thought process (Brown, 2008). Given the complex social, economic, and political climate into which current college students graduate, it may serve to prepare student leaders in negotiating challenges associated with social change and is worthy of further investigation.

**Methodology**

This study utilized a quantitative methodology to examine the relationship between leader efficacy and resilience in student leadership development and determine what role race/ethnicity and gender may play. Consistent with many of the studies reviewed, I determined a quantitative methodology to be the most appropriate as the primary goal was to explain the relationship between variables. This approach differs significantly in purpose from qualitative methods, which attempts to examine the breadth
of a phenomenon and make interpretations about the concepts (Creswell, 2012).
Additionally, quantitative studies typically utilize large, randomized samples, whereas
qualitative research focuses on small groups or case studies (Creswell, 2012). The sample
size is an important consideration as I accessed data from the Multi-Institutional Study of
Leadership, an extensive national database. The use of large samples allows for the
generalizability of findings, which researchers are less able to do with smaller samples.
Understanding how efficacy and resilience vary between groups was an essential
component in the proposed study. Such comparisons are only possible with the type of
data and method collection in a quantitative approach. Quantitative results are numeric,
which facilitates comparisons between variables (Choy, 2014).

This study utilized a non-experimental quantitative methodology to evaluate the
influence of self-esteem and resilience on socially responsible leadership and to
determine what role race and gender may play. While there is some overlap among non-
experimental quantitative designs, I determined that a causal-comparative methodology
was the most appropriate for the proposed study. Johnson (2001) further classifies the
design as a cross-sectional, predictive approach. Such a design is frequently used in
educational research to gain information on a naturally occurring phenomenon, to
suggest/extend experimental studies, or when it is not feasible to create an intervention
(Johnson, 2001). Because I wanted to understand the relationships between several latent
constructs, I utilized hierarchical moderated multiple regression. Hierarchical moderated
multiple regression is a multivariate statistical analysis used to examine complex
associations and permits exploration of variables and their inter-connections
simultaneously (West, Aiken, & Krull, 1996).
Summary of the Literature

Leadership and leadership development have proven to be complex concepts that evade clear definitions (Northouse, 2007; Rost, 1991). As one of higher education’s primary goals is to prepare individuals for future civic engagement, leadership development rightly continues to receive considerable attention on college campuses (Astin & Astin, 2000; Komives, 2013). This responsibility is even greater today as a diverse group of graduates faces an uncertain and turbulent world requiring a broad range of skills and resources for success (Goertzen & Whitaker, 2015; Hannah et al., 2008).

Many institutions of higher education have adopted the Social Change Model of Student Leadership Development (Caza & Rosch, 2014) as it aligns well with current leadership paradigms (Northouse, 2007; Rost, 1991). The model further provides opportunities for students who may not be participating in or seeking out traditional leadership roles, but who nonetheless are interested in creating positive change (HERI, 1996). These opportunities are especially relevant for some students, such as women or students of color who may not be perceived as leaders, may not have the self-assurance to seek leadership positions, or may avoid leadership opportunities. Developing all students is of value to institutions of higher education and the community.

Additionally, it is unclear as to whether personality factors, such as efficacy and resilience, influence leadership development in general and specifically within college students. The purpose of this study was to examine the relationship between efficacy and resilience in student leadership development and determine whether gender or race play a role. These concepts were explored using quantitative methods, which are discussed in Chapter 3.
CHAPTER 3

METHODOLOGY

Fostering leader capacity is essential to accomplishing the mission and achieving the goals of higher education institutions (Astin & Astin, 2000; CAS Professional Standards, 2015; Komives, 2013). However, researchers disagree on how to conceptualize leader development (Dinh et al., 2014; Hannah et al., 2008), and it remains unclear whether all students develop as leaders in the same manner (Ayman & Korabik, 2010; Eagly & Chin, 2010; Eklund et al., 2017; Quigley, 2013). The lack of confidence in current leader behaviors and the desire of current college students to contribute to positive social change increases the necessity to gain further insights into the influences on leader development (Cone Communications CSR Report, 2017; Seemiller & Grace, 2016; Seemiller & Grace, 2017). Understanding the influence of students’ efficacy beliefs and resilience can enhance our understanding of leadership development and inform policy and leadership programming practices on college campuses (Hannah et al., 2008; Machida & Schaubroeck, 2011; Pidgeon et al., 2014). Additionally, with increasing diversity on campuses and in the workforce, several researchers have shown interest in understanding race and gender influences (Dugan & Komives, 2010; Eagly & Chin, 2010; Kim & Hargrove, 2013; Ospina & Foldy, 2009; Posner, 2014). These observations highlight the need to gain a greater understanding of the variables affecting the development of college student leaders.
My research explored the relationships between efficacy, resilience, and socially responsible leadership, with a specific focus on the influence of gender and race on these relationships. The purpose of this chapter is to establish the research questions and to describe the research design, sample, procedures, instruments, and data analysis.

The investigation utilized a quantitative methodology and multivariate data analyses as outlined in the following sections to explore these research questions:

- Research Question 1: Is there a significant and positive relationship between leader efficacy and socially responsible leadership?
- Research Question 2: Is there a significant and positive relationship between resilience and socially responsible leadership?
- Research Question 3: Does socially responsible leadership differ by gender or broad racial group?
- Research Question 4: Does gender or broad racial group modify the relationships between leader efficacy, resilience, and socially responsible leadership?

**Research Design**

This study utilized a quantitative methodology to explore socially responsible leadership development in college students and its interaction with efficacy and resilience. Further, the study investigated whether race or gender influence these relationships. Several authors have investigated these constructs via qualitative or quantitative methods. For example, Arminio et al. (2000), explored leadership experiences for students of color through phenomenological interviewing, capturing individual voices, and unique perspectives. Similarly, Baughman and Bruce (2011)
utilized semi-structured interviews to reveal insights into minority student perceptions of their leadership experiences. Haber (2011) conducted in-depth interviews with female students to understand how gender influenced their leadership experiences. Finally, Komives, Owen, Longerbeam, Mainella, and Osteen, (2005) and McKenzie (2018) used grounded theory to develop models of leadership identity. These studies provided rich, descriptive information regarding these participants’ lived experiences and personal beliefs about leadership. The primary goal of the studies focused on a deep understanding of each of the individual constructs and consistent with qualitative methodologies (Choy, 2014; Creswell, 2012; Glesne, 2011).

