Social Change Engagement and Leadership Development Among College Students

Andrew Harris
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SOCIAL CHANGE ENGAGEMENT AND LEADERSHIP DEVELOPMENT AMONG

COLLEGE STUDENTS

by

Andrew Harris

A dissertation submitted in partial fulfillment
of the requirement for the degree

of

DOCTOR OF PHILOSOPHY

in

Human Development and Family Studies

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UTAH STATE UNIVERSITY
Logan, Utah
2020
ABSTRACT

Social Change Engagement and Leadership Development Among College Students

by

Andrew Harris, Doctor of Philosophy
Utah State University, 2020

Major Professor: Troy E. Beckert, Ph.D.
Department: Human Development and Family Studies

The purpose of this study was to test the relation between the seven values of the Social Change Model of Leadership Development (consciousness of self, congruence, commitment, common purpose, collaboration, controversy with civility, and citizenship) and social change engagement. Previous research examining this relationship has used inadequate measures of social change engagement. These measures of social change behaviors focused on what a participant had done rather than how a person was engaged in creating positive change. Additionally, previous research has combined the values of the Social Change Model into one omnibus construct instead of studying each value’s unique impact on social change engagement. The current study was designed to address these shortcomings by introducing two new measures of social change engagement and by calculating the individual impact of each of the values of the Social Change Model on social change engagement.

With a sample of 162 college students, a series of linear and logistic regression
analyses were conducted to determine the relationship between the values of the Social Change Model and social change engagement. The measures of social change engagement utilized in this study were based on Westheimer and Kahne’s typology of engaged citizens (personally responsible, participatory, and justice-oriented citizens). Findings from this study suggest that separating the values of the Social Change Model provides unique information compared to using the omnibus scale. This was true when using previously used measures of social change behaviors as well as the new measures of social change engagement. Of the Social Change Model values, citizenship emerged as the most consistent predictor of social change engagement across models. Additionally, measures of social generativity and sociocultural discussions were also significantly related to social change engagement. These findings can help practitioners who utilize the Social Change Model to further refine their programs as they seek to develop individuals who are engaged in creating positive social change.

(150 pages)
PUBLIC ABSTRACT

Social Change Engagement and Leadership Development Among College Students

Andrew Harris

Young people are increasingly in the public view as agents of social change. As suggested in the Social Change Model of Leadership Development, those who develop the seven values of socially responsible leadership (consciousness of self, congruence, commitment, common purpose, collaboration, controversy with civility, and citizenship) are prepared to engage in the leadership process by creating positive social change. Findings from this study suggest that the socially responsible leadership value of citizenship was the value most consistently related to social change engagement. Additionally, social generativity, or the desire to leave a legacy for future generations, as well as participating in sociocultural discussions were related to social change engagement. These findings can help educators who utilize the Social Change Model to further refine their programs as they seek to develop young leaders who are engaged in creating positive social change.
ACKNOWLEDGMENTS

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research interests while providing me with opportunities to practice my skills by working on his projects. I have benefited from his example as an instructor as well as from his Graduate Instructor’s Forum. He, more than anyone, has prepared me to be a successful scholar and educator. He has worked tirelessly to help me finish this dissertation and launch me into a career. I am not sure where I would be without his mentorship. Thank you.

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CHAPTER I
INTRODUCTION

In the wake of the February 14, 2018, shooting at Marjory Stoneman Douglas High School in Parkland, Florida, survivors of that tragedy and youth from across the nation coalesced to form March for Our Lives, a group dedicated to eliminating gun violence (March for Our Lives, n.d.). On March 24, 2018, March for Our Lives helped organize demonstrations in Washington D.C. and in over 800 other locations across the globe drawing an estimated one to two million protestors. It was one of the largest youth-led protests since the Vietnam War (Lopez, 2018; Sit, 2018). These events sparked renewed discussions about the role that young people play in politics and in leading social change. The discussion about the role that young people play in leading social change is not new. However, such discussions typically focus on preparing young people for their future roles as leaders in society rather than their potential to create change while still young.

Many colleges have made it a part of their mission to develop future leaders. The Council for the Advancement of Standards in Higher Education has said, “colleges need to develop not just better, but more leaders, and that efforts should be directed toward the entire student body…students must be better prepared to serve as citizen-leaders in a global community” (Miller, 2003, p. 196). Considering this mandate, many colleges have implemented formal leadership programs (Freeman & Goldin, 2008). In the U.S., there are more than 1,000 colleges and universities that have formal leadership programs (Brungardt at al., 2006). Some of these programs began in the 1970s but the first
published work evaluating student leadership programs did not appear until 1981 (see Roberts, 1981). Before the 1980s, collegiate leadership education was a fragmented and atheoretical field, with each educator utilizing their own unique conceptual models and pedagogical strategies (Komives, 2011). The inconsistency that began with early programs and continues today is unsurprising considering the diverse definitions of leadership that have existed throughout the empirical study of leadership.

**Historical Overview of Leadership Literature**

Humans have long been fascinated with, and invested in, understanding leadership for millennia. The earliest formal writings on leadership date back to the ancient Egyptian society around 2300 B.C.E. Human myths, legends, and religious texts are replete with stories of both exemplary and poor leadership. Noted authors on the topic have included Confucius, Lao-tzu, Plato, Aristotle, Machiavelli, and John Locke. Indeed, there are numerous books, speeches, and articles about leaders and their effectiveness and development (Bass, 2008). The empirical study of leadership within the social sciences began in 1904. Terman’s (1904) foundational study focused on the characteristics that a leader possessed. Research and theory-building following Terman’s work also focused on the leader and their traits. Today these theories are often referred to as “great man” theories because they focus on leadership as the qualities inherent in the leader (Northouse, 2018).

In the middle of last century, Stogdill (1948) published a comprehensive review of the leadership research literature. He proposed that the emergence of leadership
depended on the situation and not just on a leader’s traits and skills. The result was a
paradigm shift towards situational contingency theories which focused on leadership
behaviors and the situations where they were most effective (Hunt, 1999). Then, in the
late 1970s, researchers reintroduced traits into leadership research with constructs such as
vision, self-esteem, and charisma (Hunt, 1999) moving away from a managerial view of
leadership. This represented the beginning of a third paradigm shift in which leadership
was conceptualized as moral and ethical rather than transactional (Gini, 1997). This
paradigm, often called the postindustrial paradigm of leadership (Rost, 1993), suggests
that the goal of leadership should be to create positive change in individuals and
organizations. Another important shift of the postindustrial paradigm is the idea that
leadership is not tied to a formal position. Rather, leadership is a process of mutual
influence between leader and follower (Bedeian & Hunt, 2006; Collinson, 2005) and that
leadership is a shared aspect of group members regardless of formal position (Carson et
al., 2007).

Given the significant paradigm shifts in conceptualizing leadership, it is not
surprising that the field remains without an established definition of leadership.
Nonetheless, scholars generally agree that leadership is a process between leaders and
followers, and leaders possess certain qualities and engage in certain behaviors that result
in positive outcomes for individuals, organizations, and communities (Bass, 2008).

While leadership researchers still do not utilize a singular definition, progress has
been made toward improving the quality of leadership education. Before the formal
collegete leadership education programs began in the 1980s, only students in formal
positions typically received leadership training. This followed the paradigm of the time suggesting that leadership was tied to formal position and was the product of effective actions taken by a leader in certain situations. With the shift towards the postindustrial paradigm, in concert with colleges’ emphasis on leadership education, moral- and character-based leadership education became the norm. Leadership educators, like those who study leadership broadly, still do not use a single definition or theory. However, educators typically see that the goal of leadership education is to “provide opportunities for people to learn the skills, attitudes, and concepts necessary to become effective leaders” (Huber, 2002, p. 27). This means that collegiate leadership programs typically focus on skill building, experiential learning (Meixner & Rosch, 2011), and a commitment to diversity and inclusion (Munin & Dugan, 2011). In the midst of the disparate leadership programs and pedagogies, the Social Change Model of Leadership Development (Higher Education Research Institute [HERI], 1996) has become the most widely used (Owen, 2012).

The Social Change Model of Leadership Development

The Social Change Model (SCM) of Leadership Development was designed specifically as a collegiate leadership educational tool (HERI, 1996). Central to the SCM is the notion that leadership is a collaborative process and is not something that is inherent to a position or individual. Additionally, leadership should be value-based and concerned with creating change for society. As such, all students have the capacity to develop into leaders (Komives et al., 2016). As an educational model, the SCM has two
goals:

1. To enhance student learning and development; more specifically, to develop in each student, greater:
   a. Self-knowledge: understanding one’s talents, values and interests, especially as these relate to the student’s capacity to provide effective leadership.
   b. Leadership competence: the capacity to mobilize oneself and others to serve and work collaboratively.

2. To facilitate positive social change at the institution or in the community. That is, to undertake actions that will help the institution/community to function more effectively and humanely. (HERI, 1996, p. 19)

The SCM is comprised of seven values divided into three domains—individual, group, and societal/community. These values are called the Seven C’s (see Figure 1).

Within the SCM framework, leadership will develop these values to be effective leaders. In the individual domain, a person must develop a consciousness of self or understanding their social and personal identities as well as their core values. They must develop congruence by living authentically and in harmony with their values. Finally, they must develop a commitment to action in pursuing their passions. Within the group domain, individuals must engage in collaboration with others towards a common purpose as they work together towards a shared goal, they must also be able to engage in controversy with civility. Finally, in the societal/community domain, a leader needs to engender a sense of citizenship, or the feeling that they are a part of a larger whole. These seven values prepare an individual to engage in the ultimate goal of the SCM, an eighth C of change, specifically, positive social change (Komives et al., 2016).

Proponents of the SCM suggest, “putting all the Cs together mobilizes individuals to understand themselves and come together in collaborative ways to accomplish change
particularly social change” (Komives et al., 2016, p. 198). This statement suggests that by developing consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, and citizenship, an individual is prepared to create social change. Leadership programs that utilize the SCM should be more effective in developing young leaders who engage in social change. Indeed, this is the goal of the developers of the SCM, “to help students acquire the skills and perspectives that will enable them to become effective change agents, regardless of their actual position or level
of affluence” (HERI, 1996, p. 76). If young people are to play an important role in creating positive social change, it is important to explore the ultimate outcome of the SCM: change.

**The Multi-Institutional Study of Leadership**

The largest effort to understand student leadership development and the SCM has been the Multi-Institutional Study of Leadership (MSL). The MSL began in 2006 to address the disparities between the use of theory in leadership research and practice, as well as the disconnect between leadership research and education (MSL, 2018a). The MSL is an ongoing research designed to study leadership education at colleges and universities across the U.S. and in some places internationally. The original MSL included 52 institutions with 63,095 student surveys (Komives et al., 2006). Since then, the study has grown to include over 610,000 participants from 350 colleges and universities with survey administered in 2006, 2009, 2010, 2011, 2012, 2015, and 2018 (MSL, 2018a). The research design of the MSL is called the “input-environment-outcome” (I-E-O) model (Astin, 1991) which was designed for evaluation in higher education. The I-E-O model is designed to help researchers determine how student outcomes are influenced by the personal qualities and experiences that students bring with them to college (inputs) as well as the structure and experiences they have during college (environment). The research team for the Multi-Institutional Study of Leadership have adapted the model slightly from Astin’s original model (see Figure 2) by including environmental variables outside of the college context such as mentor relationships in the
community, and by using a cross-section approach for data collection. To account for pre-college variables, they use a retrospective pre-test (MSL, 2018b).

**Figure 2**

*Conceptual Framework of the Multi-Institutional Study of Leadership*

![Conceptual Framework of the Multi-Institutional Study of Leadership](https://www.leadershipstudy.net/design/#conceptual-model)

*Note.* Adapted from Astin (1991). Reproduced from https://www.leadershipstudy.net/design/#conceptual-model

The National Clearinghouse for Leadership Programs, one of the primary sponsors of the MSL, has published several reports detailing some of the findings from this study. Members of the research team have also published several empirical studies and over 40 theses and dissertations have been completed using these data. While the MSL has provided leadership educators with important findings about college qualities and experiences related to developing the 7 C’s of the SCM, what they call *socially responsible leadership*, little is known about the ultimate goal of the SCM, that of creating positive social change. The MSL does include measures of social change behaviors and community service but these are most often used in research as college experience variables predicting socially responsible leadership development. When they
are used as outcome variables, they fall short of measuring engagement in creating positive social change.

**Social Change Engagement**

Positive social change as an outcome is difficult to assess for two reasons. First, the overall goal of social change unfolds slowly. According to Komives et al. (2016), efforts to improve society should target the root cause of problems rather than addressing symptoms, which is difficult to do in a single episode of effort. Secondly, determining which social changes are positive is inherently value-based and disagreements would undoubtedly arise about whether social change is always positive. Because social change takes time and requires a value judgement, its evaluation might be a more appropriate task for historians. To test the relationship between the values of the SCM and social change engagement, we can measure the efforts of a young person to create positive social change. By measuring engagement in social change efforts, we can test the assertion of the SCM that, by developing socially responsible leadership, individuals are “mobilize[d] to understand themselves and come together in collaborative ways to accomplish change particularly social change.” (Komives et al., 2016, p. 198).

**The Present Study**

The present study was designed to test the main assertion of the SCM – increased levels of socially responsible leadership (consciousness of self, congruence, commitment, common purpose, collaboration, controversy with civility, and citizenship) prepares an
emerging leader to engage in creating positive social change. Previous attempts to measure the relationship between socially responsible leadership and social change engagement may have not adequately measured social change engagement. This study introduces a new approach to measuring social change engagement and tests its relationship to socially responsible leadership.
CHAPTER II

LITERATURE REVIEW

The purpose of the present study was to test the main assertion of the SCM – increased development of socially responsible leadership (consciousness of self, congruence, commitment, common purpose, collaboration, controversy with civility, and citizenship) prepares an emerging leader to engage in creating positive social change. In this chapter, I begin with a summary of the values of the SCM of Leadership Development. I then present a summary of the empirical findings on community service and activism. While community service and activism do not necessarily equate to creating social change (Komives et al., 2016), social change engagement clearly encompasses these activities. As I describe the research on community service and activism, I outline how the findings from those studies conceptually relate the values of the social change model. I do this to propose an empirically based connection between socially responsible leadership and working social change engagement. In this chapter, I also present research of important constructs that are also related to social change behaviors that will be included in the analyses as covariates.

Socially Responsible Leadership

The SCM is built on seven core values. Each of these values begin with the letter c and are sometimes called the “Seven C’s for Change” (Komives et al., 2016, p. 19). The Seven C’s are: consciousness of self, congruence, commitment, common purpose, collaboration, controversy with civility, and citizenship. These core values provide a
framework for individuals to engage in the leadership process where the goal is an eighth C, change. Komives et al. suggest that the values of the SCM are interactive and that “growth in one value increases the capacity for growth in the others” (p. 20). This interaction would support treating these values as part of a greater whole – something that Komives et al. call socially responsible leadership. The 7 C’s are divided into three domains (personal, group, and societal/community). A comprehensive discussion of the Social Change Model and the 7 C’s can be found in Komives et al. What follows is a summary of the contents of that book.

The values in the personal domain are consciousness of self, congruence, and commitment. As a value in the SCM, consciousness of self involves introspection and mindfulness as an individual constantly reevaluates themselves in a lifelong process of growth and identity making. Aspects of one’s identity include values, culture, talents, and aspirations. These pieces of identity inform how we respond to problems and work within the leadership process. To be successful, an emerging leader must be conscious of themselves. Related to consciousness of self, the second value in the personal domain is congruence. These two values are closely related because to have congruence, one must first know one’s self. Congruence means thinking, feeling, and acting in a genuine and authentic manner and in accordance with one’s values. The final value in the personal domain is commitment. Commitment involves consistency, energy, and longevity in pursuing activities. Commitment is what energizes the individual as they work towards their goals. These three values are vital to the leadership process. Individuals, who know themselves, are regularly striving for congruence and are committed to pursuing
meaningful goals will be ready to engage in creating positive social change.

Creating positive social change requires the efforts of more than one individual. The three values in the group domain are collaboration, common purpose, and controversy with civility. These values are important for all those involved in the leadership process to maximize their efforts. The first value, collaboration, represents a recognition that a group’s efforts are multiplied by the individual and diverse contributions of each of its members. This multiplicative effect is most pronounced when members of the group share a common purpose with is the second value in the group domain. A common purpose involves all the members of a group shaping priorities, goals, and methods. A common purpose also promotes trust between the members of the group. The final value in the group domain is controversy with civility. Holding this value comes with the recognition that while strength comes from diverse viewpoints, it is also the origin of conflict. Living the value of controversy with civility is allowing for critical yet civil discourse as multiple opinions are heard and integrated into the group’s common purpose. The group values of the SCM allow for effective efforts in the interactive leadership process.

The final value of the Social Change Model is the societal/community value, citizenship. This value comes from the responsibility an individual has to their communities. As one accepts that they have the responsibility to others, they are more likely to work for the benefit of the community through service, community involvement, and social responsibility. These seven values come together to prepare an individual to engage in creating positive social change, represented by the eighth C, change. The value
of change gives purpose and direction to the other values. Dedication to the value of change means seeking for growth and improvement in creating a better world. Change can happen at an individual, group, or societal level although creating positive social change is the intent of the Social Change Model. While creating positive social change is a long process, those who embrace the values of the Social Change Model (i.e., those who develop socially responsible leadership) are likely to be engaged in certain behaviors like community service and activism that contribute to social change.

**Social Change Behaviors**

Social change behaviors include a wide range of activities with the goal of creating a positive impact on society (Musil, 2003). These behaviors can broadly be separated into two categories – community service and activism. Much of the research into community service and activism demonstrates the effect that social change behaviors have on what Perry and Katula (2001) called the psychology of service – attitudinal outcomes such as self-esteem and social responsibility. While research from the Multi-Institutional Study of Leadership suggests that Social change behaviors are important predictors of socially responsible leadership development among college students (Dugan & Komives, 2007), the Social Change Model itself suggests that socially responsible leadership would predict social change behaviors.

Pancer et al. (2007) conducted a study with 880 Canadian youth where they measured participants’ identity development, levels of social responsibility, as well as the frequency of their participation in 30 civic and community activities. Those activities
were grouped into four categories: political activities (e.g., “helped prepare and make verbal and written presentations to organizations, agencies, conferences, or politicians”), community activities (e.g., “helped organize neighbourhood or community events”), helping activities (“volunteered at a school event or function”), and responding activities (“gave money to a cause”). Using a cluster analysis, they grouped participants into four groups based on their engagement in those activities: activists, helpers, responders, and the uninvolved. Pancer et al. found that activists (those involved in political, community, and helping activities) and helpers (those involved in community and helping activities) had the highest levels of identity achievement and social responsibility. What remained unclear was whether participating in political and community activities promoted the development of identity and social responsibility or vice versa. While the directionality of this effect was unclear, using the SCM as a guide, one would expect that identity development, and social responsibility would predict involvement.

Much of the research in this field has focused on how community service-learning programs promote the development of identity and social responsibility in adolescence (Hamilton & Fenzel, 1988) and college students (Dharamsi et al., 2010), but has also demonstrated that social responsibility is related to desire to engage in community service in the future (Giles & Eyler, 1994). As a construct, social responsibility encompasses an individual’s belief that they are responsible to contribute to their community. This construct aligns well with the SCM value of citizenship.

Further research has demonstrated this potentially reciprocal relationship. Support for a reciprocal relationship between community service and the personal values of the
SCM comes from Pearce and Larson (2006) who used a grounded theory approach to understand how young people, who are initially disengaged with community service, become motivated and engaged. Participants in their study initially began community service with a youth activism group as a requirement for school. Gradually, these youth connected their current engagement to their previous experiences and their work began to take on personal meaning. Once they achieved personal meaning, they were energized by what they were doing and were no longer motivated by the extrinsic school requirement. This finding connects to consciousness of self, congruence, and commitment within the SCM; as these young people became aware of how their work was congruent with their own personal values, they became committed to engaging in social change work.

Like Pearce and Larson’s (2006) findings regarding personal connection to social change work, Harré (2007) created a framework for how young people find identity through community service and activism. Harré suggests that initial engagement begins with personal characteristics such as moral character, empathy, and prosocial orientation. Additionally, personal and collective contexts such as social crises and personal experiences of injustice instigate a young person’s engagement in social change. Engaging in social change can provide youth with a sense of belonging, purpose, and feelings of efficacy. As activism and community service are integrated into a young person’s identity, feelings of integrity and commitment to action emerge. Harré finished his review by discussing how service learning and other educational programs might promote identity development through activism and community service. He suggested that such programs provide opportunities to work together to provide a sense of
community. This suggestion is in line with developing group values of the SCM like common purpose and collaboration. Harré also suggested that projects should be designed to challenge the participants. He suggests that this will lead to what Pearce and Larson (2006) found, personal investment in the work, defined in the SCM as commitment.

Another interesting finding supporting a reciprocal relationship between the values of the SCM and social change behaviors comes from Schwartz and Suyemoto (2012). They interviewed participants in an urban youth action group called Youth Force. Participants of Youth Force learned community organizing skills and engaged in work to improve the situation for urban youth by campaigning for more access to jobs. Engaging in this work provided a peer community and youth models of social change activity. Collaboration and common purpose led to feeling respected by others as well as identifying oneself as an agent of change (i.e., consciousness of self and commitment). All of this also promoted feelings of connection to community (i.e., citizenship) and civic action (i.e., change).

