THE INFLUENCE OF COLLEGE STUDENTS' INTENSITY OF INVOLVEMENT IN STUDENT ORGANIZATIONS ON LEADERSHIP VALUES

By

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ABSTRACT

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Previous research on college students' involvement in student organizations and the outcomes of that involvement supports the premise that involvement in student organizations while in college is beneficial for students in areas such as persistence to graduation, job placement, interpersonal skills, and leadership development (Astin, 1993; Pascarella & Terenzini, 2005). Furthermore, Astin's (1984) Student Involvement theory states a college student's development as a result of involvement in a specific activity is directly proportional to the quality and quantity of effort dedicated to that activity. Most studies on involvement in student organizations focus on the involvement's influence on a range of outcomes, e.g., psychosocial development, academic persistence, and leadership development (Astin, 1993; Dugan & Komives, 2007; Foubert & Grainger, 2006), and the results reinforce Astin's (1984) Student Involvement theory. However, Astin (1984) also wondered if there is a limit to the benefits of this involvement. This study looks at this question as it relates to involvement in multiple organizations.

The purpose of this study was to identify the relationship between the intensity of involvement in student organizations and college students' leadership values. In other words, are there signs of diminishing returns as college students' intensity of involvement increases in regards to their leadership development? A student's intensity of involvement is the relationship between the student's quantity and quality of involvement in student organizations (Winston & Massaro, 1987). Data were collected through an instrument that combined the Extracurricular

Involvement Inventory (EII; Winston & Massaro, 1987) and the Socially Responsible Leadership Scale, Revision 2 (NCLP, n.d.). The survey was administered electronically at the Great Lakes Affiliate of Colleges and Universities Residence Halls (GLACURH) annual regional conference in November 2013, held at Michigan State University. Attendees were college students involved in on-campus housing student organizations at institutions located in Indiana, Illinois, Michigan, Wisconsin, or Ontario, Canada. A total of 204 students provided usable survey data for use in analyses.

Results from the data analysis using multiple regressions showed that there is a positive relationship between involvement in student organizations and students' leadership values. In addition, the results provided evidence of a tipping point in a college student's intensity of Involvement (EII) at which point an increase in leadership development is less likely to occur. When participants were divided between those involved in one organization (n=41) and those involved in multiple organizations (n=163), a tipping point in the EII was determined for participants involved in multiple organizations, but not for those involved in only one organization. Implications for student affairs practitioners and researchers and recommendations for future research is also discussed.

I dedicate this dissertation to anyone who has not considered a doctorate in fear of the dissertation. It can be done. I am proof!

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KEY TO ABBREVIATIONS

EII ..... Extracurricular Involvement Inventory (Winston & Massaro, 1987)

EII SQ ..... Extracurricular Involvement Inventory Squared

GLACURH ..... Great Lakes Affiliate of College and University Residence Halls

HERI ..... Higher Education Research Institute

LID ..... Leadership Identity Development (Komives, Longerbeam, Owen, Mainella, & Osteen, 2006)

MSL ..... Multi-Institutional Study of Leadership

NACURH..... National Association of College and University Residence Halls

NCC ..... National Communications Coordinator

NCLP ..... National Clearinghouse for Leadership Programs

RHA ..... Residence Hall Association (On-Campus Housing Student Organization)

SCM ..... Social Change Model for Leadership Development (HERI, 1996)

SRLS (SRLS-R2)..... Socially Responsible Leadership Scale (Revision 2) (National Clearinghouse for Leadership Programs [NCLP], n.d.; Tyree, 1998)

Chapter 1: Introduction

One of the main purposes of higher education institutions since the establishment of Harvard is the development of future societal leaders (Thelin, 2004). Additionally, one of the ways these future leaders develop their leadership skills is through participation in extracurricular activities such as registered student organizations (Dugan, 2006b; Dugan & Komives, 2007; Dugan & Komives, 2010). Kuh (1995) argued that students often see the true learning at college occurring through these student organizations and not through the curriculum. Although specific academic majors develop future leaders in their respective fields, I argue that responsibility for developing future societal leaders has fallen on extracurricular activities, especially student organizations, and not simply through the formal curriculum (McIntire, 1989).

College administrators reinforce research that states that the more involved students are in their college experience, the more likely they are to persist to graduation (Astin, 1984) by encouraging students to become involved in student organizations. Additionally, involvement in student organizations provides opportunity for students to develop the skills needed to succeed in full-time positions after graduation (Astin, 1993). However, there is little research that looks at the outcomes of being involved in multiple organizations, especially related to leadership development. The purpose of this study was to identify the relationship between the intensity of involvement in student organizations and college students' leadership values. In other words, are there signs of diminishing returns as college students' intensity of involvement increases in regards to their leadership development?

The research on involvement in extracurricular activities, such as student organizations, has focused on that involvement's influence on the overall college experience (Abrahamowicz, 1988), academic performance (Baker, 2008), or the psychosocial development of college

students (Cooper, Healy, & Simpson, 1994; Foubert & Grainger, 2006; Hernandez, Hogan, Hathaway, & Lovell, 1999; Williams & Winston, 1985). Although there are several studies that looked at involvement in student organizations in general, much of the research focuses on specific types of student organizations such as social Greek associations (Hunt & Rentz, 1994; Winston & Saunders, 1987), campus-wide student governments (Miles, 2011, Miller & Kraus, 2004), college athletics (Astin, 1993; Grandzol, Perlis, & Draina, 2010), and community service opportunities (Astin & Sax, 1998; Hernandez et al., 1999). The results from this research support the argument that becoming involved in student organizations influences students' academic performance, psychosocial development, and leadership development, both positively and negatively. Only since the 1990s has there been research on the relationship between involvement in student organizations and developing student leaders (Dugan & Komives, 2007). It was during the 1990s when the Social Change Model for Leadership Development (SCM, Higher Education Research Institute, 1996) and the Student Leadership Practices Inventory (SLPI, Kouzes & Posner, 1998), which is based on The Leadership Challenge (Kouzes & Posner, 2003), were established. Both of these were developed with the college student in mind.

Although there have been attempts to do so, there is no agreed upon definition of leadership, nor an accepted definition of college student leadership (Komives, Lucas, & McMahon, 2006). Every individual has their own definition of what leadership means and what skills and qualities a good leader possesses. These definitions connect to the varying leadership theories that range from leadership is innate and not teachable to beliefs that leadership can be learned and revolves around common vision and goals, i.e., reciprocal leadership (Komives, Lucas, et al., 2006). Reciprocal leadership is defined as an approach in which the focus is on mutual goals and development, not just the leader's goals and vision and includes theories like

servant-leadership, transformational leadership, and followership leadership (Komives, Lucas, et al., 2006). With that said, there are leadership theories that are more pertinent than others to college student leadership, especially in today's society. The majority, if not all, of the leadership theories used with college students involved in student organizations fall under the concept of reciprocal leadership. One main reason is that through student organization involvement college students interact with each other on a regular basis which encourages concepts of reciprocal leadership. Furthermore, research shows that peer interaction, especially in student organizations, is one of the key factors of college student development, including leadership development (Astin, 1993).

Two key relational leadership theories are the Student Leadership Challenge (Kouzes & Posner, 2009) and the Social Change Model of Leadership Development (HERI, 1996). These theories have well-established instruments that measure a student's level of development on each component of the theory (Dugan & Komives, 2007; Kouzes & Posner, 1998; Posner, 2004; Tyree, 1998). Each instrument, the SLPI (Kouzes & Posner, 1998; Posner, 2004) and the Socially Responsible Leadership Scale (SRLS, Tyree, 1998) has been used in several studies and reported to be reliable and valid instruments (Dugan, 2006a, 2006b; Dugan & Komives, 2007; Dugan, Komives, & Segar, 2008; Posner, 2004, 2009; Posner & Brodsky, 1993, 1994).

Recent studies that examined the relationship between involvement in student organizations and leadership development used one of the previously listed leadership development theories (Student Leadership Challenge or SCM). These studies concluded that students involved in student organizations scored higher on certain values (e.g., Consciousness of Self, Collaboration) (Dugan, 2006b) or practices (e.g., model the way, challenge the process) (Posner & Brodsky, 1993, 1994) connected to leadership development than students not involved

in student organizations. Additionally, two studies using the Student Development Task and Lifestyle Inventory (Winston, Miller, & Prince, 1987), which is based on Chickering's (1969) original theory on psychosocial development, looked at the psychosocial development of students involved in student organizations and their level of involvement (e.g., attended meetings only, actively involved, or held an executive board position) (Cooper et al., 1994; Foubert & Grainger, 2006). Both of these studies found that students either actively involved or holding a position in a student organization scored higher on the psychosocial development indicators than students who only attended meetings (Cooper et al., 1994; Foubert & Grainger, 2006). Although these studies used psychosocial development as the dependent variable, results are similar to the studies with leadership development as the dependent variable in that those students involved in student organizations scored higher on the corresponding instrument variables (e.g., Consciousness of Self, model the way) than those not involved or who only attended meetings.

Much of the research previously mentioned focuses on college students' involvement in student organizations. However, it is important to understand that college students can be involved in other aspects of the college experience, such as working on campus, interacting with faculty, living on campus, or participating in athletic events (Astin, 1984). Astin (1984) argued that students who are involved in their college experience through these types of activities are more likely to persist through to graduation and develop personal skills in direct proportion to the quantity and quality of effort put forth. Quantity is defined as the number of hours put towards an activity, while quality is the accumulation of effort put towards completing a specific activity (Astin, 1984). The combination of quantity and quality can also be described as "intensity of involvement" (Winston & Massaro, 1987), which can vary by the type of involvement, including different student organizations.

There is little research that studies the relationship between the intensity of involvement in student organizations and college student development, in any form, including psychosocial, cognitive, or leadership. The one study that examined the intensity of involvement in student organizations looked at the six intrapersonal values based on the Survey of Interpersonal Values (Fitch, 1991). The results found that students who were considered moderately involved in student organizations (e.g., scores on the Extracurricular Involvement Inventory (EII) that were scored between – 0.5 and + 0.5 SD) scored higher on the interpersonal value of benevolence (i.e., serving others) than those considered low involvement (scores lower than – 0.5 SD) and high involvement (scores higher than + 0.5 SD) (Fitch, 1991). The results related to the interpersonal value of benevolence highlights that being highly involved does not guarantee higher scores on all of the interpersonal values, and that at least on this measure, being moderately involved is linked to greater valuing of serving others than those highly involved. One reason for this finding could possibly be that those highly involved were focused on themselves (Fitch, 1991). Additionally, the study reported that students considered highly involved scored higher on the interpersonal value of leadership than students who were lowly and moderately involved (Fitch, 1991). What is important to understand from this study is that the interpersonal value of leadership was described as "being in charge of others and having authority over others" (Fitch, 1991, p. 28). This is significantly different from reciprocal leadership that focuses on mutual goals and development (Komives, Lucas, et al., 2006). Although Fitch (1991) found that those who were considered highly involved scored higher on the interpersonal value of leadership than those who were moderately involved or lower, the definitions of leadership from Fitch and this current study differ, which may lead to different results between the two studies.

In a second study that reported results regarding intensity of involvement and leadership development, the 2006 Multi-Institutional Study of Leadership (MSL), Dugan and Komives (2007) concluded that involvement in too many student organizations was negatively related to leadership outcomes when measured using the SCM. The recommendation from this study was to encourage students to focus on one organization because the results indicated that being involved in more than one organization did not have a positive influence on leadership development as defined by SCM (Dugan & Komives, 2007). It is important to realize that this finding and the related recommendation were not the main focus of the MSL, which was to "increase the capacity of both leadership educators and institutions in developing the critical leadership skills in students that are so needed by the society" (Dugan & Komives, 2007, p. 8). The recommendation regarding involvement in student organizations was one of ten recommendations resulting from analysis of the MSL data. With all of this in mind, little is yet known about the relationship between this intensity of involvement in student organizations and leadership development, either in one or multiple organizations.

As mentioned previously, most studies that looked at student organization involvement focused on social Greek associations, campus-wide student governments, college athletics, and community service opportunities. On most campuses, there is an organization, typically called Residence Halls Association (RHA), representing a large group of students which has one commonality: living in campus housing units. Unlike many of the other organizations on a college campus, there are no additional requirements for being a member of RHA beyond living on campus. Furthermore, since RHA represents all of the students who live in campus housing units, typically the largest sub-group of students on a campus, RHAs are typically seen as a key student organizations, along with the campus' overall student government. Directors of

university housing, or similar positions, rely on feedback from RHAs regarding policies, procedures, and budgets relating to campus housing (Miller & Papish, 1993). The main advisor of RHAs is a professional staff member whose job responsibilities include serving as the RHA advisor (Boersig, 1993) In addition, typically at the beginning of each academic year, RHAs spend a significant about of time (four hours or more) focused on developing member leadership skills and values. This training usually is done in two sessions; one for the executive board members and the second for the general RHA members. Due to RHAs presence on college campuses, those they represent, and the training sessions, I am interested in knowing how involvement in RHAs influences the development of college student leaders.

The purpose of this study is to identify the relationship between the intensity of involvement in student organizations and college students' leadership development. In other words, are there signs of diminishing returns as college students' intensity of involvement increases in regards to their leadership development as defined by the Social Change Model of Leadership Development? The question driving this study is: how does the intensity of involvement in multiple student organizations, one of which is the campus-wide on-campus housing student government/organization (RHA), influence college students' leadership values?

Definition of Terms

The following is a list of those terms and abbreviations used in this study.

College Student. For the purpose of this study, the term college student refers to a traditional-aged student, 18-23, who began their college experience 1-2 years after graduating high school. Typically, students who are involved with RHAs meet this definition.

Student Organization. A student organization is a volunteer group of college students with a common purpose (curricular or non-curricular) that is officially recognized by and

registered with the department of Student Life, or similar department, at a higher education institution. Recognized groups have complied with all of the policies for being a student organization at that institution. Registered is defined as adhering to the yearly requirements that leads to specific benefits, e.g. reserving meeting space or requesting event funding.

Quality. The accumulation of effort a college student puts forth to help the organization reach its goals (Astin, 1984).

Quantity. The number of hours a college student commits to a certain organization (Astin, 1984).

Intensity of Involvement. The function of the quality and quantity a college student commits to a certain organization (Winston & Massaro, 1987).

Extracurricular Involvement Inventory. Assessment tool that transfers a student's intensity of involvement in student organizations into a numerical reference (Winston & Massaro, 1987).

Socially Responsible Leadership Scale. Assessment tool built to measure a college student's development in the seven values of the Social Change Model of Leadership Development (Tyree, 1998).

Residence Hall Association (RHA). The campus-wide student government organization that represents all students living on campus.

Conceptual Framework

During the 1990s, leadership development theories based on college students and their leadership experiences emerged (Dugan & Komives, 2007). The two most prominent theories that developed are the Social Change Model of Leadership Development (SCM, Higher, Education Research Institute [HERI], 1996) and the Leadership Challenge (Kouzes & Posner,

2003). The Leadership Challenge was originally developed from hundreds of interviews with individuals from the corporate world; the theory highlights five practices of exemplary leaders. Although the creation of an instrument to measure the development of these theories in college students emerged in the 1990s (Kouzes & Posner, 1998), the official Student Leadership Challenge concept materialized in the early 2000s (Kouzes & Posner, 2009).

More recently, the Leadership Identity Development theory (Komives, Longerbeam, et al., 2006; Komives, Owen, Longerbeam, Mainella, & Osteen, 2005) and the Relational Leadership theory (Komives, Lucas, et al., 2006) joined the college student leadership development arena. The Leadership Identity Development (LID) theory is considered a stage theory and was developed using grounded theory (Komives, Longerbeam, et al., 2006). LID argues that college students' views of leadership move from the traditional view of leadership that sees it as being a trait or behavior to the idea of leadership as mutual goals and development, or interdependent (Komives, Longerbeam, et al., 2006). The first stage, Awareness, is when a college student recognizes leaders and the concept of leadership but it is seen as something others possess, not the student. As the student moves through the six stages, eventually the student will reach the last stage, Integration/Synthesis. At this point, the student is aware of the importance of being interdependent with fellow leaders and continues his/her own leadership development which includes congruence (e.g., beliefs and actions are the same) (Komives, Longerbeam, et al., 2006).

The Relational Leadership Model (Komives, Lucas, et al., 2006) puts relationships at the core of the leadership development process. These relationships revolve around establishing a commitment to a positive purpose by being inclusive of people and ideas, empowering participants to be active, and being driven by ethical actions. The process, or how the purpose is

accomplished, is just as pertinent as the outcomes. The Relational Leadership Model argues that in order to be successful in the leadership process, individuals must be knowledgeable, self-aware, aware of others, and willing to take action (Komives, Lucas, et al., 2006). The ultimate goal of the Relational Leadership Model is for members to focus on the relational part of leadership and work toward mutual goals and development.

Of the four theories briefly described, instruments to measure college students' level of leadership development were created for the Leadership Challenge and SCM. As mentioned earlier, the Leadership Challenge was developed from interviews of individuals in the corporate world and was then adapted to college students. SCM, on the other hand, was developed from college students and their leadership experiences (HERI, 1996). Currently, the Leadership Identity Development and Relational Leadership Model theories do not have instruments to measure the level of development of college students.

The SCM focuses on how an individual develops leadership values through group interactions that focus on positive change in the society (Kezar, Carducci, & Contreras-McGavin, 2006). The overall concept of Reciprocal Leadership theories focuses on how group interactions assist in a college student's leadership development, which are explained in the next chapter. Although there are no critiques of the SCM, the main concerns of Reciprocal Leadership theories in general are the lack of resources on how to develop collaborative team work in organizations that are hierarchical and bureaucratic in nature and the lack of attention on the influence of the leader (Kezar et al., 2006). The team/group concentration of Reciprocal Leadership theories is the main reason SCM is used as the framework for this study. Much of college students' leadership development is completed through involvement in student organizations. These organizations, even though they usually consist of a president and

executive board, have an overarching theme of team/group interaction. Due to this close connection to team/group interaction and the fact SCM was created with college student leaders in mind, it fits well with studying leadership development. Furthermore, there is an instrument that is statistically reliable and valid based on it, and has been widely studied over the past 15 years.