In contrast, the research questions in my study aimed to explain the relationships between known social behaviors. Such goals are consistent with quantitative research in which the primary purpose is to use scientific analysis to make predictions about the variables of interest or, as in this study, to examine relationships between social behaviors (Creswell, 2012; Glesne, 2011; Pedhazur, 1982; Walliman, 2011). Further, qualitative methods would be ineffective as the purpose is not to understand the concepts of efficacy or resilience in broad terms, but to explain and quantify the relationships between three variables of interest (Creswell, 2012; Glesne, 2011; Walliman, 2011). For example, in investigations into resilience in African American college students, Brown and Tylka (2011) and Blackmon et al. (2016) designed correlational studies utilizing surveys and statistical analyses. Additionally, Posner (2014) sought to understand leadership behaviors among different groups of students and utilized analytic techniques to explore the variables of interest. Quantitative methods have distinctive characteristics,
which further led to my conclusion that quantitative methods are the most appropriate for the current investigation.

Several distinguishing characteristics justify using quantitative methods, such as participant selection, type of data collected, and data collection methods. Quantitative studies typically utilize large, randomized samples, whereas qualitative research focuses on small groups or case studies (Creswell, 2012). Although not a randomized sample, I used the Multi-Institutional Study of Leadership (MSL), a large national data set consisting of over 96,000 college students. Utilizing large samples can be problematic, and complications arise in logistics and randomization (Choy, 2014). Additionally, Choy (2014) acknowledges the lack of ability to interpret data from individual perspectives when using large, aggregated samples. However, the use of large samples allows for the generalizability of findings (Creswell, 2012; Glesne, 2011). As a broad application to institutions of higher education is, in part, an interest of the current study, the large sample is well-suited for inclusion in the design.

The MSL data in this study consisted of three primary variables, all of which are measured on an interval scale. Consistent with an empirical approach, observations were objective and precise as opposed to the naturalistic observations completed in a qualitative study. Finally, the quantitative method applies statistical analysis to identify relationships. This mathematical approach is in stark contrast to the interpretations of patterns or themes indicative of qualitative methods (Creswell, 2012; Glesne, 2011).

This study utilized a non-experimental quantitative design and was exploratory. This methodology is frequently used in educational research to gain information on a naturally occurring phenomenon, to suggest/extend experimental studies, or when it is
not feasible to create an intervention (Creswell, 2012; Johnson, 2001). Statistical procedures are used to analyze the data and make predictions. However, my study differs from experimental research in two distinct ways. For example, experimental research attempts to control or manipulate the variables (Creswell, 2012; Walliman, 2011). As I used archival data from a national data set of college students, no variables were added or manipulated. Additionally, the use of an existing group rather than randomly assigning groups is consistent with non-experimental quantitative designs, specifically causal-comparative designs (Creswell, 2012; Walliman, 2011).

**Sample**

The study utilized the MSL; a large, national data set designed to explore leadership development within the context of the higher education environment. A project sponsored by the National Clearinghouse for Leadership Programs, the MSL has a theoretical framework for guiding the study and practice of college student leadership development (Dugan & Komives, 2010). The MSL has been conducted on seven occasions since its inception in 2006, and I utilized the data set resulting from the 2015 administration. More than 300 institutions of higher education have participated in the survey since 2006. These institutions voluntarily participate in the survey, and students are offered incentives to take the online survey via several email contacts. The MSL instrument uses a modified version of the Socially Responsible Leadership Scale (SRLS; Tyree, 1998) as its foundation, but also includes other measures of variables of interest to my study, such as leader efficacy and resilience.

More than 96,000 students from 94 institutions of higher education, including four international schools, participated in the 2015 MSL survey. I requested that only
students who had data on the variables of interest and the resulting dataset (N=77,558) included all students who had data on resilience, efficacy, and socially responsible leadership. Table 2 summarizes the demographics of the sample.

Table 2

Demographics of Sample

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Transgendered</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian/White</td>
<td>20,588</td>
<td>37,263</td>
<td>270</td>
<td>58,121</td>
</tr>
<tr>
<td>Middle Eastern/North African</td>
<td>475</td>
<td>656</td>
<td>9</td>
<td>1140</td>
</tr>
<tr>
<td>African American</td>
<td>1653</td>
<td>3757</td>
<td>34</td>
<td>5444</td>
</tr>
<tr>
<td>American Indian/Native American</td>
<td>382</td>
<td>854</td>
<td>16</td>
<td>1252</td>
</tr>
<tr>
<td>Asian American/Pacific Islander</td>
<td>2720</td>
<td>4450</td>
<td>28</td>
<td>7198</td>
</tr>
<tr>
<td>Native Hawaiian</td>
<td>260</td>
<td>455</td>
<td>9</td>
<td>724</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2582</td>
<td>5308</td>
<td>41</td>
<td>7931</td>
</tr>
<tr>
<td>Total</td>
<td>27,377</td>
<td>49,866</td>
<td>355</td>
<td>77,558</td>
</tr>
</tbody>
</table>

I conducted a power analysis for a moderated multiple regression using G*Power (Faul, Erdfelder, Buchner, & Lang, 2009) to determine an adequate size using an alpha of .05, a standard power of .8, and a medium effect size (d^2=0.015). The results of this analysis determined a minimum total sample size of at least 85 participants to be a sample size with enough power for this study. I removed cases with missing data and outliers. I also elected to remove students who identified as transgender or gender-neutral as those students comprised less than one percent of the sample. After the data cleaning, the smallest group comprised of 60 participants, and I used this number to establish the size of each group. As a final step, I used a random number generator within Microsoft Excel (Excel 2010) to establish a stratified sample of students (N=840) who had data on all the three variables of interest and with equal distributions (N=60) across gender and race.
**Instruments**

The MSL is one of the most extensive investigations into the development of leadership in college students (Dugan, 2017; Dugan & Komives, 2010; Komives et al., 2017). It is an ideal instrument for exploring the relationships among efficacy, resilience, and socially responsible leadership. Using a modified version of the SRLS (Tyree, 1998) as its foundation, the MSL assesses student and educational outcomes relevant to the values underlying the Social Change Model (Dugan & Komives, 2010; Komives et al., 2017). The MSL incorporates other measures that assess additional variables related to leadership development. The MSL includes self-reported efficacy, as measured by the Leader Efficacy Scale (LES; Dugan & Komives, 2010; Komives et al., 2017) and self-reported resilience, as measured by the Connor-Davidson Resilience Scale (CD-RS; Conner & Davidson, 2003). According to Dugan, Kodama, and Gebhardt (2012) and Dugan (2015), MSL has repeatedly shown strong psychometric properties. For example, reliability and construct validity have been examined not only in the MSL pilot studies but also in various iterations since its inception (Dugan, 2015; Dugan et al., 2012). The following three sections describe each of the scales within the MSL utilized in my investigation.