Community service and activism are related to socially responsible leadership as defined by the values of the SCM. One of the limitations of this research is the reliance on cross-sectional methods which limits the ability to determine the direction of relationships between constructs. Another limitation of this research is that community service and activism do not necessarily equate to engaging in the leadership process and creating positive social change.
The Multi-Institutional Study of Leadership and Social Change Behaviors

The MSL has been the primary method for testing the Social Change Model and its assumptions. Findings from the MSL have suggested a developmental sequencing of the values of the SCM – leaders first develop the individual values, followed by the development of group leadership values, and finally they develop the societal leadership values (Dugan et al., 2013). Additionally, findings from the MSL also show that socio-cultural conversations, mentors, community service, and engagement in off-campus organizations all promote socially responsible leadership development (Dugan et al., 2013). While these findings provide valuable information to collegiate program directors, only two studies have tested the degree to which socially responsible leadership, as described by the 7 C’s, promotes engagement in creating positive social change. Two dissertations, which were completed using MSL data and have taken initial steps to verify this relationship, are highlighted below.

Using MSL data, Gasiorksi (2009) conducted a hierarchical logistic regression to predict whether college students engaged in community service during an average academic term. They added predictors in seven blocks: (1) background characteristics (gender, race, parental characteristics, age), (2) high school experiences (grades, community service, participation), (3) retrospective pre-test measures (socially responsible leadership when entering college), (4) college student characteristics (enrollment status, class standing, political views), (5) institutional characteristics (size, selectivity, Carnegie type), (6) college involvement, and (7) socially responsible
leadership, which is the measure used for the 7 C’s of the SCM. Gasiorski’s analyses were influenced by Astin’s (1991) Input-Environment-Outcome (I-E-O) model of evaluation. Using this framework, the inputs are what a student brings to the college experience (blocks 1-3) and the environment would be aspects of the college environment as well as the experiences they have in college (blocks 4-6). Added in the final block, socially responsible leadership was a significant predictor of whether college students engaged in community service ($\beta = .57, p < .001$). The overall model had a pseudo $R^2 = .36$ and classified 73.2% of cases correctly.

Also, with MSL data, Segar (2011) performed a hierarchical regression analysis to predict scores on a measure of social change behaviors and added the independent variables in five blocks: (1) demographic characteristics, (2) pre-college experiences, (3) institutional characteristics, (4) positional leadership development (which included the measure of socially responsible leadership), and (5) socio-cultural discussions. Segar’s final model accounted for a significant amount of variance in social change behaviors ($R^2 = .46$). Segar’s research question was whether social cultural discussions was a significant predictor of social change behaviors. While significant ($\beta = .18, p < .001$), sociocultural discussions had only a small effect on the outcome ($f^2 = .02$). Block 4, which contained the measure of socially responsible leadership produced the greatest change in $R^2 (\Delta R^2 = .26)$, however socially responsible leadership was not the only variable added in that block nor was it the strongest predictor in that block ($\beta = .14, p < .001$). Holding a leadership position was a stronger predictor of social change behaviors ($\beta = .39, p < .001$) than socially responsible leadership was.
Gasiorski’s (2009) and Segar’s (2011) findings provide initial support for the assertion that leadership development, as defined by the SCM, prepares individuals to participate in positive social change. The weakness of these studies was in the measurement of social change behaviors. Gasiorski used a dichotomous variable—whether college students engaged in community service in a typical academic term or not. Segar’s outcome variable consisted of 10 activities including taking part in a demonstration or rally, communicating with social leaders to address a pressing concern, and performing community service, all of which were scored using a 4-point scale. The community service measure that Gasiorski used could include someone who volunteers at the food bank once a semester or it could include one of the activists involved with the March for Our Lives. The measure that Segar used was more detailed, although the behaviors described in that measure of social change behaviors would not properly distinguish between someone who organizes an event from someone who showed up and participated. To test the relationship between socially responsible leadership, a distinction needs to be made between social change behaviors and social change engagement.

**Social Change Engagement**

Social change engagement goes beyond simply volunteering. Creating change on a social level requires seeking out and addressing the root of a problem (Wagner, 2016). Creating social change requires individuals to be, as Westheimer and Kahne (2002) described, a justice-oriented citizen. Justice-oriented citizens critically assess their systems and seek out injustices to correct. In addition to the justice-oriented citizen,
Westheimer and Kahne described two other types of engaged citizens: the personally responsible citizen, and the participatory citizen. The personally responsible citizen works and pays taxes, volunteers, and acts responsibly in their daily life. The participatory citizen is more active than the personally responsible citizen is and organizes community efforts to address community issues but lacks the critical consciousness that the justice-oriented citizen has. One example of distinguishing these types of citizens is how they might engage with the problem of hunger in their community. A personally responsible citizen would donate to and possibly volunteer at a food drive. A participatory citizen would most likely organize the food drive. A justice-oriented citizen, in addition to participating and organizing, would seek to address the systemic issues that contributed to hunger in the community in the first place.

Westheimer and Kahne’s (2002) citizen typologies are important to consider in concert with the SCM. Based on the work of Komives et al. (2016), leadership under the SCM is one of social change engagement and not just social change behaviors. Leadership under the SCM is the engagement of a justice-oriented citizen. Westheimer and Kahne’s typologies provide the foundation for a qualitative approach to measuring social change engagement for the present study. This new approach should provide better detection of individuals who are engaged in creating positive social change. This will be important to establishing a relationship between socially responsible leadership and social change engagement.
Social Generativity, Sociocultural Discussions, and Leadership Efficacy

There are three additional constructs related to social change engagement that are important to consider: social generativity, sociocultural discussions, and leadership efficacy. The following section summarized research on these constructs and their relationship to social change behaviors as well as the values of the Social Change Model. These constructs are included in the present investigation so that the unique effect of socially responsible leadership can be explored.

Social Generativity

The concept of generativity, as developed by Erikson (1963), refers to an individual’s concern for the next generation and desire to leave behind a legacy that will benefit those future generations. Erikson conceived generative concern as the primary task in middle adulthood, but he also expressed that every psychosocial crisis exists at every stage of development. Therefore, the importance of generativity exists in adolescents and early adults. To study generativity, McAdams and de St. Aubin (1992) created the widely used Loyola Generativity Scale (LGS). They used Erikson’s theory as a guide and validated it by comparing scores on their scale with narrative accounts of generative concern and actions. McAdams et al. (1993) used a stratified sample of young adults (ages 22-27), middle adults (ages 37-42) and older adults (ages 67-72) to study generative concern, generative action and wellbeing. Middle adults had significantly higher levels of generative concern and generative action compared to young adults and
older adults. Their initial test revealed that older adults were also significantly higher than young adults in measures of generativity. However, this difference was gone at a six-month re-test. While the consistent difference in generative concern and action for middle adults and the other two cohorts is supported by Erikson’s theory that generativity is primarily a concern of middle adulthood, the inconsistent findings between young adults and older adults suggests that generativity is not absent in early adulthood. In their own work, Pratt and Lawford (2014) suggested that generativity during adolescence and early adulthood manifests in community engagement, environmentalism, work, and political involvement.

Other researchers have likewise demonstrated that generativity manifests prior to middle adulthood. With a sample of 198 adolescents Lawford et al. (2005) measured generativity (using the LGS), community involvement, parenting styles, and personal adjustment over 6 years, from ages 17 to 23. They found that generative concern is positively related to community involvement at age 23 ($\beta = .34, p <.001$). Busch and Hoffer (2011) reported a positive relationship between generative concern (IV) and prosocial behaviors (DV) for adolescents (ages 15-18) from Germany ($b = .24, SE = .06, p <.001$) and from Cameroon ($b = .35, SE = .04, p <.001$) providing cross-cultural evidence for this relationship.

In addition to its connection to community engagement, generativity is also related to activism. Building on the qualitative work of Chan (2009), Matsuba et al. (2012) sought to demonstrate a quantitative link between generativity and environmental activism. Using a sample of 54 environmental activist and 56 nonactivists, half of whom
were early adults (ages 17 – 27, $M = 21.8$, $SD = 21.8$), they found that college-aged environmental activists scored higher on measures of generativity than their non-activist comparisons. Additionally, younger activists did not differ from their older counterparts on measures of generativity or action. In another study, Jia et al. (2015) found that among the Canadian youth in their sample ($N = 91$), generative concern at age 23 was significantly related to environmental activism (efforts to create social change) at age 32. This relationship persisted even after controlling for political orientation and benevolent attitudes. Generative concern is an important part of the SCM values of *citizenship* and *commitment*. Leaders should feel connected to others in their communities and desire to create positive change for their community. Because activism and community engagement are both aspects of creating positive social change, these findings demonstrate the importance of generativity when studying positive social change.

**Sociocultural Discussions**

Social change requires addressing systemic issues that precipitate societal problems. For social change to happen, individuals must engage in *socio-cultural discussions* to uncover the root of issues. As part of the SCM, these conversations can promote the personal values of *consciousness of self*, *congruence*, and *commitment* as well as the group values of *common purpose* and *controversy with civility*. Inkelas et al. (2006) operationalized socio-cultural discussions in their study of university living-learning programs. Their measure assessed the frequency with which students discussed social issues, lifestyles and diversity with their peers. They also asked how often students talked with students who differed from them on personal values, religion, and politics.
Their study focused on examining the difference between students who lived in living-learning communities (LLCs) and those who did not. Their findings showed that individuals who lived in LLCs ($M = 15.9$, $SD = 4.4$, range: 6-24) engaged in more socio-cultural discussions than their peers did ($M = 15.0$, $SD = 4.4$).

Researchers have also highlighted the relationship between sociocultural discussions and civic engagement and other related constructs. In a dissertation on living learning programs, Dong (2005) analyzed extant data of 2,642 college students. Using regression analyses, Dong demonstrated that sociocultural discussions were significantly related to civic engagement ($\beta = .152$), social responsibility ($\beta = .135$), and civic empowerment ($\beta = .108$).

MSL researchers also use the Inkelas et al. (2006) measure as part of their assessments. In a foundation report summarizing the findings from the first wave of the MSL, Dugan and Komives (2007), reported that sociocultural discussions were the strongest environmental predictor of growth in the SCM values as well as leadership efficacy though they provided little detail about this finding. Findings from Segar (2011) suggest that it only has a small effect on social change behaviors. Using a sample of 94,367 undergraduates from the 2009 wave of the MSL, Segar performed a hierarchical regression analysis where sociocultural discussions were added as the final predictor. Although statistically significant, this relationship had a small effect size, $b = .17$, $p < .001$, $f^2 = .02$, and only accounted for 2.4% of the total 45.5% of the variance explained by the model. While this is a small amount of variance, the measure of social change behaviors used by Segar encompassed how often students engage in one of ten activities.
Some of these activities include community service, being involved in community organizations, signing petitions, communicating with leaders about issues, and participating in a rally; all of which are more in line with participatory or personally responsible citizenship. None of these behaviors reaches the level of justice-oriented citizen, which is where we would expect to see sociocultural discussions have an impact. Notwithstanding Segar’s findings, sociocultural conversations might still be an important predictor of social change engagement.

**Leadership Efficacy**

Bandura (1982) suggests that self-efficacy is an important motivational process of behavior. Self-efficacy refers to an individual’s belief in their capacity to perform certain behaviors. Self-appraisal is based on previous experience, vicarious experience, physiological states, and verbal persuasion (Bandura, 1989). Self-efficacy is an important predictor of whether someone will engage in and persist in a task (Bandura, 1982). Popper and Mayseless (2007) suggest that self-efficacy is an important part of becoming a leader. In the domain of leadership through social change, self-efficacy would help a leader to begin engaging in social change work and persist through the difficulties encountered when seeking to create positive social change.

Finley (1991) argued that self-efficacy is the catalyst that moves individuals who believe in a cause toward action. They surveyed and interviewed Wiccan feminists and, using qualitative analyses, found that those who endorsed statements that suggested self-efficacy were more empowered to creating change. Similarly, Velasquez and LaRose (2015) studied online activism among early adults ($M_{age} = 20.9, SD = 2.8$) and found that
political self-efficacy predicted political participation ($\beta = .223, p < .01$). Interestingly, the effect of self-efficacy on political participation disappeared when collective efficacy, the belief that as a group you can accomplish a task, was added into the model. This suggests that there could be an indirect effect of self-efficacy on political participation through collective efficacy, though Velasquez and LaRose did not specifically test for this mediation relationship. Collective efficacy is reminiscent of the group values of collaboration and common purpose. Because self-efficacy has been demonstrated to be a valuable predictor of many behaviors (Bandura, 1982), and has been shown to be related to social change behaviors, leadership efficacy is an important construct to consider.

**Gender, Race/Ethnicity, and Age**

Researchers have previously also demonstrated the relationship between demographic variables and social change behaviors like community service and activism. Cruce and Moore (2007) conducted a large study ($N = 129,597$) of college students to determine what student characteristics were related to engaging in community service. They found that non-traditional students, females, and African American, Latinx, and Asian American students all had greater odds of engaging in community service. Other studies have found similar things as Cruce and Moore. Bonnett (2008) found that females engaged in more community service hours than males did on average using MSL data. Marks and Jones (2004) also found that females were more likely to engage in community service using data from the National Education Longitudinal Study of 1998.

Findings from race have been more mixed as Gasiorski (2009) found different
racial groups were more likely to engage in community service at different levels of a hierarchical logistic regression model. In their analysis, Gasiorski found that Asian American students were less likely to provide community service while Latinx students were more likely. Segar (2011) found that African American and Asian American students scored higher on a measure of social change behaviors while Latinx students scored lower. These findings suggest that the relationship between race/ethnicity and social change behaviors is more nuanced than a univariate analysis can account for.

The Current Study

The purpose of this study was to test the relationship between socially responsible leadership and social change engagement. Building on the previous work conducted by Gasiorski (2009) and Segar (2011), I used a different approach to measure social change engagement. Instead of a forced response measure that captured what a student had done, I used two measures to determine how a student engaged in social change efforts. First, I asked participants to provide stories of their social change work. Using a qualitative content analysis, I classified them as either a personally responsible citizen, participatory citizen, or justice-oriented citizen (Westheimer & Kahne, 2002). For the second method, I asked participants to classify themselves as one of those three citizen types. Using the two new measures of social change engagement, I sought to use the values of socially responsible leadership to predict which type of citizen each participant had been classified as. In these analyses, I also controlled for the demographic variables of age, gender, and race/ethnicity and the covariates of social generativity, sociocultural
discussions, and leadership efficacy. Previous research testing the relationship between social change behaviors and socially responsible leadership also suffers by using an omnibus measure of socially responsible leadership instead of separating the individual values of the SCM. In addition to the new measures of social change engagement, I tested the relationship between social change engagement and the individual values of the SCM. A detailed description of the procedures and methods is presented in Chapter III. Based on this review of the literature on these topics, I hypothesized that females will be more likely to engage in the different measures of social change behaviors used in this study. I also hypothesized that people of color would be more likely to engage in social change behaviors. Additionally, the covariates leadership efficacy, social generativity, and sociocultural conversations would also be significantly related to the outcome. With the inclusion of the covariates, I did not hypothesize that the omnibus SRLS would be a significant predictor of social change behaviors, but I did hypothesize that some of the subscales, citizenship in particular as it relates to social responsibility, would be statistically significant.
CHAPTER III

METHOD

Research Design

This study used a correlation design with measurement at one time point. The following research questions guided this inquiry.

RQ1: Do the values of socially responsible leadership in college students predict social change behaviors as measured by the standard MSL measures while controlling for social generativity, socio-cultural discussions, leadership efficacy and the demographic variables of age, gender, and race/ethnicity?

RQ2: Do the values of socially responsible leadership in college students predict social change engagement as measured by assigned citizen types while controlling for social generativity, socio-cultural discussions, leadership efficacy and the demographic variables of age, gender, and race/ethnicity?

Recruitment

To recruit for the study, I primarily used two methods of sampling—purposive and convenience sampling. The purposive portion of the sample came from the Val R. Christensen Service Center at Utah State University. Expressed on their website, the mission of the Val R. Christensen Service Center is to “prepare and educate all students to make life-long contributions through genuine service and foster positive attitudes and personal growth through service in our communities” (https://servicecenter.usu.edu/). At the time of recruitment, there were 15 service programs at the center, each with an online portal that students could join and receive updates about potential opportunities to engage in community service. Membership in these programs ranges from 44 to 200 students with some students having memberships in multiple programs. The Community Service
Coordinator at the center agreed to send out notifications for the study via these portals (N. Ault, personal communication, 2 Oct 2018). I targeted the service center for recruitment based on an assumption that students who associate with the service center likely would be engaged more in social change efforts than a typical student. Since social change engagement was the primary outcome variable for this study, a purposive sampling technique was used to gather data from individuals who would likely score high on my outcome variables.

In order to increase variability in the dependent variable, I also recruited participants from four introductory courses in the Human Development and Family Studies (HDFS) department at Utah State University. The goal of recruiting this convenience sample in addition to the purposive sample was to increase the amount of variability in the data and avoid a skewed sample. I recruited from two section of HDFS 1500, Human Development Across the Lifespan, and three sections of HDFS 2400, Marriage and Family Relationships. Both courses are listed as breadth social science classes, which means that students can take these courses to fulfill a general education requirement for graduation. As such, these classes potentially have students from all disciplines across campus.

To bolster my chances of recruiting participants who score high on the dependent variables, I also used a snowball method of recruiting. When finishing the questionnaire, participants were prompted with the following:

“Thank you for participating in this study! If you know of anyone else who attends USU who you think should participate in this study, please pass along the link you received.”
Because participants recruited using the snowball method would have used the same link as the friend who sent it to them, there would be no way of knowing which participants were recruited in this way and I made no efforts to differentiate them.

To conduct analyses appropriately, I set a sample goal of 300 participants. Estimates for sample size needed for a logistic regression, the main statistical technique used in this study, range from 10 participants per independent variable (Starkweather & Moske, 2011) to 50 participants per independent variable (Wright, 1995). Because this study had 14 independent variables, I would need a sample from 140 to 700.

**Sample**

Participants were recruited for this study with an initial goal of recruiting 300 participants. Three hundred fifty-seven people opened the survey. Of those, 16 did not move passed the consent form, three individuals indicated that they did not qualify for the study (at least 18 years old and current USU student), four individuals responded to the consent form and then did not complete any other questions, one individual only completed the demographic questions and another individual only responded to the dichotomous community service question. These 25 individuals were removed leaving 332 responses. An additional 35 responses were removed because they closed the survey before completing it. Of those 35 participants only 7 completed all of the demographic and dependent variables and began responding to the independent variable measures. These 35 cases would have been removed from analysis due to list-wise deletion, so they were removed at this point, prior to data analysis. From the Val R. Christensen service
center at USU, 152 responses were retained for analyses. From the introductory classes in the Human Development and Family Studies department at USU 145 responses were retained resulting in a sample size of 297.

This sample was further reduced after noticing irregularities in the data when calculating coefficient alphas for the subscales of the Socially Responsible Leadership Scale (SRLS). For the sample from the service center, all the reverse coded items were flagged as being negatively correlated with the total score and potentially needing to be reverse coded. The same was not true for the sample drawn from the introductory classes. There were some earlier indications during data collection to suggest that someone was responding multiple times to the survey distributed through the service center receive multiple incentives. These indicators included multiple surveys being completed in a period of time that seemed unreasonably quick and in succession during the early hours of the morning. I checked the data to ensure that I had reverse coded the items correctly and met with a statistical consultant to discuss the issue. Because I was worried about the potential for bad data corrupting my analyses and with no statistical way of determining which cases were bad, I decided to reduce the sample further and only include participants who had offered a complete response to the short answer questions. I did this assuming that those participants who took the time to thoughtfully respond to the short answer questions would have also thoughtfully responded to the rest of the survey. It is possible that this approach removed some valid responses of those who chose not to respond to the qualitative questions for other reasons. Knowing no other way of discovering the potential invalid responses through statistical methods, potentially losing
some valid responses was better than keeping bad data. This resulted in a total sample of 162 participants with 24 responses from the service center and 138 responses from the introductory classes. I moved forward with the analyses because this sample size was sufficient as it was over the suggested minimum of 140 participants needed to conduct my proposed analyses (Starkweather & Moske, 2011).

Participants in the final sample had a mean age of 20.46 (SD = 2.49) years old with the youngest being 18 and the oldest being 34. Only five participants were over the age of 25. Most of the participants were either freshman (n = 60) or sophomores (n = 52) with some juniors (n = 29), seniors (n = 17) and post-graduate students (n = 4). There were 137 female (84.6%) and 25 male (16.4%) participants. Almost all of the sample (90.74%) was White (n = 147) with some African American (n = 2), Asian American (n = 2), Latinx/Hispanic (n = 4), and multiracial (n = 7) students. The sample is less diverse than the university where this sample was drawn where 83% of the student body is White. This sample had more females compared to the student body which is 54%. This was likely due to part of the sample being recruited from Human Development and Family Studies classes which tend to have more female students. The classes where participants were recruited were mostly female (79.78%).