The SCM was developed as a result of a grant from the Dwight D. Eisenhower Leadership Development program (HERI, 1996). The assumptions of the SCM are (1) leadership is more of a process and not a position, (2) leadership is collaborative, (3) all students have the potential to be leaders, (4) leadership should be based on values, (5) leadership can be developed through service to others and the community, and (6) leadership encourages change in others and the society (HERI, 1996). The SCM supports the belief that any student can develop leadership attributes, with or without serving in an executive board position. Furthermore, leadership involves individuals working together to affect positive change in others and the society, which can be done through service to the community. Since the model focuses on positive change that can affect society in general, the creator named it the Social Change Model of Leadership Development (HERI, 1996).

The goals of the SCM focus on developing self-knowledge and leadership competencies in individual college students and enhancing positive change, specifically at higher education institutions and the related communities (HERI, 1996). These goals are reached through the connection of three components of the model: individual, group, and society (HERI, 1996). The values and components connected to the SCM are individual values-Consciousness of Self, Congruence, Commitment; group-Collaboration, Common Purpose, Controversy with Civility; and society-Citizenship (see Table 1 for definitions, HERI, 1996).

Table 1 Values Definitions for the Social Change Model of Leadership Development

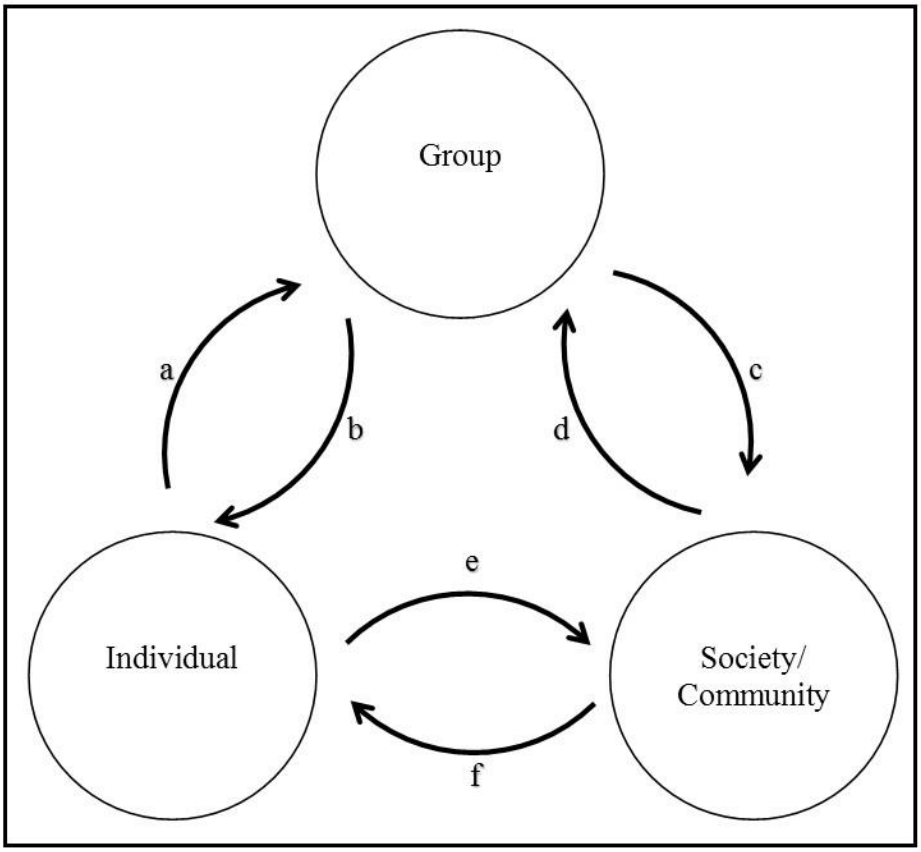
Value	**Definition**
Consciousness of Self	Awareness of the beliefs, values, attitudes, and emotions that motivate on to take action.
Congruence	Thinking, feeling, and behaving with consistency, genuineness, authenticity, and honesty towards others; actions are consistent with most deeply-held beliefs and convictions.
Commitment	The psychic energy that motivates the individual to serve and that drives the collective effort; implies passion, intensity, and duration, and is directed toward both the group activity as well as its intended outcomes.
Collaboration	To work with others in a common effort; constitutes the cornerstone value of the group leadership effort because it empowers self and others through trust.
Common Purpose	To work with shared aims and value; facilitates the group's ability to engage in collective analysis of issues at hand and the task to be undertaken.
Controversy with Civility	Recognizes two fundamental realities of any creative group effort; that differences in viewpoint are inevitable, and that such differences must be aired openly, but with civility. Civility implies respect for others, a willingness to hear each other's views, and the exercise of restraint in criticizing the views and actions of others.
Citizenship	The process whereby an individual and the collaborative group become responsibly connected to the community and the society through the leadership development activity. To be a good citizen is to work for positive change on the behalf of others and the community.
Change	The ability to adapt to environments and situations that are constantly evolving, while maintaining the core functions of the group.

Source: Higher Education Research Institute. (1996). as cited in Dugan, J. P. and Komives, S. R. (2010). Influences on college students' capacities for socially responsible leadership. *Journal of College Student Development, 51*(5), 525-549

Figure 1 highlights the connection between the three components and related values. The arrows indicate that the development of a component's values influence the development of another component's values. For example, the concept of Controversy with Civility will not be developed unless the individuals involved have strong values related to Congruence and

Commitment (Komives, Lucas, et al., 2006). Detailed descriptions of the key values and the relationship between the three groups are found in chapter two.

Figure 1 Three Components of the Leadership Development Model



Note. Source: HERI (1996). *A social change model of leadership development guidebook: Version III.* College Park, MD: National Clearinghouse for Leadership Programs (p. 20).

Conclusion

Although developing societal leaders has been a focus of American higher education since its inception, the vehicle for that development process has migrated from the formal curriculum to extracurricular activities such as student organizations. Furthermore, the concept of leaders and leadership has also morphed from being individualistic and trait-related to being relational and developmental. Research shows that involvement in student organizations is beneficial for college students' development, i.e., psychosocial, cognitive, leadership. However,

little is known about the influence of being involved in multiple organizations on leadership development.

While there are several leadership development models constructed from college student leadership experiences, the Social Change Model for Leadership Development was used in this study. Two main reasons for this decision are (1) the model was developed from college students' experiences, and (2) there is a valid and reliable instrument built from the model. The research question driving this study is: how does the intensity of involvement in multiple student organizations, one of which is the campus-wide on-campus housing student government/organization (RHA), influence college students' leadership development?

Chapter 2: Literature Review

The question driving this study is: how does the intensity of involvement in multiple student organizations, one of which is the campus-wide on-campus housing student government/organization (RHA), influence college students' leadership development? With the emergence of the Student Affairs profession in the early 1930s, colleges and universities broadened their focus to educating the "whole student" (Terenzini, Pascarella, & Blimling, 1996, p. 196), which included engaging students both in and outside of the classroom. Thelin (2004) notes that since the inception of American higher education, college students have valued their out-of-class experiences more than the knowledge gained in the classroom. As the student population increased and became more diverse, the nature and number of these experiences have grown to include student organizations that represent an array of student interests.

Consequently, students have opportunities to join a variety of organizations that reflect their multiple interests, which has increased the likelihood that students are committed to more than one organization at a time. Through this type of participation, students involved in student organizations, either as an active member or as an executive board member, tend to develop more positive interpersonal and intrapersonal skills than students who either only attended meetings or were not involved in student organizations (Cooper et al., 1994; Fitch, 1991; Foubert & Grainger, 2006). Furthermore, college students involved in student organizations are more likely to increase their leadership attributes than students who do not participate in student organizations (Dugan, 2006b; Dugan & Komives, 2007; Dugan & Komives, 2010). With that said, little is known about the relationship between involvement in multiple student organizations and leadership development. In other words, is the relationship linear, in which increases in student organization involvement lead to increases in leadership development, or is the

relationship curvilinear, where there is a point when an increase in one variable leads to a decrease in the other variable?

This review of literature focuses on five specific topics. At the conclusion of this chapter, the reader will have a better understanding of (1) the evolution of leadership theories and ones that are prevalent in today's society, (2) the Social Change Model for Leadership Development (SCM, Higher Education Research Institute [HERI], 1996), (3) student involvement theory and benefits of participating in registered student organizations, and (4). residence hall associations. The gaps in the literature that lead to the purpose of this study are also identified.

Evolution of Leadership Theories

In this section, the evolution of leadership development theories is discussed. These theories can be divided between the industrial and post-industrial paradigms of leadership (Komives, Lucas, et al., 2006). The industrial paradigm is defined as a focus on the hierarchical concepts of leadership including leaders and followers (Finley, 1994). In the industrial paradigm, the effectiveness of leadership is due to the leader, not to the relationship with others (Finley, 1994). The post-industrial paradigm of leadership, on the other hand, is one that focuses on the social relationship between those involved (Dugan, 2006b). The emphasis is on positive change for the better of the organization, or community, and the effectiveness of leadership is due to the relationship and all individuals connected to that organization.

The industrial paradigm includes leadership theories that purport that leaders are born, not made; there are specific traits needed to be leader; there is only one way to lead; or that different situations require different leadership (Kezar et al., 2006; Komives, Lucas, et al., 2006). Although Komives, Lucas, et al. (2006) state that the emergence of these theories took place

during the mid-1800s and lasted until the late-1900s, I argue that the industrial paradigm theories were in existence during the early establishment of higher education institutions in the United States, well before the mid-1800s. One reason for this argument is that one of the main goals of higher education was to develop societal leaders from the sons of well-known business men and clergy. In other words, help those who supposedly already have the leadership traits build on those traits and develop into societal leaders. Even though these theories served American higher education well during the early years, views about leadership development and the relationship between leaders and followers evolved (Komives, Lucas, et al., 2006). In the late-1900s, theories focusing on the importance of the relationship between all those involved in the leadership experience and on the idea that leadership is not simply innate but can be taught emerged (Kezar et al., 2006). These theories marked the beginning of the post-industrial paradigm of leadership development.

The post-industrial paradigm encompasses two leadership approaches: reciprocal, and chaos/systems (Komives, Lucas, et al., 2006). These approaches led to theories that focus on the importance of the relationship between members of the organization, leaders and followers together (Komives, Lucas et al., 2006). Theories under the reciprocal approach are based on the belief that every member gains something from being involved in the organization, not just the leader. Furthermore, the organization accomplishes its goals and visions through the relationships built between the members. The overarching principle of the chaos/systems approach is that everything is interconnected and relationships are critical to the success of the organization (Kezar et al., 2006). Behaviors are adapted through interactions with the environment and others. Since the SCM (HERI, 1996) falls under the reciprocal approach of

leadership development, the following section discusses the major leadership theories that are seen as reciprocal approaches.

Reciprocal Approach Theories

The reciprocal approach consists of several theories, however the three key theories are: transformative leadership, servant-leadership, and followership (Komives, Lucas, et al., 2006). Transformative leadership is built from the assumption that leadership is connected to the needs and goals of the followers (Burns, 1978). The ultimate purpose of transformative leadership is the development of deeper ethical goals and actions in all who are involved in the group, i.e., leaders and followers (Komives, Lucas, et al., 2006). The relationship between leaders and followers is based on mutual motivation (Kuhnert & Lewis, 1987). Leaders such as John F. Kennedy, Mother Teresa, and Martin Luther King, Jr. are examples of transformative leaders (Bass, 1990). One way transformative leadership is seen in a college student organization is when a president works with members of an organization, such as a community service group, to highlight the level of homeless in a city. Ideally, working together on the project leads to greater ethical aspirations and actions in the future. Transformational leadership is usually compared to transactional leadership, which focuses more on how each person can benefit from the other's involvement, or when there is an exchange of possessions (Komives, Lucas, et al., 2006). A key difference between these two theories is what the followers gain from the relationship. Through transactional leadership, followers get something that is more self-serving while transformational leadership assists in the development of deeper ethical goals and behavior. An example of transactional leadership in a student organization is when members of the organization entice students to become involved simply for the chance to put the activity on their resume; there is no mention of how the involvement will better the students ethically. Due to the collaborative

nature of transformational leadership, it is considered a reciprocal approach to leadership development.

Servant-leadership theory is based on a person's passion to serve others. Servant leaders become involved in an organization, activity, or event because of their desire to assist others, not because it looks good on their resume or because they want to be seen as the leader (Komives, Lucas, et al., 2006). This is why the theory is called SERVANT-leadership; the term servant is before leadership because serving others is their purpose, not being seen as a leader; even though *because* of their passion to serve, these individuals become leaders (Greenleaf, 2002) An example of this type of leadership is a college student who lives in a residence hall and joins the policy and procedure committee of the Residence Hall Association in order to ensure the housing policies are appropriate and to advocate for other residents. It is very likely that due to this desire and level of commitment to the goals of the committee and to the community, the student will be seen as a leader in this group. The student did not join simply to be seen as a leader in the organization or to include the experience on a resume, but because the student wanted to advocate for the residents. Servant-leadership is seen as a reciprocal approach to leadership because the desire to serve others is more important than what the student gains from the experience.

The last key theory under the heading of reciprocal approaches is followership. The followership theory is based on the relationship between the leader and the followers. It is not a relationship in which followers are passive, that leaders tell the followers what to do and they do it. Instead, the effective follower is one who demonstrates critical thinking, not dependent on the leader, and is active in process (Kelley, 1988). In this relationship, the effective follower listens to the leader and determines how to help the leader reach the goals of the organization by

thinking for themselves and bringing suggestions to the leader. It is also important for the leaders to realize that they are not necessarily better than the followers, but that they are equal in importance even if the responsibilities vary (Kelley, 1988). Smith (1996) described followership as, "a subtle act of leadership" (p. 204), which links these roles closely together.

Summary

Understanding the evolution of leadership theories from those based on innate ability and behavior to theories that stress the importance of mutual development and goals of all involved is central to appreciate the current state of leadership development higher education institutions. Although the birth of American higher education occurred during the industrial paradigm and the prevalent theories of that time, leadership development opportunities available at American higher education institutions now resemble the three major reciprocal approaches. The next section describes another theory from the reciprocal approach to leadership development, Social Change Model of Leadership Development (HERI, 1996) that is used as the main framework for this study. I contend that SCM uses the three other reciprocal leadership theories as foundational theories. The key difference between this theory and the three already described is that SCM was developed for college students and their college experiences (HERI, 1996).

Social Change Model of Leadership Development

The Social Change Model of Leadership Development (SCM) is considered a reciprocal approach since it is based on assumptions that leadership is collaborative and is more concerned about the process of reaching goals than in the positions held in an organization (HERI, 1996). SCM was created from a grant through the Dwight D. Eisenhower Leadership Development program with the goal of creating a leadership theory based on college students (HERI, 1996). SCM focuses on the development of self-knowledge and leadership values that are either

individual, group, or societal. Improving values in one area/component likely leads to improving values in another area/component. The main focus of SCM is that these interactions lead to enhanced positive change in higher education institutions and related communities (HERI, 1996). SCM comprises seven values: Consciousness of Self, Congruence, Commitment, Collaboration, Common Purpose, Controversy with Civility, and Citizenship. Each of the seven values is described in more detail as well as how the three components build on each other.

Social Change Model Values

Consciousness of self (Individual). A simple definition of this value is being self aware (HERI, 1996). However, Consciousness of Self involves more than being aware of who you are, your personality, and what you value and believe; it also entails being able to look at your actions and thoughts truthfully. In other words, an individual who has a strong Consciousness of Self value analyzes the reasons behind his or her actions or thoughts; the individual is not simply "doing" something but knows the reason for the action. Another term for this process is mindfulness (HERI, 1996; Komives & Wagner, 2009).

It is possible for an individual to develop behaviors that comprise the Consciousness of Self value. One way is to encourage feedback from others regarding behaviors displayed (HERI, 1996; Komives & Wagner, 2009). Collecting information from external sources, positive and negative, can help an individual be aware of how others view his or her behaviors. Being open and sincere to the feedback provided does not necessarily mean that the individual needs to agree to the feedback and then change his or her actions or thoughts; rather, the individual should reflect on the feedback and determine if the observation is accurate. For example, the president of a student organization inadvertently offended members of the executive board with a decision that led to several members being angry. The president then asks the board members for

feedback on how things are going in the organization. The angry members may provide feedback that does not accurately reflect their overall thoughts because the recent decision has clouded the members' views.

Personal reflection is another way an individual can enhance the Consciousness of Self value (HERI, 1996; Komives & Wagner, 2009). Reflection can be done through journal writing, quietly thinking about past events, or simply talking with friends. The goal is to analyze prior experiences and determine if the actions and thoughts from the past accurately represent the individual's personality, beliefs, and values.

Congruence (Individual). Congruence means how well your actions fit with your values and beliefs (HERI, 1996). For example, if a college student believes that everyone has a right to voice an opinion, but this person is consistently interrupting others when sharing their thoughts, then this individual is probably not displaying the Congruence value. In order to be strong in the Congruence value, a college student must also be strong in the Consciousness of Self value. One way that a college student can be aware of when his or her behaviors are not congruent with personal values or beliefs is having an uncomfortable feeling when acting a certain way. In the example above, if the college student is strong in the Consciousness of Self value, he or she may feel uneasy when interrupting others, but does not understand the reason for the discomfort. Personal reflection and feedback would help this college student become aware of the incongruence between actions and values.