**Socially Responsible Leadership Scale**

Socially responsible leadership refers to a “purposeful, collaborative, values-based process” (Komives et al., 2017, p.xii) and is theoretically grounded in the Social Change Model of Student Leadership. Initially developed by Tyree (1998), the Socially Responsible Leadership Scale connected the theoretical framework from the Social Change Model to the investigation and assessment of college student leadership.
development. Tyree’s original study utilized multiple analytic tests to establish adequate reliability, with measures of internal consistency ranging from 0.69 to 0.92 (Dugan, 2015; Tyree, 1998). Additionally, this initial study utilized correlational techniques to establish adequate content validity (Dugan, 2015; Tyree, 1998). Since its initial development, other studies using the SRLS, as well as the MSL pilot studies, yielded modifications to the instrument and confirmation of its reliability and validity (Dugan, 2015; Dugan et al., 2012). The most recent iteration of the SRLS contains 34 items across six scales associated with the values of the Social Change Model (consciousness of self, congruence, commitment, collaboration, controversy with civility, and citizenship). The current study yielded a Cronbach’s alpha of 0.957 for the SRLS. While the MSL uses the SRLS as a foundation, it also incorporates other factors believed to be essential to social responsibility and engagement in leadership (Komives et al., 2017; Dugan & Komives, 2007). As two of these other factors are relevant to the study.

**Leader Efficacy Scale**

Efficacy refers to an individual’s beliefs about his or her capabilities to effect change and includes cognitive, motivational, and affective processes (Bandura, 1995). In leader development, efficacy has shown influence over internal processes and impact upon an individual’s leadership performance, motivation, and engagement in leadership opportunities (Burnette et al., 2010; Chan & Drasgow, 2001; Chemers et al., 2000; Hendricks & Payne, 2007; Hannah et al., 2008). The MSL includes the Leader Efficacy Scale, an original measure of efficacy beliefs related to leadership capacity (Dugan & Komives, 2007; Komives et al., 2017). The scale consists of four questions (scored on a Likert scale) in which students evaluate their beliefs relevant to their ability to lead
others, organize a group’s task to accomplish a goal, take the initiative to improve something and work with a team on a group project. The original validation study yielded Cronbach’s alphas ranging from 0.87 - 0.88 (Dugan et al., 2012). My investigation resulted in similar reliability and yielded a Cronbach’s alpha of 0.871 on this sample of LES.

**Connor-Davidson Resilience Scale**

Several authors define resilience as the ability to move forward when confronted by adversity or challenging circumstances (Richardson, 2002; Southwick et al., 2014; Windle, 2010). The concept relates to leadership in that resilience shows the adaptability and optimism required within complex and diverse environments. The Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) is a widely used measure of resilience with sound psychometric properties as defined by test-retest reliability and internal consistency. The original test developers reported a high level of test-retest agreement, with an intraclass correlation coefficient of 0.87 (Connor & Davidson, 2003).

Additionally, the original validation study resulted in an internal consistency of 0.89 for the full scale, and item-total correlations for the five subscales ranged from 0.30 to 0.70 (Connor & Davidson, 2003). Campbell-Stills and Stein’s (2007) modifications resulted in a 10-item scale, which also showed sound psychometric properties. Their modifications resulted in a unidimensional scale with high reliability (Cronbach’s alpha value of 0.85). The MSL utilizes this 10-item scale, which yielded Cronbach’s alpha of 0.906 in this sample.
Procedures

My study utilized archival data that resulted from the 2015 administration of the MSL, a survey of students from participating institutions of higher education. After an institution of higher education elected to participate, the research organization contacted students via email. Incentives varied by each school and served to encourage students to participate and increase the response rate. The survey opened to students in January 2015 and closed in April 2015, and students completed the survey over a secure website. Each student could request removal from participation or inclusion in the dataset at any time. Initial portions of the survey incorporated information regarding informed consent. In 2015, a total of 94 schools participated, and over 96,000 students completed the survey.

Before receipt of any data and as a safeguard to ethical research, I submitted a request to the Louisiana Tech Institutional Review Board for review of this research (Appendix A). The research proposal was approved without full institutional review as it utilized archival data, and the data files did not provide either personally identifiable information of students or school affiliations. Additionally, permission to use the MSL 2015 data required a National IRB and strict adherence to standards of confidentiality. I requested only information of interest to my study, including all scales and subscales associated with socially responsible leadership, efficacy, and resilience. Also, to address possible moderation in the relationships between the variables of efficacy and resilience to socially responsible leadership, I requested student demographic data regarding race and gender. I maintained all data on a password-protected hard drive accessible only to me.
**Data Analysis**

The study utilized hierarchical moderated multiple regression to examine the relationships among efficacy, resilience, and socially responsible leadership and to determine any moderating effects of gender or race. Multiple regression is a flexible analytic procedure used to assess the relationships between two or more independent variables and explain the amount of variance each independent variable contributes (Cohen & Cohen, 1983; Pedhazur, 1982). I explored eight hypotheses:

- **Hypothesis 1**: There is no relationship between leader efficacy and socially responsible leadership.
- **Hypothesis 2**: There is no relationship between resilience and socially responsible leadership.
- **Hypothesis 3**: There are no differences in socially responsible leadership by gender.
- **Hypothesis 4**: There are no differences in socially responsible leadership by broad racial group?
- **Hypothesis 5**: Gender does not influence the relationship between leader efficacy and socially responsible leadership.
- **Hypothesis 6**: Gender does not influence the relationship between resilience and socially responsible leadership.
- **Hypothesis 7**: Race does not influence the relationship between leader efficacy and socially responsible leadership.
- **Hypothesis 8**: Race does not influence the relationship between resilience and socially responsible leadership.
There were five variables in this investigation, with each participant contributing data to each variable. I removed all cases with missing data. The dependent or outcome variable was the capacity for socially responsible leadership, as measured by the SRLS. The primary independent variables were a self-reported level of leader efficacy, as measured by the LES and a self-reported level of resilience, as measured by the CD-RISC. I treated gender and race as moderator variables. SRLS, LES, and CD-RISC measures reflect differences in magnitude, and these variables were considered continuous or interval variables. In contrast, gender and race were considered nominal variables.

I completed the analysis of data by conducting a series of multiple regressions within SPSS Statistics (Version 25). I cleaned and organized the data before conducting the analysis. For example, I removed cases with missing data and cases in which students identified as transgender or gender-neutral. The final dataset (N=840) included cases with equal distributions across gender (male and female) and seven broad racial categories. I also transformed the data in several different ways to meet the assumptions of the regression and enhance the interpretation. For example, I recoded the categorical variable (race) as dichotomous variables.

Additionally, I centered the continuous independent variables to enhance the interpretation (West et al. 1996). Further, to complete the analysis of any moderation of gender and race on the variables of interest, I created interaction terms for inclusion in the multiple regression equations. I also utilized descriptive statistics to summarize the data. As a last step, I assessed assumptions for independence of observations, linearity, homoscedasticity, and multicollinearity before completing the regression analyses. This
last step included examining the data for outliers, leverage and influential points, and normality.