**Procedures**

To recruit participants, a letter was posted to the Service Center’s portals and to the introductory class Canvas pages explaining that the purpose of the study was to understand college students’ efforts to improve society. The letter also explained that the
study would require them to complete a short questionnaire as well as provide thoughtful, written responses to three questions. A copy of the recruitment letter can be found in the Appendix. The short-response questions were included in the announcement to allow potential participants time to consider the questions before opening the survey. Participants were also informed that the first 300 participants to complete the questionnaire would receive a $5 incentive.

Following the IRB-approved protocol, the questionnaire was administered through Qualtrics, an online survey platform. Once the participants followed the survey link found in the announcement, they were asked to verify that they were at least 18 years old and were a current student. If both criteria were met, participants were presented with a letter of information detailing their rights as a participant and asking them to confirm that they qualified for the study by being over 18 years old and a current student at Utah State University. Once they confirmed eligibility, they were taken to the survey to complete. Once they complete the survey, there were thanked for their participation and offered a link to follow to another survey, unconnected to their responses, where email addresses were gathered to process the incentive payments. This was done to ensure anonymity.

Measures

The survey contained three open-ended questions as well as 100 closed-response option questions. The survey included measures designed to assess the following constructs: socially responsible leadership, social change behaviors, social change
engagement, leadership efficacy, social generativity, social perspective taking, sociocultural discussions, and the demographic variables of age, class level, gender, and race/ethnicity.

**Socially Responsible Leadership**

The primary independent variables for analyses were the values of the Social Change Model of Leadership Development. Tyree (1998) was the first to operationalize how to measure development of the values described in the Social Change Model with the SRLS. The SRLS is a self-report measure where respondents answer using a 5-point scale ranging from (1) strongly disagree to (5) strongly agree. The original SRLS had 104 items, separated into eight constructs that correspond with the eight values of the SCM each with 12-14 items. Tyree (1998) demonstrated that the scale had good internal consistency (Henson, 2001) for each of the subscales of the SRLS: consciousness of self ($\alpha = .82$), congruence ($\alpha = .82$), commitment ($\alpha = .85$), collaboration ($\alpha = .77$), common purpose ($\alpha = .82$), controversy with civility ($\alpha = .69$), citizenship ($\alpha = .92$), and change ($\alpha = .78$). Tyree also reported evidence of construct validity of the SRLS by using a factor analysis. The items for each of the eight domains produced between two and four significant factor loadings with at least 30% of the variance explained by the first factor. Additionally, each of the domains had either one or no items fail to load on the first factor. Additional evidence of validity presented by Tyree include positive item-total correlations ($r = .36$ to $r = .75$) for all the items except one as well as correlations between the domains suggesting similarity but enough difference to show distinction between the constructs ($r = .42$ to $r = .70$).
The SRLS was reduced from 104 items to 68 items (SRLS-Rev2) for the first wave of the MSL in 2006 (Dugan, 2008), then reduced again to 40 items (SRLS-Rev3) for the 2009 wave. A further revision (SRLS-Rev4) reduced the measure to 34 items omitting two domains in the process (Common Purpose and Change). For the present study, I used the SRLS-Rev2 to measure socially responsible leadership. I chose this version rather than Tyree’s (1998) 104-item version because the 68-item measure should induce less participant fatigue. This was especially important because there are three open-ended questions to measure the dependent variable. I did not use the SRLS-Rev3 or -Rev4 because they were unavailable for public use. Previous work using MSL data has typically utilized an omnibus measure of socially responsible leadership by taking the mean of all the items on the SRLS. In my own analyses, I used both the omnibus SRLS measure as well as the individual subscales on the SRLS.

Social Change Behaviors

I used two measures of social change behaviors as the independent variables to answer research question 1, “Do the values socially responsible leadership in college students predict social change behaviors as measured by the standard MSL measures while controlling for social generativity, sociocultural discussions, leadership efficacy and the demographic variables of age, gender, and race/ethnicity?” The first was a dichotomous measure of whether a participant engages in community service. The second was a continuous measure of engagement in various social change behaviors. These measures are the same measures used previously by Gasiorski (2009) and Segar (2011) respectively.
The first measure of social change behaviors was a dichotomous variable that asked participants, “In a typical academic term, do you engage in any community service?” Participants who answered yes, were then asked to report approximately how many hours they engaged in service on their own, as part of a class, as part of a student organization, or as part of a community organization in an average month. These follow-up items were scored using a slider scale ranging from 0 to 100.

The second measure of social change behaviors comes from the Multi-Institutional Study of Leadership. The Social Change Behaviors Scale asks participants to rate the frequency of their engagement on a list of ten behaviors. This scale uses a 4-point scale ranging from (0) “never” to (3) “often.” Because of the nature of this measure where a student might engage in some of these behaviors but not all, internal consistency would not be inappropriate to calculate (Cronbach, 1951); however, previous work with this measure has cited good internal consistency (Segar, 2011). Because this measure has only been used in the large surveys of the MSL which only measures at one time point, no test-retest reliability has been established which would be more appropriate for this type of measure.

**Social Change Engagement**

To answer research question 2, “Do the values of socially responsible leadership in college students predict social change engagement as measured by the assigned citizen types while controlling for social generativity, sociocultural discussions, leadership efficacy and the demographic variables of age, gender, and race/ethnicity?,” I utilized two approaches to determine a participant’s level of social change engagement. First, I
used a qualitative approach wherein I asked participants three open-ended questions using the following prompt: “Below are three open-ended questions about your attitudes and experiences. Please write at least a paragraph for each question adding as much detail as you can.” The questions were: (1) “What does it mean to you to create positive change in your community?” (2) “Describe in detail a project that you participated in where you felt that you had made a difference in your community.” (3) “Describe in detail another project that you participated in where you felt that you had made a difference in your community.” Participants were presented with these questions in the recruitment letter (see the Appendix) to allow them time to consider their answers before taking the survey.

In addition to the open-ended questions, I asked participants to identify themselves among descriptions of three prototypes of citizen behaviors. The prototype descriptions were written using Westheimer and Kahne’s (2002) typologies: personally responsible citizen, participatory citizen, and justice-oriented citizen. Because the Westheimer and Kahne typologies served as the coding scheme for the qualitative analysis, this measure was included to serve as an additional measure of citizen type as well as a member check for my coding process.

**Covariates**

**Leadership Efficacy**

The MSL team designed the leadership efficacy scale as a domain specific measure of self-efficacy (Bandura, 1989). The measure asks a participant’s confidence in succeeding in four leadership relevant tasks on a four-point scale ranging from (1) “Not
at all Confident” to (4) “Very Confident”. The scores from previous waves of the MSL have demonstrated internal consistency with coefficient alphas ranging from 0.87 to 0.88 with scores from different populations (Dugan et al., 2012). No information for validity has been presented for this scale.

**Social Generativity**

Morselli and Passini (2015) developed the Social Generativity Scale because they felt that the Loyola Generativity Scale, the most commonly used measure of social generativity, as well as similar scales did not adequately measure an orientation towards future generations and instead focused on self-transcendence. Morselli and Passini’s Social Generativity measure was a new addition to the 2018 wave of the MSL (J. P. Dugan, personal communication). As such, analyses with this construct are absent from MSL reports. Similarly, this measure has not been used in other studies with college-aged students to study social change behaviors or leadership.

Morselli and Passini (2015) report a coefficient alpha of .78 with item-total correlations ranging from .40 to .64 as well as acceptable model fit in a confirmatory factor analysis on scores collected during scale construction. Efforts by Morselli and Passini to validate their measure include a factor analysis with good model fit ($\chi^2 (15) = 296.82$, CFI = .96, TLI = .93; RMSEA = .08, SRMR = .04) and correlations with previous measures of generativity ranging from .46 to .48 suggesting that the measures are related but addressing different dimensions of related constructs. Additionally, the Social Generativity Scale was designed to address a lack of social concern in previous measures of generativity and regression analyses demonstrated that this new measure was
more related to other measures of community than previous measures of generativity. These all suggest construct validity for this measure. The Social Generativity Scale contains six statements answered using a 7-point scale ranging from (1) “strongly disagree” to (7) “strongly agree”.

**Sociocultural Discussions**

The Socio-Cultural Discussions scale was developed for the National Study of Living-Learning Programs (Inkelas et al., 2008). The measure asks participants how often they engage in conversations with their peers outside of class about topics of cultural and political issues. Participants respond on a 4-point scale ranging from (0) “Never” to (3) “Very Often”. Internal consistency for data collected with this measure ranges from 0.85 (Inkelas et al., 2008) to 0.90 (Segar, 2011). No evidence of validity has been presented for this scale.

**Demographic variables**

Demographic variables included age, gender, and race/ethnicity. Age was measured as a continuous variable with participants selecting their age using a sliding scale. Gender and race/ethnicity both used a forced response format with one option allowing participants to list something that was not listed. The responses for gender were: “Female,” “Male,” “Questioning/Unsure,” “Transgender,” and “Preferred Response Not Listed (Specify)”. The options for race/ethnicity were: “White/Caucasian,” “Middle Eastern/North African,” “African American/Black,” “American Indian/Alaskan Native,” “Asian American,” “Native Hawaiian/Pacific Islander,” “Latinx/Hispanic,” “Multiracial,”
and “Race Not Listed (Specify).”

Analytic Plan

To answer the two research questions, I utilized both qualitative and quantitative procedures and three different statistical techniques. I began preparing the data for inferential analyses by calculating descriptive statistics for all of the variables. I also conducted preliminary statistical analyses by testing the internal consistency of my measures. I also conducted a correlation analysis to determine the risk of multicollinearity in my variables. Below I outline the techniques used to answer each research question and provide a rationale for the appropriateness of each type of analysis in answering the research questions.

Analytic Plan for Research Question One

To answer the first research question: “Do the values of socially responsible leadership in college students predict social change behaviors as measured by the standard MSL measures while controlling for social generativity, socio-cultural discussions, leadership efficacy and the demographic variables of age, gender, and race/ethnicity?” I used both a hierarchical logistic regression and a hierarchical linear regression. These analyses were patterned after the work previously done by Gasiorski (2009) and Segar (2011) using the same dependent variables.

I first conducted a hierarchical logistic regression, which allows for exploration of the relationship between one or more independent variables and a dichotomous dependent variable (Wright, 1995). For this analysis, I used the dichotomous variable of
whether participants engaged in community service in a typical academic term as my dependent variable. Second, I conducted a hierarchical regression analysis with the Social Change Behaviors Scale as the dependent variable. Similar to a logistic regression, a linear regression allows for the exploration of the linear relationship between one or more independent variables and a continuous dependent variable (Cohen et al., 2003). For both of these analyses, I utilized a hierarchical approach. A hierarchical approach shows the impact of the independent variable(s) while controlling for the impact of the covariates by entering the independent variables into the analysis in steps (Cohen et al., 2003).

For both analyses, I entered the independent variables in three steps. The first model included the demographic variables (age, gender, and race/ethnicity). The second model introduced the covariates (leadership efficacy, social generativity, and, sociocultural discussions) and the third model added the main independent variable (socially responsible leadership). Previous MSL work has only utilized the omnibus SRLS measure to predict social change behaviors. Conceptually some of the SCM values, such as citizenship, should be more related to social change behaviors than other values, such as controversy with civility. While the omnibus SRLS could be seen as an overall measure of leadership development, combining all the subscales together could also obscure the effects of some of the subscales.

Considering the potential different effects of the subscales, I tested a fourth model, as an alternative to the third model, that included the eight subscales of the SRLS (consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change) instead of the omnibus scale. This
fourth model allowed for the exploration of the individual values of the Social Change Model and their impact on social change behaviors.

Based on previous research, I hypothesized that females and people of color would be more likely to engage in social change behaviors. The covariates leadership efficacy, social generativity, and sociocultural conversations should also be significantly related to the outcome. With the inclusion of the covariates, I did not hypothesize that the omnibus SRLS would be a significant predictor of social change behaviors, but I did hypothesize that some of the subscales, citizenship in particular, would be statistically significant.

**Analytic Plan for Research Question Two**

To answer the second research question: “Do the values of socially responsible leadership in college students predict social change engagement as measured by assigned citizen types while controlling for social generativity, socio-cultural discussions, leadership efficacy and the demographic variables of age, gender, and race/ethnicity?” I used a two-step plan of analysis. An undergraduate research assistant and I analyzed the qualitative data from the two questions that asked participants to “Describe in detail a project that you participated in where you felt that you had made a difference in your community.” and coded them for social change engagement. The goal of our analysis was to classify each story based on the level of engagement that the participants demonstrated in their stories. We coded the data using a directed approach to content analysis. A directed approach to coding is guided by theory or relevant research findings (Hsieh & Shannon, 2005). Westheimer and Kahne’s (2002) distinctions between the personally
responsible, participatory, and justice-oriented citizen served as our coding scheme to classify social change behaviors as one of four categories: (0) uninvolved citizen, (1) personally responsible citizen, (2) participatory citizen, and (3) justice-oriented citizen. After the coding was complete, I created ordinal data by assigning each participant who completed the qualitative measures a citizen type.

Using those rankings, I ran a hierarchical multinomial logistic regression analysis. As with the previous analyses, I added the same independent variables in three steps. The first model included the demographic variables (age, gender, and race/ethnicity). The second model added the covariates and other control variables (leadership efficacy, social generativity, and, sociocultural discussions) and the third model added the main independent variable (socially responsible leadership). I also tested the fourth alternative model which included the eight subscales of the SRLS (consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change) instead of the omnibus measure of socially responsible leadership. Because the dependent variable had three groups, I tested each of the four models twice. First with personally responsible citizens (level 1) as the reference group. Results from this analysis demonstrated the odds of being a participatory citizen (level 2) or a justice-oriented citizen (level 3) compared to a personally responsible citizen. Then I tested the models with participatory citizens (level 2) as the reference group to determine the odds of being a justice-oriented citizen (level 3) compared to a participatory citizen (level 2). I repeated the analysis process a second time using the participant-assigned citizen types instead of the researcher-assigned citizen types.
Based on the previously reviewed literature, I hypothesized that females and people of color would be more likely to be categorized as either participatory (level 2) or justice-oriented citizens (level 3). I also hypothesized that the covariates leadership efficacy, social generativity, and sociocultural conversations would be significantly related to higher levels of citizen type. With the inclusion of the covariates, I did not hypothesize that the omnibus SRLS would be a significant predictor of citizen type, but I did hypothesize that some of the subscales, citizenship in particular, would be statistically significant.
CHAPTER IV

RESULTS

In this chapter, I present the results from all the analyses I conducted to answer my research questions. First, I present the descriptive statistics for the sample and the reliability estimates for the measures used in this study as well as the results of a correlation analysis of the independent variables to test for potential multicollinearity. Then I present the results of the analyses I used to answer my research questions. First, I present the results of the hierarchical logistic regression and hierarchical linear regression analyses conducted to answer research question 1. For research question 2, I present the results of the qualitative analysis to classify participants based on the stories that they shared. Finally, I present the results of the hierarchical multinomial logistic regression analysis used to analyze the qualitatively coded data and the participant-rated citizen types. All analyses for this project were conducting in R version 3.6.1 (R Core Team, 2019).

Descriptive Analyses

Dependent Variables

The dependent variables for this study were a dichotomous measure of community service and a continuous measure of social change behaviors for Research Question 1 and an ordinal measure of engaged citizen type for Research Question 2. Descriptive analyses for the community service and social change behaviors variables are presented in Table 1. In this sample, 95 participants (58.6%) indicated that they gave
community service in a typical academic term while 67 (41.4%) did not. For those who engaged in community service, they served an average of 13.98 ($SD = 26.00$) hours in a typical month, with a maximum of 190 hours served. Participants who served did so most often with a campus organization ($M = 4.21$, $SD = 12.19$). Next highest was serving on their own ($M = 3.96$, $SD = 10.92$) and with a community organization ($M = 3.52$, $SD = 8.49$). They served the least on average as part of a class ($M = 2.30$, $SD = 7.94$).

Participants had a mean score of .74 ($SD = .62$) on the Social Change Behaviors Scale, which has a range of 0 to 3 with the maximum score being 2.9.

Table 1

Descriptive Statistics for Social Change Behaviors and Community Service

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>$SD$</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
<th>Skew</th>
<th>Kurtosis</th>
<th>$N$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social change behaviors</td>
<td>.74</td>
<td>.62</td>
<td>0-3</td>
<td>0</td>
<td>2.9</td>
<td>1.37</td>
<td>1.47</td>
<td>159</td>
</tr>
<tr>
<td>Community service</td>
<td>13.98</td>
<td>26.00</td>
<td>0-100</td>
<td>0</td>
<td>190</td>
<td>3.45</td>
<td>15.23</td>
<td>162</td>
</tr>
<tr>
<td>...as part of a class</td>
<td>2.30</td>
<td>7.94</td>
<td>0-100</td>
<td>0</td>
<td>60</td>
<td>5.60</td>
<td>34.92</td>
<td>162</td>
</tr>
<tr>
<td>...with a campus org.</td>
<td>4.21</td>
<td>12.19</td>
<td>0-100</td>
<td>0</td>
<td>98</td>
<td>4.72</td>
<td>26.42</td>
<td>162</td>
</tr>
<tr>
<td>...with a community org.</td>
<td>3.52</td>
<td>8.49</td>
<td>0-100</td>
<td>0</td>
<td>80</td>
<td>5.55</td>
<td>41.37</td>
<td>162</td>
</tr>
<tr>
<td>...on your own</td>
<td>3.96</td>
<td>10.92</td>
<td>0-100</td>
<td>0</td>
<td>90</td>
<td>5.15</td>
<td>31.35</td>
<td>162</td>
</tr>
</tbody>
</table>

Because the engaged citizen type variable included a qualitative element, I present descriptive information for that variable later in this chapter, along with a description of the qualitative procedures.

Independent Variables

The independent variables for this study included the demographic variables of age, gender, and race/ethnicity, the eight subscales of the SRLS, leadership efficacy,
social generativity, and sociocultural discussions. Descriptive statistics for the independent variables, except for the demographic variables, are presented in Table 2.

Table 2

Descriptive Statistics for the Independent Variables

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>Min</th>
<th>Max</th>
<th>Skew</th>
<th>Kurtosis</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRLS</td>
<td>4.03</td>
<td>.31</td>
<td>1-5</td>
<td>3.00</td>
<td>4.75</td>
<td>-.30</td>
<td>.36</td>
<td>154</td>
</tr>
<tr>
<td>Consciousness of self</td>
<td>3.76</td>
<td>.51</td>
<td>1-5</td>
<td>2.22</td>
<td>4.89</td>
<td>-.38</td>
<td>.27</td>
<td>159</td>
</tr>
<tr>
<td>Congruence</td>
<td>4.36</td>
<td>.49</td>
<td>1-5</td>
<td>2.57</td>
<td>5.00</td>
<td>-.89</td>
<td>.84</td>
<td>160</td>
</tr>
<tr>
<td>Commitment</td>
<td>4.41</td>
<td>.48</td>
<td>1-5</td>
<td>2.67</td>
<td>5.00</td>
<td>-1.06</td>
<td>1.40</td>
<td>162</td>
</tr>
<tr>
<td>Collaboration</td>
<td>4.10</td>
<td>.36</td>
<td>1-5</td>
<td>3.12</td>
<td>4.88</td>
<td>-.15</td>
<td>-.30</td>
<td>162</td>
</tr>
<tr>
<td>Common purpose</td>
<td>4.10</td>
<td>.38</td>
<td>1-5</td>
<td>2.89</td>
<td>5.00</td>
<td>-.05</td>
<td>.17</td>
<td>161</td>
</tr>
<tr>
<td>Controversy with civility</td>
<td>3.80</td>
<td>.38</td>
<td>1-5</td>
<td>2.82</td>
<td>5.00</td>
<td>-.15</td>
<td>.23</td>
<td>161</td>
</tr>
<tr>
<td>Citizenship</td>
<td>4.01</td>
<td>.52</td>
<td>1-5</td>
<td>2.38</td>
<td>5.00</td>
<td>-.27</td>
<td>.46</td>
<td>162</td>
</tr>
<tr>
<td>Change</td>
<td>3.66</td>
<td>.46</td>
<td>1-5</td>
<td>2.20</td>
<td>4.70</td>
<td>-.26</td>
<td>.45</td>
<td>161</td>
</tr>
<tr>
<td>Leadership efficacy</td>
<td>3.04</td>
<td>.62</td>
<td>1-4</td>
<td>1.25</td>
<td>4.00</td>
<td>-.12</td>
<td>-.43</td>
<td>162</td>
</tr>
<tr>
<td>Social generativity</td>
<td>5.31</td>
<td>.85</td>
<td>1-7</td>
<td>2.5</td>
<td>7.00</td>
<td>-.38</td>
<td>.15</td>
<td>159</td>
</tr>
<tr>
<td>Sociocultural discussions</td>
<td>1.67</td>
<td>.73</td>
<td>0-3</td>
<td>0.00</td>
<td>3.00</td>
<td>.05</td>
<td>-.58</td>
<td>162</td>
</tr>
</tbody>
</table>

Preliminary Analyses

Measurement Reliability

I calculated the internal consistency for each of the scales used in this study. The results for these data and previously published work are presented in Table 3. Of the 13 scales and subscales used in these analyses, only two were potentially problematic from a statistical perspective. The Collaboration and Controversy with Civility subscales of the SRLS had alphas below the conventional .70 (Henson, 2001; Nunnally, 1978). Previous research had yielded satisfactory alphas suggesting that the low alpha coefficients...
observed in this study might be a property of this sample and not the scale (Bonett & Wright, 2015). Additionally, the 95% confidence intervals for both scales included values at or above .70. Given this, I decided to retain these scales for analysis. As indicated in the last chapter, it is not appropriate to calculate an internal consistency score for the Social Change Behaviors Scale so it does not appear in the table.