Commitment (Individual). Commitment describes the amount of time and energy a college student puts towards an activity and connected outcomes, which relates to personal values and passions (HERI, 1996). When the activity and outcomes are closely related to personal values and passions, the student's commitment will be high. On the other hand, if they

are loosely connected, the student's commitment is lower. In this situation, the likelihood that the student will continue with the activity is low. An example of this low commitment is when a college student who is passionate about giving back to the community through service decides to join an organization that touts community service as one of its key pillars. However, during the first couple of meetings, the topic of community service is briefly mentioned and organizational members focus more on socializing with each other. The college student appreciates the opportunity to get to know others in the organization, but values service to the community much more. Since the organization seems to not value community service as much as the college student, the student's commitment to the organization is low. It is likely that the student will withdraw from the organization and find another one that relates more closely to his or her values and passions.

Collaboration (Group). The general definition of collaboration is working together with common goal in mind (HERI, 1996). However, it is not simply meeting to discuss the common goals or purpose. Collaboration also means having an open mind, discussing differences and ultimately, coming to a mutual decision. This is different from compromise or cooperation. Compromise usually entails each party involved letting go of a value or belief for the greater good (Komives & Wagner, 2009); cooperation is seen when the parties involved combine efforts to accomplish their individual goals, not mutual goals (HERI, 1996). Although compromise and cooperation are seen in student organizations, SCM emphasizes reaching a mutual decision between the parties, which entails self-awareness and willingness to adjust goals for the betterment of the group, e.g., collaboration. When there is a disagreement in a collaborative relationship, the parties involved focus on understanding each other and the reasons behind one's views, eventually redefining values in order to move the group forward. This process requires

each party to examine their own individual values (e.g., Consciousness of Self, Congruence, Commitment) while working for the common purpose of the group.

Common purpose (Group). One way of looking at the Common Purpose value is to look at shared vision and goals (HERI, 1996). There are two ways shared visions and values are established. The first is when the leader of a group provides his or her own vision for the group and then "enrolls", or persuades, members into that vision (HERI, 1996; Komives & Wagner, 2009). This is possible when the leader's vision relates to the overall purpose of the group and connects to the values of members. For example, the president of an outdoor adventure group shares that his or her vision for the year is for the group to have more non-members than members attend their weekend adventure trips to hopefully increase membership. Although the group did not develop this vision together, it is likely that they will agree to it since it still incorporates their weekend trips, which is the organization's common purpose. However, when it comes time for these weekend adventure outings, members may not be as supportive of non-member attendance as they would be if they were part of creating the vision.

Being part of creating the vision is the other way a shared vision can be developed in which the president "engages" members in developing the direction for the organization (HERI, 1996). Research has shown that when members are involved in developing the vision or goals for the organization they are more likely to be committed to accomplishing those goals or vision (Kouzes & Posner, 2003). With that said, engaging members in developing the common purpose is not necessarily better than "enrolling" members. Instead, these two ways can be viewed at the opposite ends of a continuum (HERI, 1996). The best way to develop a common purpose depends on the positional leaders and members of the organization. If an organization consists of members who have been part of the group for a year or more, engaging the members in

determining the vision for the group may be the best route since members are more likely to understand the mission of the group. However, if the membership is young, approximately less than a year of involvement, sharing the president's or executive board's vision may be better given that the membership is still learning about the group and its purpose. Another way to explain the difference between engaging and enrolling members in establishing the group's vision is identifying members' awareness of the group's organizational culture e.g., beliefs, ideology (Dill, 1982).

Controversy with civility (Group). Controversy and conflict are usually seen as interchangeable (HERI, 1996), even while conflict has more of a negative connotation than controversy (HERI, 1996; Komives & Wagner, 2009). This negative connotation focuses on "winners" and "losers" and has more of a personal undercurrent (HERI, 1996). Additionally, a fear of retaliation is connected to the term "conflict", which may lead to those involved not being honest with viewpoints (HERI, 1996). Controversy is completely opposite (HERI, 1996). The undercurrent of "controversy" is that the individuals with differing viewpoints are focused on resolving the differences in ways that will be favorable to all involved, a win/win situation (Covey, 1990; HERI, 1996). When a student organization is able to agree to handle differing opinions in a civil manner, members may feel comfortable sharing opinions that may not be the same as others hold (Tjosvold, 1989). In order to focus on a win/win outcome, the students involved need to believe in collaboration and working towards a common purpose (Covey, 1990). However, strongly held viewpoints or a focus on being right and winning will likely prevent an organization or individuals from handling controversy with civility (Covey, 1990; HERI, 1996). In order to develop a culture that is supportive of the Controversy with Civility

value, the organization needs to focus on the other SCM values such as Consciousness of Self, Congruence, Commitment, Common purpose, and Collaboration.

Citizenship (Society). Citizenship is active engagement in one's community (HERI, 1996). A college student can be involved in multiple communities, such as their residence hall, their major, or the overall university. Ideal citizenship is when a college student is a positive addition to the specific community. One way to do this is to care for the community and help the overall community reach its goals. Furthermore, the college student interacts with other members of the community and becomes invested in the positive change that takes place in the community (Komives & Wagner, 2009). On a college campus, positive citizenship is seen when college students are involved in student government, campus-wide committees, or in an activity/event that improves the university (HERI, 1996). For example, at a certain campus recycling exists but is not promoted well and students continue to throw recyclable items in the trash. A student organization strongly believes in recycling, promoting the different ways to recycle and its simplicity. Therefore, the organization develops a campus-wide campaign to increase the amount of recycling done in the residence halls. In this situation, the student organization is working on improving the campus and showcasing positive citizenship. In order to accomplish this task, the students must possess strong Consciousness of Self, Commitment, and Congruence values. Furthermore, within the organization strong Collaboration, Common Purpose, and Controversy with Civility values need to be present.

Interaction between Components

This section explains how development in one area's (e.g., individual, group, society) values can influence the development of another area's values, and vice versa. The arrows in

Figure 1 show this continuous feedback. Ultimately, Figure 1 (page 13) symbolizes the importance of continuous learning and developing through the seven values.

Individual and group. The continuous feedback between these two areas is shown as arrows A and B in Figure 1. Arrow A symbolizes the importance of being conscious of one's self, congruent, and committed to one's values and passions when working in a group setting. Not only are these three values interdependent, it is unlikely that an individual will be successful in the group values of Collaboration, Common Purpose, and Controversy with Civility if the individual values are not strong.

Arrow B represents how the development of the group values influences the development of individual values. For example, individuals may believe that their actions are congruent with their values and beliefs (Congruence). However, during a group meeting feedback is given to individuals that indicates that is not true. Therefore, the individuals need to reflect on this feedback and develop ways to ensure congruence. Another example is when the group is experiencing controversy with civility. During this situation, an individual may need to re-evaluate personal values and beliefs and therefore, their consciousness of self, in order to understand the difference between one's personal values and beliefs and the values and beliefs of fellow group members. This may lead to changes in the individual's values and beliefs for the betterment of the group.

Group and society. Arrows C and D denote the relationship between the group values and responsible citizenship. If a group is not handling controversy with civility but behaving more in a competitive nature, then responsible citizenship, which encourages positive engagement, is not likely to happen. However, if a group is working collaboratively with a

common purpose and handling controversy civilly, the campus benefits from the supportive nature. Positive change will be seen at the campus through responsible citizenship.

Arrow D signifies how the community can influence the group members and their development. An example is when the Young Democrats organization decides to protest a decision of the administration. The results of the protest, either positive or negative, will influence the development of the group's values and how the group will interact with campus in the future. If the protest is handled in a responsible and caring manner, similar to controversy with civility, the feedback from the society will be positive, or at least favorable. However, if the protest is handled in an "us vs. them" mentality, the feedback will not be favorable and will probably lead the organization to evaluate their common purpose and how they handled controversy.

Society with individual. Arrow E represents how the individual and related values can influence the development of responsible citizenship and communities. The values of the individuals in a community influence its goals and commitment. If the individuals' values of Consciousness of Self, Commitment, and Congruence are positive and help develop a positive community, the Citizenship value increases. However, if the individual values are not positive in nature, i.e., the belief that government is corrupt, then the Citizenship value decreases.

Finally, Arrow F symbolizes how service to the community, or building responsible citizenship, influences the individual. Through serving the campus community, a college student will interact with others that will lead the student to analyze his/her individual values of Consciousness of Self, Commitment, and Congruence. Imagine a college student who decided to join student government in order to challenge the university's policies. Although the student's individual values do not match those of the community, and may be seen as negative, the student

is still involved in one of the largest organizations on campus and being a citizen. Through this involvement, the student may begin to notice changes in his/her beliefs because of the differing opinions in the organization. As a result of becoming involved in student government, the student analyzed his/her individual values and adjusted them to new beliefs.

Research Using the Social Change Model

Although the Social Change Model of Leadership Development was introduced in 1996, there was no instrument in place to measure college students' development in the eight values of the model. For her dissertation, Tyree (1998) developed an instrument to measure college students' development in the values called the Socially Responsible Leadership Scale (SRLS). Further description about the scale is found in Chapter 3, Methodology. Since its inception, the SRLS has been used for multiple theses and dissertations and is also the main component of the Multi-Institutional Study on Leadership (MSL), developed in 2006 by Dugan and Komives (2007). Even though there are a handful of studies focused on specific aspects of the SCM e.g., Citizenship and Change values (Durham Hynes, 2010; VanHecke, 2006), the majority of research using the SCM as a framework collected data on all of the SCM values using the SRLS.

From a review of several dissertations and studies that used the SRLS, SRLS-R2 (the second revision of the SRLS), or the MSL, I determined that college students who participated in the studies consistently scored the highest on the Commitment value (Buschlen, 2010; Dugan, 2006b; Dugan & Komives, 2007; Gerhardt, 2008; Haber, 2006; Humphreys, 2007; McCurtis, 2012; Nobbe, 2012; Slife, 2007; Trujillo, 2009). The Commitment value focuses on the amount of time and energy a college student puts forth towards the outcomes of the group (HERI, 1996). This observation is not surprising since most, if not all, students are involved in student organizations with outcomes that connect closely with their passions and therefore, want to help

the organization succeed. Additionally, the instructions for the instruments asks the participants to think of their involvement in registered student organizations so I argue that the participants will rate themselves high on the statement related to the Commitment value.

The next two highest values, on average, are the Congruence and Common Purpose values. The Congruence value is described as how well college students' actions fit with their values and beliefs while the Common Purpose value is defined as having a shared vision and working towards that vision. What I find interesting is that college students score higher on the Congruence value than on the Consciousness of Self value. This tells me that college students are not aware of what they value and believe, yet their actions match their beliefs more often than not. This seems to be in conflict; how can a college students' actions match his/her beliefs if he/she is not aware of his/her values and beliefs? Lee and King (2001) contend that this disparity between stated values (what is verbalized) and active values (what is acted) is seen more often than expected. Additionally, it may be difficult for a college student to realize what values/beliefs are being seen by other students through his or her behaviors (Lee & King, 2001).

Further review of the research identified that participants consistently scored the lowest on Controversy with Civility, Citizenship, and Change values with the Change value being the lowest in the majority of the studies (Buschlen, 2010; Dugan, 2006b; Dugan & Komives, 2007; Gerhardt, 2008; Haber, 2006; Humphreys, 2007; McCurtis, 2012; Nobbe, 2012; Slife, 2007; Trujillo, 2009). Depending on the study, the lowest score rotated between these three. My interpretation of this is that these three values are not emphasized as much as the other values in student organizations. The Controversy with Civility value is one that needs practice and dedicated time to develop. If the organization does not focus on how it connects to the large campus community, I argue that the Citizenship value will not be high. Continual discussions on

values that need to be developed are important to making improvements in values. For example, in one study that used students in a leadership training course as the experimental group, Citizenship was the third highest value (Buschlen, 2010), while the same value for the control group (psychology classes) was the sixth highest (or third lowest) value. The assumption could be made that the leadership class spent time talking about the connection to the greater campus community in class and the participants understood the importance of Citizenship. This study is the only anomaly regarding the Citizenship value and it was for the experimental group.

In a study somewhat similar to my current research, Gerhardt (2008) compared the MSL scores of four groups of college students: involved in Greek organizations and at least one other student organization, involved in three or more non-Greek organizations, involved in one to two non-Greek organizations, and no involvement in student organizations. Gerhardt (2008) found that the scores of students involved in Greek organizations and three or more non-Greek organizations were not significantly different. When comparing scores between students involved in three or more non-Greek organizations and one to two non-Greek organizations, Gerhardt (2008) reported that college students involved in three or more non-Greek organizations scored significantly higher on all of the values except for the Commitment and Change values. The key differences between Gerhardt (2008) and my current study is that Gerhardt (2008) looked strictly at involvement in organizations and not the intensity of that involvement, specifically Greek social organizations. I took the intensity of involvement into consideration as the main dependent variable and I did not use Greek organization involvement as one of the groups.

The studies that use the SRLS, SRLS-R2, or MSL collected data from all students, no matter their student organization involvement (Dugan, 2006b; Dugan & Komives, 2007; Haber,

2006; Humphreys, 2007; Trujillo, 2009); from students participating in a leadership class (Buschlen, 2010); from college students involved in specific organizations i.e., Greek organizations (Gerhardt, 2008); or from students at specific institutions i.e., Gallaudet vs. Hearing institutions (Slife, 2007). The current study will further the research regarding the development of the eight values of the Social Change Model of Leadership Development by looking at the intensity of involvement in student organizations and involvement in Residence Hall Associations (RHAs) among students from across institutions located in a specific region of the country. Later in the chapter, information will be shared about RHAs and the minimal amount of research focused on the benefits of being involved in this type of organization.

Summary

Student organizations would not exist if not for the students. These students and the organizations work to influence positive change in the higher education institution. This is one of the main reasons the Social Change Model of Leadership Development was created and based on the experiences of college students. Ultimately, colleges and universities want to see all students, no matter the level of student organization involvement, become citizens of the institutions. However, those involved in student organizations are more likely to develop a connection to the university than those who are not involved in organizations, such as with fellow students, staff members, and faculty members (Abrahamowicz, 1988). This supports the connection between the group and society components of the model. The Social Change Model of Leadership Development serves as a way to explain the development of leadership values in college students.

College Student Involvement and Student Organizations

This section includes literature related to Astin's (1984) Theory of Student Involvement and college student involvement in student organizations. There is a lot of research that looks at the benefits of being involved in student organizations and how the benefits relate to psychosocial, interpersonal, or leadership development. At the end of the section, the gap in literature related to the intensity of involvement in student organizations will be highlighted.

Student Involvement Theory

Involvement. This term has many different meanings (Involvement, n.d.); however, when connected to colleges and universities, there is a certain definition. Astin (1984) defined involvement, specifically college student involvement, as "the amount of physical and psychological energy that the student devotes to the academic experience" (p. 297). Using this definition as a foundation, Astin (1984) proposed a theory that argues that students who are more involved in their college experience are more likely to persist to graduation than those who are not involved. This involvement occurs in several ways that compete for a finite amount of a student's time i.e., place of residence, academic involvement, student-faculty interactions, athletic participation, or student organization involvement. Ultimately, the student determines how much time is spent with each type of involvement.

Astin (1984) further explained that college student involvement can be measured quantitatively (number of hours) or qualitatively (accumulation of energy/effort), and that development and learning connected to an educational program (in-class or out-of-class) is directly proportional to this quantity and quality of involvement in that program. In other words, when a student spends more time and puts more effort into the same program, the learning and development that comes from that involvement will increase as well. It is important to highlight,

though, that Astin (1984) questioned if there might be a limit to the amount of the learning and development that occurs when the level of involvement reaches a certain level.

Even though Astin (1984) described different types of involvement (e.g., place of residence and student-faculty interactions), I argue that when the term is discussed in the higher education context, involvement in student organizations is the main type of involvement identified. The term "student organizations" encompasses a wide array of interests, ranging from honor societies and sports groups to student governments, academic-related clubs, and social Greek organizations. Out-of-class experiences such as participating in student organizations are key to the psychosocial and leadership development of students (Abrahamowicz, 1988; Kuh, 1995; Moore, Lovell, McGann, & Wyrick, 1998).

Student Governments

The current study looked at involvement in campus-wide housing associations, e.g., RHAs. The RHA is considered the governing body for the students living in campus housing (Komives & Tucker, 1993), which is different from the campus student government organization (SGA) that represents all students at the institution. Both RHA and SGA organizations provide services for the students they represent, manage budgets, and provide recommendations regarding campus policies. Since RHAs have not been well studied, due to these similarities, reviewing the literature on student government involvement and its relationship with leadership development can provide some foundation for studying involvement in RHAs.

Since the early 1900s, student government organizations have been part of the college campus (Golden & Schwartz, 1994). Originally, these organizations were seen as a way for college administrators to keep order with the student body (Golden & Schwartz, 1994). The student government was essentially an extension of the college administration with little

decision-making responsibilities and not an independent entity that has power to make decisions and influence campus policy. The 1960s and 1970s saw the control of student governments shift from college administrators to students involved in the organizations as a result of the free speech movement (Golden & Schwartz, 1994). The current structure of the majority of student governments provides opportunity to influence campus policy and be an active part of the system for the college students involved.

Even though student government organizations have been around for over 100 years, research looking at the benefits of being involved in them is minimal, especially leadership skills or value development (Downey, Bosco, & Silver, 1984; Kuh & Lund, 1994; Laosebikan-Buggs, 2009; Schuh & Laverty, 1983). The studies focus more on the benefits of involvement after college (Downey et al., 1984; Schuh & Laverty, 1983), the experiences of student government leaders (May, 2009; Miles, 2011), influence on career choice (Laosebikan-Buggs, 2009), and general benefits of involvement in student governments (Kuh & Lund, 1994). Student government organizations are known to be a great way to develop leadership skills and values (Astin, 1993; Kuh & Lund, 1994; Pascarella & Terenzini, 2005; Romano, 1996); however, studies looking at leadership development of any type as a result of that involvement have yet to be identified.