Following the organization of data and testing for assumptions, I performed a series of multiple regression equations to examine the relationship among (a) leader efficacy, (b) resilience, (c) gender, (d) race, and (e) socially responsible leadership. In contrast to standard multiple regression, a hierarchical multiple regression determines if the independent variables of primary interest (leader efficacy and resilience) explain a significant amount of variance in the dependent variable after controlling for specific factors, in this case, gender and race (Cohen & Cohen, 1983; Pedhazur, 1982).

To address the first two research questions, I evaluated correlation coefficients to assess the relationship between the independent variables (leader efficacy and resilience) and the dependent variable (Socially Responsible Leadership). After those analyses and to answer the final research question and the related hypotheses, I conducted moderated multiple regression equations to understand the effects of the two moderator variables. I ran separate models for each interaction, resulting in four models assessing the influence of race and gender on the relationships between leader efficacy, resilience, and socially responsible leadership. In interpreting the results, I used an alpha level of less than 0.05 to identify statistical significance, although to gain an understanding of practical significance, I also considered effect size.

Summary

Leadership and leader development are complex concepts yet are integral in the preparation of college students to ensure active and responsible civic engagement (Astin & Astin, 2000; CAS Professional Standards, 2015; Komives, 2013). This responsibility is
even greater today in the face of corporate misconduct, uncivil discourse, and failures to effectively address global issues. Such an environment requires a broad range of skills and resources for success (Goertzen & Whitaker, 2015; Hannah et al., 2008). Developing efficacy and resilience may be essential to building leadership capacity for social responsibility and preparing students for barriers encountered with civic engagement and social change. While emerging leadership literature explores these concepts, there is limited empirical research, especially in college students. This study examines these concepts and their relationship to socially responsible leadership. My investigation considered the interactions between leader efficacy and resilience and the influence of gender and race on the development of student leadership. The investigation utilized quantitative methodology, specifically moderated multiple regression, to explore these research questions. In chapter 4, I provide a detailed analysis, including descriptions of the sample and a summary of the results organized around the four research questions.
CHAPTER 4

RESULTS

Leadership, as defined by the Social Change Model, moves beyond specific skills or behaviors, and draws attention to social responsibility (Dugan, 2017; Komives et al., 2007; HERI, 1996). That is, it defines leadership in terms of inclusion, collaboration, awareness of self and others, and as having a shared purpose of social change. As such, the process prepares future leaders to effectively engage in and meet the challenges presented in an environment of diversity and complex issues. The model further motivates and prepares leaders to enact positive change focused on societal rather than individualistic needs. This non-experimental, quantitative study explored the concepts of leader efficacy and resilience and their relationship to socially responsible leadership. While the relationships between leader efficacy, resilience, and socially responsible leadership were of primary concern, I also investigated the influence of gender and race in these relationships. I explored five research questions and related hypotheses:

- **Research Question 1**: Is there a significant and positive relationship between leader efficacy and socially responsible leadership?

- **Hypothesis 1**: There is no relationship between leader efficacy and socially responsible leadership.
• **Research Question 2**: Is there a significant and positive relationship between resilience and socially responsible leadership?

  • **Hypothesis 2**: There is no relationship between resilience and socially responsible leadership.

• **Research Question 3**: Does socially responsible leadership differ by gender or broad racial group?

  • **Hypothesis 3**: There are no differences in socially responsible leadership by gender.

  • **Hypothesis 4**: There are no differences in socially responsible leadership by broad racial groups?

• **Research Question 4**: Does gender or race modify the relationships between resilience, leader efficacy, and socially responsible leadership capacity?

  • **Hypothesis 5**: Gender does not influence the relationship between leader efficacy and socially responsible leadership.

  • **Hypothesis 6**: Gender does not influence the relationship between resilience and socially responsible leadership.

  • **Hypothesis 7**: Race does not influence the relationship between leader efficacy and socially responsible leadership.

  • **Hypothesis 8**: Race does not influence the relationship between resilience and socially responsible leadership.

I conducted multivariate analyses to explore these hypotheses. This chapter summarizes the data analysis and presents the results. Following a detailed description of
the sample and descriptive statistics, I organized the results of the statistical analysis
around the five research questions.

**Data Analysis and Results**

As an initial inquiry into the relationship between socially responsible leadership, leader efficacy, and resilience, I organized the data and summarized the variables of interest using descriptive statistics before conducting the regression analysis. There were five variables in this investigation, with each participant contributing data to each variable. The dependent or outcome variable was the capacity for socially responsible leadership, as measured by the Socially Responsible Leadership Scale (SRLS). The primary independent variables were a self-reported level of leader efficacy, as measured by the Leader Efficacy Scale (LES) and a self-reported level of resilience, as measured by the Connor-Davidson Resilience Scale (Connor & Davidson, 2003). Race and gender were treated as moderator variables. To ensure adequate representation of all groups, I narrowed the original dataset of over 77,000 college students using a disproportionate stratified sampling procedure. This procedure resulted in a final sample (N=840) with equal numbers of participants across gender: (a) male and (b) female) and equal number across seven broad racial groups: (a) White/Caucasian, (b) Middle Eastern/North African, (c) African American/Black, (d) American Indian/Alaska Native, (e) Asian American, (f) Native Hawaiian/Pacific Islander, and (g) Latino/Hispanic. See Table 3 for details on the variables of primary interest.
### Table 3

**Descriptives and Coding for Model Variables**

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td>Reference Group: Female Caucasian/White</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Independent Variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader Efficacy Scale</td>
<td>3.106</td>
<td>0.696</td>
<td>4-item composite score; 1=Not at all confident; 4=Very confident</td>
</tr>
<tr>
<td>Connor-Davidson Resilience Scale</td>
<td>3.935</td>
<td>0.689</td>
<td>5-item composite score; 0=Strongly disagree; 5=Strongly agree</td>
</tr>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socially Responsible Leadership Scale</td>
<td>4.185</td>
<td>0.481</td>
<td>34-item composite measure; 1=strongly disagree; 5=strongly agree</td>
</tr>
</tbody>
</table>

Before running the regression analysis, I conducted diagnostics to assess for assumptions of linearity, normality, and homoscedasticity. This step included examining the data for outliers, leverage points, and influential points. The results of these diagnostics revealed no violations of assumptions. For example, there was homoscedasticity, as assessed by visual inspection of scatterplots of standardized residuals versus standardized predicted values. Scatter and variability were observed.

Additionally, there was no evidence of multicollinearity, as assessed by tolerance values greater than 0.1. There were no bivariate correlations above 0.70. Further, there were no leverage values greater than 0.2, nor values for Cook’s distance above 1. In producing normality probability plots comparing the distribution of standardized
residuals to a normal distribution, I found evidence of normality. Residual errors showed independence of observations with Durbin-Watson values ranging from 1.898 to 1.943.