**Table 3**

*Internal Consistency Estimates for the Scale Scores*

<table>
<thead>
<tr>
<th>Scale/subscale</th>
<th>Coefficient alpha</th>
<th>Previous alphas</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRLS</td>
<td>.93 [.91, .94]</td>
<td>.93 – .96</td>
</tr>
<tr>
<td>Consciousness of self</td>
<td>.76 [.71, .82]</td>
<td>.78</td>
</tr>
<tr>
<td>Congruence</td>
<td>.83 [.79,.87]</td>
<td>.79</td>
</tr>
<tr>
<td>Commitment</td>
<td>.82 [.78, .87]</td>
<td>.83</td>
</tr>
<tr>
<td>Collaboration</td>
<td>.64 [.56, .72]</td>
<td>.80</td>
</tr>
<tr>
<td>Common purpose</td>
<td>.74 [.68, .80]</td>
<td>.81</td>
</tr>
<tr>
<td>Controversy with civility</td>
<td>.61 [.52, .70]</td>
<td>.72</td>
</tr>
<tr>
<td>Citizenship</td>
<td>.83 [.80,.87]</td>
<td>.90</td>
</tr>
<tr>
<td>Change</td>
<td>.76 [.71, .82]</td>
<td>.82</td>
</tr>
<tr>
<td>Leadership efficacy scale</td>
<td>.79 [.74, .84]</td>
<td>.87 – .88</td>
</tr>
<tr>
<td>Social generativity scale</td>
<td>.81 [.71, .86]</td>
<td>.78</td>
</tr>
<tr>
<td>Sociocultural discussions scale</td>
<td>.86 [.83, .89]</td>
<td>.85 – .90</td>
</tr>
</tbody>
</table>

**Multicollinearity**

I also conducted correlation analyses between all of the independent variables used to determine the risk of multicollinearity (Alin, 2010). A correlation matrix of the independent variables is in Table 4. When independent variables are highly correlated, there is the risk of multicollinearity (Blalock, 1963) which results in regression coefficients that are unreliable (Cohen et al., 2003). The highest correlation between
### Table 4

**Correlations Between the Independent Variables (N = 134)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Age</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Gender*</td>
<td></td>
<td>.32***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3 Race/ethnicity*</td>
<td></td>
<td></td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Leadership efficacy</td>
<td>.15</td>
<td>.06</td>
<td>.05</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Social generativity</td>
<td></td>
<td>.25**</td>
<td>.09</td>
<td>-.04</td>
<td>.38***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Sociocultural discussions</td>
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*Gender: 0 = female, 1 = male.

Race/Ethnicity: 0 = White, 1 = People of Color.

The Socially Responsible Leadership Scale is comprised of eight subscales (variables 8-15) and so correlations are not presented for those relationships.

*p < .05. **p < .01. ***p < .001.
independent variables in the current study was between the citizenship subscale of the SRLS and the Social Generativity Scale (r = .64, p < .001). A high correlation does not necessarily indicate the risk of multicollinearity (Alin, 2010) so I also calculated variance inflation factor scores for each analysis. Factor scores ranged from 1.00 to 3.27 which is below the problematic threshold of 10.00 (Cohen et al., 2003). This indicated that multicollinearity was not a problem in my analyses.

**Social Change Behaviors**

The goal in asking the first research question was to expand on the work of previous studies (Gasiorski, 2009; Segar, 2011), which sought to establish the relationship between the values of the SCM and social change engagement. These previous studies used an omnibus measure of socially responsible leadership, potentially obscuring the effects of the individual values of the SCM. My analyses were patterned after the previous studies. I first conducted a hierarchical logistic regression with community service engagement as the dependent variable. Then I conducted a hierarchical linear regression with social change behaviors as the dependent variable.

**Community Service**

The first analysis was a hierarchical logistic regression with community service engagement as the dependent variable. This variable measured whether a participant engages in community service in a typical academic semester with a dichotomous response (no/yes). The independent variables were entered in three steps. The first model included the demographic variables (age, gender, and race/ethnicity). The second model
added the covariates and other control variables (leadership efficacy, social generativity, and, sociocultural discussions) and in the third model, the main independent variable (socially responsible leadership) was added. I also tested a fourth model, as an alternative to the third model, that included the eight subscales of the SRLS (consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change) instead of the omnibus measure of socially responsible leadership. Results for this hierarchical logistic regression analysis are presented in Table 5. All continuous independent variables were mean centered prior to analysis to allow for interpretation of the intercept. Because of the logit distribution, the intercept is less meaningful to interpret but the mean centered variables were used in this analysis for consistency with the other analyses in this study. Additionally, the two categorical variables were dummy coded. For gender, females were assigned as the reference group. When each of the racial/ethnic categories were given their own dummy code and included in the analyses, none of the coefficients were significant. With so few respondents in each of the other racial/ethnic categories, I collapsed those responses (Harel & Steele, 2018) into a dichotomous dummy variable with White as the reference group.

The first model included the demographic variables of age, gender, and race. Model 1 had a significant likelihood ratio test, $\chi^2 (3) = 8.52, p < .05$ compared to the null model and correctly identified 59.15% of cases and had a sensitivity of .78 and a specificity of .32. In this first model, age was a statistically significant predictor ($b = .22, p < .05, OR = 1.25$) meaning that for every one year older a participant was, they were
Table 5

Findings from the Hierarchical Logistic Regression Analysis Predicting Engagement in Community Service

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
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<td>% of correctly identified cases</td>
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<td>[50.60%, 67.32%]</td>
<td>70.50%</td>
<td>[62.18%, 77.93%]</td>
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Note. All continuous predictors were mean centered prior to analyses. Gender was dummy coded with female as the reference group. Race was dichotomized to White/non-White and then dummy coded with White as the reference group.

*p < .05. **p < .01. ***p < .001.
1.25 times more likely to engage in community service.

The second model included the demographic variables from Model 1 and added leadership efficacy, social generativity, and sociocultural discussions. Including these variables increased the number of correctly predicted cases to 70.50%. The specificity increased to .55 and the sensitivity increased to .82. Model 2 had a significant likelihood ratio test, $\chi^2 (6) = 31.17, p < .001$ compared to the null model and was a significantly better fitting model when compared to Model 1, $\chi^2 (3) = 22.65, p < .001$. In this model, age was no longer a significant predictor but social generativity ($b = .94, p < .01, OR = 2.55$) and sociocultural discussions ($b = .72, p < .05, OR = 2.05$) were. Within this model, a one-unit change on the Social Generativity Scale resulted in participants being 2.55 times more likely to engage in community service. A one-unit change on the Sociocultural Discussions Scale meant that participants were 1.97 times more likely to engage in community service.

In Model 3, the omnibus measure of Socially Responsible Leadership was added to the previously added variables (age, gender, race/ethnicity, leadership efficacy, social generativity, and sociocultural discussions). The inclusion of the omnibus SRLS increased the predictive capability of this model to 71.64%. It also increased the sensitivity to .80 and the specificity to .60. Model 3 had a significant likelihood ratio test, $\chi^2 (7) = 31.47, p < .001$ compared to the null model but it was not significantly better than Model 2, $\chi^2 (1) = .30, p = .58$. The omnibus SRLS was not significantly related to the outcome. However, social generativity ($b = .92, p < .01, OR = 2.50$) and sociocultural discussions ($b = .66, p < .01, OR = 1.93$) maintained their significance. Similar to the
previous model, a one-unit increase in their respective scale scores meant that participants were 2.50 and 1.93 times more likely to engage in community service.

Model 4 included the eight subscales of the SRLS (consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change) instead of the omnibus measure and had a significant likelihood ratio test, $\chi^2 (14) = 51.55, p < .001$ and correctly predicted 72.39% of cases with a sensitivity of .78 and a specificity of .64. Model 4 was significantly better than Model 2, $\chi^2 (8) = 20.37, p < .01$, and as an alternative to Model 3, Model 4 had better model fit, $\chi^2 (7) = 20.07, p < .01$. Model 4 had several significant predictors. The demographic variables age ($b = .29, p < .05, OR = 1.34$) and race/ethnicity ($b = -1.56, p < .05, OR = .21$) were significant. For every one-year older participants were, they were 1.34 times more likely to engage in community service. Because race/ethnicity was dummy coded with White participants being the reference group and all other racial/ethnic identities as the other group, the negative relationship meant that students who were people of color were 4.76 times less likely to engage in community service. Sociocultural discussions was also a significant predictor of the outcome ($b = .99, p < .05, OR = 2.69$) such that a one-unit increase in the Sociocultural Discussions Scale meant that participants were 2.69 times more likely to engage in community service. Unlike previous models however, social generativity was no longer significant.

Finally, four of the subscales from the SRLS were significant predictors of engaging in community service: collaboration ($b = -2.13, p < .05, OR = .12$), controversy with civility ($b = -2.31, p < .05, OR = .10$), citizenship ($b = 1.72, p < .05, OR = 5.56$), and
change ($b = 1.52$, $p < .05$, $OR = 4.58$). The citizenship and change subscales were both positively related to the outcome such that a one-unit increase in those scale scores meant that participants were respectively 5.56 and 4.58 times more likely to engage in community service. The negative relationships between the collaboration and controversy with civility subscales indicate that ever one-unit increase in those scales meant that participants were respectively 8.41 and 10.07 times less likely to engage in community service.

**Social Change Behaviors**

The second analysis was a hierarchical linear regression with social change behaviors as the dependent variable. The measure of social change behaviors assessed the frequency with which participants engaged in ten behaviors. This measure used a 4-point scale ranging from 0 (never) to 3 (very often). As with the previous analysis, the independent variables were entered in three steps, (1) demographic variables (age, gender, and race/ethnicity), (2) covariates and other control variables (leadership efficacy, social generativity, and, sociocultural discussions) and (3) the main independent variable (socially responsible leadership). In this analysis, I also tested the fourth alternative model that included the eight subscales of the SRLS instead of the omnibus measure. Results for this hierarchical linear regression analysis are presented in Table 6. All continuous independent variables were mean centered prior to analysis. Gender was dummy coded with females as the reference group. Race/ethnicity was also dummy coded with White as the reference group.
### Table 6

**Findings from the Hierarchical Regression Analysis Predicting Social Change Behaviors (N = 134)**

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<th>Model 2</th>
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</table>

\[F(3,130) = 3.022, \quad p < .05\]
\[F(6,127) = 10.43, \quad p < .001\]
\[F(7,126) = 9.796, \quad p < .001\]
\[F(14,119) = 6.287, \quad p < .001\]

\[R^2 = .0651\]
\[.3300\]
\[.3524\]
\[.4252\]
\[.0436\]
\[.2984\]
\[.3165\]
\[.3575\]
\[.2648\]
\[.0224\]
\[.0952\]

\[F for \text{change in } R^2\]
\[F(3,130) = 16.735, \quad p < .001\]
\[F(1,126) = 4.3596, \quad p < .05\]
\[F(8,119) = 2.4616, \quad p < .05\]

**Note.** All continuous predictors were mean centered prior to analyses. Gender was dummy coded with female as the reference group. Race was dichotomized to White/non-White and then dummy coded with White as the reference group.

*p < .05. **p < .01. ***p < .001.
Model 1 included the demographic variables (age, gender, and race/ethnicity) and was overall statistically significant, $R^2 = .06$, $F(3,130) = 3.02$, $p < .05$. Model 1 has a small effect ($f^2 = .09$) on the outcome. Of the independent variables in Model 1, only age was significant ($b = .06$, $SE = .03$, $p < .01$, $\beta = .22$) such that a one standard deviation increase in age was related to a .22 standard deviation unit increase in scores on the Social Change Behaviors Scale.

In Model 2, leadership efficacy, social generativity, and sociocultural discussions were added to the analysis. Model 2 was also significant overall, $R^2 = .33$, $F(6,127) = 10.43$, $p < .001$, $f^2 = .51$. Adding the covariates in this model results in a significant increase in the amount of variance explained, $\Delta R^2 = .26$, $F(3,130) = 16.73$, $p < .001$, $f^2 = .35$. In Model 2, no demographic variables were significant but social generativity ($b = .25$, $SE = .06$, $p < .001$, $\beta = .34$) and sociocultural discussions ($b = .18$, $SE = .07$, $p < .01$, $\beta = .21$) were the significantly related to the outcome. A one standard deviation unit increase in scores on the Social Generativity Scale was related to a .34 standard deviation unit increase in the outcome. Similarly, a one standard deviation unit increase in scores on the Sociocultural Discussions Scale was related to a .21 standard deviation unit increase in the outcome.

Model 3 included the omnibus SRLS in addition to all the variables included earlier and was significant overall, $R^2 = .3524$, $F(7,126) = 9.796$, $p < .001$, $f^2 = .54$. Adding the omnibus SRLS resulted in a significant increase in the amount of variance explained, $\Delta R^2 = .02$, $F(1,126) = 4.36$, $p < .05$, $f^2 = .01$ compared to Model 2. In this model, social generativity ($b = .22$, $SE = .06$, $p < .001$, $\beta = .30$) and sociocultural
discussions \((b = .16, SE = .06, p < .05, \beta = .19)\) retained their significance. A one standard deviation unit increase in those scales respectively was related to a .30 and .19 standard deviation unit increase in the Social Change Behaviors Scale. Finally, the omnibus SRLS was also significant \((b = .40, SE = .19, p < .05, \beta = .19)\) such that a one standard deviation unit increase in scores on the SRLS was related to a .19 standard deviation unit increase in the outcome.

Model 4 included the eight subscales of SRLS (consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change) instead of the omnibus measure. This model was significant overall, \(R^2 = .4252, F(14,119) = 6.287, p < .001, f^2 = .74\) and explained significantly more of the variance than Model 2, \(\Delta R^2 = .09, F(8, 119) = 2.46, p < .05, f^2 = .09\). In Model 4 only the common purpose \((b = .45, SE = .20, p < .05, \beta = .25)\) and citizenship subscales \((b = .33, SE = .14, p < .05, \beta = .26)\) from the SRLS were significant. A one standard deviation unit increase in scores on the common purpose scale were related to a .25 standard deviation unit increase in scores on the Social Change Behaviors Scale. Similarly, a one standard deviation unit increase in scores on the citizenship scale were related to a .26 standard deviation unit increase in scores on the Social Change Behaviors Scale.

**Social Change Engagement**

To answer the second research question, I tested the relationship between the values of the Social Change Model (operationalized as socially responsible leadership) and social change engagement using both a qualitative measure and a participant self-
rated measure of engaged citizen type. The qualitative approach involved participants relating stories of their social change engagement which were then coded using content analysis and a coding scheme based on a conceptualization of citizen types (personally responsible, participatory, and justice-oriented). The participant-assigned approach asked each participant to rate themselves as a particular citizen type after reading descriptions of each. Once participants were classified by citizen type, a hierarchical multinomial logistic regression was used to determine if type of citizen could be predicted using socially responsible leadership while controlling for social generativity, socio-cultural discussions, leadership efficacy and the demographic variables of age, gender, and race/ethnicity.

Citizen Type

The qualitative approach to measure social change engagement involved asking participants to relate two different stories according to the following prompt: “Describe in detail a project that you participated in where you felt that you had made a difference in your community.” Together with an undergraduate research assistant, I coded each of the stories related by the participants using a directed content analysis approach (Hsieh & Shannon, 2005). I developed a coding scheme based on the work of Westheimer and Kahne (2002) for this analysis. Westheimer and Kahne proposed a tri-part typology of engaged citizenship, the personally responsible citizen, the participatory citizen, and the justice-oriented citizen. Table 7, from Westheimer and Kahne’s manuscript, details the differences between these citizen types and provides example behaviors as well as core assumptions that drive their actions. This table served as a guide while we coded the
responses. In addition to the three categories suggested by Westheimer and Kahne, we included a fourth category, *Uninvolved Citizen* for any participants who indicated that they did not feel they had participated in any efforts to make a difference in their community.

**Table 7**

*Citizen Typologies as Defined by Westheimer and Kahne (2002)*

<table>
<thead>
<tr>
<th>Personally responsible citizen</th>
<th>Participatory citizen</th>
<th>Justice-oriented citizen</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acts responsibly in his/her</td>
<td>Active member of community</td>
<td>Critically assesses social,</td>
</tr>
<tr>
<td>community</td>
<td>organizations and/or</td>
<td>political, and economic</td>
</tr>
<tr>
<td></td>
<td>improvement efforts</td>
<td>structures to see beyond</td>
</tr>
<tr>
<td>Works and pays taxes</td>
<td>Organized community</td>
<td>surface causes</td>
</tr>
<tr>
<td></td>
<td>efforts to care for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>those in need, promote</td>
<td></td>
</tr>
<tr>
<td></td>
<td>economic development,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or clean up environment</td>
<td></td>
</tr>
<tr>
<td>Recycles, gives blood</td>
<td>Knows how government</td>
<td></td>
</tr>
<tr>
<td></td>
<td>agencies work</td>
<td></td>
</tr>
<tr>
<td>Volunteers to lend a hand in</td>
<td>Knows strategies for</td>
<td>Knows about democratic</td>
</tr>
<tr>
<td>times of crisis</td>
<td>accomplishing collective</td>
<td>social movements and</td>
</tr>
<tr>
<td></td>
<td>tasks.</td>
<td>how to effect systemic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>change</td>
</tr>
</tbody>
</table>

**Sample Action**

| Contributes food to a food drive | Helps to organize a food drive | Explores why people are hungry and acts to solve root causes |

**Core Assumptions**

| To solve social problems and improve society, citizens must have good character; they must be honest, responsible and law-abiding members of the community | To solve social problems and improve society, citizens must actively participate and take leadership positions within established systems and community structures | To solve social problems and improve society, citizens must question, debate, and change established systems and structures that reproduce patterns of injustice over time |

*Note.* Reproduced from Westheimer and Kahne (2002).
After we each coded the stories independently, I calculated interrater reliability using Cohen’s Kappa coefficient (Cohen, 1960) and a percentage agreement (McHugh, 2012). For the first set of stories, the two raters had 78.80% agreement resulting in $\kappa = .61$ ($z = 9.49, p < .001$). For the second set of stories, the two raters had 77.90% agreement resulting in $\kappa = .60$ ($z = 8.58, p < .001$). Cohen suggests that a Kappa coefficient from .41 – .60 represents moderate agreement and .61 – .80 would be substantial agreement while McHugh (2012) suggested that a more appropriate standard would be to treat .60 to .79 as moderate agreement while also considering the percentage of agreement. McHugh also suggested that 80% agreement should be the goal for clinical tests but that between 61% and 79% agreement would be worth considering. Because the qualitative measure and coding scheme were exploratory and the percentage agreement was above 75% with moderate interrater reliability, we moved on to addressing discrepancies between our two sets of codes.

After compiling our responses into a table for comparison, most differences between the two sets of codes were whether a participant should be categorized as either a personally responsible citizen (level 1) or a participatory citizen (level 2). For the first coded story, 24 of the 34 (70.59%) incongruent codes were between those two citizen types. For the second coded story, 30 out of 33 (90.90%) incongruent codes were between those two citizen types.

After comparing the stories of the incongruent codes, the difference we observed primarily had to do with a participant’s efforts within an organization or organized event. According to Westheimer and Kahne (2002), participatory citizens are “Active member
of community organizations and/or improvement efforts”; whereas, personally responsible citizens will “[volunteer] to lend a hand in times of crisis” (p. 240). To bring our coding in better alignment with Westheimer and Kahne we decided that participants who described being a part of an organized effort would be considered participatory citizens except when those efforts were (1) a one-time or otherwise limited event or (2) the effort was tangentially related to their employment. In those cases, participants were rated as personally responsible citizens. For those disagreements that were not between personally responsible citizens (level 1) or participatory citizens (level 2), we examined those on a case by case basis and came to a consensus on what citizen type best represented the participant’s story.

Once agreement was reached, each participant was assigned a single code ranging from 0 to 3. Each participant’s score was determined by the highest classification they received between their two stories. In this sample, three participants were rated as uninvolved citizens (1.86%). There were 40 personally responsible citizens (24.84%), 106 participatory citizens (65.84%), and 12 justice-oriented citizens (7.45%). Example responses for each of the citizen-type categories can be found in Table 8.

In addition to sharing two stories where the participant felt that they had made a difference in their community, participants were asked to rate themselves using Westheimer and Kahne’s (2002) typologies. Three participants (1.85%) rated themselves as other (“I don’t feel like any of the above descriptions describes me”), 110 (67.90%) rated themselves as personally responsible citizens, 19 (11.73%) rated themselves as participatory citizens, and 30 (18.52%) rated themselves as justice-oriented citizens.