Research on the Benefits of Student Organization Involvement

Throughout the past 30 years, research focused on the benefits of being involved in student organizations looked at interpersonal skills, psychosocial skills, or leadership skills development (Abrahamowicz, 1988; Cooper et al., 1994; Dugan & Komives, 2007; Fitch, 1991; Foubert & Grainger, 2006). These studies used a variety of scales such as the College Student Experiences Questionnaire (Pace, 1984) and the Student Development Task and Lifestyle

Inventory (Winston, Miller, & Prince, 1987), which make comparing results from the studies difficult even though each compared the development of students involved in student organizations and students not involved in student organizations. The other main scale often used to study involvement in student organizations is the Multi-Institutional Study for Leadership (MSL), which includes the SRLS-R2 along with questions about self-efficacy (Dugan & Komives, 2007).

The studies that used the Student Development Task and Lifestyle Inventory (Cooper et al., 1994; Foubert & Grainger, 2006) each completed a three-year longitudinal examination, either freshmen year and junior year or sophomore year and senior year, of undergraduates' psychosocial development. Both compared college students' development in relation to Chickering's (1969) Establishing and Clarifying Purpose vector between three main groups: not involved in student organizations, involved in student organizations, and holding a leadership position in an organization. The results of the post-tests of each study indicated that students involved in student organizations, either as a leader or as a non-leader, scored statistically significantly higher on all five measures the Establishing and Clarifying Purpose task (e.g., educational involvement, career planning, lifestyle planning, life management, and cultural participation) than students who were not involved in student organizations (Cooper et al., 1994; Foubert & Grainger, 2006).

Abrahamowicz (1988) used the College Student Experiences Questionnaire and found that in terms of the quality of effort put forth in fourteen college experiences (i.e., clubs and organizations, dormitory or fraternity or sorority), students who were members of a student organization scored statistically significantly higher than students who were not involved. In other words, students who were involved in organizations were involved in those fourteen

experiences more often than students not involved in organizations. Furthermore, Abrahamowicz (1988) reported that students who were members of student organizations reported statistically significantly higher quality of relationships built with other students, faculty, and administrative personnel than those who were not involved in student organizations.

In 2007, Dugan and Komives shared the results of the 2006 Multi-Institutional Study for Leadership (MSL). The MSL instrument adapted the Socially Responsible Leadership Scale (Tyree, 1998) and included questions regarding pre-college characteristics and leadership efficacy. Dugan and Komives (2007) reported that students who were involved in student organizations at any level scored statistically significantly higher on all of the SCM values than students not involved in student organizations.

Although the above studies measured different outcomes, each reported that students involved in student organizations scored statistically significantly higher than students not involved in student organizations on their particular scale. Additionally, in each of these studies, involvement in multiple student organizations was not studied. Dugan and Komives (2007) mentioned that being involved in multiple organizations showed a negative relationship with the SCM values. Their recommendation was to encourage students to become involved in one student organization and continue that involvement throughout college (Dugan & Komives, 2007).

Research on Involvement in Multiple Student Organizations

Similar to research looking at the involvement in multiple student organizations at the college level, there is also a large amount of research focused on adolescences and their involvement in extracurricular activities and the outcomes of this involvement. In fact there is concern from a variety of sources (i.e., media reports, books, research studies) that adolescences

are involved in too many of these activities (Mahoney, Harris, & Eccles, 2006). These concerns led to the development of the Over-Scheduling Hypothesis that is based on three assumptions: (1) motivation for participating is extrinsic; (2) time commitment for activities hinders typical family activities (e.g., dinnertime, family outings); and (3) participating is multiple activities leads to developmental problems or negative relationships with parents (Mahoney et al., 2006).

A meta-analysis completed by Mahoney et al. (2006) concluded that for the majority of adolescences, the motivation to participate in extracurricular activities is more intrinsic and the involvement in multiple activities leads to positive development. However, there were a couple studies documenting a certain level of involvement, which led to significantly lower levels of well-being than adolescences who did not participate in activities or a curvilinear relationship between the involvement and well-being outcomes (Cooper, Valentine, Nye, & Lindsay, 1999; Marsh, 1992; Marsh & Kleitman, 2002). The similarities of the outcomes of adolescence and college students being involved in extracurricular activities is not surprising since research in both arenas support the notion that involvement in these activities does lead to positive development in a variety of areas (e.g., academics, well-being). Furthermore, scholars raise the question about if a limit to the benefit exists (Astin, 1984; Marsh, 1992; Marsh & Kleitman, 2002). Research on adolescence provides an opening in the research on college students and their involvement in multiple organizations.

There are two studies that looked at involvement in multiple organizations. The earliest study (Fitch, 1991) looked at the relationship between that involvement and the students' development of interpersonal values using the Survey of Interpersonal Values (i.e., benevolence, leadership, independence). Winston and Massaro's (1987) Extracurricular Involvement Inventory (EII) was used to determine the participants' level of involvement. Moderately

involved students were those who scored ±0.5 SD on the EII. Subsequently, lowly involved students scored below -0.5 SD and highly involved students scored above 0.5 SD. Fitch (1991) reported statistically significant differences on three of the interpersonal values: benevolence, leadership and independence. Benevolence is described as serving others, Leadership is having power over others, and Independence is not relying on others (Fitch, 1991). The moderately involved participants scored significantly higher than the other two groups on the interpersonal value of benevolence while lowly involved participants score significantly higher than the moderately involved group on the interpersonal value of independence (Fitch, 1991). The highly involved group scored significantly higher than the other two groups on the interpersonal value of leadership (Fitch, 1991). It is important to realize that the definition of Leadership used by Fitch (1991) is different from the definition used in this study. The SCM identifies leadership more as a process that involves working with others for positive change in the greater society (HERI, 1996), which is similar to the definition of benevolence.

The other study compared the MSL scores of college students involved in Greek organizations and at least one other organization to students involved in (1) three or more non-Greek organizations, (2) one to two non-Greek organizations, and (3) not involved in student organizations and their development of the Social Change Model of Leadership Development values (Gerhardt, 2008). The results of the study indicated students involved in three or more non-Greek organizations scored statistically significantly higher than students not involved in student organizations on all eight values of the SCM. Furthermore, when the students involved in three or more non-Greek organizations were compared to those involved in 1-2 non-Greek organizations, the student involved in three or more scores statistically significantly higher on all of the values except Commitment and Change values (Gerhardt, 2008). Although this study

provides evidence contrary to my current study, there are two key differences between the studies. First, my study looked at students involved in RHAs and additional organizations; Gerhardt (2008) used Greek organizations in one of the comparative groups. Second, and most important, my study looked at the intensity of involvement, not simply being involved or not involved in organizations. In other words, in my study a participant who is involved in two organizations and holds leadership roles in both could have the same intensity of involvement as a participant who is involved in three organizations but holds a leadership position in one of those organizations.

Summary

The benefits of being involved in student organizations on a college campus are well established since the early 1980s (Abrahamowicz, 1988; Astin, 1984, 1993; Pascarella & Terenzini, 2005). In his seminal work on the Theory of Student Involvement, Astin (1984) questioned one of his assumptions, stating that there may be a limit to the development of a student when a certain level of involvement is reached. Two studies (Fitch, 1991; Gerhardt, 2008) essentially studied this query. Fitch (1991) looked at the intensity of involvement that looks at the quality and quantity of a college student's involvement in student organizations while Gerhardt (2008) compared MSL scores of students involved in a certain number of organizations. The current study combines the Fitch and Gerhardt studies by using the intensity of involvement as the independent variable and the SCM values as the dependent variable. Fitch (1991) mentioned that "moderation may be the key" to achieving balance (p. 28). My assumption is that students with moderate intensity of involvement totals will have similar or higher SCM value scores when compared to students with high intensity of involvement totals.

Residence Hall Associations

This section discusses the different structures of campus housing student governments, Residence Hall Associations (RHAs), the connection between leadership development and RHAs, and research revolving around RHA involvement and leadership development. RHAs serve as the governing body for students that live in campus-sponsored housing (Dunkel & Schuh, 1998). Most, if not all, four-year higher education institutions that have campus housing also have RHAs (Verry, 1993). Documentation on the origin of RHAs is like finding a needle in a haystack; however, there is scholarly writing explaining the role RHAs play on a college campus, as well as the importance of having an RHA (Miller & Papish, 1993; Werring, 1984). There are three main purposes of RHAs that include working with the housing professional staff in improving facilities, providing opportunities for students to get to know each other, and serving as a leadership training ground (Komives & Tucker, 1993). The last purpose is crucial to this study.

On most college campuses that sponsor campus housing there is more than one place students can live, typically called a residence hall or apartments. Many campuses also identify clusters of residence halls or apartments as a specific area. For example, on Michigan State University's campus there are five areas of campus with residence halls, or neighborhoods (Residence Education and Housing Services, 2013). The benefits of living on-campus are well documented (Astin, 1993; Pascarella & Terenzini, 2005). These benefits include being more likely to persist and graduate from college, being satisfied with their college experience, holding positive views regarding social change, and participating in extracurricular activities, such as RHAs. On most campuses, each residence hall has its own government, which consists of the typical leadership roles (e.g., president, vice president, secretary, and treasurer) and

representatives from each floor. The purpose of a hall government is identical to that of an RHA, but at the hall level. It is possible that a campus has an area government instead of hall governments; this is typically seen on campuses that house fewer than one hundred students in each residence hall. On the majority of campuses with campus housing, the separate hall governments send one or two members to the RHA to represent that hall's interest at the campus level (Verry, 1993). The campus housing student government structure for a campus is initially determined by the professional staff working with the group; however, eventually the students involved in the organizations make the ultimate decision on the structure. This may include changing titles and responsibilities of officers to disbanding an organization altogether. For the current study, the government structure of RHAs and hall governments with representatives to RHA are used as a reference point. Furthermore, when RHA is mentioned, the term also includes hall governments because the two types of organizations are more similar than different regarding structure and purpose.

No matter what type of government structure there is for students in on-campus housing, in order for it to be successful, experts strongly encourage identifying a professional housing staff member to serve as the main advisor for the organization (Komives & Tucker, 1993). As mentioned above, one of the key purposes of RHAs is to serve as training grounds for leadership development. One of the many responsibilities of the RHA advisor is to provide leadership training opportunities for students involved in RHAs (Averill, 1993; Boersig, 1993). These opportunities range from executive retreats at the beginning of each semester to leadership conferences for hall government members (Komives & Tucker, 1993). There is much information that can be shared during these events, however the main topics covered typically include facilitating icebreakers (activities that encourage members to get to know each other) and

team building activities (tasks that require the members to work together to accomplish specific goals), reviewing positional responsibilities, goal setting, establishing expectations on how everyone will work together, creating the budget, and planning for the year. These retreats provide a foundation for the members of the RHAs; additional leadership development occurs throughout the year when members need to make decisions, handle crises, manage controversy with civility, or become overwhelmed with responsibilities. The RHA advisor is usually present when any of these situations occur to provide suggestions and support so the members can make the best choices for the organization.

Not only do RHAs provide college students the chance to hone their leadership, communication, decision-making, and advocating skills but they do not limit who can become involved. Although there may be additional requirements to serve in an executive role, the only requirement to be a general member is to live on campus. Due to the minimal requirements, the range of college students who are able to participate in RHA is vast. Similarly, RHA members have the opportunity to develop their leadership skills and values, no matter the member's level of involvement. Since RHA members are also able to be involved in other student organizations, I decided RHAs would work well in the study and can serve as a proxy for similar organizations such as campus-wide student organizations.

National Association of College and University Residence Halls

Another avenue for developing leadership skills and values is through participation in regional and national housing conferences (Hellwig-Olson & Tattershall, 1993). In 1954, RHAs and housing professionals from Iowa State University, University of Colorado, University of Missouri, and University of Northern Iowa established the Midwest Dormitory Conference in hopes that ideas and information would be shared among professional staff and each university

would grow from this exchange (Coleman & Dunkel, 2004; Dunkel & Schuh, 1998). In 1961, the organization changed its name to the National Association of College and University Residence Halls (NACURH) when a similar regional organization merged with the Midwest Dormitory Conference (Coleman & Dunkel, 2004; Dunkel & Schuh, 1998). As of today, over 400 campuses in the United States, Canada, Mexico, Australia, and Qatar are members of NACURH divided into eight regions (National Association of College and University Residence Halls, n.d.,).

NACURH's mission statement states its dedication and commitment to leadership development of residence hall students and doing so through the many programs and services the organization offers (NACURH, n.d.). One of those programs is sponsoring annual conferences at the regional and national level. These conferences are typically 3 days and are for RHA members to share ideas, network, and gain leadership skills through program sessions focused on personal, professional, and organization growth. Not only do the students gain leadership skills by attending these program sessions, but the majority of the session presenters are residence hall students, either serving as executive board or general members. Although NACURH offers a variety of leadership developments opportunities, the annual conferences have the opportunity to reach a larger number of residence hall students.

Research on RHA Involvement and Leadership Development

RHAs are seen as a vehicle for developing student leaders (Averill, 1993; Dunkel & Schuh, 1998; Komives & Tucker, 1993; Miller & Papish, 1993), although there are only a few studies that provide evidence that students do develop leadership skills or values by being involved in RHAs. The two studies that looked at leadership development and RHA involvement took different approaches. One study interviewed alumni about their RHA

involvement and asked them to reflect on their leadership development as a result of that involvement (Rosch & Lawrie, 2011), while the other collected data on leadership skills from students involved in RHAs at the time of the study (Romero-Aldaz, 2001).

In a recent study six college graduates who were involved in residence hall-related organizations (i.e., RHA, hall government) were asked to share what they learned from this involvement (Rosch & Lawrie, 2011). Although the study did not refer to the SCM and its associated values, the skills and values highlighted in the study related well to the SCM. The participants discussed how involvement in the organizations provided opportunity to improve their ability to reflect and essential adjust beliefs and actions for the future (Rosch & Lawrie, 2011). This is an example of how students can improve their Consciousness of Self value through feedback and reflection. Another result that was shared was how being involved in the organization led to reinforcement of the students' values and how the reinforcement led to their leadership style being congruent to their values (Rosch & Lawrie, 2011). Even though the Controversy with Civility value was not included directly studied, participants shared that involvement led to improved problem solving, openness to ideas, and acknowledging ways action can impact others (Rosch & Lawrie, 2011). Finally, the participants discussed the importance of connecting to the broader community, i.e., the campus community (Rosch & Lawrie, 2011). This qualitative study provided evidence that the SCM can serve as a model for leadership development even when the model was not used in the study. Furthermore, the study also highlights that involvement in RHAs provides sufficient opportunities to development the values associated with the SCM.

Romero-Aldaz (2001) studied the skills achieved by students who served as leaders in RHAs. Romero-Aldaz (2001) compared males with females and presidents of RHAs with

students who represent the RHA at the regional level, e.g., National Communication Coordinators. Using the Student Leadership Outcome Inventory (Crowder, 2000), Romero-Aldaz compared the scores of seven different skills (e.g., critical thinking, career preparation, organization and planning, time management, self-confidence, diversity awareness, and technology) of the 266 participants. Females scored significantly higher than males on six of the seven scales (the exception was technology skills) and the presidents scored significantly higher than the National Communication Coordinators on the self-confidence skills (Romero-Aldaz, 2001). The results of the study suggest that females experience greater levels of development in leadership skills than males in these two types of positions. The key difference between Romero-Aldaz's (2001) study and the current study is the focus of the dependent variable. Romero-Aldaz (2001) looked at the skills developed as a result of the involvement in RHAs while my study's dependent variable consists of leadership values. Even though a couple of the skills measured (e.g., critical thinking, self-confidence, and diversity awareness) could be compared to the SCM values, the similarities are not enough to sufficiently compare the two studies.

Summary

As a result of living in campus-sponsored housing, college students are automatically members of the campus-wide housing organization, i.e., RHAs. There is only one other organization on a college campus that can tout a similar characteristic: campus-wide student government association. One of the main purposes of RHAs is to provide leadership development opportunities for the members (Komives & Tucker, 1993). There are different avenues through which this leadership development takes place, from local day-long conferences to national 3-day leadership conferences. These experiences are supported by the university

through the expectation that the organization advisors are housing professionals for whom being the advisor is a responsibility. Even though RHA is seen as a way to develop student leaders, few research studies focus on this involvement and its relationship with leadership development. The studies that do look at leadership development provide a foundation for the current study.

Conclusion

After reviewing the literature focused on leadership development and involvement or participation in student organizations, a gap can be identified when looking at involvement in multiple organizations. The literature supports Astin's (1984) theory of student involvement, especially in regards to student organization involvement. However, there is minimal information on the outcomes on leadership development and involvement in multiple organizations. College administrators encourage students to become active in student organizations, but very few establish limits to the level of that involvement or even differentiate the benefits of the different forms of involvement. It can be argued that this is because college students are considered adults and able to make their own decisions. However, college administrators, specifically student affairs professionals, are seen as mentors and college students rely on their insights regarding the college experience. This relationship is seen in the campus-wide on-campus housing student organizations, RHAs. We need to know more about the relationship between the intensity of involvement in multiple student organizations and leadership development in order to assist college students in the navigation of the college experience.

Chapter 3: Methodology

This chapter reviews how I designed my study. I discuss my research design, sampling framework, collection of data, analysis of the data, and the limitations of the study. The purpose of this study is to identify the relationship between the intensity of involvement in student organizations and college students' leadership development. In other words, is there a point when an increase in a student's intensity of involvement no longer corresponds to an increase in leadership values, as defined by the Social Change Model of Leadership Development? The question driving this study is: how does the intensity of involvement in multiple student organizations, one of which is the campus-wide on-campus housing student government/organization (RHA), influence college students' leadership development?

The research questions for this study are:

1. What is the relationship between college students' intensity of involvement in multiple student organizations and their leadership development as defined by the Social Change Model of Leadership Development (Higher Education Research Institute [HERI], 1996)?
2. Are there signs of diminishing returns regarding college students' intensity of involvement and their leadership development?