**Research Question 1**

To explore the relationship between leader efficacy and socially responsible leadership, I examined the correlation coefficient for the participants’ self-reported leader efficacy, as measured by the Leader Efficacy Scale, and their self-reported socially responsible leadership capacity, as measured by the Socially Responsible Leadership Scale (Tyree, 1998). Leader efficacy was related to socially responsible leadership capacity \( (r (838) = 0.612, \ p < 0.001) \), indicating the relationship is not due to chance. Rather, per Cohen’s categories regarding the strength of a relationship, a strong relationship exists between leader efficacy and socially responsible leadership. Further, the coefficient of determination \( (r^2 = 0.375) \) indicated a large effect, meaning 37.5% of the variability in socially responsible leadership is accounted for by the relationship. Full details are found in Table 4. Based on this result, the null hypothesis (H1), which indicated no relationship between efficacy and socially responsible leadership, was rejected. The results of the analysis demonstrate a strong, positive, and linear relationship between leader efficacy and socially responsible leadership. Thus, students expressing greater levels of leader efficacy also expressed a greater capacity for socially responsible leadership.

**Research Question 2**

To explore the relationship between resilience and socially responsible leadership, I examined the correlation coefficient for the participants’ self-reported level of resilience, as measured by the Connor-Davidson Resilience Scale (Connor & Davidson,
2003), and their self-reported socially responsible leadership capacity, as measured by the Socially Responsible Leadership Scale (Tyree, 1998). A positive correlation was also found between resilience and socially responsible leadership capacity ($r (838) = 0.634$, $p < 0.001$), indicating a significant, linear relationship between these two variables. Again, utilizing Cohen’s categories to evaluate the strength of the relationship, the relationship is strong. Further, the coefficient of determination ($r^2 = 0.402$) indicated a large effect, meaning 40.2% of the variability in socially responsible leadership is accounted for by the relationship. Full details are found in Table 4. Based on this result, the null hypothesis (H2), which indicated no relationship between resilience and socially responsible leadership, was rejected. Rather, the results of the analysis demonstrate a strong, positive, and linear relationship between a self-reported level of resilience and socially responsible leadership capacity. That is, in this sample of college students, higher levels of resilience are associated with higher levels of socially responsible leader capacity.

Table 4

**Summary of Correlations Between Socially Responsible Leadership, Efficacy, and Resilience**

<table>
<thead>
<tr>
<th>Measure</th>
<th>SRL capacity</th>
<th>LES</th>
<th>CD-RS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRL capacity</td>
<td>0.612**</td>
<td>0.634**</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000**</td>
<td>0.000**</td>
<td></td>
</tr>
<tr>
<td>LES</td>
<td>0.612</td>
<td>0.571</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0.000**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. N=840; **p<0.001*

**Research Question 3**

To address Research Question 3, I conducted an ANOVA to compare socially responsible leadership capacity by gender and race. Descriptives are found in Table 5.
Females reported a higher level of capacity for socially responsible leadership than did males. Concerning broad racial groups, reported socially responsible leadership capacity ranged from a low of 4.038 (Asian American) to a high of 4.305 (Hispanic/Latino).

Table 5

*Summary of Means and Confidence Intervals for Gender and Race*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>4.165</td>
<td>0.023</td>
<td>4.119 - 4.210</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>4.206</td>
<td>0.023</td>
<td>4.160 - 4.251</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Racial Group</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>4.129</td>
<td>0.043</td>
<td>4.044 - 4.214</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Eastern/Northern African</td>
<td>4.108</td>
<td>0.043</td>
<td>4.023 - 4.193</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American/Black</td>
<td>4.254</td>
<td>0.043</td>
<td>4.169 - 4.339</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian</td>
<td>4.201</td>
<td>0.043</td>
<td>4.116 - 4.286</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian American</td>
<td>4.038</td>
<td>0.043</td>
<td>3.953 - 4.123</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>4.260</td>
<td>0.043</td>
<td>4.175 - 4.345</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>4.305</td>
<td>0.043</td>
<td>4.220 - 4.390</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Dependent Variable: Socially Responsible Leadership Capacity

The main effect for gender was not significant ($F (1,832) = 1.562, p=0.212$), and the null hypothesis (H3), which indicated no differences in socially responsible leadership by gender, was retained. In contrast, the main effect for race was found ($F (6,832) = 4.956, p<0.000$), suggesting significant differences in levels of socially responsible leadership capacity by broad racial groups. Based on these results, the null hypothesis (H4), which indicated no differences in socially responsible leadership by race, was rejected. However, the results revealed a small effect size ($\eta^2 = 0.035$), indicating minimal variability (3.5%) in socially responsible leadership is accounted for.
by race. No interaction effects were found between gender and race with respect to socially responsible leadership capacity. Full details are found in Table 6.

Table 6

Summary of Univariate Analysis of Variance

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>8.231*</td>
<td>13</td>
<td>0.633</td>
<td>2.815</td>
<td>0.001</td>
<td>0.042</td>
</tr>
<tr>
<td>Race</td>
<td>6.688</td>
<td>6</td>
<td>1.115</td>
<td>4.956</td>
<td>0.000</td>
<td>0.035</td>
</tr>
<tr>
<td>Gender</td>
<td>0.351</td>
<td>1</td>
<td>0.351</td>
<td>1.562</td>
<td>0.212</td>
<td>0.002</td>
</tr>
<tr>
<td>Race * Gender</td>
<td>1.192</td>
<td>6</td>
<td>0.199</td>
<td>0.883</td>
<td>0.507</td>
<td>0.006</td>
</tr>
</tbody>
</table>

Note. Dependent Variable: Socially Responsible Leadership

To further explore the differences revealed by broad racial groups on socially responsible leadership, a secondary analysis was conducted. Post hoc comparisons using Tukey’s HSD test indicated no differences between students identifying as Caucasian/White or American Indian/Native Alaskan and any other racial groups. However, differences were found among students identifying as (a) Middle Eastern/Northern African, (b) African American/Black, (c) Asian American, (d) Native Hawaiian/Pacific Islander, and (e) Hispanic/Latino groups. Specifically, while Asian American students reported lower capacity for socially responsible leadership than all other broad racial groups, significant differences were found between Asian American students and those students identifying as African American/Black, Native Hawaiian/Pacific Islander, and Hispanic/Latino. Additionally, significant differences were found between Hispanic/Latino students and Middle Eastern/Northern African students. These results are summarized in Table 7.
Table 7

*Summary of Comparisons Between Racial Groups on Socially Responsible Leadership*