Table 8

Examples of Participant Stories and the Corresponding Researcher-Rated Citizen Type

<table>
<thead>
<tr>
<th>Category</th>
<th>Example story</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uninvolved citizen</td>
<td>“I don't think I have made much of a difference.”</td>
</tr>
<tr>
<td>Personally responsible citizen</td>
<td>“I just try to do little things each day. They may not make a difference to the entire community but to the few individuals it does make a big difference and positive change. I've been the [recipient] of positive changes and do my best to pay it forward. Hopefully other people will pay it forward as well”</td>
</tr>
<tr>
<td>Participatory citizen</td>
<td>“I help with many of the Food insecurity and Food waste initiatives on campus, and on numerous occasions, it feels I make a difference. For example, when a student tells me he wasn't sure where his next meal was coming from and I help him not feel hungry that day. Or when I prevent 100lbs of apples from going to waste.”</td>
</tr>
<tr>
<td>Justice-oriented citizen</td>
<td>“I served as president for the Queer Student Alliance (QSA) for a year, and in my time, we actively worked to promote a more inclusive campus and help the QSA grow. Our membership numbers grew exponentially, and now the club is flourishing with an abundance of members. My work as president included changing the meeting location of our club, publicly advertising events, and openly speaking about different meetings and events.”</td>
</tr>
</tbody>
</table>

Between the research rating and the participants’ self-ratings, there was a 33.00% agreement with a $\kappa = .102$ ($z = 2.9$, $p < .01$, $N = 161$). Based on convention, the agreement between the participants self-rating and the researcher ratings is either none (McHugh, 2012) or none to slight (Cohen, 1960). The participants’ perceptions of themselves were different from the researcher’s perceptions. Either the coding scheme was invalid, the participants did not adequately understand the citizen typologies we were using for the coding scheme, or there was bias in the self-report measure of citizen type. Assuming the independent variables included in this study were good predictors of social change engagement, the results should demonstrate which measurement technique better
captured social change engagement among our participants.

**Researcher-Rated Citizen Type**

To determine the relationship between the research-rated citizen type and the independent variables, I conducted a hierarchical multinomial logistic regression analysis with the research-rated citizen type as the dependent variable. Because only three participants were rated as uninvolved citizens, they were combined with the lowest level of citizenship, personally responsible citizens (level 1). Collapsing categories is a common technique to deal with ordinal groups when one group has a low frequency (Harel & Steele, 2018). As with the previous analyses, I added the independent variables in three steps. The first model included the demographic variables (age, gender, and race/ethnicity). The second model added the covariates and other control variables (leadership efficacy, social generativity, and, sociocultural discussions) and the third model added the main independent variable (socially responsible leadership). I also tested the fourth alternative model that included the eight subscales of the SRLS (consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change) instead of the omnibus measure of socially responsible leadership. In a multinomial logistic regression analysis, one level of the dependent variable is arbitrarily set as a comparison group. Odds ratios then represent the odds of being in one group instead of being in the reference group. Because the dependent variable had three groups, I tested each of the models twice. I first tested the models with personally responsible citizens (level 1) as the reference group to determine the odds of being a participatory citizen (level 2) or a justice-oriented citizen (level 3) compared to a
personally responsible citizen (level 1). Second, I tested the model with participatory
citizens (level 2) as the reference group to determine the odds of being a justice-oriented
citizen (level 3) compared to a participatory citizen (level 2).

None of the models tested with the researcher-rated citizen type as the dependent
variable had good overall model fit. Results for these analyses can be found in Tables 9 –
12. Because of this, any individual coefficients that were statistically significant should
be interpreted with caution. However, I present the findings from these analyses below
and what they might mean.

Model 1 included the demographic variables (age, gender, race/ethnicity) and had
a nonsignificant likelihood ratio test, $\chi^2 (6) = 4.20, p = .65$ and correctly predicted
65.76% of cases. No demographic variables were significant in predicing citizen type.
In Model 2, leadership efficacy, social generativity, and sociocultural discussions were
added. This model also had a nonsignificant likelihood ratio test, $\chi^2 (12) = 11.09, p = .52$
and a comparison of the two models suggests that they are no different statistically, $\chi^2 (6)$
$= 6.88, p = .33$. Model 2 correctly predicted 67.91% of cases and like Model 1, no
variables were predictive of citizen type.

Model 3 introduced the omnibus SRLS had a nonsignificant likelihood ratio test,
$\chi^2 (14) = 12.86, p = .54$ and correctly predicted 66.42% of cases. A likelihood ratio test
comparing Model 3 with Model 2 was also nonsignificant, $\chi^2 (2) = 1.78, p = .41$. With the
addition of the omnibus SRLS in Model 3, leadership efficacy became significant ($b =
1.30, p < .05, OR = 3.69$) in predicting justice-oriented citizens (level 3) compared to
Table 9

Model 1 of the Hierarchical Multinomial Logistic Regression Analysis with Researcher-Rated Citizen Type as the Dependent Variable

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Personally responsible citizen as reference</th>
<th>Participatory citizen as reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participatory citizen</td>
<td>Justice-oriented citizen</td>
</tr>
<tr>
<td>Intercept</td>
<td>.89  2.43*** .23</td>
<td>-1.51  .22*** .46</td>
</tr>
<tr>
<td>Age</td>
<td>.15  1.17 .11</td>
<td>.07  1.07 .21</td>
</tr>
<tr>
<td>Gender</td>
<td>.06  1.06 .59</td>
<td>-.33  .71 1.22</td>
</tr>
<tr>
<td>Race</td>
<td>.17  1.18 .71</td>
<td>1.19  3.28 1.00</td>
</tr>
<tr>
<td>N</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>χ²  4.2035</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>% of correctly identified cases</td>
<td>65.76% [56.98%, 73.65%]</td>
<td></td>
</tr>
</tbody>
</table>

Note. All continuous predictors were mean centered prior to analyses. Gender was dummy coded with female as the reference group. Race was dichotomized to White/non-White and then dummy coded with White as the reference group.

***p < .001.
Table 10

Model 2 of the Hierarchical Multinomial Logistic Regression Analysis with Researcher-Rated Citizen Type as the Dependent Variable

<table>
<thead>
<tr>
<th>Model 2</th>
<th>Personally responsible citizen as reference</th>
<th>Participatory citizen as reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participatory citizen</td>
<td>Justice-oriented citizen</td>
</tr>
<tr>
<td>Intercept</td>
<td>.94</td>
<td>2.57***</td>
</tr>
<tr>
<td>Age</td>
<td>.11</td>
<td>1.12</td>
</tr>
<tr>
<td>Gender</td>
<td>.05</td>
<td>1.05</td>
</tr>
<tr>
<td>Race</td>
<td>.10</td>
<td>1.10</td>
</tr>
<tr>
<td>Leadership efficacy</td>
<td>.40</td>
<td>1.49</td>
</tr>
<tr>
<td>Social generativity</td>
<td>.32</td>
<td>1.38</td>
</tr>
<tr>
<td>Sociocultural discussions</td>
<td>.16</td>
<td>1.17</td>
</tr>
<tr>
<td>N</td>
<td>134</td>
<td></td>
</tr>
<tr>
<td>Log Likelihood $\chi^2$</td>
<td></td>
<td>11.086</td>
</tr>
<tr>
<td>df</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>% of correctly identified cases</td>
<td></td>
<td>67.91% [59.30%, 75.71%]</td>
</tr>
</tbody>
</table>

Note. All continuous predictors were mean centered prior to analyses. Gender was dummy coded with female as the reference group. Race was dichotomized to White/non-White and then dummy coded with White as the reference group.

***p < .001.
Table 11

Model 3 of the Hierarchical Multinomial Logistic Regression Analysis with Researcher-Rated Citizen Type as the Dependent Variable

<table>
<thead>
<tr>
<th></th>
<th>Personally responsible citizen as reference</th>
<th>Participatory citizen as reference</th>
<th>Participatory citizen as reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participatory citizen</td>
<td>Justice-oriented citizen</td>
<td>Participatory citizen as reference</td>
</tr>
<tr>
<td>Model 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>1.03</td>
<td>-1.43</td>
<td>-1.03</td>
</tr>
<tr>
<td></td>
<td>2.79***</td>
<td>.49</td>
<td>.36***</td>
</tr>
<tr>
<td></td>
<td>.26</td>
<td>.24***</td>
<td>.26</td>
</tr>
<tr>
<td>Age</td>
<td>.12</td>
<td>.05</td>
<td>-.12</td>
</tr>
<tr>
<td></td>
<td>1.13</td>
<td>1.05</td>
<td>.89</td>
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<tr>
<td></td>
<td>.12</td>
<td>.22</td>
<td>.12</td>
</tr>
<tr>
<td>Gender</td>
<td>-.15</td>
<td>-.66</td>
<td>.15</td>
</tr>
<tr>
<td></td>
<td>.86</td>
<td>.52</td>
<td>1.17</td>
</tr>
<tr>
<td></td>
<td>.64</td>
<td>1.28</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>-.02</td>
<td>.95</td>
<td>.97</td>
</tr>
<tr>
<td></td>
<td>.74</td>
<td>1.05</td>
<td>2.65</td>
</tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Leadership efficacy</td>
<td>.67</td>
<td>1.30</td>
<td>-.67</td>
</tr>
<tr>
<td></td>
<td>1.95</td>
<td>3.69*</td>
<td>.51</td>
</tr>
<tr>
<td></td>
<td>.43</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Social generativity</td>
<td>.40</td>
<td>.06</td>
<td>-.40</td>
</tr>
<tr>
<td></td>
<td>1.49</td>
<td>1.06</td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td>.28</td>
<td>.54</td>
<td>.28</td>
</tr>
<tr>
<td>Sociocultural discussions</td>
<td>.20</td>
<td>.41</td>
<td>-.20</td>
</tr>
<tr>
<td></td>
<td>1.22</td>
<td>1.51</td>
<td>.82</td>
</tr>
<tr>
<td></td>
<td>.30</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td>SRLS</td>
<td>-.14</td>
<td>-1.37</td>
<td>1.14</td>
</tr>
<tr>
<td></td>
<td>.32</td>
<td>.25</td>
<td>3.14</td>
</tr>
<tr>
<td></td>
<td>.91</td>
<td>1.56</td>
<td>.91</td>
</tr>
<tr>
<td>$N$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Likelihood $\chi^2$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$df$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of correctly identified cases</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: All continuous predictors were mean centered prior to analyses. Gender was dummy coded with female as the reference group. Race was dichotomized to White/non-White and then dummy coded with White as the reference group.

*p < .05. ***p < .001.
### Table 12

**Model 4 of the Hierarchical Multinomial Logistic Regression Analysis with Researcher-Rated Citizen Type as the Dependent Variable**

<table>
<thead>
<tr>
<th>Model 4</th>
<th>Participatory citizen as reference</th>
<th>Justice-oriented citizen as reference</th>
<th>Justice-oriented citizen as reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>$b$</td>
<td>$\exp(b)$</td>
<td>$SE$</td>
</tr>
<tr>
<td>Interception</td>
<td>1.07</td>
<td>2.93***</td>
<td>.28</td>
</tr>
<tr>
<td>Age</td>
<td>.11</td>
<td>1.12</td>
<td>.13</td>
</tr>
<tr>
<td>Gender</td>
<td>-.06</td>
<td>.94</td>
<td>.72</td>
</tr>
<tr>
<td>Race</td>
<td>.18</td>
<td>1.20</td>
<td>.83</td>
</tr>
<tr>
<td>Leadership efficacy</td>
<td>.89</td>
<td>2.45*</td>
<td>.52</td>
</tr>
<tr>
<td>Social generativity</td>
<td>.01</td>
<td>1.01</td>
<td>.35</td>
</tr>
<tr>
<td>Sociocultural discussions</td>
<td>.10</td>
<td>1.10</td>
<td>.35</td>
</tr>
<tr>
<td>Consciousness of self</td>
<td>-.24</td>
<td>.79</td>
<td>.56</td>
</tr>
<tr>
<td>Congruence</td>
<td>.49</td>
<td>1.63</td>
<td>.64</td>
</tr>
<tr>
<td>Commitment</td>
<td>-1.68</td>
<td>.19**</td>
<td>.76</td>
</tr>
<tr>
<td>Collaboration</td>
<td>-.67</td>
<td>.51</td>
<td>.94</td>
</tr>
<tr>
<td>Common purpose</td>
<td>.49</td>
<td>1.63</td>
<td>1.02</td>
</tr>
<tr>
<td>Controversy with civility</td>
<td>.55</td>
<td>1.73</td>
<td>.80</td>
</tr>
<tr>
<td>Citizenship</td>
<td>1.18</td>
<td>3.27*</td>
<td>.71</td>
</tr>
<tr>
<td>Change</td>
<td>-.98</td>
<td>.37</td>
<td>.73</td>
</tr>
</tbody>
</table>

| $N$ | 134 |
| Log Likelihood $\chi^2$ | 31.461 |
| $df$ | 28 |
| % of correctly identified cases | 30.60% [22.93%, 39.14%] |

**Note.** All continuous predictors were mean centered prior to analyses. Gender was dummy coded with female as the reference group. Race was dichotomized to White/non-White and then dummy coded with White as the reference group.

*p < .05. **p < .01. ***p < .001.
personally responsible citizens (level 1). What this would mean is that for every one-unit increase in scores on the Leadership Efficacy Scale, participants were 3.69 times more likely to be a justice-oriented citizen as opposed to a personally responsible citizen.

Model 4 had the eight subscales of the SRLS instead of the omnibus measure. Model 4 had a nonsignificant likelihood ratio test, $\chi^2 (28) = 31.46, p = .30$ and correctly predicted 30.60% of cases. Additionally, Model 4 was not significantly different from Model 2, $\chi^2 (14) = 18.60, p = .18$. There were however, several individually significant variables that should be interpreted with caution as the overall model fit was poor.

With personally responsible citizen (level 1) as the reference group, leadership efficacy ($b = .89, p < .05, OR = 2.45$) and the commitment ($b = -1.68, p < .01, OR = .19$) and citizenship ($b = 1.18, p < .05, OR = 3.27$) subscales were statistically significant predictors of being a participatory citizen (level 2). This means that a one-unit increase in leadership efficacy scores meant that participants were 2.45 times more likely to be a participatory citizen instead of a personally responsible citizen. The citizenship subscale was also positively related such that a one-unit increase in leadership efficacy scores meant that participants were 3.27 times more likely to be a participatory citizen. The commitment subscale however had a negative relationship to the outcome. A one-unit increase in commitment scores meant that participants were 5.37 times less likely to be a participatory citizen. Compared to personally responsible citizens (level 1) there were two variables that were predictive of being a justice-oriented citizen (level 3) – leadership efficacy ($b = 1.92, p < .01, OR = 6.85$) and consciousness of self ($b = -2.01, p < .05, OR = .13$). A one-unit increase in leadership efficacy scores meant that participants were 6.85
times more likely to be a justice-oriented citizen and a one-unit increase in consciousness of self scores meant that participants were 7.46 times less likely to be a justice-oriented citizen.

Compared to participatory citizens (level 2), the consciousness of self \( (b = .89, p < .05, OR = 2.45) \) and the commitment \( (b = -1.68, p < .01, OR = .19) \) subscales were statistically significant predictors of being a justice-oriented citizen (level 3). This means that a one-unit increase in commitment scores meant that participants were 10.50 times more likely to be a justice-oriented citizen and a one-unit increase in consciousness of self scores meant that participants were 5.87 times less likely to be a justice-oriented citizen.

**Participant-Rated Citizen Type**

For this analysis, I performed a hierarchical multinomial logistical regression analysis with the participant-rated citizen type. This analysis followed the same pattern as the previous analysis. The independent variables were added in three steps (demographic variables, covariate and control variables, and the main independent variable) with a fourth alternative model to the third model. I also conducted this analysis twice, once with personally responsible citizens (level 1) as the reference group and once with participatory citizens (level 2) as the reference group. Results from these analyses can be found in Tables 13-16.

Model 1 had a significant likelihood ratio test, \( \chi^2 (6) = 13.25, p < .05 \) and correctly predicted 70.15% of cases. With personally responsible citizen (level 1) as the reference group, age \( (b = .25, p < .001, OR = 1.28) \) and race/ethnicity \( (b = 1.35, p < .01, \)
Table 13

Model 1 of the Hierarchical Multinomial Logistic Regression Analysis with Participant-Rated Citizen Type as the Dependent Variable

<table>
<thead>
<tr>
<th></th>
<th>Personally responsible citizen as reference</th>
<th>Participatory citizen as reference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participatory citizen</td>
<td>Justice-oriented citizen</td>
</tr>
<tr>
<td>Intercept</td>
<td>$b$</td>
<td>$\exp(b)$</td>
</tr>
<tr>
<td></td>
<td>-2.07</td>
<td>.12***</td>
</tr>
<tr>
<td>Age</td>
<td>.25</td>
<td>1.28***</td>
</tr>
<tr>
<td>Gender</td>
<td>.69</td>
<td>1.99</td>
</tr>
<tr>
<td>Race</td>
<td>1.35</td>
<td>3.88**</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Likelihood $\chi^2$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$df$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of correctly identified cases</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. All continuous predictors were mean centered prior to analyses. Gender was dummy coded with female as the reference group. Race was dichotomized to White/non-White and then dummy coded with White as the reference group.

*p < .05. **p < .01. ***p < .001.
Table 14

Model 2 of the Hierarchical Multinomial Logistic Regression Analysis with Participant-Rated Citizen Type as the Dependent Variable

<table>
<thead>
<tr>
<th></th>
<th>Personally responsible citizen as reference</th>
<th>Participatory citizen as reference</th>
<th>Justice-oriented citizen</th>
<th>Participatory citizen as reference</th>
<th>Justice-oriented citizen</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>Exp(b)</td>
<td>SE</td>
<td>b</td>
<td>Exp(b)</td>
</tr>
<tr>
<td>Intercept</td>
<td>-2.12</td>
<td>.12***</td>
<td>.38</td>
<td>-1.85</td>
<td>.16***</td>
</tr>
<tr>
<td>Age</td>
<td>.22</td>
<td>1.24</td>
<td>.13</td>
<td>.06</td>
<td>1.06</td>
</tr>
<tr>
<td>Gender</td>
<td>.84</td>
<td>2.31</td>
<td>.71</td>
<td>.88</td>
<td>2.41</td>
</tr>
<tr>
<td>Race</td>
<td>1.44</td>
<td>4.23*</td>
<td>.74</td>
<td>-.44</td>
<td>.64</td>
</tr>
<tr>
<td>Leadership efficacy</td>
<td>-.31</td>
<td>.73</td>
<td>.53</td>
<td>.13</td>
<td>1.14</td>
</tr>
<tr>
<td>Social generativity</td>
<td>.56</td>
<td>1.76</td>
<td>.43</td>
<td>.95</td>
<td>2.58**</td>
</tr>
<tr>
<td>Sociocultural discussions</td>
<td>.74</td>
<td>2.10*</td>
<td>.42</td>
<td>1.17</td>
<td>3.23***</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log likelihood $\chi^2$</td>
<td></td>
<td></td>
<td></td>
<td>40.843***</td>
<td></td>
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<tr>
<td>df</td>
<td></td>
<td></td>
<td></td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>% of correctly identified cases</td>
<td></td>
<td></td>
<td></td>
<td>74.63% [66.39%, 81.74%]</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** All continuous predictors were mean centered prior to analyses. Gender was dummy coded with female as the reference group. Race was dichotomized to White/non-White and then dummy coded with White as the reference group.