Research Design

The dependent variables for my study are the eight values of the Social Change Model for Leadership Development (SCM, HERI, 1996). SCM was created in the mid-1990s as a result of a grant from Dwight D. Eisenhower Leadership Development program (HERI, 1996). SCM focuses on how an individual and the groups of which they are a part can assist in developing positive change in the society. In the case of colleges and universities, the entire institution is

considered the society. Change is seen as the overall value of the theory and the remaining seven values work together to affect Change. The seven values are divided between the three main components of the model: individual, group, society:

Individual: Consciousness of Self, Congruence, Commitment

Group: Collaboration, Common Purpose, Controversy with Civility

Society: Citizenship.

The main independent variable is the intensity of involvement in student organizations. Intensity of Involvement was measured through the Extracurricular Involvement Inventory (EII, Winston & Massaro, 1987). A detailed description of the EII is later in the chapter. Additional independent variables included the following demographic information: year in college, class level, major, GPA, age, gender, sexual orientation, ethnicity, international status, institutional type, location of institution (i.e., what state or province), total enrollment at the institution, total on-campus population, number of years in RHA-related organizations, type of RHA position (e.g., hall government officer, general member, RHA officer), and the number of organizations in which the participant is currently involved. Previous research provides support for variables such as year in college, class level, gender, ethnicity, sexual orientation, and type of position (Cooper et al., 1994; Dugan, 2006a; Dugan & Komives, 2007; Dugan et al., 2008; Foubert & Grainger, 2006; Kezar & Moriarty, 2000). The remaining variables were collected either as a requirement for using the Socially Responsible Leadership Scale, revision 2 (i.e., major, GPA, and age) or as descriptors and used as a control variable (i.e., international status, institutional type, location, enrollment, on-campus population, and years in RHA-relation organizations), if needed.

Sampling Framework

A sample is a representation of the larger population being studied (Remler & Van Ryzin, 2011). For the purpose of this study, the population being studied consists of college students who participate in the campus-wide on campus student associations (RHAs) (Dunkel & Schuh, 1998). RHAs became prevalent on college campuses in the early twentieth century to serve as the student government organization for students living on campus (Dunkel & Schuh, 1998). One of the purposes of RHAs is to develop future societal leaders (Komives & Tucker, 1993). Although RHAs have been part of the college campus since the early twentieth century and are seen as a prominent student organization, few studies focus on college students' involvement in RHAs and possible influences of that involvement (Romero-Aldaz, 2001; Rosch & Lawrie, 2011). Furthermore, no RHA study used the SCM as its conceptual framework. This study fills that gap in the literature.

The sample for this study consisted of college students from the states of Indiana, Illinois, Michigan, Wisconsin, and the province, Ontario, Canada. These are the states and province that are part of the Great Lakes Affiliate of College and University Residence Halls (GLACURH) (National Association of College and University Residence Halls, n.d.). This type of sampling is called convenience sampling since I am relying on a certain set of participants (Remler & Van Ryzin, 2011). In the case of this study, the sample was from the participants of the annual GLACURH regional conference, held every November at a member institution. On average, the annual GLACURH regional conference brings 400-600 college students together for the 3-day conference. (S. Cooke, personal communication, April 26, 2013). The 2013 GLACURH Regional Conference had 571 undergraduate attendees (M. J. Koller, personal communication,

June 18, 2014). All attendees were made aware of the opportunity to participate in the study which led to 243 surveys being collected (42.6%).

Instrumentation

The instrument for this study combined two separate inventories that provide self-reported data: Extracurricular Involvement Inventory (EII) (Winston & Massaro, 1987) and the Socially Responsible Leadership Scale-Revised Version 2 (SRLS) (Tyree, 1998). As a doctoral student at Michigan State University, I had access to an online survey program, Qualtrics, which was used to administer the EII and SRLS electronically.

I received permission from Roger Winston (Appendix A) to use the EII and from the National Clearinghouse for Leadership Programs (Appendix B) to use the SRLS-R2. This permission also included shifting the administration of both from paper to an online data software program, Qualtrics. The College of Education at Michigan State University purchased a license allowing faculty and students access to use the program for collecting data. Two of the key features of the program are the ability to display questions depending on certain answers and the ability to direct participants from one survey to another while keeping the data separate and anonymous. What this means is the data collected through the online administration of the EII and SRLS-R2 was not connected to the form participants filled out if they wanted to be part of the random drawing of incentives.

The survey consisted of demographic data, EII items, and SRLS-R2 items. The demographics included: year in school, class level, age, gender, sexual orientation, ethnic background, current GPA, institution type, population of institution and on campus living, length of involvement in housing organizations, and number of organizations with which students are currently involved. One of the stipulations for using the SRLS-R2 was collecting certain

demographics: class level, age, gender, sexual orientation, ethnic background, and current GPA in college. Since a student could be considered sophomore during their third year in college, I asked for the number of years in college in addition to class level.

After inputting demographic information, participants were asked to complete an Involvement Index for each student organization with which they were currently involved. Once those are complete, the participants completed the SRLS-R2.

Extracurricular Involvement Inventory

Winston and Massaro (1987) believed that more information could be gathered regarding college students' involvement in student organizations than what the College Student Experiences Questionnaire (CSEQ, Pace, 1984) collected in the Clubs and Organizations section that included five statements on a student's overall experience in student organizations, not each organization separately. Winston and Massaro (1987) developed an instrument to measure involvement in a student organization using Astin's (1984) Student Involvement theory. Part of the Student Involvement Theory states that the development of a student (i.e., psychosocial, cognitive, skills) from an educational program, either in-class or out-of-class, is directly proportional to the quantity and quality of the student's involvement (Astin, 1984). Quantity is defined as the number of hours devoted to the educational program and quality is defined as the accumulation of effort used to assist the program in reaching its goals (Astin, 1984). In the case of this study, student organizations were the educational program used.

Winston and Massaro (1987) defined the relationship between the quantity and quality of a student's involvement in a student organization as the "intensity of involvement". Quantity was measured as the total number of hours devoted to the specific organization during the most recent four weeks (Winston & Massaro, 1987). Quality is more difficult to determine. Winston

and Massaro (1987) measured the quality of a student's involvement using the frequency of attending meetings, being involved in discussion and decisions, attending sponsored events, holding a position, promoting the organization on campus, and taking on responsibilities. A student who attends meetings but does not make the effort to get to know others, take on additional responsibilities, or share with others about their involvement would have a low level of "intensity of involvement." A high level of intensity would be seen when a student not only attends meetings but is active in the decision making process, promotes the organization to those not currently involved, and participates in sponsored events.

The EII is the sum of a student's Involvement Index (INIX) intensity scores, one for each organization (Winston & Massaro, 1987). The INIX consists of eight questions related to a student's involvement in that specific organization for the past four weeks (see Appendix C), two of which are simply informational (e.g., type of organization and office held). The remaining six questions relate to the quantity and quality of involvement. The quantity of involvement is measured by the number of hours involved in an organization during the most recent four weeks, while the quality of involvement is the sum of answers to five statements related to the student's involvement during the most recent four weeks: attend meetings, promote organization, attend events, hold a position, and complete responsibilities (Winston & Massaro, 1987). Since the information collected through the INIX is not quantifiable, Winston and Massaro (1987) assigned scores for these six questions. For every eight hours spent with an organization, a student scored 1 point (e.g., 1-8, 9-16, 17-24, etc.). For example, if a student recorded 10 hours of involvement with an organization, the student's score for quantity of involvement is 2. The five questions that determine quality of involvement were assigned a 3 for "very often", 2 for

"often", 1 for "occasionally", and 0 for "never" and all other responses. The total quality of involvement scores for a student is the sum of the five questions.

The overall INIX score for the student's involvement in a specific organization is the product of the quantity of involvement score and the quality of involvement score. For example, a student who spent 10 hours with an organization (quantity score=2) and answered "often" for all five questions (quality score=2*5=10) would have an INIX intensity score of 20 (2*10). The EII overall score for a student is the sum of the student's INIX intensity scores for all organizations with which they are involved.

Winston and Massaro (1987) used two separate studies to establish reliability and validity for the EII. Reliability describes how consistent a measure is (Remler & Van Ryzin, 2011). Another way to describe reliability is how well the results from one study compare to the results from another study using the same measures, or instrument. Winston and Massaro (1987) stated that the Pearson product-moment correlations were established from having a subgroup complete the EII again after two weeks. The reported correlation value was .97. Validity refers to how well the measures actually measure the construct they are meant to measure (Remler & Van Ryzin, 2011). Validity was measured by first correlating the EII results with the Clubs and Organizations section results of the College Student Experiences Questionnaire (CSEQ) and then by correlating the EII scores between contrasting groups (Winston & Massaro, 1987). The correlations were .45 and .55, respectively. Correlations measure the linear relationship between two variables or, in this case, the scores from two inventories (Ott & Longnecker, 2010). Correlations range from +1.00 to -1.00, describing the strength of the correlation as well as the direction (positive or negative) (Ott & Longnecker, 2010). The test-retest correlation of .97 is considered a strong positive correlation since it is very close to +1.00; this indicates the results

from the first and second administrations are closely related. The validity correlation scores are not as strong as the reliability correlation since they are .45 and .55. These measures indicate a positive relationship between the EII and the Clubs and Organization section of the CSEQ and a positive relationship between the two contrasting groups that completed the EII. Although these correlations are not as strong, Winston and Massaro (1987) stated that they were statistically significant at the $p < .001$ level. In other words, the EII is reliable and valid.

Socially Responsible Leadership Scale-Revised Version 2

The original Socially Responsible Leadership Scale (Tyree, 1998) was created in order to measure the eight values of the Social Change Model for Leadership Development: Consciousness of Self, Congruence, Commitment, Collaboration, Common Purpose, Controversy with Civility, Citizenship, and Change (HERI, 1996). The research team used the Social Change Model for Leadership Development Guidebook, Version III (HERI, 1996) as a guide for developing the items for the scale. The final scale was pared down to 104 items from the 291 that were initial developed (Tyree, 1998). The remaining 104 items not only connected to one of the eight values of the model but also fall into one of three types of actions described in the SCM: knowing, being, and doing (HERI, 1996, Tyree, 1998). Each item was written as a statement so the participants would rate their agreement level: strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree (Tyree, 1998). Additionally, there are a number of statements that are negatively worded in order to check response reliability.

The scale used for the Socially Responsible Scale scored the agreement levels as such: 1 for strongly disagree, 2 for disagree, 3 for neither agree nor disagree, 4 for agree, and 5 for strongly agree. The scale was reversed for the negatively worded statements in order to score

those items accurately. The scores for each value is the mean score of the 12-14 statements connected to that value (Tyree, 1998).

In 2006, the original Socially Responsible Leadership Scale was revised and the 104-item scale was pared down further to a 68-item scale, while maintaining reliability and validity (National Clearinghous for Leadership Programs, n.d.). The revised version is called Socially Responsible Leadership Scale, Revised Version 2 (SRLS-R2) (See Appendix D). The original SRLS and the SRLS-R2 reported the following reliability, using Cronbach's alpha:

Table 2 Reliability of the original SRLS and SRLS-R2

Construct	**Original SRLS Cronbach's alpha (Tyree, 1998)**	**SRLS-R2 Cronbach's alpha (NCLP, n.d.)**
Consciousness of Self	.82	.78
Congruence	.82	.79
Commitment	.85	.83
Collaboration	.77	.80
Common Purpose	.82	.81
Controversy with Civility	.69	.72
Citizenship	.92	.90
Change	.78	.82

Source: National Clearinghouse for Leadership Programs (n.d.). Socially responsible leadership scale revised version 2: Using the SRLS-R2 for research and assessment, p. 10. College Park, MD, University of Maryland College Park.

These correlations indicate strong positive relationships between the statements for each value. For example, the value, Consciousness of Self is measured by a student's answers to nine statements (i.e., I am able to articulate my priorities, I can describe how I am similar to other people) (NCLP, n.d.). The .78 for Conscious of Self value for the SRLS-R2 signifies that the Consciousness of Self value statements have a strong internal reliability.

In order to determine the validity of the statements and their relation to the assigned construct, Tyree (1998) ran correlations between each statement and the sum of the scores for the assigned construct. The correlations for all of the original statements were statistically

significantly except for one which was part of the collaboration construct. The range of the r scores for those that were statistically significant was .2718 to .7701 while the r-scores for one statement not significant was .0100. The SRLS-R2 was revised in a way to retain the validity of the instrument (NCLP, n.d.). For the complete list of correlations, see Appendix E.

Data Collection

Data were collected during the regional GLACURH conference, held from November 22-24, 2013 at Michigan State University. Conference attendees were from a range of institutions with campus housing from Indiana, Illinois, Michigan, Wisconsin, and Ontario, Canada. Information about the research project was shared in the conference booklet and at the conference through posted signs and verbal announcements at the opening session and other sessions. At the end of the survey, participants had the opportunity to enter into a drawing for gift certificates as an incentive for completing the survey. If a participant indicated interest in the gift certificate drawing, the participant was directed to a completely new survey to collect their contact information for the drawing. This information was not connected to the data collected from the EII and SRLS-R2.

Computer stations were set up in a central location during the conference Friday evening during social time, Saturday morning and afternoon, and after the closing banquet on Saturday evening. Conference attendees were given a link to the survey if they wanted to still participate after the conference. Since the conference was the weekend before Thanksgiving, the survey remained open for two weeks after the conference. I also asked the conference advisor to send an email on my behalf to the RHA advisors in the GLACURH region to share with their students after the conference. The email provided the survey link to attendees who may not have had the opportunity to complete the survey during the conference.

Data Analysis

The data were analyzed through SPSS version 21. Initially, the data were analyzed through bivariate comparisons, t-tests, and analysis of variances (ANOVA) (Ott & Longnecker, 2010; Pallant, 2013). Correlations between the overall SCM value score and each of the independent variables, e.g., EII scores, gender, ethnic background, year in college, were run to determine the type of relationships between them. For the independent variables that had two groups (i.e., gender), t-tests were completed to determine statistical differences in the dependent variable scores (Pallant, 2013). ANOVAs were run to determine statistical significance between the independent variable with more than two groups and the dependent variable, the overall SRLS score.

Once the correlations were determined, using the literature as support, I completed a multiple regression (Remler & Van Ryzin, 2011) with the overall SRLS score as the dependent variable and the EII score as the main independent variable to answer the first research question that asked about the relationship between the EII score and the overall SRLS score. The multiple regression was controlled for the institution's enrollment, participant's number of years in RHA, gender, sexual orientation, ethnicity, class level, GPA, and type of RHA position. I also ran the multiple regressions with each of the single values (i.e., Consciousness of Self, Collaboration, Citizenship) and components (e.g., individual, group, society) as the dependent variable. In a similar dissertation, Gerhardt (2008) analyzed the SRLS scores of college students determined by the number of organizations in which they were involved. Therefore, an additional multiple regression was completed using the number of involvement indexes as the main independent variable instead of the EII score to determine which independent variable, or both, were statistically correlated with the overall SRLS score. This study looked at college students

involved in multiple student organizations. In order to determine the answer to the research questions focused on students involved in multiple student organizations, I split the data into two sets: students involved in one organization and students involved in multiple organizations (two or more). I then re-ran the multiple regressions for each set with the EII score as the main independent variable and the overall SRLS score, each single value, and each component as the dependent variable.

My second research question asked if there are signs of diminishing returns regarding the relationship between the EII score and the overall SRLS score. Another way of explaining this is determining a tipping point at which the development of the leadership values is minimal, static, or reduced. Perce and Aguinis (2013) also used the term, "Too-Much-of-a-Good Thing" Effect, in the field of management to describe this concept. All of these descriptions (diminishing returns, tipping point, Too-Much-of-a-Good-Thing) are connected to curvilinear relationships between two variables. In order to answer my second question, I needed to perform a multiple regression that included a variable that was the square of the EII score (Aiken & West, 1991). For example, if a participant had an EII score of 10, then new variable, EIISQ, would be 100. Once the regression was ran, I used the coefficients (b) of the EII score (b_1) and EII square (b_2) variables in the following formula to determine the point (X) in which an increase in the EII score no longer indicated an increase in the overall SRLS score: $X = -b_1 / 2 * b_2$. I also ran similar regressions when the data were split between students involved in one organization and involved in multiple organizations.

Limitations

As with any type of research, there were limitations to consider. First and foremost, the data collected were self-reported by the college students. Although the hope is that students accurately reported their experiences, it cannot be guaranteed (Remler & Van Ryzin, 2011). Humans have a tendency to report experiences in a way that shows them in a better light (Remler & Van Ryzin, 2011). Even though it can be argued that college students are eager and willing to share their experiences and may do so more accurately, the limitations of self-reporting need to be kept in mind when analyzing data.

Another limitation was that the data were collected at one specific conference. The attendees of this conference were from four different states and one Canadian province. This leads to the limitation that the data collected may not be generalizable to the larger population of the United States or Canada; however, there still may be lessons others can learn from the results. Furthermore, the data are relatable to only those who attended the conference. Students who did not attend the conference were not able to complete the survey.

Using the campus-wide housing student organization (RHAs) as the common denominator for the study is another limitation of the study. Although students organizations typically have similar processes and positions (e.g., general meetings, activities, president, vice president), how each organization uses these processes vary. With that said, the RHAs from across the GLACURH tend to have similar processes and positions since the RHAs are members of GLACURH and NACURH. Therefore, the data collected may not be able to be generalized to students who are only involved in non-campus housing student organizations.

The data may be skewed regarding the intensity of involvement because the EII asks participants to consider the most recent four weeks when completing the Involvement Index

inventories. Typically, there is preparation time for the GLACURH conference during these four weeks, especially the two weeks before the conference. Therefore the Involvement Index score may be higher than normal due to the conference preparation. This may also lead to lower Involvement Index scores for other organizations.

An additional limitation is the online dissemination of the instrument. As mentioned earlier, the total EII score is the sum of the Involvement Indexes completed by a participant; one index per organization. I stated in the survey instructions at the beginning of each new Involvement Index to complete the next index of organization #2, #3, etc. What I found when the students were completing the Involvement Index section of the instrument, some did not read the top of the new screen and thought the instrument was repeating itself. This led to participants possibly completing fewer Involvement Indexes than the number of organizations in which they were currently involved.