<table>
<thead>
<tr>
<th>Race</th>
<th>Race</th>
<th>Mean Difference</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian American</td>
<td>African American/Black</td>
<td>-0.216</td>
<td>0.008</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td></td>
<td>-0.222</td>
<td>0.006</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td></td>
<td>-0.266</td>
<td>0.000**</td>
</tr>
<tr>
<td>Hispanic</td>
<td>Middle Eastern/Northern African</td>
<td>0.197</td>
<td>0.023</td>
</tr>
</tbody>
</table>

*Note.* Sig. <0.05

**Research Question 4**

Research Question 4 investigated the influence of race and gender on the relationship between the independent variables (leader efficacy and resilience) and socially responsible leadership. A series of moderated multiple regressions using the Socially Responsible Leadership Omnibus score as the dependent variable was conducted to answer this question. Moderating effects of race and gender were assessed separately for both leader efficacy and resilience. The results of the four models are found in Table 8.
Table 8

Summary of Moderated Regression Analyses

<table>
<thead>
<tr>
<th>Efficacy</th>
<th>β</th>
<th>T</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-0.052</td>
<td>-1.372</td>
<td>0.620</td>
<td>0.385</td>
<td>0.001</td>
</tr>
<tr>
<td>Broad Racial Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Eastern/North African</td>
<td>0.123</td>
<td>1.682</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American/Black</td>
<td>0.087</td>
<td>1.233</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>0.071</td>
<td>1.002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian American</td>
<td>0.063</td>
<td>0.916</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>0.099</td>
<td>1.435</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>0.113</td>
<td>1.668</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resilience</th>
<th>β</th>
<th>T</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-0.019</td>
<td>-0.513</td>
<td>0.648</td>
<td>0.420</td>
<td>0.000</td>
</tr>
<tr>
<td>Broad Racial Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Eastern/North African</td>
<td>0.063</td>
<td>0.906</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American/Black</td>
<td>0.082</td>
<td>1.132</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>0.130</td>
<td>1.840</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian American</td>
<td>0.137</td>
<td>1.944</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>0.043</td>
<td>0.621</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>0.041</td>
<td>0.577</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. N=840, **p<.001*

In the first regression model, the increase in variation explained by the addition of an interaction term between gender and leader efficacy to a main effects model was examined. Gender did not moderate the effect of leader efficacy on socially responsible leadership, as evidenced by an increase in total variation of less than 1%, which was not statistically significant, \( F(1,836) = 1.883, p=0.170 \). Based on this observation, the null hypothesis (H5), which indicated that gender does not influence the relationship between leader efficacy and socially responsible leadership, was retained. Full details are found in Table 8.

Similar results were found in the second regression model when assessing the increase in variation explained by the addition of an interaction term between race and
leader efficacy to the main effects model. Race did not moderate the effect of leader
efficacy on socially responsible leadership, as evidenced by an $R^2$ change of 0.003, ($F$
(6,826) =0.698, $p=0.651$). Based on this observation, the null hypothesis (H6), which
stated the broad racial category does not influence the relationship between efficacy and
socially responsible leadership, was retained. Full details are found in Table 8.

In the third regression model, interaction terms were entered to assess the
influence of gender on resilience and socially responsible leadership. Results revealed
gender did not moderate the effect of resilience on socially responsible leadership, as
evidenced by an increase in total variation explained of less than 0%, ($F$ (1,836) =0.263,
$p=0.608$). Based on this observation, the null hypothesis (H7), which stated gender does
not influence the relationship between resilience and socially responsible leadership, was
retained. Full details are found in Table 8.

In the fourth and final moderated regression model, the increase in variation
explained by the addition of an interaction term between race and resilience to the main
effects model was assessed. Race did not moderate the effect of resilience on socially
responsible leadership, as evidenced by an increase in total variation explained of 0.4%,
which was not statistically significant, ($F$ (6,826) =0.978, $p=0.439$). Based on these
observations, the null hypothesis (H8), which stated race does not influence the
relationship between resilience and socially responsible leadership, was retained. Full
details are found in Table 8.

With no interactions revealed, I conducted a hierarchical regression with the main
effects only. Results of this output revealed that gender was not a significant contributor
($F$ (1, 838) =1.520, $p=0.218$) at step one, explaining less than 1% of the variance.
Introducing race contributed only 2.8% of the total variance, but this change was statistically significant \( F(6, 832) = 4.960, p < 0.001 \). Adding leader efficacy to the regression model explained a total of 39.3% of the variance and was also significant \( F(1, 830) = 489.065, p < 0.001 \). Finally, the addition of resilience explained another 12.3% of the variance and was also significant \( F(1, 830) = 211.222, p < 0.001 \). Together, all four variables explained 51.1% of the variance, with leader efficacy uniquely contributing 35.7%. Full details are found in Table 9.

Table 9

Summary of Hierarchical Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>( \beta )</th>
<th>T</th>
<th>R</th>
<th>( R^2 )</th>
<th>( \Delta R^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.041</td>
<td>1.233</td>
<td>0.043</td>
<td>0.002</td>
<td>0.002</td>
</tr>
<tr>
<td>Broad Racial Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Eastern/North African</td>
<td>-0.022</td>
<td>-0.356</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American/Black</td>
<td>0.125</td>
<td>2.038</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>0.072</td>
<td>1.177</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian American</td>
<td>-0.091</td>
<td>-1.494</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Native Hawaiian/Pacific Islander</td>
<td>0.131</td>
<td>2.139</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>0.175</td>
<td>2.863</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Efficacy</td>
<td>0.421</td>
<td>22.115</td>
<td>0.627</td>
<td>0.393</td>
<td>0.357**</td>
</tr>
<tr>
<td>Resilience</td>
<td>0.303</td>
<td>14.533</td>
<td>0.719</td>
<td>0.516</td>
<td>0.123**</td>
</tr>
</tbody>
</table>

*Note.* \( N=840, **p<.001 \)

Limitations of the Study

As with all research, my study has some limitations. The limitations of my study primarily relate to data collection and sample selection. The original data from MSL resulted from a cross-sectional, self-reported design. Such designs are voluntary and collect information at a single point in time. Therefore, there is a possibility that the data
did not represent all sectors of the population. This imbalance is evident in the large representation of Caucasian/White students and female students in the sample.

Further, self-reported data is susceptible to response bias. One of the principal investigators with MSL argues against these drawbacks and asserts the SRLS (Tyree, 1998) adequately addressed response bias by utilizing Crowne Marlow to correct for social desirability (Dugan, 2015). However, this possibility should be considered when interpreting the results.

Additionally, quantitative data, as collected in a survey, limits insight into psychological phenomena like efficacy and resilience. While this was not the purpose of the current study, future research could gain additional insights through exploring socially responsible leadership and the phenomena of efficacy and resilience with qualitative methods. Another limitation of the current study concerns the sample selection. To narrow the large sample in which racial groups were not equally represented, I intentionally utilized a disproportionate stratified sampling technique. Doing so ensured all racial groups equal representation. However, while this strategy was purposeful, it may nonetheless result in artificially inflated findings, showing significant results where none existed.