*p < .05. **p < .01. ***p < .001.
Table 15

Model 3 of the Hierarchical Multinomial Logistic Regression Analysis with Participant-Rated Citizen Type as the Dependent Variable

<table>
<thead>
<tr>
<th></th>
<th>Participatory citizen as reference</th>
<th>Justice-oriented citizen</th>
<th>Participatory citizen as reference</th>
<th>Justice-oriented citizen</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>b</strong></td>
<td>Exp(b)</td>
<td>SE</td>
<td><strong>b</strong></td>
<td>Exp(b)</td>
</tr>
<tr>
<td><strong>Intercept</strong></td>
<td>-2.15</td>
<td>.12***</td>
<td>-1.98</td>
<td>.14***</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>.22</td>
<td>1.24</td>
<td>.13</td>
<td>.05</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>.91</td>
<td>2.49</td>
<td>.72</td>
<td>1.14</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td>1.50</td>
<td>4.48*</td>
<td>.77</td>
<td>-1.19</td>
</tr>
<tr>
<td><strong>Leadership Efficacy</strong></td>
<td>-.39</td>
<td>.67</td>
<td>.61</td>
<td>-.16</td>
</tr>
<tr>
<td><strong>Social Generativity</strong></td>
<td>.53</td>
<td>1.70</td>
<td>.46</td>
<td>.79</td>
</tr>
<tr>
<td><strong>Sociocultural Discussions</strong></td>
<td>.73</td>
<td>2.07*</td>
<td>.44</td>
<td>1.17</td>
</tr>
<tr>
<td><strong>SRLS</strong></td>
<td>.43</td>
<td>1.54</td>
<td>1.15</td>
<td>1.60</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>134</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Log Likelihood χ²</strong></td>
<td>42.652***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>df</strong></td>
<td>14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>% of correctly identified cases</strong></td>
<td>75.7% [67.19%, 82.40%]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. All continuous predictors were mean centered prior to analyses. Gender was dummy coded with female as the reference group. Race was dichotomized to White/non-White and then dummy coded with White as the reference group. *
p < .05. **p < .01. ***p < .001.
Table 16

Model 4 of the Hierarchical Multinomial Logistic Regression Analysis with Participant-Rated Citizen Type as the Dependent Variable

<table>
<thead>
<tr>
<th>Model 4</th>
<th>Personally responsible citizen as reference</th>
<th></th>
<th>Participatory citizen as reference</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participatory citizen</td>
<td>Justice-oriented citizen</td>
<td>Participatory citizen</td>
<td>Justice-oriented citizen</td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>-2.44</td>
<td>.09***</td>
<td>.47</td>
<td>-2.40</td>
<td>.09***</td>
</tr>
<tr>
<td>Age</td>
<td>.44</td>
<td>1.56**</td>
<td>.19</td>
<td>.08</td>
<td>1.08</td>
</tr>
<tr>
<td>Gender</td>
<td>.37</td>
<td>1.45</td>
<td>.88</td>
<td>1.51</td>
<td>4.51*</td>
</tr>
<tr>
<td>Race</td>
<td>1.21</td>
<td>3.37</td>
<td>.87</td>
<td>.22</td>
<td>1.24</td>
</tr>
<tr>
<td>Leadership efficacy</td>
<td>-.64</td>
<td>.53</td>
<td>.78</td>
<td>-.02</td>
<td>.98</td>
</tr>
<tr>
<td>Social generativity</td>
<td>-.06</td>
<td>.94</td>
<td>.58</td>
<td>.59</td>
<td>1.80</td>
</tr>
<tr>
<td>Sociocultural discussions</td>
<td>.55</td>
<td>1.74</td>
<td>.49</td>
<td>1.24</td>
<td>3.45***</td>
</tr>
<tr>
<td>Consciousness of self</td>
<td>.64</td>
<td>1.90</td>
<td>.78</td>
<td>-.50</td>
<td>.60</td>
</tr>
<tr>
<td>Congruence</td>
<td>-2.54</td>
<td>.08***</td>
<td>.96</td>
<td>-1.06</td>
<td>.35</td>
</tr>
<tr>
<td>Commitment</td>
<td>.56</td>
<td>1.75</td>
<td>.83</td>
<td>1.00</td>
<td>2.72</td>
</tr>
<tr>
<td>Collaboration</td>
<td>-.40</td>
<td>.67</td>
<td>1.28</td>
<td>.91</td>
<td>2.48</td>
</tr>
<tr>
<td>Common purpose</td>
<td>.70</td>
<td>2.00</td>
<td>1.38</td>
<td>1.53</td>
<td>4.62</td>
</tr>
<tr>
<td>Controversy with civility</td>
<td>-1.61</td>
<td>.20</td>
<td>1.24</td>
<td>1.02</td>
<td>2.77</td>
</tr>
<tr>
<td>Citizenship</td>
<td>2.56</td>
<td>12.98**</td>
<td>1.21</td>
<td>.91</td>
<td>2.49</td>
</tr>
<tr>
<td>Change</td>
<td>1.08</td>
<td>2.95</td>
<td>1.09</td>
<td>-.78</td>
<td>.46</td>
</tr>
</tbody>
</table>

N | 134
Log likelihood $\chi^2$ | 63.662***
$df$ | 28
% of correctly identified cases | 78.36% [70.42%, 85.00%]

Note. All continuous predictors were mean centered prior to analyses. Gender was dummy coded with female as the reference group. Race was dichotomized to White/non-White and then dummy coded with White as the reference group.

*p < .05. **p < .01. ***p < .001.
OR = 3.88) were both statistically significant predictors of being a participatory citizen (level 2). This meant that for every one-year increase in age, participants were 1.28 times more likely to be participatory citizens. With regards to race/ethnicity, because that variable was dummy coded with White as the reference group, students of color were 3.88 times more likely to be participatory citizens. Race/ethnicity (b = -2.04, p < .05, OR = .13) was also a statistically significant predictor of being a justice-oriented citizen (level 3) when participatory citizen (level 2) was the reference group such that participants of color were 7.69 times less likely to be justice-oriented citizens compared to participatory citizens.

Model 2 had a significant likelihood ratio test, χ² (12) = 40.84, p < .001 compared to the null model and correctly predicted 74.63% of cases. Adding the covariates also resulted in a significant likelihood ratio test comparing Model 2 to Model 1, χ² (12) = 27.60, p < .001. With personally responsible citizen (level 1) as the reference group, age lost significance while race/ethnicity (b = 1.44, p < .05, OR = 4.23) maintained significance meaning that people of color were 4.23 times more likely to be participatory citizens (level 2) compared to personally responsible citizens. Additionally, sociocultural discussions (b = .74, p < .05, OR = 2.10) were statistically significant predictors of being a participatory citizen (level 2) and social generativity (b = .95, p < .01, OR = 2.58) and sociocultural discussions (b = 1.17, p < .001, OR = 3.23) were both statistically significant predictors of being a justice-oriented citizen (level 3). This means that a one-unit increase in social generativity meant that participants were 2.58 times more likely to be a justice-oriented citizen (level 3) than a personally responsible citizen (level 1).
Additionally, a one-unit increase in sociocultural discussions meant that participants were 2.10 times more likely to be a participatory citizen (level 2) and 3.23 times more likely to be a justice-oriented citizen (level 3) With participatory citizen (level 2) as the reference, no variables were significant predictors of being a justice-oriented citizen (level 3).

Model 3 had a significant likelihood ratio test, $\chi^2 (14) = 42.65$, $p < .001$ compared to the null model and correctly predicted 75.70% of cases. Compared to the previous model, Model 3 was not significantly better than Model 2, $\chi^2 (2) = 1.81$, $p = .40$. With personally responsible citizen (level 1) as the reference group, race/ethnicity ($b = 1.50$, $p < .05$, $OR = 4.48$) and sociocultural discussions ($b = .73$, $p < .05$, $OR = 2.07$) were statistically significant predictors of being a participatory citizen (level 2). Participants of color were 4.48 times more likely to be participatory citizens and a one-unit increase in sociocultural discussions meant that participants were 2.07 times more likely to be a participatory citizen (level 2). Social generativity ($b = .79$, $p < .05$, $OR = 2.20$) and sociocultural discussions ($b = 1.17$, $p < .001$, $OR = 3.24$) were statistically significant predictors of being a justice-oriented citizen (level 3). A one-unit increase in social generativity meant that participants were 2.20 times more likely to be justice-oriented citizens and a one-unit increase in sociocultural discussions meant that participants were 3.24 times more likely to be justice-oriented citizens. No variables were statistically significant in predicting justice-oriented citizens (level 3) when participatory citizen (level 2) is the reference group.

Model 4 had a significant likelihood ratio test, $\chi^2 (28) = 63.66$, $p < .001$ and correctly predicted 78.36% of cases. Like Model 3, Model 4 was not significantly
different from Model 2, $\chi^2 (16) = 22.82, p = .12$. With personally responsible citizen (level 1) as the reference group, age ($b = .44, p < .001, OR = 1.56$) and the socially responsible leadership subscales congruence ($b = -2.54, p < .001, OR = .08$) and citizenship ($b = 2.56, p < .001, OR = 12.98$) were statistically significant predictors of being a participatory citizen (level 2) but race/ethnicity and sociocultural discussions were no longer significant. For every one year older a participant was, they were 1.56 times more likely and a one-unit increase in the citizenship subscale meant a participant was 12.98 times more likely to be to be a participatory citizen (level 2). Additionally, a one-unit increase in scores on the congruence subscale meant that participants were 12.68 times less likely to be participatory citizens.

Sociocultural discussions ($b = 1.24, p < .001, OR = 3.45$) was statistically significant predictors of being a justice-oriented citizen (level 3) such that a one-unit increase in scores on the Sociocultural Discussions Scale meant that participants were 3.45 times more likely to be a justice-oriented citizen. With participatory citizen (level 2) as the reference, age ($b = -.36, p < .05, OR = .70$) and the socially responsible leadership subscale controversy with civility ($b = 2.63, p < .05, OR = 13.94$) were statistically significant predictors of being a justice-oriented citizen (level 3). This means that every one year older participants were, they were 1.4 times less likely to be justice-oriented citizens and for every one-unit increase in scores on the controversy with civility subscale, participants were 13.94 times more likely to be a justice-oriented citizen.
CHAPTER V
DISCUSSION

In this chapter, I provide a summary and discussion of the results of the analyses conducted to determine the extent to which the eight values of the Social Change Model of Leadership Development were related to social change engagement for the participants in this study. I begin by reviewing the issue driving this inquiry, and then I summarize and review the findings for the research questions and discuss their implications. Finally, I cover the limitations of the study, implications for practice, and suggestions for future research.

Youth Engagement in Social Change Work

The role that young people play in creating positive social change is often discussed from the perspective of what can be done to prepare them for future engagement, rather than preparing them for and encouraging them to engage in current social change work. The SCM is the most frequently used model for leadership education at colleges in the U.S. (Owen, 2012). The SCM was originally designed “to help students acquire the skills and perspectives that will enable them to become effective change agents, regardless of their actual position or level of affluence” (HERI, 1996, p. 76). However, up to now, research involving the SCM has primarily focused on how to best develop the values of the SCM, while little research has focused on whether those values are actually associated with greater engagement in social change work. The scant research that does exist to that end uses simple indicators of engagement. The purpose of
this study was to examine the extent to which the values of the Social Change Model were related to engagement in social change work. There were two research questions guiding the analyses.

**Does Socially Responsible Leadership Predict Social Change Behaviors?**

The first research question was “Do the values of socially responsible leadership in college students predict social change behaviors as measured by the standard MSL measures while controlling for social generativity, sociocultural discussions, leadership efficacy and the demographic variables of age, gender, and race/ethnicity?” The goal for this research question was to model previous work done using the values of the SCM and their relationship to social change behaviors. To answer this question, I conducted two analyses. The first was a hierarchical logistic regression analysis using the eight values of the SCM, collectively called socially responsible leadership, social generativity, participation in sociocultural discussions, leadership efficacy, and the demographic variables of age, gender, and race/ethnicity to predict whether a participant volunteers in a typical academic semester. This analysis was patterned after the work of Gasiorski (2009). For the second analysis, I conducted a hierarchical linear regression analysis using socially responsible leadership, social generativity, and participation in sociocultural discussions, leadership efficacy, and the demographic variables of age, gender, and race/ethnicity to predict participants’ scores on a scale of engagement in social change behaviors. This analysis was patterned after the work of Segar (2011). These analyses yielded results similar to the work of Gasiorski and Segar. Below, I
outline the similarities and differences as I summarize and explain the findings for each of these two analyses.

**Community Service**

In the current sample, 58.60% of participants indicated that they engaged in community service in a typical academic semester. The first analysis was a hierarchical logistic regression analysis to predict if participants engaged in community service during a typical academic term. As an analysis technique, logistic regression is used to determine the effect that a combination of predictor variables has on the probability of a participant being in one of two groups, in this case, those who typically engage in community service and those who typically do not. Following a hierarchical procedure (Lewis, 2007), I entered demographic variables in the first model (age, gender, and race/ethnicity), added covariates and other control variables in the second model (leadership efficacy, social generativity, and, sociocultural discussions) and finally added the main independent variable (socially responsible leadership) in the third model. Because including all of the subscales in one omnibus measure could obscure the relationships between community service and the individual values of the SCM, I also tested a fourth model, as an alternative to the third model, that included the eight subscales of the SRLS (consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change) instead of the omnibus scale. Entering predictor variables hierarchically or in progressive steps, helps to determine the effects that predictor variables that are entered in later steps have above and beyond the effects of those variables entered in earlier steps. These steps are referred to as different models.
Demographic Variables

Gender. Based on Gasiorski’s (2009) analysis, I expected that gender would have been important in predicting community service. Across all the models run by Gasiorski, females were 1.1 to 1.4 times more likely to engage in community service than males were. This is unsurprising as females typically score higher on measures that predict community service (Einolf, 2011) and previous research has found that females in college are more likely to engage in community service than males are (Astin & Sax, 1998; Astin et al., 2000; Bonnet, 2008; Cruce & Moore, 2007; Fitch, 1991; Marks & Jones, 2004; Sax et al., 1996; Serow & Dreyden, 1990; Vogelgesang & Astin, 2000). In this study, gender was not a significant predictor of community service. This finding could be specific to my sample and not representative of the population. This sample was 84.60% female where a little more than half (56.20%) engaged in community service. For the males in the current sample, 72.00% of them engaged in community service. Even though males were more likely to engage in community service, there were too few of them for the model to adequately use gender to predict community service. This would explain why gender was not a significant predictor of community service in any of the models.

Race/ethnicity. Race/ethnicity was not a significant predictor in Models 1, 2, or 3. In Model 4, when I added the eight subscales of the SRLS, race/ethnicity became a significant predictor. When accounting for the effects of all other variables in Model 4, students who were non-White were 4.76 times less likely to have engaged in community service compared to white students. Findings from previous studies are mixed on race/ethnicity and community service. In Gasiorski’s (2009) analyses, certain
races/ethnicities were found to have different effects on whether a participant engaged in community service in a typical semester. Asian American participants were 1.13 to 1.26 times less likely to engage in community service. Latinx participants were between 1.22 and 1.27 times more likely to engage in community service. Other researchers have found conflicting evidence on whether race/ethnicity was an important predictor of community service. Cruce and Moore (2007) found that African American, Latinx, and Asian American college students were all more likely to engage in community service, while Marks and Jones (2004) found no relationship between race and volunteering. My finding that non-white students were less likely to engage in community service was contrary to these previous findings and, like the findings on gender, were likely a reflection of my sample rather than the overall population. Only 15 (9.32%) participants identified as some race/ethnicity other than White. Of those 15, six (40%) indicated that they engaged in community service in a typical academic semester.

**Age.** Age was a significant predictor in Model 1, was nonsignificant in Models 2 and 3 and was again a significant predictor of community service engagement in Model 4. For every year of age, participants were between 1.25 and 1.34 times more likely to engage in community service. Previous research supports the finding that older college students are more likely to engage in community service than younger college students are. Cruce and Moore (2007) found that non-traditional students (25 years old and older) were more likely to engage in community service than participants under the age of 25. Gasiorski’s findings were mixed across models but in the final model, participants that were 25 years old or older were 1.16 times more likely to volunteer.
Covariates and Control Variables

Leadership efficacy. Leadership efficacy was not significant in any of the models. This was likely because engaging in community service is about participating rather than leading. Confidence in one’s ability to lead others, organize a group, or take initiative would not be needed to participate in community service and so these null findings are not surprising.

Social generativity. In Model 2, social generativity was a significant indicator of engaging in community service such that for every point higher in social generativity a participant scored, they were 2.60 times more likely to engage in community service. With the addition of socially responsible leadership in Model 3, this relationship decreased only slightly where participants were 2.50 times more likely to engage in community service. Previous research has established a link between generativity and community service during adolescence and into early adulthood (Lawford et al., 2005; Pratt & Lawford, 2014).

Interestingly, the relationship between social generativity and community service disappeared in the alternative model with the addition of the socially responsible leadership subscales. This was likely due to the introduction of the citizenship subscale which was significantly related to community service in Model 4. If citizenship were to be removed from the Model 4 analysis, social generativity would maintain statistical significance. Social generativity was significant in Model 3 when the effect of the citizenship subscale was obscured while it was combined with the other subscales in the omnibus measure of socially responsible leadership. These competing effects were likely
because social generativity (e.g., “I have a personal responsibility to improve the area in which I live.”) and citizenship (e.g., “I believe I have responsibilities to my community”) were highly correlated constructs ($r = .65, p < .001$).

The findings related to social generativity from Model 4 suggest that the citizenship subscale contains more unique information when predicting engagement in community service. Conceptually, social generativity should be unique from citizenship because it is a desire to contribute to society because one feels a responsibility towards others and is interested in leaving behind a legacy. Morselli and Passini (2015) developed the Social Generativity Scale because they felt that the most used measures of social generativity did not adequately measure an orientation towards society and future generations and instead focused on a generalized self-transcendence and legacy. My findings suggest that the Morselli and Passini measure may be too similar to the construct of citizenship. Further refinement of this measure may be warranted.

**Sociocultural discussions.** Participating in sociocultural discussions was statistically significant in predicting whether a participant engaged in community service in Models 2, 3, and 4. Across these models, for every one unit increase in their score on the Sociocultural Discussions Scale a participant was between 1.93 and 2.69 times more likely to have engaged in community service. This relationship was strongest in Model 4. Previous research indicates that sociocultural discussions are related to an increased desire to engage in social change work (Dugan et al., 2008; Shalka, 2008). Gasiorski (2009) found that, while initially significant, sociocultural discussions failed to reach significance once socially responsible leadership was added to their models. Gasiorski
stated that this finding indicated that there exists overlap in those two measures, but did not elaborate on this finding beyond mentioning a study by Dugan and Komives (2007) where socially responsible leadership predicted the development of socially responsible leadership. From these findings however, socially responsible leadership and sociocultural discussions do not appear to be so related. Unlike the relationship between social generativity and citizenship observed earlier, socially responsible leadership and sociocultural discussions are not measured using similarly worded scale items. They are also conceptually different constructs with a small correlation with each other \((r = .30, p < .001)\). Rather than losing significance with the addition of socially responsible leadership, sociocultural discussions were significant while socially responsible leadership was not. This suggests that sociocultural discussions may have an important relationship to engaging in community service beyond leadership development as defined by the Social Change Model.

**Socially Responsible Leadership**

The omnibus measure of socially responsible leadership was not a significant predictor in my model but it was significant in Gasiorski’s (2009) model. Gasiorski stated that their findings are consistent with previous findings suggesting that self-rated leadership ability was “one of the most significant predictors of college community service participation” (Gasiorski, 2009, p. 168, citing Astin & Sax, 1998; Sax et al., 1996; Vogelgesang & Astin, 2000). Gasiorski does, however, caution a direct comparison to those previous studies. Astin’s measures of leadership ability focused on positional leadership roles, while the SRLS was designed to measure attitudes based on the eight
values of the Social Change Model. In addition to that caveat, it is important to note that socially responsible leadership had a small effect size (Chen et al., 2010) and only provided a small amount of information in Gasiorski’s model. Compared to the previous model which introduced college involvement variables (e.g., participation in advocacy, religious, and service groups), the final model only increased correct classification from 73.00% to 73.20% and only increased various estimations of total variance explained (Pseudo R²) by .003 to .004. It is possible that the difference between my own findings and those of Gasiorski could be influenced by sample size. Gasiorski was working with a sample of 47,230, while mine was only 134. Increased sample size results in greater power and a greater likelihood of detecting even small effects.

Beyond the small effect size of socially responsible leadership in Gasiorski’s analysis, I hypothesized that the omnibus SRLS would not be a significant predictor of engaging in community service for conceptual reasons. The SRLS is made up of eight subscales representing eight diverse constructs. Indeed, these varied constructs have intercorrelations ranging from .21 (consciousness of self and citizenship) to .65 (common purpose and collaboration). Each of the values of the Social Change Model are important in this conceptualization of leadership and one might argue that an overall score would represent an individual’s overall level of leadership development. However, I do not think that the personal domain values (consciousness of self, congruence, commitment) or the group values (common purpose, collaboration, controversy with civility) would necessarily be predictive of engaging in community service. Combining the eight subscales into one omnibus measure could potentially dilute the effect that any one value
(specifically the community value of *citizenship*) might have on community service engagement. In my sample, the omnibus SRLS had a small correlation with the dichotomous community service variable ($\rho = .18$, $p = .03$). The community service variable correlated with each of the subscales ranging from nonsignificant ($\rho = .02$, $p = .81$) with the *collaboration* subscale to statistically significant with a medium effect size ($\rho = .36$, $p < .001$) with the *citizenship* subscale. Based on this reasoning and the statistical evidence, I chose to run an alternative fourth model that used the individual subscales instead of the omnibus SRLS measure.

In model 4, the citizenship subscale was a significant predictor of community service where a one-unit increase in score on citizenship meant a participant was 5.56 times more likely to have served in the community. Items from the citizenship subscale endorse statements like, “I believe I have a responsibility to my community,” “I have the power to make a difference in my community,” and “I give time to making a difference for someone else.” These statements endorse acting for the good of one’s community so the relationship between the citizenship subscale and community service is expected. As alluded to earlier, these items are similar to those from the Social Generativity Scale which includes statements like, “I carry out activities in order to ensure a better world for future generations,” “I have a personal responsibility to improve the area in which I live,” and “I think that I am responsible for ensuring a state of well-being for future generations.” These similarities would explain the loss of significance that social generativity experienced in Model 4.

Three other subscales of socially responsible leadership were statistically
significant, but in unexpected ways. The change subscale was positively related to engaging in community service such that a one-unit increase in scores on the change subscale meant that a participant was 4.58 times more likely to engage in community service. The change subscale of the SRLS is comprised of items that seem to represent a level of comfort with the concept of change (e.g., “I work well in changing environments”) or an endorsement that change is good (e.g., “Change brings new life to an organization”) and not an active participation in positive change. Within the Social Change Model framework, the eighth C, change, represents the ultimate goal of leadership, creating positive change. However, this concept of change is not solely focused on creating positive social change. The eighth C can represent change within an individual or at a group level as well. Because of the conceptual breadth of this construct and because the items from the measure do not measure positive social change, this relationship was unexpected. It is possible individuals who are open to change and who see change as desirable are more likely to seek out opportunities to make a difference in their community.