Conclusion

The research questions for this study were: (1) what is the relationship between college students' intensity of involvement in multiple student organizations and their leadership development as defined by the Social Change Model of Leadership Development (HERI, 1996); (2) are there signs of diminishing returns regarding college students' level of involvement and their leadership development? Data were collected through convenience sampling at a regional conference of the National Association of College and University Residence Halls held at Michigan State University in November 2013. The main independent variable was the college students' Intensity of Involvement scores, which are created by completing the Extracurricular Involvement Inventory (Winston & Massaro, 1987). The dependent variables were the college students' scores from the Socially Responsible Leadership Scale, revision 2 (NCLP, n.d.), based

on the Social Change Model of Leadership Development (HERI, 1996). Data were analyzed at the individual value level, component level (individual, group, society), and overall SCM value level. In the next chapter, the results from the survey and analysis of the data are discussed.

Chapter 4: Findings

In this chapter I share information gathered from data collection, including reasons for eliminating participants, participants' demographics, and how the data were used to answer the study's two research questions. The purpose of this study was to identify the relationship between the intensity of involvement in student organizations and college students' leadership development. In other words, is there a point when an increase in a student's intensity of involvement no longer corresponds to an increase in leadership values, as defined by the Social Change Model of Leadership Development? The question driving this study was: how does the intensity of involvement in multiple student organizations, one of which is the campus-wide on-campus housing student government/organization (RHA), influence college students' leadership development?

The research questions for this study are:

1. What is the relationship between college students' intensity of involvement in multiple student organizations and their leadership development as defined by the Social Change Model of Leadership Development (Higher Education Research Institute [HERI], 1996)?
2. Are there signs of diminishing returns regarding college students' intensity of involvement and their leadership development?

Participants

Participants in the study were college students attending the annual regional Great Lakes Affiliate of College and University Residence Halls (GLACURH) conference held at Michigan State University in November 2013. The conference attendees were enrolled at colleges and universities located in Illinois, Indiana, Michigan, Wisconsin, and Ontario, Canada. There were

571 undergraduate attendees at the conference, all made aware of the opportunity to participate in the study, and 243 surveys were collected (42.6%) (M. J. Koller, personal communication, June 18, 2014). One of the requirements of IRB approval was allowing participants the option to refuse to answer questions. Therefore, incomplete surveys were possible. While reviewing the data, 39 surveys were deemed incomplete and were removed from the analysis. The reasons for removing the surveys were the following: two participants did not accept the consent form; seven did not complete any part of the survey; nine only completed the demographic portion of the survey; five did not provide information pertinent to the main independent variable, the Extracurricular Involvement Inventory (EII) score; and sixteen did not complete enough of the dependent variable portion of the survey to provide an accurate score.

The remaining 204 surveys were completed by 132 females (64.7%), 71 males (34.8%), and one participant who indicated being both male and female (0.5%). Participants had the option to choose "rather not say" with regards to the sexual orientation with which they identify. Eight participants chose "rather not say" and two simply did not provide an answer. The remaining 194 participants' sexual orientation breakdown was: 158 (81.4%) heterosexual, 22 (11.3%) gay/lesbian, and 14 (7.2%) bisexual. The ethnicity of the participants was as follows: 166 (82.6%) White/Caucasian, 16 (8%) African American/Black, 1 (0.5%) Latino/Latina, 1 (0.5%) Pacific Islander/Native Hawaiian, and 17 (8.5%) Multi-racial. Two participants stated that their race was not included in the choice set on the survey and one participant did not answer the question. With regards to how many years the participants have been in college, the breakdown was as follows: 61 (29.9%) first year; 65 (31.9%) second year; 41 (20.1%) third year; 28 (13.7%) fourth year; 7 (3.4%) fifth year; and 2 (1%) sixth year or more.

Table 3 Demographics of Participants (n=204)

Gender	Male		Female		Male/Female		
	71 (34.8%)		132 (64.7%)		1 (0.5%)		
Sexual Orientation	Heterosexual		Gay/Lesbian		Bisexual	Rather Not Say	No Answer
	158 (81.4%)		22 (11.3%)		14 (7.2%)	8	2
Ethnicity	White/ Caucasian	African/ African American	Latino/ Latina	Pacific Islander/ Native Hawaiian	Multi-racial	Race Not Included	No Answer
	166 (82.6%)	1 (0.5%)	1 (0.5%)	1 (0.5%)	17 (8.5%)	2	1
Years in College	First	Second	Third	Fourth	Fifth	Sixth +	
	61 (29.9%)	65 (31.9%)	41 (20.1%)	28 (13.7%)	7 (3.4%)	2 (1%)	

The data were collected at a conference specifically for college students involved in on-campus housing organizations (RHA). This involvement could have been at the residence hall/area organization level (hall government) or at the campus-wide organization level such as a Residence Hall Association. For this study both types of organizations were described as on-campus housing organizations (RHA). The following demographic data related directly to that involvement. One participant did not indicate the number of years of involvement in on-campus housing organizations. Of the remaining 203 participants, 96 (47.3%) were in their first year while 61 (30%) had two years of experience, 31 (15.3%) had three years, 12 (5.9%) had four years, and 3 (1.5%) had five years of experience in on-campus housing organizations. Participants chose one of thirteen options regarding the type of involvement that also included the type of position held, if the participant held one (i.e., no position, hall government president, RHA treasurer), in these organizations. Table 4 includes a list of 13 options from which participants had to choose. Due to the large number of options for type of involvement, I collapsed the groups from thirteen to five: general member (n=43, 21.2%), hall government

member (n=64, 31.5%), RHA member (n=48, 23.6%), hall government representative to RHA (n=38, 18.7%), and RHA representative to the region (National Communications Coordinator) (n=10, 4.9%). One participant did not indicate a type of involvement.

Table 4 Position Held in Hall Government or RHA, possible responses

No position-general member	RHA president
Area/Hall Representative to RHA	RHA Vice President
Hall Government President	RHA Secretary
Hall Government Vice President	RHA Treasurer
Hall Government Secretary	NCC (National Communications Coordinator)
Hall Government Treasurer	RHA other, please specify
Hall Government other, please specify	

Additional demographics collected included class level, majors, grade point average, state or province in which the institution is located, type of institution (e.g., 2-year, 4-year, public, private), the enrollment numbers of the institution, the number of beds available in campus housing, and the number of organizations involved. The majority of the participants were either freshmen or sophomores (n=123, 60.3%) and were involved in two or three student organizations (107, 52.4%). Furthermore, roughly three-quarters of the participants were between the ages of 18-20 (n=156, 76.5%) and had a cumulative GPA of a 3.00 or above (159, 77.9%). With the exception of Ontario, Canada, the participants were, more or less, evenly distributed among the four states: Indiana, Illinois, Michigan, and Wisconsin. The enrollment of the participants' institutions fell mostly in the 3,000-9,999, 10,000-19,999, and more than 19,999 ranges (181, 88.4%). Additionally, the majority of beds available in campus housing ranged from 1,000 to 9,999 (156, 76.5%). Tables 5-11 provide the breakdown for each of these demographics.

Table 5 Class Level of Participants

	Frequency	**Percent**
First year/Freshman	60	29.4
Sophomore	63	30.9
Junior	45	22.1
Senior	27	13.2
Graduate	1	0.5
Missing Data	8	3.9
	204	100.0

Table 6 Age of Participants

	Frequency	**Percent**
17	1	0.5
18	43	21.1
19	63	30.9
20	50	24.5
21	31	15.2
22	8	3.9
23	4	2.0
24	1	0.5
25	2	1.0
28	1	0.5
	204	100.0

Table 7 Grade Point Average (GPA) of Participants

	Frequency	**Percent**
3.50-4.00	81	39.7
3.00-3.49	78	38.2
2.50-2.99	32	15.7
2.00-2.49	6	2.9
< 1.99	2	1.0
Missing Data	5	2.5
	204	100.0

Table 8 Location of Institution

	Frequency	**Percent**
Indiana	31	15.2
Illinois	51	25.0
Michigan	51	25.0
Ontario, Canada	15	7.4
Wisconsin	55	27.0
Other	1	0.5
	204	100.0

Table 9 Enrollment of Institution

	Frequency	Percent
1,000-2,999	18	8.8
3,000-9,999	55	27.0
10,000-19,999	58	28.4
> 19,999	68	33.3
Missing Data	5	2.5
	204	100.0

Table 10 Number of Beds in Campus Housing

	Frequency	Percent
< 1,000	11	5.4
1,000-2,999	53	26.0
3,000-4,999	56	27.5
5,000-9,999	47	23.0
> 9,999	33	16.2
Missing Data	4	2.0
	204	100.0

Table 11 Number of Organizations Involved In versus Number of Involvement Indexes Completed

	Organizations Involved		Indexes Completed		Difference
	Frequency	Percent	Frequency	Percent	
One	36	17.6	41	20.1	+5
Two	50	24.5	53	26.0	+3
Three	57	27.9	52	25.5	-5
Four	40	19.5	37	18.1	-3
Five	10	4.9	13	6.4	+3
Six	11	5.4	8	3.9	-3
	204	100.0	204	100.0	

The Majors variable was initially split into 22 categories, with "other" being number 23, as identified by the College Student Experience Questionnaire (Pace, 1984). This questionnaire is one of the most widely used surveys to determine how college students' quality of effort and perceptions correlate with their personal growth regarding to a holistic set of learning outcomes. To simplify data analysis, I used Anthony Biglan's classification of disciplines (1973), which is a three-dimensional classification of common postsecondary education majors. The three

dimensions are Hard/Soft, Pure/Applied, and Life/Non-Life that lead to dividing the common postsecondary majors into eight groups (See table 12).

Table 12 Common Postsecondary Majors Divided by Biglan's Classification

	Hard		**Soft**	
	Life	**Non-Life**	**Life**	**Non-Life**
Pure	Biology, Biochemistry, Genetics, Physiology, etc.	Mathematics, Physics, Chemistry, Geology, Astronomy, Oceanography, etc.	Psychology, Sociology, Anthropology, Political Science, Area Study, etc.	Linguistics, Literature, Communications, Creative Writing, Economics, Philosophy, Archaeology, History, Geography, etc.
Applied	Agriculture, Psychiatry, Medicine, Pharmacy, Dentistry, Horticulture, etc.,	Civil Engineering, Telecommunication Engineering, Mechanical Engineering, Chemical Engineering, Electrical Engineering, Computer Science, etc.	Recreation, Arts, Education, Nursing, Conservation, Counseling, HR Management, etc.	Finance, Accounting, Banking, Marketing, Journalism, Library And Archival Science, Law, Architecture, Interior Design, Crafts, Arts, Dance, Music, etc.

Source. Goel, S. (2010, July 27). Well rounded curriculum – An insight from Biglan's classification of disciplines. Engineering and Computing Education: Reflections and Ideation. Retrieved from http://goelsan.wordpress.com/2010/07/27/biglans-classification-of-disciplines/

For my study I decided to not include the Life/Non-Life dimension because the original 22 categories limited the ability to place majors in to this dimension. For example, one major option in my study's survey was Business with suggestions of management, marketing, and accounting. In Biglan's classification, management is considered a Life dimension while the other two are Non-Life. However, when a participant marked Business on the survey, it was impossible to determine the Life/Non-Life dimension. Therefore, the participants' majors were

collapsed into one of four groups based on the remaining two dimensions (Hard/Soft and Pure/Applied) of Biglan's classifications: Hard-Pure, Hard-Applied, Soft-Pure, and Soft-Applied (see table 13).

Table 13 Majors using Biglan's Hard/Soft and Pure/Applied

	Frequency	**Percent**
Hard & Pure	19	9.3
Hard & Applied	34	16.7
Soft & Pure	44	21.6
Soft and Applied	97	47.5
Missing	10	4.9
	204	100.0

In order to determine if the study's sample was representative of the study's population (undergraduate conference attendees), I compared the sample's demographics to the demographics of the study's population and undergraduate students attending Michigan State University (MSU). MSU's undergraduate population was used because MSU has a large undergraduate population, which is likely to represent the demographics of the study's population. Since the only demographic I was able to compare between the study's sample and population was gender, I decided to use MSU's undergraduate population when comparing the study sample's Gender, Ethnicity, GPA, Age, and Class Level. Table 14 provides the comparisons with the survey data being adjusted to the categories provided by MSU data results. When the gender breakdown of the study's sample was compared with the breakdown of the study's population, the percentages were almost identical: Conference attendees: male-37.3%, female-62.7%; Survey Participants: male-34.8%, female-64.7% (M. J. Koller, personal communication, June 18, 2014). The comparisons of the study's sample demographics with the study's population and with MSU's undergraduate population, although not exact, provide support that the study's sample is representative of the study's population.

Table 14 Survey Demographics vs. MSU Demographics

	Survey Participants		Michigan State University	
Gender*	Male	Female	Male	Female
	34.8%	64.7%	50%	50%
Ethnicity*	White/Caucasian	Non-White/ Caucasian	White/Caucasian	Non-White/ Caucasian
	83%	10%	69%	31%
GPA**	2.50 – 4.00	2.49 and below	2.50 – 4.00	2.49 and below
	93.6%	3.9%	99.5%	0.4%
Class Level***	Freshmen/ Sophomore	Junior/Senior	Freshmen/ Sophomore	Junior/Senior
	60.3%	35.3%	42.5%	57.5%
Age*	Average Age	24 or Older	Average Age	24 or Older
	20	2%	20	4%

*. CollegePortrait.com (College Portrait, 2013)
**. MSU's Common Data Set, 2013-2014 (Michigan State University, 2013)
***. MSU's Headcount by Academic Level and Student Category (Michigan State University, Spring 2010)

Independent Variables

Overall, data pertaining to 17 independent variables were collected in order to determine the participant's intensity of involvement. The majority of the independent variables were demographic data, including items required by the National Clearinghouse for Leadership Programs to use the SRLS-R2 in this study (see Appendix F). The participant first indicated the number of student organizations in which he/she was currently involved. This number led to the same number of Involvement Indexes (INIX) being generated by the survey for the participant to complete, one for each student organization (Winston & Massaro, 1987). Each INIX included questions about the type of organization, position held in that organization, if any, the total number of hours during the most recent four-week period spent regarding the organization, and five statements which measured the quality of the participant's (See Appendix C). The total of an INIX is the number of hours multiplied by the sum of the students' answers to five statements related to the quality of that involvement. In order to score an INIX, the number of hours a participant entered was assigned 1 point for every eight hours spent on the organization and the

answers to the quality of involvement statements ranged from 0-3, 0 for "never" and 3 for "very often". The minimum INIX score was 0 and the maximum was 150 (10 for the number of hours multiplied by 15, a score of 3 for each of the five statements).

The main independent variable, the Extracurricular Involvement Inventory (EII) score, was created by summing the totals of the Involvement Indexes each participant completed. The minimum EII score was 0 and if six INIXs were completed, the maximum score was 900 (150 x 6). While analyzing the data, I found that many participants did not complete all of the indexes they were expected to fill out. For example, one participant who indicated being involved in four organizations only completed one INIX. Therefore, I created a new independent variable, Total Indexes, to provide an accurate count of indexes completed. See table 11 to compare the Number of organizations and the Total INIXs completed.

The remaining independent variables were identified as either ordinal or nominal. The ordinal variables were Year in College, Class Level, Age, Institution Enrollment, On Campus Population, and Years in RHA. Major, Gender, Sexual Orientation, Ethnicity, Institution Type, Location of Institution, and Position in RHA were nominal variables. The location of the institution was included strictly as a demographic variable for possible future analysis between locations, therefore it was excluded from further analyses in this document. In addition, the initial review of the data indicated that all participants attended four-year institutions. Since all participants indicated attending a 4-year institution, this variable was also excluded from further analyses.

When working with regressions and correlations, using nominal variables with more than two groups is difficult since the numeric values are simply place holders (Field, 2012). When a nominal variable includes only two groups, one is coded 0 and the other is coded 1 (See Table

15). However, this is not possible with more than two groups. In order to accurately represent variables with more than two groups, dummy variables are created. Dummy variables are used to represent groups of participants in zeroes and ones (Field, 2012). A dummy variable is created for each group of the variable in which one group is coded 1 and the remaining groups are coded 0. Then these new variables are included in the regression. In the current study, the Majors variable was divided into four dummy variables, each representing one of the four groups: Hard-Pure, Hard-Applied, Soft-Pure, and Soft-Applied.

Additionally, I decided to collapse the Sexual Orientation and Ethnicity variables into two groups primarily due to the number of participants indicated as a non-majority (i.e., gay/lesbian or African American/African). This also minimized the number of variables included in the regression. For example, Ethnicity now included two groups instead of five dummy variables, each representing one of the Ethnicity groups. The Ethnicity variable was narrowed to White/Caucasian and Non-White/Caucasian, and the Sexual Orientation variable was adjusted to Heterosexual and Non-Heterosexual. The final variable I chose to collapse further was Position in RHA. When I reviewed the five new groups I identified two positions serving a dual role: RHA Representative and Communications Coordinator. In both of these positions, the individual was part of two organizations. In the case of the RHA Representative, this individual was a member of RHA and of the hall/area government he/she represents. In a similar way, the Communications Coordinator served as the institution's representative to the regional association and was a member of the institution's RHA. The remaining three positions (general member, hall government, and RHA) were considered single role positions. Therefore, I created the RHA position variable to indicate membership to one of two groups: Dual Position and Single Position. Table 15 shows how the nominal variables with two groups were coded.