**Summary**

This chapter presented the results of an exploration into the relationships between leader efficacy, resilience, and the capacity for socially responsible leadership in an extensive sample of college students. Additionally, I investigated whether gender and race influenced these relationships. The results of these analyses revealed a positive, linear relationship between leader efficacy and the capacity for socially responsible
leadership ($r$ (838) =0.612, $p<0.001$). Similarly, the analysis revealed that resilience is strongly associated with the capacity for socially responsible leadership ($r$ (838) =0.634, $p<0.001$). The capacity for socially responsible leadership varied according to race, but not by gender. Individuals identifying as Asian Americans reported the lowest capacity, and those identifying as Hispanic/Latino reported the highest capacity. These differences were significant. However, neither gender nor race was found to modify the relationships between leader efficacy, resilience, and the capacity for socially responsible leadership. The full model of gender, broad race, efficacy, and resilience explaining the variance of socially responsible leadership capacity was statistically significant, $R^2=0.516$, $F$ (9,830) =98.475, $p<0.001$. Together, all four variables explained 51.1% of the variance with leader efficacy uniquely contributing 35.7% and resilience uniquely contributing 12.36%. Chapter 5 elaborates on these findings and their contribution to socially responsible leadership within the post-secondary educational environment. The discussion connects the study to the literature and explores future directions.
CHAPTER 5

DISCUSSION

While institutions of higher education have long provided leadership development (Caza & Rosch, 2014; Dugan, 2017; Owen, 2012), a mistrust in national and global leadership currently exists, especially among the younger generation (Cone Communication CSR Report, 2017; Shahid, 2015; Seemiller & Grace, 2017). My awareness of increasingly complex global challenges, growing divisiveness, rising uncivil discourse, and the decline of ethical decision making by influential individuals encouraged me to explore how to engage college students and prepare them with the skills and desire necessary to be socially responsible and civically engaged. Efficacy and resilience are related concepts that play a crucial role in motivating change, confronting adversities, and persisting through difficulties (Anderson et al., 2008; Bandura, 1995; Schwarzer & Warner, 2013; Southwick et al., 2014). These characteristics may also enhance developing leadership capacity focused on social responsibility and civic engagement; however, limited empirical research investigates these concepts in college student leader development, especially concerning resilience. Therefore, I studied socially responsible leadership by examining two characteristics, efficacy and resilience, which I believe enhance socially responsible leadership and are necessary to confront the complex ethical dilemmas and global challenges facing leaders today.
The results of my investigation confirm positive relationships between socially responsible leadership capacity and the two variables of interest. The results of this investigation revealed a strong association between leader efficacy and socially responsible leadership. Further, the study found a significant relationship between resilience and socially responsible leadership. Thus, students who reported high levels of leader efficacy or resilience also reported high levels of socially responsible leadership capacity. Neither gender nor race modified the relationships between the three constructs. Together, all four variables explained 51.1% of the variance, with efficacy uniquely contributing 35.7% and resilience contributing 12.36%. While gender did not show a significant contribution, race showed a minimal, but significant contribution to the variability in socially responsible leadership capacity.

These results confirm previous findings, most notably the positive relationship between leader efficacy and the capacity for socially responsible leadership \((r (838) = .612, p<.001)\). This finding is consistent with previous research and provides additional empirical evidence supporting the importance of leader efficacy in developing socially responsible leadership in college students (Caza & Rosch, 2014; Dugan & Komives, 2010; Haber et al., 2018; Kodama & Dugan, 2013; McCormick et al., 2002). While not new, this positive association between efficacy and socially responsible leadership serves as a timely reminder for colleges of the complexity of leader development and the need to actively build students’ efficacy regarding their ability to influence or lead others. Institutions can focus on integrating efficacy skills into existing curriculum and addressing influences on efficacy beliefs, such as socialization, culture and social identity. This finding regarding efficacy is particularly salient for women who tend to
undervalue their leadership ability (Haber et al., 2018; McCormick et al., 2002; Paustian-Underdahl et al., 2014). Institutions of higher education must expand students’ definitions of leadership ability and intentionally support the contributions of all students. This action seems necessary if we are to engage fully with all students in our mission of preparing future leaders for the complexities of today’s global environment.

Of specific interest to me was the association between resilience and capacity for socially responsible leadership. The analysis revealed resilience is strongly associated with the capacity for socially responsible leadership ($r (838) = .634, p < .001$). Given the association between efficacy and resilience, this strong and positive association was not unexpected. For example, high levels of efficacy promote motivation and persistence under difficult circumstances (Bandura, 1995; Cassidy, 2015; Schwarzer & Warner, 2013). The studies establish a statistically significant relationship between resilience and socially responsible leadership capacity in college students.

Resilience is also a skill that can be developed and therefore taught (Southwick et al., 2014). Resiliency increases with an outward perspective and working toward positive change. Resilience skills would enhance leader development by preparing student leaders to persist and negotiate challenges associated with social change in the complex, fast-paced, and global environment. Including the development of resilience alongside leadership skills, attitudes, and behaviors reflected in the Social Change Model may enhance leadership (HERI, 1996), as well as other societal needs, such as civic engagement, which require forward-thinking, thinking beyond yourself, a positive mindset, and collaboration. The National Task Force on Civic Learning and Democratic Engagement shares this contention (A Crucible Moment, 2012). The Task Force argues
that by increasing civic engagement, institutions of higher education also increase their ability to impact “local and global economic vitality, social and political well-being, and collective action to address public problems” (A Crucible Moment, 2012, p. 2).

Institutions of higher education that intentionally develop students’ abilities to cope with adversity may have significant potential to increase the enactment of social responsibility and civic engagement.

Further, this finding may also have relevance for campuses when engaging students who are not in leadership positions nor otherwise actively involved. Infusing resilience skills into the broader campus environment recognizes that developing these skills provides benefit beyond positional leadership and builds the capacity for all students to contribute to social change. The relationship has further applications to student and leader development, as resilience shows promise in protecting against social pressures and other challenges (Richardson, 2002; Southwick et al., 2014; Ungar, 2014). Additionally, developing resilience provides additional value to students characterized as limited in coping skills (CCMH, 2018; Coiro et al., 2017; Galante et al., 2018; Maykrantz & Houghton, 2018). These students must also navigate challenges beyond college. Developing resilience may equip them with the necessary skills to fully engage, persist through difficulties, and become more socially proactive.