However, more interesting than the positive relationship between the change subscale and community service engagement were the observed negative relationships with two of the subscales of socially responsible leadership. In Model 4, negative relationships emerged between engaging in community service and the collaboration subscale. A one-unit increase in the collaboration subscale and participants were 8.41 times less likely to engage in community service. Additionally, there was a negative relationship between community service and the controversy with civility subscale such
that an increase in the controversy with civility subscale meant a participant was 10.18 times less likely to engage in community service. These two subscales had the strongest relationships with the outcome variable in Model 4. Conceptually these two subscales would seem to have no relationship with engaging in community service. The collaboration subscale includes items that endorse working well within a group (e.g., “I actively listen to what others have to say”) and has a nonsignificant correlation with community service ($\rho = .02, p = .81$). The controversy with civility subscale includes items that endorse a willingness to engage with others (e.g., “I share my ideas with others”), a belief that conflicting ideas can be a good thing (e.g., “When there is a conflict between two people, one will win and the other will lose,” reverse coded) and a tolerance for conflict (e.g., “I am uncomfortable when someone disagrees with me”). The controversy with civility subscale also has a nonsignificant correlation with the outcome variable ($\rho = .06, p = .47$). Further research is needed to determine why these relationships emerged.

**Summary of Community Service Analyses**

Given that the goal of these analyses was to strengthen previous research on the relationship between socially responsible leadership and community service, these findings provide some interesting insights. The omnibus measure of socially responsible leadership was not significant in this analysis although several of the subscales were. As expected, the citizenship subscale was a significant predictor of engaging in community service with a medium effect size. The change subscale also had a medium effect while the collaboration and controversy with civility both had large negative effects. While
some of these effects were unexpected, they illustrate one of the problems with treating socially responsible leadership as a single construct. Combining these positive and negative relationships with several other nonsignificant subscales has the potential to obscure individual effects. This is especially likely when the constructs measured by the eight subscales of the SRLS are as conceptually distinct as they are.

Social Change Behaviors

For the second analysis, I used a hierarchical linear regression analysis and entered the variables in three blocks to determine the effect that those variables had on engaging in social change behaviors. This second analysis is based on a similar analysis conducted by Segar (2011), which, in addition to Gasiorski’s (2009) work, represents the only two efforts to establish a relationship between socially responsible leadership and social change behaviors. For this analysis, the measure of social change behaviors, served as the dependent variable. Participants rated the frequency of engaging in ten behaviors using a 4-point scale ranging from 0 (never) to 3 (very often). These behaviors included “performing community service,” “acted to raise awareness about a campus, community, or global problem,” “took part in a protest, rally, march or demonstration,” and “worked with others to address social inequality.” In this sample, the mean score for engaging in social change behaviors was .74 (SD = .62). A linear regression is used to determine how an increase or decrease in a predictor variable is related to an increase in the outcome variable. Similar to the first analysis, I entered the predictor variables hierarchically. I entered the demographic variables in the first model (age, gender, and race/ethnicity), added covariates and other control variables in the second model (leadership efficacy,
social generativity, and, sociocultural discussions), and added the main independent variable (socially responsible leadership) in the third model. I also analyzed a fourth model using the subscales of the SRLS instead of the omnibus measure for the same reasons discussed above.

**Demographic Variables**

The first model included the demographic variables of age, gender, and race/ethnicity. Model 1 had an $R^2$ of .08 which meant that the demographic variables explained 7.99% of the total variance in the social change behaviors scale.

**Age.** Age was a statistically significant positive predictor of engagement in the first model. This relationship was only present in Model 1 and its predictive value disappeared as more variables were added in later blocks. This would indicate that some of the variability in social change behaviors that was explained by age was better accounted for by other variables. Segar’s (2011) analysis did not include age; however, other researchers have found older college students more likely to engage in community service (Cruce & Moore, 2007; Gasiorski, 2009). My findings suggest that a similar effect could be present for other social change behaviors, but the effect is likely not very strong.

**Gender.** Gender was not a significant predictor of social change in any of the models. Like Gasiorski (2009), Segar found that females were more likely to engage in social change behaviors than males. This is consistent with research suggesting that females are more likely to engage in those behaviors described in the Social Change Behaviors Scale (Cruce & Moore, 2007; Dote et al., 2006; Jones & Abes, 2004; Jones &
Hill, 2001, 2003). I expected to find gender to be a significant predictor of social change behaviors in my analysis. However, females in this sample had a mean score of 1.72 ($SD = .62$) on the Social Change Behaviors Scale, while males had a mean score of 1.90 ($SD = .65$). It should be noted that 32.00% of the males in this sample came from the service center, whereas only 12.12% of the females in the sample came from the service center. Since participants recruited from the service center scored higher on the measure of social change behaviors ($M = 1.53$, $SD = .75$) than participants recruited from the introductory classes, $M = .61$, $SD = .49$, $t (25.27) = 5.67$, $p < .001$, this would explain why the males in the sample scored higher on the dependent variable. Additionally, the disparity between the number males and females in this sample might explain why the effect of gender on the outcome is not present in the analysis.

**Race/ethnicity.** Race/ethnicity was not a significant predictor of social change behaviors in this study. Segar (2011) found that African American and Asian American participants scored higher on the measure of social change behaviors while Latinx participants scored lower. These findings are different from what Gasiorski (2009) found where Latinx students were more likely to volunteer while Asian American students were less likely to volunteer. As was stated earlier, Cruce and Moore (2007) found that African American, Asian American, and Latinx students were more likely to volunteer. Beyond volunteering, previous research has found that engagement in social change behaviors was related to participation in ethnic organizations for non-white students (Harper & Quaye, 2007). Engagement in these kinds of organizations can lead to greater ethnic identity (Ikelas, 2004) and awareness of social issues, which in turn could lead to greater
engagement in social change behaviors. However, given the disparate findings on race/ethnicity (Cruce & Moore, 2007; Gasiorski, 2009; Segar, 2011), it is unclear if race and/or ethnicity are individually important factors of predicting social change behaviors. Rather, race/ethnicity might be related to participation in organizations that would promote engagement as well as sociocultural discussions and citizenship.

**Covariates and Control Variables**

**Sociocultural discussions.** Engaging in sociocultural discussions, was a significant positive predictor of social change behaviors in Models 2 and 3. In Model 4, sociocultural discussions were no longer significantly related to social change behaviors. Segar (2011) also found that sociocultural conversations had a small effect on social change behaviors and suggested a possible explanation for this small effect – previous research has found that these kinds of discussions were predictive of attitudes (Dugan et al., 2008; Shalka, 2008) more than they were predictive of behaviors. Engaging in sociocultural discussions might make a student more aware of social injustices whereas things like social generativity and citizenship are more likely to lead them to act.

**Social Generativity.** Researchers have associated generativity with activism throughout adulthood (see Jia et al. 2015; Matsuba et al., 2012; Pratt & Lawford, 2014). Similar relationships were found in these analyses. In Model 2, social generativity was a significant positive predictor of social change behaviors and remained significant in Model 3. Like in the previous analysis, social generativity lost significance in Model 4 with the addition of the citizenship subscale. If the citizenship subscale was removed from Model 4, social generativity was significant. As was noted earlier, the citizenship
subscale and social generativity scale have items with substantial conceptual overlap and a high correlation. The strong relationship between these two constructs explain why social generativity is nonsignificant in Model 4.

Leadership efficacy. Leadership efficacy was not a significant predictor of social change behaviors. Like the measure of community service, the Social Change Behaviors Scale assesses participants’ participation in such activities and not whether they organize or lead those activities. If the measure was worded in a way that asked about organizing or leading those same activities, leadership efficacy might have been significant. Further research would help to determine what role leadership efficacy plays in organizing social change behaviors as opposed to participating in them.

Socially Responsible Leadership

In Model 3, I added the omnibus measure of socially responsible leadership. The effect of adding socially responsible leadership in Model 3 was quite small compared to the rest of the variables previously added. Nonetheless, the omnibus measure was a significant predictor of the outcome. My hypothesis that the omnibus measure of socially responsible leadership would not be a significant predictor of social change behaviors was not supported. Even though the omnibus measure was a statistically significant predictor, I analyzed the alternative model because I predicted that the individual subscales of the SRLS would serve as better predictors of social change behaviors – both conceptually and statistically.

In Model 4, there were only two significant predictors of social change behaviors, the collaboration and citizenship subscales. The other six SRLS subscales, the covariates
(leadership efficacy, sociocultural discussions, and social generativity) and the demographic variables were not significant. This suggests that in this combination of predictor variables, the collaboration and citizenship subscales were the best predictors of social change behaviors. As with the community service analysis, the citizenship subscale which represents higher feelings of responsibility towards one’s community could lead to greater involvement in social change behaviors. Because the social change behaviors scale included more activities than engaging in community service, it is interesting that the same relationship between citizenship and social generativity emerged. The social change behaviors scale includes items such as “acted to benefit the common good or protect the environment,” and “took action in the community to try and address a social or environmental problem.” It is conceivable that these activities might better capture the generative desire to leave a legacy. However, these findings suggest that the social generativity scale is still not distinct enough from the citizenship subscale in predicting social change behaviors.

The collaboration subscale was also significantly related to social change behaviors. Items on the collaboration subscale endorse beliefs that working with others produces better results (i.e., “I can make a difference when I work with others on a task”) and confidence in one’s ability to work well with others (i.e., “I am seen as someone who works well with others”). Of the ten behaviors on the Social Change Behaviors Scale, five explicitly refer to working with others (i.e., “Worked with others to address social inequality”) whereas the others could have been done alone but are likely to have happened in a group (i.e., “Acted to raise awareness about a campus, community, or
global problem”). Because many of the items on the Social Change Behaviors Scale included an element of working within a group or organization, those who score higher on that scale likely had more experience working within a group and would therefore rate themselves higher on the collaboration subscale as well.

**Summary of Social Change Behaviors Analyses**

As with the previous analysis on community service, the present findings illustrate the value of examining the individual subscales of the SRLS as opposed to the omnibus scale. Unlike the community service analysis, the omnibus SRLS was significantly related to the outcome, however, like the previous analysis, the model utilizing the eight subscales had a better model fit. Additionally, these findings further establish the Social Change Model value of citizenship as an important predictor of social change behaviors.

**Summary of Research Question 1 Analyses**

The main purpose of this study was to test the assumption of the – students who develop socially responsible leadership are “mobilize[d] to understand themselves and come together in collaborative ways to accomplish change particularly social change.” (Komives et al., 2016, p. 198). Previous research conducted to establish this relationship (Gasiorski, 2009; Segar, 2011) is potentially limited by using measures of social change behaviors that did not necessarily capture overall social change engagement. To address this, I utilized both a qualitative approach and a participant-rated approach to measure social change engagement which will be discussed in the next section.
A second potential shortcoming of the previous studies was their use of an omnibus measure of socially responsible leadership rather than the individual values of the Social Change Model. While these values represent a global picture of socially responsible leadership, the values of the SCM are conceptually distinct and merging them together can potentially obscure the relationships that exist between them and social change engagement. To address this shortcoming, I conducted analyses, based on previous work (Gasiorski, 2009; Segar, 2011), using the individual subscales of the SRLS instead of the omnibus measure. Most notable was the relationship between citizenship and the outcomes for both analyses. Understanding that citizenship is the most important value in the Social Change Model related to engaging in social change behaviors provides practitioners with an emphasis for their programs if social change behaviors is their goal.

These analyses also highlight the shortcomings of the measures of social change behaviors that I used as my dependent variables. I found that there was no relationship between the omnibus SRLS and engaging in community service. Even when I removed all other variables except for the demographic variables, the omnibus SRLS was still not significantly related to whether a student engaged in a community service in a typical academic year. However, socially responsible leadership was related to engaging in a measure of social change behaviors. The reason that I found significant results with one analysis and not the other could be because of the outcome measures used for those analyses. Whether or not a student engaged in community service during a typical academic semester does not necessarily capture the idea of creating positive social
change. Because that measure was dichotomous, there was no differentiation between an individual who acted to address issues in their community and an individual who helped with small community initiatives. While both actions are good things, they are different. Helping with small initiatives such as collecting and sorting food for a food drive falls short of engaging in the leadership process. Whereas, working to address problems in one’s community likely involves the leadership process by working with organizations and stakeholders to create positive social change.

The Social Change Behaviors Scale is closer to the conception of creating social change described by Komives et al. (2016). This measure was better than the dichotomous community service variables for two reasons. First, it captures a wider variety of behaviors, some of which would be a part of addressing the root causes of social issues and trying to address them. Second, it accounts for differences in the frequency of participation in those behaviors. However, this measure is still limited in that the behaviors described range in activity level from “Signed a petition,” “Performed community service,” and “Took part in a protest, rally, march or demonstration,” to “Been actively involved with an organization that addresses a social or environmental problem,” and “Acted to raise awareness about a campus, community, or global problem.” Even those behaviors, which are on the side of greater involvement, are still ambiguous. That student described earlier who helps with a food drive every few months could be considered to be actively involved with an organization that addresses a social or environmental problem and might score the same as someone who works with the same frequency with an organization seeking to address the underlying issues that
contribute to hunger and poverty in their community. According to Komives et al. (2016), the latter is the person who is creating positive social change whereas the former is merely addressing a problem without solving it. To address the shortcomings of these two measures of social change behaviors, I proposed a qualitative measure of social change engagement that I might test the ultimate outcome of the Social Change Model.

Another potential reason there were different results in these two analyses could be due to the different way that the individual subscales of the SRLS interacted with the outcomes. In the community service analysis, the citizenship and change subscales had medium positive effects while the collaboration and controversy with civility subscales had large negative effects on the outcome. When pooled together into the omnibus measure of socially responsible leadership, these conflicting effects appear to have cancelled each other out. This highlights the problem with combining the values of socially responsible leadership into one construct instead of studying them on their own.

### Does Socially Responsible Leadership Predict Social Change Engagement?

The second research question was, “Do the values socially responsible leadership in college students predict social change engagement as measured by assigned citizen types while controlling for social generativity, sociocultural discussions, leadership efficacy and the demographic variables of age, gender, and race/ethnicity?” The goal for this research question was to determine to what extent the values of the Social Change Model were related to engagement in social change work.
Because social change engagement might be more nuanced than can be captured in a forced response measure, I used two methods for measuring social change engagement. First was a qualitative measure where participants would describe the work that they had done to make their communities better. I used Westheimer and Kahne’s (2002) typologies of involved citizens: the personally responsible citizen (level 1), participatory citizen (level 2), and the justice-oriented citizen (level 3) to create a coding scheme for assigning participants a level of engagement. The second method involved asking participants to classify themselves using the same citizen types. To answer this research question, I utilized a hierarchical multinomial logistic regression following the same pattern as the previous two analyses.

**Researcher-Rated Citizen Type**

For the qualitative measure, participant responses were coded to classify them as one of these types of citizen based on the stories they shared. After coding was completed, 40 participants were categorized as personally responsible citizens (level 1), 106 were categorized as participatory citizens (level 2), and 12 were categorized as justice-oriented citizens (level 3). Once each participant had been classified with a citizen type, I conducted a series of hierarchical multinomial logistic regression analyses. A multinomial logistic regression functions similarly to a logistic regression but it allows for an outcome variable with more than two groups. Following the same hierarchical procedure that I used in the previous two analyses. I entered the demographic variables in the first model (age, gender, and race/ethnicity), added covariates and other control variables in the second model (leadership efficacy, social generativity, and, sociocultural
discussions), and then added the main independent variable (socially responsible leadership) in the third model. I also tested a fourth alternative model using the eight subscales of the SRLS instead of the omnibus measure to better understand the relationship between social change engagement and the individual values of the Social Change Model.

I also tested each model twice, once with personally responsible citizens (level 1) as the reference group and once with participatory citizens (level 2) as the reference group. The first set of models showed which variables predicted whether a participant was a participatory (level 2) or justice-oriented (level 3) citizen instead of a personally responsible citizen (level 1). The second set of models showed which variables predicted whether a participant was a justice-oriented citizen (level 3) compared to a participatory citizen (level 2).

All of the models using the research-rated citizen types as the dependent variables had poor model fit. This meant that the individual coefficients should only be treated as exploratory and interpreted with caution. As in the analyses with social change behaviors and community service, citizenship was related to being a participatory citizen (level 2) when compared to personally responsible citizens (level 1) though it was not related to being a justice-oriented citizen (level 3). Most interesting in these models was that leadership efficacy was significantly related to being a justice-oriented citizen (level 3) compared to a personally responsible citizen (level 1) in Models 3 and 4. Leadership efficacy was also related to being a participatory citizen (level 2) in Model 4. Leadership efficacy was unrelated to either community service or social change behaviors although
neither of those measures captured activities that would necessarily require leadership efficacy. Justice-oriented citizens would be involved in the leadership process in their pursuits and would likely have experience and confidence in taking initiative and organizing a group. This relationship warrants further investigation.

The overall model fit being poor is unfortunate and could be the result of several possibilities. First, the variables included in the model were poor predictors of the outcome. This possibility is unlikely because of previous research and my own analyses suggest that these independent variables have a relationship to social change behaviors at least and likely with social change engagement. Another possibility that these models had poor model fit could be due to the lack of variability in the dependent variable. More than half of participants (67.09%) were classified as participatory citizens. With so many participants in one group, the model could have struggles to fit properly. This problem could have been exacerbated by the small sample size. The low estimated sample size needed to detect significant effects was 140 participants whereas this sample had 162 participants. Finally, model fit could be so poor because the qualitative measure and/or coding scheme did not capture participants’ true citizen type. If so, the models would have been unable to predict citizen types using the independent variables.

Participant-Rated Citizen Type

In addition to their written summaries of community work, I asked participants to classify themselves based on Westheimer and Kahne’s (2002) typologies. Participants were asked to read the descriptions of the three typologies and pick the one that most resembled their level of community engagement. A comparison of the participants’ self-
classifications and my own classifications yielded a 33.00% agreement. In the sample, 110 participants rated themselves as personally responsible citizens (level 1), 19 rated themselves as participatory citizens (level 2) and 30 rated themselves as justice-oriented citizens (level 3). My coding scheme classified most participants (65.84%) as participatory citizens (level 2), whereas the majority of participants (69.18%) rated themselves as personally responsible citizens (level 1). This discrepancy most likely arose from my approach to the qualitative measurement of social change engagement. Asking participants to relate one or two stories of a time when they “felt that [they] had made a difference in [their] community,” only captured a snapshot of their engagement and not an entirety of their efforts.

Other constructs in developmental fields highlight the duality of a snapshot and a totality of the construct. For example, this distinction can be seen when discussing certain emotions such as anger (Spielberger, 2010a) and anxiety (Spielberger, 2010b). The common terminology for this phenomenon is that anger or anxiety can be either a state – a momentary emotional experience – or a trait, a more stable personality characteristic. Rosenberg (1965) made a similar distinction about self-esteem suggesting that there was barometric self-esteem and baseline self-esteem. Barometric self-esteem fluctuates throughout the day while a baseline self-esteem reflects a more stable sense of one’s self-worth. Rather than measuring a trait or baseline level of citizenship, my qualitative measurement approach appears to have captured a state or barometric level of citizenship, and an especially positive one at that. When asked to share a story of when they felt that they had made a difference in their community, my participants likely related their best
moments. Based on my findings, it does not appear that this approach effectively captured social change engagement. Possible revisions of this qualitative approach to measuring social change engagement are discussed later.

Assuming that participants would have a better understanding of their trait or baseline level of citizenship, their personal ratings might be more valid than how I had classified them. While it is possible that, like their stories, they presented a more favorable version of themselves in their self-ratings, the discrepancy between the research ratings and the participant ratings suggest that the participants were more self-aware in their evaluations. Using the participant-rated citizen types, I conducted a hierarchical multinomial logistic regression following the same procedure as the previous analyses. The models first included the demographic variables (age, gender, and race/ethnicity) in the first model, followed by covariates and other control variables in the second model (leadership efficacy, social generativity, and, sociocultural discussions) and finally the main independent variable (socially responsible leadership). I also tested the alternative model, which included the eight subscales of the SRLS instead of the omnibus measure. I again tested each model twice, once with personally responsible citizens (level 1) as the reference group and once with participatory citizens (level 2) as the reference group.

**Demographic Variables**

**Age.** In Models 1, and 4, age was a significant predictor of being a participatory citizen (level 2) as opposed to a personally responsible citizen (level 1). For every year older, a participant was either 1.28 times, or 1.56 times more likely to be a participatory citizen in Models 1, and 4 respectively. Age was also a significant in
predicting participatory citizens (level 2) compared to justice-oriented citizens (level 3). In Model 2, being older meant a participant was 1.23 times more likely to be a participatory citizen. In Model 4, they were 1.43 times more likely. As seen in previous research and my own analyses, increased age is related to greater engagement in college students. These findings would indicate that Westheimer and Kahne’s (2002) typologies might not be ordinal. Participatory and justice-oriented citizens are, by their description, more engaged than personally responsible citizens, but when compared to each other, they might be nominally different ways of participating. A justice-oriented citizen is not more engaged than a participatory citizen is, their behaviors are just manifested differently. In my analysis, older students are more likely to be participatory citizens while younger students are more likely to be either personally responsible or justice-oriented.