Table 15 Codes for Gender, Sexual Orientation, Ethnicity, and RHA Positions

	Coded as 0	**Coded as 1**
Gender	Female	Male
Sexual Orientation	Non-Heterosexual	Heterosexual
Ethnicity	Non-White/ Caucasian	White/Caucasian
RHA Position	Single	Dual

In order to rule out extraneous variables, I ran correlations between the independent variables to determine which ones were statistically significantly correlated to each other. Table 16 provides the results of the correlations. Due to the statistically significant positive correlations between the EII, number of organizations, and number of INIX variables, I decided to use the EII as the proxy for the other two variables. In a similar fashion, the correlations between the number of years in college, class level, age, and number of years in RHA variables were also positively and significantly correlated. The class level variable correlated the highest with the years in college, age, and number of years in RHA variable. There is also research on the relationship between class level and extracurricular involvement (Cooper et al., 1994; Foubert & Grainger, 2006). Therefore, I decided to use Class Level as a proxy for years in college and age variables. I kept number of years in RHA (RHAyear) as a separate variable because it represents the commonality of the participants. Lastly, the correlation between the institution's enrollment and on-campus population variables was statistically significant and positive. Therefore, I decided to use the overall institution population as a proxy for the on-campus population variable since the institution population is more likely to be commonly known.

As a review, not all of the independent variables were included in running the linear regressions that answered the research questions. Several were chosen to serve as proxies for other variables to minimize the number of predictors used that leads to the degrees of freedom

for which to account. Therefore, the following variables were used: EII, institutional enrollment, type of RHA position (single/dual), GPA, gender, sexual orientation, ethnicity, class level, and number of years in RHA organizations. Literature supports the inclusion of most of these variables: type of RHA position (Cooper et al., 1994; Foubert & Grainer, 2006), gender (Case, 2011; Dugan, 2006a; Dugan & Komives, 2007; Kezar & Moriarty, 2000), sexual orientation (Dugan et al., 2008), ethnicity (Dugan & Komives, 2007; Kezar & Moriarty, 2000; Trujillo, 2009), and class level (Cooper et al., 1994; Foubert & Grainger, 2006). The remaining variables used, institutional enrollment and GPA, have a statistically significant correlation (-.156) with each other, one of which (GPA) also has a statistically significant correlation with the EII (-.190). Therefore, I decided to include institutional enrollment and GPA in the multiple regression.

Table 16 Pearson r Correlations of Independent Variables

	EII	INIXs	# of Orgs	Year in College	Class Level	GPA	Age	Institution enrollment	Beds on Campus
Indexes	.394**								
Orgs	.382**	.958**							
Years	.136	-.008	-.008						
Class	.191**	.061	.084	.803**					
GPA	-.190**	.000	.022	-.074	-.071				
Age	.149*	.038	.029	.728**	.752**	.103			
Inst. Enroll.	.136	-.076	-.097	.009	.033	-.156*	.017		
Beds	-.045	-.034	-.065	-.108	-.076	-.014	-.106	.579**	
Years in RHA	.230**	.061	.057	.702**	.751**	-.073	.626**	.029	-.119

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Dependent Variable

The dependent variable was determined by using the Socially Responsible Leadership Scale (SRLS), which measured leadership development as defined by the Social Change Model (SCM, HERI, 1996). The basic premise of the SCM is that leadership development is based on values instead of skills or traits. Values focus on the individual person, the group, or the related society, seven in total. The ultimate focus of the SCM is enacting positive change.

The SRLS consisted of 68 statements, each represented one of the seven SCM values, including the Change value. Participants were asked to rate his/her level of agreement of each statement, 1 for strongly disagree to 5 for strongly agree. The score for each value was the average of the statements measuring the specific value (See Appendix D). Therefore the score for each value was between 1.00 and 5.00. Each of the seven SCM values was connected to a specific component of the SCM, three in total:

Individual: Consciousness of Self value, Congruence value, Commitment value

Group: Collaboration value, Common Purpose value, Controversy with Civility value

Society: Citizenship value (HERI, 1996).

The component scores are the average of the questions/statements related to the values that are part of that component. For example, the Self component consists of the Consciousness of Self, Congruence, and Commitment values. The overall SRLS score was the average of all statements and ranged from 1.00 to 5.00.

In order to determine which, if any, of the independent variables had a statistically significant relationship with the overall SRLS score, which was the primary dependent variable, I completed a bivariate comparison with the independent variables. These results are found in Table 17. From these results, the only independent variable with a statistically significant

correlation with the overall SRLS score was the EII variable and it was a positive correlation. I also completed bivariate comparisons between the EII variable and the eight SCM values and three SCM components. A review of these results show that the EII variable's correlation with all of the SCM components and six of the eight values was statistically significant. The two exceptions were the Controversy with Civility and Change values. These results are found in Table 18.

Table 17 Pearson r Correlations of Independent Variables with the overall SRLS Score

	Overall SRLS Score
EII	.211**
# of Indexes	.029
# of Orgs	.046
Year in College	.057
Class Level	.039
GPA	.072
Age	.088
Gender	-.040
Sexual Orientation	-.023
Ethnicity	.049
RHA Position	-.106
Institution enrollment	-.014
On Campus Population	-.026
Year in RHA	.085

**. Correlation is significant at the 0.01 level (2-tailed).

I also ran T-tests and Analysis of Variances (ANOVAs) to determine if there was a difference between the overall SRLS score means between independent variable groups (Field, 2012). For the independent variables with only two groups (e.g., gender, sexual orientation, ethnicity, and dual/single RHA positions), I completed independent t-tests to compare the overall SRLS scores between these variables' groups (Pallant, 2013). For each of these variables, there was no significant difference between the variable's two groups. Furthermore, the magnitude of the differences in the means was small, except for the dual/single RHA positions. Table 19

shows the means, standard deviations, t-scores, significance, and mean difference for each of listed variables and associated groups

Table 18 Pearson r Correlations between the EII and the SCM Values and Components

	EII
Consciousness of Self	.146*
Congruence	.151*
Commitment	.190**
Self Component	**.187****
Collaboration	.232**
Common Purpose	.278**
Controversy with Civility	.047
Group Component	**.220****
Citizenship/Society Component	**.262****
Change	.113

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

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Table 19 T-tests for Independent Variables with Two Groups

Gender	**t(203) = 0.571, *p* = 0.568, two-tailed; Mean Difference = 0.032**				
	Mean	SD		Mean	SD
Male	4.244	0.412	Female	4.212	0.357
Sexual Orientation	**t(204) = 0.332, *p* = 0.741, two-tailed; Mean Difference = 0.021**				
	Mean	SD		Mean	SD
Heterosexual	4.217	0.372	Non-Heterosexual	4.237	0.395
Ethnicity	**t(204) = 0.585, *p* = 0.562, two-tailed; Mean Difference = 0.047**				
	Mean	SD		Mean	SD
White/Caucasian	4.230	0.353	Non-White	4.138	0.471
RHA Positions	**t(204) = -1.509, *p* = 0.133, two-tailed; Mean Difference = -0.093**				
	Mean	SD		Mean	SD
Single	4.244	0.380	Dual	4.151	0.361

With the exception of the EII variable, the remaining variables were ordinal with more than two groups. In order to determine if the difference between the means of the overall SRLS score of these groups was significant, ANOVAs were conducted. Table 20 provides the *F*-value and *p*-value of each test, and eta squared to determine if the magnitude of the difference in the

groups' means, either small, moderate, or large. From the ANOVAs, there was a statistically significant difference at the $p < .05$ level in the overall SRLS scores for the different Class levels: F (3, 191) = 3.474, p = .017. The actual difference in mean score between these groups was moderate. The effect size, calculated using eta squared, was .052. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for seniors (M = 4.386, SD = .300) was significantly different from the juniors (M = 4.107, SD = .345). The remaining class levels did not different significantly with the juniors or seniors. The ANOVAs for the remaining variables indicated no significant differences between the mean overall SRLS score means for the associated groups.

Table 20 ANOVA Results for Ordinal Independent Variables

Variable (n)	**df1 (# of categories-1)**	**df2 (n-df1-1)**	**F value**	**P value**	**Eta squared**
Year in College (204)	5	198	1.281	0.274	0.031
Class Level (195)	3	191	3.474	0.017*	0.052
Majors (194)	3	190	1.166	0.324	0.018
GPA (199)	4	194	0.695	0.596	0.014
State (203)	4	198	0.517	0.723	0.010
Inst. Enrollment (199)	3	195	1.644	0.181	0.025
On Campus Population (200)	4	195	1.026	0.395	0.021
RHA Year (203)	4	198	1.957	0.12	0.036
# of Orgs (204)	5	198	1.548	0.177	0.038
# of Indexes (204)	5	198	1.303	0.264	0.032

*. $p < 0.05$ level.

Research Question #1: Relationship between Intensity of Involvement and Leadership Development

To determine the relationship between the independent variable EII and the dependent variable of overall SRLS score, I ran a multiple regression to fit a linear model to the data in order to predict the values of the overall SRLS score from the independent variables (Field, 2012).

There were nine variables I needed to control for in the multiple regression. These variables were divided into three levels: institutional, group, and individual. The institutional variable used was the institutional enrollment since the correlation with the other relevant institutional level variable, on-campus population, was a statistically significant positive correlation at the $p < .01$ level. The two group variables used were the EII and type of RHA position (single or dual). Lastly, the individual related variables included were GPA, class level, gender, sexual orientation, ethnicity, and number of years in RHA. There is relevant research that identifies each of the chosen variables has a significant relationship, either positive or negative, with extracurricular involvement and therefore, were included in the analysis (Case, 2011; Dugan, 2006a; Dugan et al., 2008; Foubert & Grainger, 2006; Hernandez et al., 1999; Moore et al., 1998; Schuh & Laverty, 1983; Trujillo, 2009).

The multiple regression was run excluding cases listwise, meaning if a case, or participant, was missing one piece of data of the predictors used it would be excluded from the test (Pallant, 2013). As a result of the predictors used, 184 cases were analyzed, which is 90.2% of the total number of cases. Tables 21 – 24 show the correlations between the predictors and the independent variable (overall SRLS score), Regression Model Summary, ANOVA table, and the coefficients of the predictors. The nine predictors explained 10.5% of the variance in the overall SRLS score, F (9, 174) = 2.262, $p < .05$. Only one predictor's contribution to the change in the SRLS score was statistically significant, EII (*beta* = .300, $p < .01$). Due to related research (Gerhardt, 2008) that compared college students' SRLS scores determined by the number of organizations in which the students were involved, I also ran a multiple regression with the total number of indexes completed as the main independent variable, replacing the EII score. The

results from the test are found in tables 25 and 26. The nine predictors were not able to significantly explain the variance in the dependent variable, the overall SRLS score.

Table 21 Overall SRLS Score Correlations with Regression Predictors

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.308	.000**
Gender	-.056	.223
Sexual Orientation	-.078	.147
Ethnicity	.024	.372
RHA Position	-.079	.142
GPA	.084	.129
Class Level	.042	.287
Number of RHA Years	.068	.179
Institution Enrollment	.050	.252

**. Correlations significant at .001 (1-tailed)

Table 22 Regression Model Summary with the EII Score

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.324	.105	.058	.353

Table 23 ANOVA with the EII Score

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.536	9	.282	2.262	.020*
Residual	21.677	174	.125		
Total	24.213	183			

*. $p < .05$ level

Table 24 Coefficients with the EII Score

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.154	.172		24.201	.000
EII	.002	.000	.300	3.985	.000**
Gender	-.028	.057	-.036	-.479	.633
S. Orientation	-.025	.067	-.029	-.374	.709
Ethnicity	.034	.071	.035	.474	.636
RHA Position	-.063	.063	-.073	-1.003	.317
GPA	.007	.032	.017	.219	.827
Class Level	-.014	.037	-.041	-.380	.704
RHA Years	.005	.041	.014	.126	.900
Institution	.006	.027	.016	.211	.833

**. $p < .01$ level

Table 25 Regression Model Summary with the Total Number of INIXs

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.180	.033	-.018	.367

Table 26 ANOVA with the Total Number of INIXs

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.788	9	.088	.650	.753
Residual	23.425	174	.135		
Total	24.213	183			

*. $p < .05$ level

The overall SRLS score is the mean of all 68 questions of the SRLS. However, the SRLS also measures the eight values of the SCM as well as its three components, Self, Group, and Society. Each of the 68 statements represented one of the eight SCM values. The score for each value was the average of scores of the statements related each value. The component scores were determined by averaging the scores of the statements related to the values that make up the specific component. Each of the values and related components were considered aspects of a college student's leadership development, so I ran separate multiple regressions with the same predictors, but with the eight values and three components scores as the dependent variable. The complete multiple regression results can be found in Appendix H, however the R squared, *F* value and Significance, and significant beta values for the eight values and three components scores are shared in Table 27. The results show that the nine predictors were able to statistically explain significant variance in the dependent variable for the Commitment, Collaboration, Common Purpose, and Citizenship values and the Group component. The EII predictor contributed significantly to the variance for all of the above dependent variables.

Table 27 Multiple Regressions for SCM Values and Components with EII

D.V.	R	R Squared	*F*	Sig.	Largest Beta	Sig.
Consciousness of Self	.267	.071	1.485	.157	.232	.003**
Congruence	.272	.074	1.541	.137	.249	.001**
Commitment	.328	.108	2.335	.017*	.303	.000**
Self	**.301**	**.091**	**1.924**	**.051**	**.304**	**.000****
Collaboration	.360	.129	2.875	.003**	.320	.000**
Common Purpose	.356	.127	2.807	.004**	.342	.000**
Controversy with Civility	.202	.041	.820	.599	.119^	.125
Group	**.337**	**.113**	**2.474**	**.011***	**.309**	**.000****
Citizenship/ Society	.322	.104	2.241	.022*	.304	.000**
Change	.287	.082	1.730	.085	-.173^^	.020*

*. $p < .05$ level
**. $p < .01$ level
The largest *beta* for six of the nine values was related to the EII variable (scores range 0-900).
^. Represents Ethnicity (0 = non-White/Caucasian; 1 = White/Caucasian)
^^. Represents RHA Positions (0 = single role; 1 = dual role)

Since my research questions focused on involvement in multiple organizations, I decided to collapse the INIX variable from six groups into two: one organization and multiple organizations. This provided additional answers specific to involvement in multiple organizations. Therefore, I split the data into two sections: one organization (n=41) and multiple organizations (n=163). I ran the multiple regressions listwise, which means cases that do not include data for all of the variables in the model were removed. This resulted in 38 cases (92.7%) actually being analyzed in the one organization section and 146 cases (89.6%) for the multiple organizations section. The results show that the nine predictors were not able to significantly explain the variance in the dependent variables for participants involved in only one organization. This is likely due to the sample size for cases involved in one organization. The complete multiple regression results for participants involved in one organization can be found in Appendix I. The results for the participants involved in multiple organizations show that the

nine predictors were able to significantly explain the variance in the dependent variables: Commitment, Collaboration, Common Purpose, and Citizenship values and the Group component. The EII predictor contributed significantly to the variance for all five dependent variables. Table 28 reports the results of the multiple regression for the Commitment, Collaboration, Common Purpose, and Citizenship values and the Group component. The complete multiple regression results for participants involved multiple organizations can be found in Appendix J.

Table 28 Multiple Regressions for Specific SCM Values and Components with EII for Participants in Multiple Organizations

D.V.	R	R Squared	*F*	Sig.	Largest Beta	Sig.
Commitment	.344	.118	2.025	.041*	.277	.002**
Collaboration	.394	.155	2.772	.005**	.308	.000**
Common Purpose	.369	.136	2.388	.015*	.339	.000**
Group	**.357**	**.128**	**2.211**	**.025***	**.293**	**.001****
Citizenship/ Society	.340	.115	1.971	.047*	.281	.002**

*. $p < .05$

**. $p < .01$

The largest *beta* for the four values and Group component was related to the EII variable (scores range 0 = 900)

Summary

The first research question was, What is the relationship between college students' intensity of involvement in multiple student organizations and their leadership development as defined by the Social Change Model of Leadership Development (HERI, 1996)? In order to answer this question, I ran multiple regressions using nine independent variables as the main predictors. The first multiple regression was conducted to predict how much of the variance in the overall SRLS score could be explained by the nine predictors. The results show that 10.5%

of the variance could be explained by the nine predictors, F (9, 174) = 2.262, $p < .05$, with the EII variable statistically contributing the most to that variance (beta - .300, $p < .01$).

Since the overall SRLS score included scores at the value level and the component level, multiple regressions were run to determine if the variance in those variables could be significantly explained by the nine predictors. The variance in four values and one component scores were significantly explained by the predictors: Commitment, F (9, 174) = 2.335, $p < .05$, Collaboration, F (9, 174) = 2.875, $p < .01$; Common Purpose, F (9, 174) = 3.807, $p < .01$; Citizenship/Society Component, F (9, 174) = 2.241, $p < .05$; and Group Component, F (9, 174) = 2.474, $p < .05$. The EII variable was the predictor that significantly contributed to the variances in all of these values and components.

When the data were split between cases involved in one organization and multiple organizations, the multiple regressions run identified significant explanations of variances for four values and the group component for the multiple organization cases: Commitment F (9, 136) = 2.025, $p < .01$; Collaboration F (9, 136) = 2.772 $p < .01$; Common Purpose F (9, 136) = 2.388, $p < .05$; Citizenship F (9, 136) = 1.971, $p < .05$; and Group F (9, 136) – 2.211 $p < .05$. The EII variable was the predictor that significantly contributed to the variance in all four values and the group component. The nine predictors did not significantly explain the variance in any of the dependent variables for the one organization cases. The discussion of these results will be in Chapter 5.

Research Question #2: Diminishing Returns in Leadership Development Variables

The second research question was: Are there signs of diminishing returns regarding college students' intensity of involvement and their leadership development? In order to determine if there was a point in relation to the intensity of involvement where the development

of leadership values was no longer increasing at the same rate, additional analyses were required. Spearman's Law of Diminishing Returns (Jensen, 2003) explains the relationship between two variables that shows smaller advances in the dependent variable as the independent variable increases at the same rate. Although it is well known as an economic term related to supply and demand, the concept can be used in a variety of fields including education (Pierce & Aguinis, 2013). For the current study, my goal was to determine if there was an intensity of involvement level/score where development of leadership values as defined by the SCM would taper off. In other words, is there a tipping point where a certain level of involvement, or intensity, is no longer a benefit to developing leadership values?