I also explored differences in socially responsible leadership by gender and race. Consistent with previous research using the SRLS (Dugan, 2006; Dugan & Komives, 2007; Dugan & Komives, 2010), my analysis revealed females report a higher level of capacity for socially responsible leadership than do males. However, the difference was not significant ($F(1,832) = 1.562, p = .212$) and may, as Diaz (2018) suggests, reflect the
tendency of transformational leadership approaches to minimize differences between genders. This finding may also indicate a movement away from hierarchical approaches and interests of both genders in transformational behaviors such as focusing on relationships, collaboration, and influence (Eklund et al., 2018; Tillapaugh & Haber-Curran, 2016).

Additionally, the capacity for socially responsible leadership varied according to race. This finding is also consistent with previous research (Dugan & Komives, 2007; Kodama & Dugan, 2013; Rosch et al., 2015). My analysis revealed small but significant, main effects for race ($F(6,832) = 4.956, p < .000$). These results align with research that illustrates students identifying as Asian Americans report the lowest capacity, and those identifying as Hispanic/Latino report the highest capacity for socially responsible leadership (Dugan et al., 2008; Huszco & Enders, 2017; Kodama & Dugan, 2013). As Ayman et al. (2010) and others suggest, culture and socialization impact our view of ourselves and how we interact with others. This view influences decisions regarding leader behavior and leader capacity. While these differences were small, they are significant and may impact student decisions regarding involvement. These differences were an essential finding for institutions in developing leadership opportunities for students of color who resist identifying with positional leadership and yet contribute through collective agency (Arminio, 2000; Ayman, 2010; Brown, 2008; Dugan et al., 2008). It is imperative campuses acknowledge these differences, not to isolate students, but to ensure a campus commitment to promoting an environment that builds a sense of belonging in all students.
Finally, neither gender nor race modified the relationship between the variables of interest. That is, neither gender nor race affected the strength of the relationship between efficacy or resilience and socially responsible leadership. This finding was unexpected as previous research provides strong evidence that socialization and role expectations influence genders and races differently (Bandura, 1977; Claus-Ehlers et al., 2006; Eklund et al., 2018; Huszco & Enders, 2017). Additionally, this influence extends to efficacy and resilience (Debb et al., 2016; McCormick, 2002; Strayhorn, 2016). As Diaz (2107) and Paustian-Underdahl et al. (2014) suggest, the Socially Responsible Leadership Scale may minimize the effects of these differences; however, our understanding of their influence remains pertinent in the training and development of college students to recognize, be sensitive to, and work with differing perspectives.

**Practical Implications**

Two decades after the introduction of the Social Change Model for Student Leadership (HERI, 1996) and the extensive development of effective leadership programming on college campuses, current national and global leadership demonstrate behaviors inconsistent with the seven values and social responsibility (Bandura, 1995; Brown, 2018; Clinton, 2017; Johnson, 2019). Distrust in these leaders is evident, especially in the current generation of students (Cone Communication CSR Report, 2017; Seemiller & Grace, 2017; Shahid, 2015). There are also continued calls for more collective action in addressing societal concerns (Voegtlin et al., 2012; Witt & Stahl, 2015; World Economic Forum, 2019). Although the current generation desires to responsibly address issues of societal interest, such as income/gender inequality, climate change, and data fraud, there is evidence they may lack the necessary skills to confront
challenging situations (CCMH, 2018; Coiro et al., 2017; Galante et al., 2018; Maykrantz & Houghton, 2018). While leadership programs provide important skills, knowledge, and attitudes for effective leadership, my findings suggest enhancing the training with the inclusion of efficacy and resilience skills may be beneficial to students in effectively navigating complex problems confronting leaders today (Buschlen & Dvorak, 2011; Dugan & Komives, 2010; Murphy & Johnson, 2016).

My findings regarding the positive association between efficacy, resilience, and socially responsible leadership can inform the university curriculum and policies regarding student engagement and leader preparation. It is imperative to foster an inclusive environment that promotes social and civic responsibility if we expect our graduates to be prepared and committed to confront and persist through issues of social change. More than providing new information, I believe findings in this study present a timely reminder to institutions of higher education of their obligations to develop students with the skills and desire to be socially responsible and civically engaged. While I understand there may be disagreement on the purpose of leadership, I hope this study serves as an invitation to explore options that benefit students, institutions and the broader community. I encourage institutions of higher education to purposefully incorporate essential skills and respond to the current generation of students who are poised to make positive social change.

For example, institutions of higher education should acknowledge our obligation to produce informed learners who can initiate positive social change by critically analyzing complex problems and meeting the challenges presented by our interconnected society. Facilitating and initiating change requires confidence and perseverance; that is,
enacting change demands taking risks and persisting through challenges. Focusing on academic skills alone is insufficient in attaining this goal, and neither can isolate leadership programming. Institutions of higher education must integrate the development of efficacy and resilience as part of the greater campus community if we are to fulfill our missions.

Additionally, institutions of higher education should provide an environment that acknowledges, and addresses influences to student and leadership development, especially within different genders and races, such as role expectations, socialization, culture, and social identity. Such an environment increases opportunities for students to explore shared values, creating change, and collective action.

Finally, institutions of higher education should engage in opportunities for cross-campus partnerships to create a campus culture focused on a holistic approach to student and leader development. These partnerships would allow opportunities for students to reflect upon and apply their learning within a broader context, thus enhancing the transfer of these skills to the environment after college.

**Implications for Future Research**

My study explored the relationship between socially responsible leadership and two related constructs, efficacy, and resilience. A key finding of this study is the significant relationship between resilience and socially responsible leadership capacity in college students, and future investigations should expand upon this research in several ways. For example, future studies might explore the relationships between efficacy and resilience and the seven values underlying the Social Change Model. Future studies might further examine the role of gender and race in this relationship between efficacy
and resilience and the seven values of the Social Change Model. Finally, using qualitative methods to explore the phenomenon of resilience and its connection to socially responsible leadership provides rich, descriptive information regarding these participants’ lived experiences and personal beliefs about leadership.
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APPENDIX A

HUMAN USE APPROVAL LETTER
EXEMPTION MEMORANDUM

TO: Dr. Bryan McCoy and Ms. Paula Atkins

FROM: Dr. Richard Kordal, Director of Intellectual Property & Commercialization (OIPC) rkordal@latech.edu

SUBJECT: HUMAN USE COMMITTEE REVIEW

DATE: June 25, 2018

TITLE: "Influences on Socially Responsible Leadership in College Students"

HUC 18-149

According to the Code of Federal Regulations Title 45 Part 46, your research protocol is determined to be exempt from full review under the following exemption category(s):

101(b) (4) Research involving the collection or study of existing data, documents, records, pathological specimens or diagnostic specimens, if these sources are publicly available or the information is recorded by the investigator in such a manner that the subjects cannot be identified directly or through identifiers linked to the subjects.

Thank you for submitting your Human Use Proposal to Louisiana Tech's Institutional Review Board.