**Race/ethnicity.** Race/ethnicity was also significant suggesting that students of color were 3.88 times more likely to be participatory citizens (level 2) as opposed to personally responsible citizens (level 1) in Model 1, 4.23 times more likely in Model 2, and 4.48 times more likely in Model 3. Race/ethnicity is not significant in Model 4. Additionally, non-white participants are 7.69 times more likely to be a participatory citizen (level 2) when compared to a justice-oriented (level 3) citizen in Model 1 but not in any other model. As discussed previously, some research has found that people of color are more likely to be engaged (Cruce & Moore, 2007) which would explain the significance in being a participatory rather than a personally responsible citizen. What is interesting is the difference between justice-oriented citizens and participatory citizens.
Research has demonstrated that students of color are more likely to be engaged addressing social inequity, especially when those students are engaged in ethnic student organizations (Harper & Quayle, 2007; Inkelas, 2004). Fighting social inequity would fall under the behavior of the justice-oriented citizen making my findings unexpected. In my sample, only one non-white participant classified themselves as justice-oriented. The relationship between race/ethnicity and social change engagement warrants further study.

**Gender.** As has been discussed previously, female students are more likely to be engaging in social change behaviors than males are. Gender was not significant across all models in this analysis. Possible reasons for this have been discussed previously.

**Covariates and Control Variables**

**Sociocultural discussions.** Sociocultural discussions were a significant predictor of citizen type. Engaging in sociocultural conversations meant a participant was 2.10 times more likely to be a participatory citizen (level 2) compared to a personally responsible citizen (level 1) in Model 2 and 2.07 times more likely in Model 3. It was not significant in Model 4. This relationship makes sense as engaging with those who are of differing backgrounds could lead a college student to become aware of way that they could be involved. This effect was more pronounced when comparing justice-oriented citizens (level 3) to personally responsible citizens (level 1). Participants were 3.23 times more likely to be justice-oriented citizens in Model 2, 3.24 times more likely in Model 3 and 3.45 times more likely in Model 4. Racial inequity is often seen as a root cause of injustices in the U.S. (Hanson & Hanson, 2006; Longazel et al., 2011; Shedd & Hagan, 2006). Engaging is sociocultural discussions could especially make students aware of
social injustices and racial inequity and so it makes sense that the effect on justice-oriented citizenship being more pronounced than the effect on participatory citizenship is. Sociocultural discussions did not differentiate between participatory citizens and justice-oriented citizens.

**Social generativity.** Social generativity was only significant when comparing justice-oriented citizens (level 3) to personally responsible citizens (level 1). In Model 2, increased social generativity meant that participants were 2.58 times more likely to be justice-oriented citizens and in Model 3 they were 2.20 times more likely. Social generativity was not significant in Model 4 but this could be in part due to the inclusion of the citizenship subscale as was seen in previous analyses. When citizenship is removed from Model 4, social generativity does not become significant so there must be other variables that shared variance with social generativity obscuring its effect. It is intriguing that this effect was only present when comparing justice-oriented citizens to personally responsible citizens. Because social generativity involves feelings of responsibility to one’s community and a desire to leave a legacy, I expected social generativity to be a significant predictor of both participatory citizenship (level 2) and justice-oriented citizenship (level 3). Future research should explore this relationship as well.

**Leadership efficacy.** Like all previous analyses, leadership efficacy was not significant in any of these analyses. When first conceiving of the qualitative measure, I had hoped to capture stories of participants leading social change efforts rather than simply participating in them. However, the self-ratings still do not capture this aspect of engagement and so leadership efficacy remains insignificant.
As expected, the omnibus SRLS was not statistically significant in Model 3. As in all the previous analyses, citizenship was a significant predictor in this model. Increased citizenship meant a participant was 12.98 times more likely to be a participatory citizen (level 2) compared to a personally responsible citizen (level 1). As discussed previously, the citizenship subscale endorses ideas of responsibility to make a difference in one’s community so it is no surprise that it is such a strong predictor of participatory citizenship where individuals are actively engaged with organizations seeking to better the community. What is interesting is that citizenship was not related to being a justice-oriented citizen (level 3) when social generativity was only significant when comparing justice-oriented citizens (level 3) to personally responsible citizens (level 1). Perhaps this illuminates a possible distinction between the citizenship subscale and social generativity scale. Because the unique aspect of social generativity is the desire to leave behind a legacy, this attitude might lead a student to be more interested in changing underlying systems and create lasting social change. Citizenship, on the other hand, orients a student towards working within existing structures to make a difference in their community.

Interestingly, the controversy with civility subscale was significant in distinguishing justice-oriented citizens (level 3) from participatory citizens (level 2). An increase in scores on the controversy with civility scale meant that a participant was 13.94 times more likely to be a justice-oriented citizen. The controversy with civility subscale includes items that endorse a willingness to engage with others (e.g., “I share my ideas with others”), a belief that conflicting ideas can be a good thing (e.g., “When
there is a conflict between two people, one will win and the other will lose,” reverse coded) and a tolerance for conflict (e.g., “I am uncomfortable when someone disagrees with me”). Because a justice-oriented citizen believes that solving societal problems involves challenging established systems to root out injustices, they might be more comfortable approaching conflict than a participatory citizen who tries to solve problems through working within the system. What is interesting though is that a similar relationship does not appear when comparing justice-oriented citizens with personally responsible citizens. This relationship should be studied further.

Finally, there was an interesting finding where participants who scored higher on the congruence subscale were 12.72 times more likely to be a personally responsible citizen (level 1) than a participatory citizen (level 2). The congruence subscale captures a person’s feelings of integrity values (i.e., “Being seen as a person of integrity is important to me”) as well as a conviction that they live according to their values (i.e., “My actions are consistent with my values”). This orientation might be best demonstrated by personally responsible citizens who believe that acting well in everyday life will have a positive impact on society. Participatory and justice-oriented citizens might be more insecure about whether they are living up to their ideals. Based on the assumptions of the Social Change Model, higher levels of any of the eight subscales should be connected to greater levels of engagement. This relationship should be investigated further.

**Summary of Research Question 2 Analyses**

The results of the analyses using the researcher assigned citizen types were nonsignificant across all models. Previous research illustrating the relationship between
the independent variables and social change behaviors suggest that the issue lies with the dependent variable. Most likely the qualitative measure of social change engagement was too simplistic because it only measured a single instance of citizenship (state/barometric) rather than a totality of a person’s actions that would suggest what kind of citizen they are (trait/baseline). However, findings from the analyses utilizing the participant-rated citizen type yielded some interesting insights.

Unexpectedly, there were the different effects for participatory citizens (level 2) and justice-oriented citizens (level 3). I had originally conceived of these citizen types as hierarchical but if that were true, I would expect to see similar relationships for both when comparing them to personally responsible citizens (level 1). However, these results suggest that they might be nominal categories instead of ordinal. For example, in Model 4, sociocultural discussions was related to being a justice-oriented citizen (level 3) while citizenship was related to being a participatory citizen (level 2). When compared to the personally responsible citizen, sociocultural conversations might promote justice-oriented citizens while developing citizenship might promote participatory citizens. This could be valuable for practitioners as they develop their programs and consider their intended outcomes.

More interesting, however, was that the tangled relationship between social generativity and citizenship and their relationship to social change engagement was potentially clarified. Findings from the community service and social change behaviors analyses led me to conclude that the Social Generativity Scale could need refinement, as it did not seem to be distinct from the citizenship subscale. In those analyses the effect of
social generativity was absent from the model where the citizenship subscale was added. In the analyses with the participant-rated citizen type, social generativity was related to justice-oriented citizens (level 3) in Models 2 and 3, while the citizenship subscale was only related to participatory citizens (level 2). These findings suggest that these two constructs are distinct and useful in differentiating between justice-oriented citizens and participatory citizens.

**Implications**

There are several implications that can be drawn from this study. The first implication of this study is the importance of studying the values of the Social Change Model independently instead of combining them into a single measure of socially responsible leadership. It is understandable why previous research has utilized this approach as the values conceptually represent a wholistic picture of leadership. Additionally, these values are all positively correlated with each other. In this study however, citizenship emerged as the most consistently significant predictor of social change behaviors and engagement. What is more, in some of the analyses in this study, some of the values of the SCM had strong negative relationships with the outcome. By combining these values into one measure, their unique effects would have been lost. Future research would do well to test both the omnibus measure of socially responsible leadership as well as the unique contributions of each of the values. As researchers are interested in the relationship between the values of the Social Change Model and certain outcomes, understanding which values are related to those outcomes will empower
practitioners to tailor their programs to accomplish their goals.

The second major implication is that the citizen types described by Westheimer and Kahne (2002) are likely distinct categories instead of a hierarchy of engagement. In this study, I found that citizenship was strongly related to being a participatory citizen while engaging in sociocultural discussions was predictive of being a justice-oriented citizen. This finding is valuable for practitioners as they determine what outcomes they desire for their participants. Finally, the potential for using citizen type as a measure of social change engagement is promising and will be explored more fully in the limitations and future directions section.

Additionally, there are important implications for practitioners who utilize the Social Change Model of Leadership Development in their leadership training. The most consistent finding across all the analyses was the importance of the SCM value of citizenship in predicting social change engagement. While the values of the Social Change Model would be important for any leader when they are seeking to create positive social change, citizenship was the SCM value that was most consistently related to engaging in social change. While this study did not determine the directionality of that effect, when a person has an increased feeling that they have the responsibility to make a difference in their community, it logically follows that they would be more likely to be engaged in creating positive change. Komives et al. (2016) suggested that one of the most valuable aspects of the 7 C’s model is that groups can isolate which values need to be focused on in order to achieve the goals of the group. If programs are interested in encouraging its participants to be actively engaged in creating positive social change,
results from this study suggest a greater emphasis might be properly placed on instilling the value of citizenship.

The effect that social generativity had on social change engagement has important implications. While this effect would disappear when the citizenship subscale was added to the social change behaviors and community service analyses, it remained strong in predicting justice-oriented citizenship. Because of this relationship, the literature on social generativity could provide practitioners with an additional avenue to teaching the Social Change Model value of citizenship. Undoubtedly, these constructs are similar. Both emphasize a responsibility to give back to one’s community. However, the important difference with social generativity is that there is a desire to give to future generations and leave a legacy of oneself (Erikson, 1963). Instilling the SCM value of citizenship is likely effective in promoting community service and other social change behaviors. It is also likely effective in promoting the development of participatory citizens. However, if the goal of practitioners of the Social Change Model is in creating justice-oriented citizens, in addition to instilling in future leaders a feeling of responsibility to their community, practitioners could also incorporate these aspects of social generativity into their curriculum.

Finally, leadership efficacy was a nonsignificant predictor in all but one of the analyses in this study. Additionally, the one set of models where it was significant had poor model fit and should only be interpreted cautiously. The lack of significant results could be because the emphasis of the dependent variables in this study was on participating in social change work rather than creating positive social change. Central to
the Social Change Model is the notion that leadership is a collaborative process and is not something that is inherent to a position or individual. One potential pitfall of de-emphasizing the influence of an individual is that students taught under this model might not exercise the authority which MacNeil (2006) believed to be an essential part of leadership. MacNeil (2006) suggested that authority does not necessarily denote position but it does mean that a leader has influence and decision-making power. As a young leader exercises authority and by creating opportunities to engage in positive social change, they develop confidence in their ability to organize the efforts of others (Harris & Beckert, 2019). Without practicing authority, emergent leaders would not develop efficacy leading others. Therefore, practitioners of the Social Change Model would do well to encourage the use of authority, regardless of formal position.

**Limitations and Future Directions**

Several limitations in this study require attention. First, the sample was drawn from a limited pool of students at USU. Demographically, the sample was mostly white (90.74%) and female (84.6%), which is not representative of the wider population of the U.S., so generalization is limited. Additionally, because this was cross-sectional research, it is difficult to suggest the directionality of the relationships observed and it is impossible to establish causality.

One major limitation of the study came from reducing the sample. Evidence suggests that some individual(s) attempted to acquire multiple incentives. Because of this, some of the data gathered could have come from invalid responses. Although steps
were taken to ensure that only valid responses were used in the analyses, this meant that less than the target sample size of 300 was used. Additionally, it is possible that in removing the invalid responses, some valid responses were removed. A post hoc power analysis revealed that this resulted in a potential loss of power (1-\(\beta\) = .31). The reduction in sample also meant that the end sample was primarily from introductory classes. These findings should be replicated with better controls on recruitment to avoid a similar problem.

Another limitation came from the qualitative measure of citizen type. This measure was formatted in such a way that it appears to have measured a state or barometric sense of social change engagement instead of a more stable trait or baseline level of social change engagement. This was balanced with the second measure of social change engagement where participants were asked to classify themselves. Findings using this second measure of social change engagement were closer to the hypothesized results as well as previous research suggesting that the participant-rated citizenship types measured what was intended to be measured.

Step should be taken to ensure this measurement approach is further refined. To capture a more global image of an individual’s social change engagement, a more detailed interview would be needed. This interview procedure could focus on the consistent efforts of social change engagement instead of brief episodes. Additionally, these interviews should also examine the core assumptions of social change that Westheimer and Kahne (2002) suggest differentiate between the three types of citizens in addition to behaviors. Then steps should be taken to further validate the self-rating
measure of social change engagement by comparing them to the findings of the interviews described above. A validated self-rating measure would be a valuable addition to further survey research where lengthy qualitative interviews are impractical. Finally, expanding this study into a longitudinal design would better help establish directionality of the effects and shed light on the state/trait issues surrounding the construct of social change engagement. Ideally, future research would follow a class of freshman as they progress through their college career. Once or twice a year the participants could be surveyed to determine how they are engaged in social change work and how they score on the values of socially responsible leadership. A study like this could establish how they change over time.

**Conclusion**

Young people are increasingly in the public view as agents of social change. As suggested in the Social Change Model of Leadership Development, social change is a collaborative process and the more individuals involved the better. Those who develop the seven values of the Social Change Model are prepared to engage in creating positive social change. This purpose of this study was to better understand the connection between the values of the Social Change Model and social change engagement among college students. Previous research examining this relationship used inadequate measures of social change engagement. They also combined the values of the Social Change Model into one measure instead of studying each value’s impact on social change engagement. This study was designed to address these shortcomings by introducing two new measures
of social change engagement and by calculating the individual impact of each of the values of the Social Change Model. Findings from this study suggest that the Social Change Model value of citizenship, which captures feelings responsibility towards one’s community, was the most important value related to social change engagement.

Additionally, social generativity, or the desire to leave a legacy for future generations, and sociocultural discussions were positively related to social change engagement. These findings can help practitioners prepare emerging youth leaders to engage in creating positive social change.
REFERENCES


APPENDIX

RECRUITMENT LETTER
Andy Harris, doctoral student in the Human Development and Family Studies department is looking for research participants for a study about college students and how they are trying to make a difference in their community (IRB Protocol #10511). Participants will need to complete a 30-minute questionnaire online. This questionnaire will include three questions that require a thoughtful written response in addition to multiple-choice questions. The first 300 participants will receive a digital gift card from a vendor of their choice including iTunes, Google Play, Amazon, and Ebay. To participate you must be a current USU student and at least 18 years old.

If you are interested in participating, please read the follow questions and consider how you might respond to them.

1) What does it mean to you to create positive change in your community?
2) Describe in detail a project that you participated in where you felt that you had made a difference in your community.
3) Describe in detail another project that you participated in where you felt that you had made a difference in your community.

There are also two optional questions:
4) What qualities and values have prepared you and/or other college students to engage in positive social change?
5) What leadership skills and qualities are most important for you and/or other college students in creating positive social change?

You can take the survey by following this link:
[Survey Link]

If you have any questions, please contact Andy Harris at aharris@aggiemail.usu.edu. You can also contact Troy Beckert, Professor of Human Development and Family Studies at troy.beckert@usu.edu
CURRICULUM VITAE

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Educational History

2015-Present  Doctor of Philosophy
Utah State University, Human Development and Family Studies
Completed: August 2020
Committee Chair: Troy E. Beckert, Ph.D.

2011-2015  Bachelors of Science
Utah State University, Psychology
Completed: May 2015

Professional History

2016-2019  Graduate Research Assistant
Department of Human Development and Family Studies
Utah State University, Logan, Utah

2016-2018  Graduate Instructor
Department of Human Development and Family Studies
Utah State University, Logan, Utah

2015-2019  Graduate Teaching Assistant
Department of Human Development and Family Studies
Utah State University, Logan, Utah

2014-2015  Undergraduate Teaching Fellow
Department of Human Development and Family Studies
Department of Psychology
Utah State University, Logan, Utah

Undergraduate Research Assistant
Department of Psychology
Utah State University, Logan, Utah
RESEARCH

Refereed Publications


**Harris, A.**, Beckert, T. E. (In Preparation). National panel study of adolescents participating in HOBY leadership seminars


Refereed Presentations


Funded Grant Proposals

Harris, A. & Cassinat, J. (2018, August). My role: 75% effort
Faculty mentor: Whiteman, S.
Sibling influences on nonmedical use of prescription drugs among adolescence and early adulthood. Graduate Research and Creative Opportunity (GRCO) grants provide a $1,000 grant to support original research, scholarship, or creative work by USU graduate students with the guidance of a faculty member. Total: $1000.00

Long-term effects of participation in a HOBY seminar on youth identity, purpose, social responsibility, and community service. Funded by Hugh O’Brian Youth Leadership (HOBY). I approached HOBY with this proposal to conduct this research under the mentorship of my major professor, T. Beckert. Total: $8689.38

Advanced Training

R for the Health, Behavioral, Educational, and Social Sciences (2017, June)
TEACHING

Undergraduate Courses

Graduate Instructor of Record

HDFS 3130: Research Methods (Fall, 2018). Enrollment: 28
FCHD 1500: Human Development Across the Lifespan (Spring 2018).
  Enrollment: 119
FCHD 1500: Human Development Across the Lifespan (Fall 2017). Enrollment: 111
FCHD 3130: Research Methods (Fall, 2016) Broadcast Delivery – 8 sites,
  Enrollment: 14

Guest Lecturer

HDFS 3130: Research Methods (Fall 2019)
  Topic: Correlation Research Methods
HDFS 1500: Human Development Across the Lifespan (Fall 2018)
  Topic: Positive Youth Development in Adolescence
FCHD 3130: Research Methods (Spring 2016)
  Topic: Measurement
  Topic: Dissemination of Research
FCHD 3210: Families and Cultural Diversity (Spring 2016)
  Topic: Program Evaluation
FCHD 3130: Research Methods (Fall 2015)
  Topic: Descriptive Research Methods
  Topic: Dissemination of Research
FCHD 3570: Youth & Adolescence (Spring 2015)
  Topic: Motivation and Achievement
PSY 3210: Abnormal Psychology (Fall 2014)
  Topic: Pervasive Developmental Disorders

Graduate Teaching Assistant

HDFS 3100: Abuse and Neglect in Families (Spring 2020)
PSY 3010: Psychological Statistics (Fall 2019)
HDFS 2410: Marriage and Family Relations (Summer 2019, Online Delivery)
HDFS 1500: Human Development Across the Lifespan (Summer 2019, Online Delivery)
HDFS 1500: Human Development Across the Lifespan (Spring 2019)
HDFS 3570: Youth & Adolescence (Summer 2018, Online Delivery)
FCHD 3350: Family Finance (Summer, 2017, Online Delivery)
FCHD 1500: Human Development Across the Lifespan (Spring, 2017)
FCHD 3570: Youth & Adolescence (Summer, 2016, Online Delivery)
FCHD 3130: Research Methods (Spring, 2016)
FCHD 3210: Families and Cultural Diversity (Spring, 2016)
FCHD 3130: Research Methods (Fall 2015)
FCHD 1500: Human Development Across the Lifespan (Fall 2015)

**Undergraduate Teaching Fellow**

FCHD 3570: Youth & Adolescence (Spring 2015)
PSY 3210: Abnormal Psychology (Fall 2014)

**Student Mentoring**

Undergraduate Writing Mentor (Fall 2019)
- I provided writing mentorship for undergraduate student applying for the Undergraduate Research and Creative Opportunity (URCO) grant from Utah State University

**Community Presentations**


**SERVICE**

**Membership in Professional Organizations**

- Society for Research in Adolescence (SRA)
- Society for Research in Child Development (SRCD)
- American Evaluation Association (AEA)
- Mixed Methods International Research Association (MMIRA)

**Community Service**

**2007-Present** Hugh O’Brian Youth Leadership (HOBY), Utah
- Youth Facilitator (2019)
- ALA Program Evaluation Subcommittee (2018)
- Leadership Seminar Chair (2015-2018)
- Seminar Planning Committee (2012-2018)
- Director of Facilitators (2012-2014)
- Youth Facilitator (2011-2012)
- Junior Staff (2007-2008)

*HOBY* is a non-profit organization that provides leadership training to high school students around the U.S. and Internationally.

**AWARDS**

Graduate Student Instructor of the Year 2018-2019 - Utah State University Department of Human Development and Family Studies.