In order to answer this question, the analyses required the use of a quadratic equation that incorporates the square of the independent variable identify possible diminishing returns in multivariate models (Aiken & West, 1991). Since the EII variable was the only variable that was continuous, it was the only one that required the squared variable. I then re-ran the multiple regressions from question 1 with the addition of the new variable, EII Squared. Results from these tests are shared in Tables 29 and 30. These results provided the data needed to complete the second part of the tests, which is solving the following formula: $X = -b_1/2b_2$, where X is the tipping point for the independent variable (EII), b_1 is the regression coefficient for the EII variable, and b_2 is the regression coefficient for the EII Squared variable. This equation is derived from the quadratic formula, $b_1 + 2b_2X = 0$, adjusted to solve for X (Aiken & West, 1991). Table 31 shows the tipping point of the EII variable (219) that indicated score beyond which an increase in the EII is likely to coincide with a decline in the overall SRLS score for the entire group.

Table 29 ANOVA of overall SRLS score with EII and EII Squared Variables

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.298	10	.330	2.728	.004**
Residual	20.915	173	.121		
Total	24.213	183			

**. $p < .01$

Table 30 Coefficients of overall SRLS score with EII and EII Squared

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.133	.169		24.410	
EII	.004	.001	.823	3.723	.000
EII Squared	-9.153E-006	.000	-.539	-2.510	.000
Gender	-.024	.057	-.032	-.422	.013
Sexual Orientation	-.015	.066	-.017	-.220	.674
Ethnicity	.032	.070	.033	.452	.826
RHA Position	-.072	.062	-.083	-1.159	.652
GPA	-.001	.032	-.002	-.020	.248
Class Level	-.028	.037	-.080	-.755	.984
Years in RHA	.003	.041	.007	.069	.451
Institution	-.007	.027	-.018	-.242	.945
					.809

Table 31 Determining Tipping Point of EII score for Sample

	Entire Sample
EII Variable	
0 Return[a]	219
% Cases	5.39% (11 cases)

[a] Value of X when $b_1 + 2b_2X = 0$.

Similar to the first research question, I also ran the same tests with the same predictors, but with the data split between participants involved in one organization (n=41) and those involved in multiple organizations (n=163). The results from these analyses are seen in tables 32-36. Table 32 shows the *F*-value was not statistically significant for participants involved in one organization, while Table 34 shows the *F*-value was statistically significant for participants involved in multiple organizations. Table 33 highlights the coefficients for the predictors,

including the EII Squared, resulting from the multiple regression for participants involved in one organization and Table 35 highlights the coefficients from the multiple regression for participants involved in multiple organizations. Table 36 shows the tipping point in the EII variable for participants involved in multiple organizations was 224. This indicated the point beyond which an increase in the EII is likely to coincide with a decline in the overall SRLS score for participants involved in multiple organizations. The meaning from these results is discussed in Chapter 5.

Table 32 ANOVA of overall SRLS score with EII and EII Squared for Participants in One Organization

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.290	10	.129	1.114	.388
Residual	3.125	27	.116		
Total	4.415	37			

*. $p < .05$

Table 33 Coefficients of overall SRLS score with EII and EII Squared for Participants in One Organization

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.952	.371		10.647	.000
EII	-.004	.007	-.306	-.570	.574
EII Squared	8.198E-005	.000	.722	1.345	.190
Gender	-.070	.117	-.102	-.599	.554
Sexual Orientation	-.057	.158	.068	.362	.721
Ethnicity	.074	.196	.067	.377	.709
RHA Position	.201	.167	.215	1.202	.240
GPA	-.037	.071	-.089	-.514	.612
Class Level	-.017	.081	-.054	-.214	.832
Years in RHA	-.028	.124	-.066	-.226	.823
Institution	.074	.076	.206	.968	.342

Table 34 ANOVA of overall SRLS score with EII and EII Squared for Participants in Multiple Organizations

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.717	10	.272	2.177	.023*
Residual	16.843	135	.125		
Total	19.560	145			

*. $p < .05$

Table 35 Coefficients of overall SRLS score with EII and EII Squared for Participants in Multiple Organizations

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.161	.195		21.372	.000
EII	.004	.001	.838	2.852	.005
EII Squared	-8.933E-006	.000	-.570	-2.037	.044
Gender	.013	.068	.017	.190	.850
Sexual Orientation	-.046	.076	-.052	-.601	.549
Ethnicity	.005	.079	.006	.065	.948
RHA Position	-.112	.069	-.132	-1.617	.108
GPA	.010	.038	.024	.266	.791
Class Level	-.032	.045	-.090	-.718	.474
Years in RHA	.000	.046	-.001	-.008	.994
Institution	-.018	.032	-.048	-.542	.588

Table 36 Determining Tipping Point of EII score for Participants in Multiple Organizations

	Multiple Organizations Section
EII Variable	
0 Return[a]	224
% Cases	6.75% (11 cases)

[a] Value of X when $b_1 + 2b_2X = 0$.

Summary

To answer the second research question, I used a quadratic equation to determine if there was a curvilinear relationship between the EII score (intensity of involvement) and the SRLS score (leadership development). In other words, I wanted to know if there was a certain EII score that indicated a decrease in the SRLS score, known as the tipping point. The quadratic equation used was $b_1 + 2b_2X = 0$ (Aiken & West, 1991). The equation included the square of

any continuous independent variable used in the analysis. For this study, the only independent variable that was continuous was the EII score; therefore a new variable was created, EII Squared. Multiple regressions were run to provide the data needed to solve the quadratic equation. The regression coefficient for the EII score is represented by b_1 and the regression coefficient for EII Squared by b_2. In order to solve for X, the tipping point for the EII score, the equation was adjusted: $X = -b_1/2b_2$.

Multiple regressions were run on the entire sample (n=204) and then on the data split between cases involved in one organization (n=41) or multiple organizations (n=163). The multiple regressions resulted in a statistically significant *F*-score for the entire sample, with the tipping point for the entire sample was an EII score of 219. When the data were split between participants involved in one organization or multiple organizations, the *F*-score for participants in multiple organizations was statistically significant and a tipping point of 224 in the EII variable. The regressions ran for participants involved in one organization was not statistically significant; therefore there was no identifiable tipping point.

Conclusion

In this chapter I provided the participants' demographic information and how each of those items were incorporated, or not incorporated, in the analyses used to answer the two research questions. Furthermore, I reviewed how data regarding the intensity of involvement (EII) and leadership development (SCM) were combined to create the main independent variable, the EII score, and the dependent variables. Multiple regressions were run to answer the two research questions. The data were run as the entire sample and then split between participants involved in one organization or multiple organizations. The results of the multiple

regressions showed positive statistically significant relationships between the intensity of involvement and leadership development for the entire sample and for participants involved in multiple organizations. Additionally, the regressions run to answer question 2 resulted in determining a tipping point in the EII score beyond which it is likely to coincide with a decline in the overall SRLS score for the entire sample and for the participants involved in multiple organizations.

Chapter 5 will share the discussion of this data and how it relates to the current research on involvement in extracurricular activities.

Chapter 5: Discussion and Conclusion

In this chapter I begin with a brief review of the problem and the purpose of the study. I then share my interpretations of the findings, implications for key players (i.e., student affairs professionals and researchers), and recommendations for future research. Since the inception of higher education in North America, students considered learning from out-of-classroom activities just as valuable, if not more valuable, than learning from in the classroom (Thelin, 2004). Initially, out-of classroom activities were in-depth debates or physical games among the students (Thelin, 2004). As the years passed, more and more institutions saw the creation of actual sport teams, Greek organizations, honorary societies, and student organizations related to specific topics (Moore et al., 1998).

Throughout the past half century, studies have measured the outcomes of attending college and of being involved in a specific student organization (Moore, et al., 1998). Furthermore, the outcomes, positive and negative, varied between academic achievement, cognitive development, moral development, and psychosocial/personal development (Abrahamowicz, 1988; Chickering & Reisser, 1993; Hernandez et al., 1999). The overall consensus, though, has been that being involved in the college experience is more likely to lead to positive overall development and persistence to graduation. Although studies on the influence of attending college are prevalent in the past 50 years, it has only been since the 1990s that studies focused on college students' leadership development became part of the landscape (Komives, Lucas, et al., 2006). In the 1990s, two instruments measuring college students' leadership development emerged: the Socially Responsible Leadership Scale (SRLS, Tyree, 1998) and the Student Leadership Practice Inventory (Kouzes & Posner, 1998). Both were developed from an established leadership theory. The main difference between the two theories

is the Social Change Model for Leadership Development (Higher Education Research Institute [HERI], 1996), the theory from which the SRLS was developed, was created from the actual experiences of college students. The other theory, The Leadership Challenge (Kouzes & Posner, 2003) was developed from experiences of leaders in the business industry.

Most studies looking at the leadership development of college students focused on the influence of one type of organization or activity such as community service. Very few looked at involvement in multiple student organizations and its influence on leadership development (Fitch, 1991; Gerhardt, 2008). The problem investigated in this study is how a college student's intensity of involvement in multiple registered student organizations is related to the student's leadership development. Although there are two main leadership development theories available to measure college students' leadership development, one has been used more frequently than the other: the Social Change Model of Leadership Development. Therefore, this theory was used as the current study's framework.

The purpose of this study was to identify the relationship between the intensity of involvement in student organizations and college students' leadership development. In other words, is there a point when an increase in a student's intensity of involvement no longer corresponds to an increase in leadership values, as defined by the Social Change Model of Leadership Development? The research questions for this study were:

1. What is the relationship between college students' intensity of involvement in multiple student organizations and their leadership development as defined by the Social Change Model of Leadership Development (HERI, 1996)?
2. Are there signs of diminishing returns regarding college students' intensity of involvement and their leadership development?

The intensity of involvement is the product of the quantity of the involvement (hours spent) and the quality of the involvement (effort put towards achieving an organization's goals) (Winston & Massaro, 1987). The Extracurricular Involvement Inventory (EII, Winston & Massaro, 1987) was developed to provide a quantifiable score that represents a college student's intensity of involvement. The main component of the EII is the Involvement Index (INIX) form a college student completes for each of the student organizations in which the student is currently active. The final EII score is the sum of the (INIX) scores for a college student. The INIX score was the sum of the quality statement scores (5 in total) multiplied by quantity score (see Appendix C). The participants' leadership development was determined by completing the Socially Responsible Leadership Scale (SRLS, National Clearinghouse for Leadership Programs [NCLP], n.d.) that is based on the Social Change Model (HERI, 1996). This model states that leadership is based more on values and not specific skills or traits. These values are either individually-, group-, or societal-based:

Individual: Consciousness of Self, Congruence, Commitment

Group: Collaboration, Common Purpose, Controversy with Civility

Society: Citizenship (see table 37 for descriptions)

The score for each value and component was the average of the scores for the related statements (ranging from 1-5, 1 for strongly disagree and 5 for strongly agree), and the overall SRLS score was the average of the scores for all statements. The research questions were answered with "leadership development" defined as the overall SRLS, individual values, and components, separately.

Interpretation of Findings

In this section I will provide my interpretations of the survey results as they relate to the two research questions for the entire sample and when the sample was split into cases of those

who were involved in one organization and involved in multiple organizations determined by the number of involvement indexes (INIXs) completed. Furthermore, I will situate my findings within the extant relevant research.

Research Question #1

Overall Leadership Development (Overall SRLS score). Research studies that focus on the influence involvement in student organizations has on a college student's development have ranged from the overall college experience (Abrahamowicz, 1988) to specific areas such as psychosocial development (Cooper et al., 1994; Foubert & Grainger, 2006) and leadership development (Campbell, Smith, Dugan, & Komives, 2012; Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001; Dugan, 2006b; Posner, 2009a). Most of these studies support Astin's (1984) Student Involvement theory, which states that the more a college student is involved in their college experience the more likely the student is to persist until graduation. The unique aspect about this study is that it focused not only on the quantity of the involvement (number of organizations) and the class level of the participants, but also the quality of that involvement. Statements to determine the quality of the involvement related to the frequency of the student's participation in meetings and activities, promotion of the organization to others, and fulfillment of the student's responsibilities for the organization. There is only one other study that used intensity of involvement as the independent variable, but placed the cases in one of three groups: +0.5 SD, ±0.5 SD, and -0.5 SD (Fitch, 1991). The current study used the independent variable, EII, as a continuous variable and did not separate the cases by the standard deviations. Therefore, this study provided additional information about the intensity, or level, of involvement in student organizations and its relationship with leadership development.

The results from this study are no different from these previous studies. The results indicated that the EII, along with the additional eight predictors, was able to explain a significant amount of the variance in the dependent variable, the overall SRLS score, in the participants ($F(9,174) = 2.262$, $p = .02$). As predicted, the variable that contributed the most to the variance was the EII score (*beta* = .300, $p = .000$). Therefore, there is a significant positive relationship between the intensity of involvement of a college student and the student's leadership development. The fact that the EII contributed the most to the variance supports the suggestion that we should study more than the class level of students or the number of organizations in which students' are involved when looking at the development of students, especially their leadership development. In fact, the correlations between the overall SRLS score (leadership development) and the two independent variables used in previous studies (number of organizations and class level) were not significant. This contradicted the results of a similar study (Gerhardt, 2008), which indicated significant differences in the SRLS scores of college students who were involved in three or more organizations and students involved in 1-2 organizations.

Additionally, the results from the current study's correlation between leadership development and class level contradicted longitudinal studies that compared college students' psychosocial development as a freshmen and once again as a junior or senior (Cooper et al., 1994; Foubert & Grainger, 2006) and reported there was a substantial difference between these class levels. Although leadership development is not the same as psychosocial development, there are similarities between the Social Change Model (HERI, 1996) and Chickering and Reisser's (1993) identity theory that assist in comparing the current study's results with the results from these two previous studies. The instrument Cooper et al., (1994) and Foubert and

Grainger (2006) used, the Student Development Task and Lifestyle Inventory (Winston et al., 1987), measured certain concepts from Chickering and Reisser's theory: establishing and clarifying purpose, managing interpersonal relationships, and academic autonomy. Two of these concepts, establishing and clarifying purpose and managing interpersonal relationships, are similar to the SCM values of Consciousness of Self, Congruence, Collaboration, and Controversy with Civility.

Since the number of involvement indexes a participant completed did not always equal the number of student organizations in which the participant was involved, I used the Total Number of Indexes variable as a proxy for the number of student organizations. In order to compare the results using the number of organizations and using the EII as the main independent variable, I also ran multiple regressions replacing the EII with the Total Number of Indexes variable and keeping the other eight predictors. The results showed that the nine predictors were not able to explain a significant amount variance in the overall SRLS score ($F(9, 174) = .650$, $p = .753$). Therefore, in this study, the overall SRLS score did not have a significant relationship regarding the number of involvement indexes a participant completed, which also means there was no significant relationship between the number of organizations in which a student is involved and leadership development.

The main focus of this study is the relationship between the intensity of involvement and leadership development for college students' who are involved in more than one student organization. The number of organizations the participants were involved in ranged from one to six, so I needed to divide the data into two groups: participants involved in one organization and participants involved in multiple organizations. The entire sample of 204 was split into one

group of 41 (involvement in one organization) and one group of 163 (involvement in multiple organizations).

Since the number of participants in the group based on involvement in one organization was less than 100, the results from the regressions were skewed and inaccurate interpretation of the results. With that said, the results from the multiple regression for participants involved in one organization indicated a positive relationship but it was not a significant one ($F(9, 28) = 1.008$, $p = .457$). The results from the multiple regression for participants involved in multiple organizations also showed a positive relationship between the intensity of involvement and leadership development ($F(9, 136) = 1.914$, $p = .055$), but similar to those involved in one organization, the relationship was not significant. These results support the assumption that the relationship between intensity of involvement in multiple organizations and leadership development is positive. However, the results of the current study's regression models do not statistically confirm the positive relationship. Therefore, when the first question is focused on the intensity of involvement in multiple organizations and its relationship with leadership development, there is no support for a significant relationship, positive or negative.

Individual Values and Components. The Social Change Model consists of seven values that lead to positive social change and the development of leadership values (see table 37). Part of this study was to also determine the type of relationship between the intensity of involvement and each of the seven values and the three components of the Social Change Model. Results from running the multiple regressions for each value and each component showed that the nine predictors were able to significantly explain the variance in several values and components: Commitment value ($F(9, 174) = 2.335$, $p = .017$), Collaboration value ($F(9, 174) = 2.875$, $p = .003$), Common Purpose value ($F(9, 174) = 2.807$, $p = .004$), Citizenship

value/Society component ($F(9, 174) = 2.241$, $p = .022$) and the Group component ($F(9, 174) = 2.474$, $p = .001$). The EII variable significantly contributed the most to the variance in all of these dependent variables. An interesting observation is how these results compare to the bivariate comparison of the EII variable and the individual values and component scores.

The results of the bivariate comparison (table 18) showed that the EII variable had significant correlations with all values and components of the SCM with the exception of the Controversy with Civility and Change values. The results of the multiple regressions highlighted the importance of the additional predictors (GPA, class level, institutional enrollment, gender, sexual orientation, ethnicity, RHA position, and year in RHAs) in analyzing the relationship between EII and SCM values and components. The additional predictors altered the relationship between the EII and the values of Consciousness of Self and Congruence; both are values that are part of the Individual/Self component. An argument could be made that the reason for this is that college students are very focused on the values connected to the group and the larger society (e.g., the institution): Collaboration, Common Purpose, and Citizenship. The Commitment value, although it is a self-component value, is the value that connects with the group component values. Table 37 provides a brief explanation of the seven values.

I also contend that the reason the nine predictors did not significantly predict the variances in the Consciousness of Self and Congruence values is a result of the environment in which the data were collected. The participants were at a conference geared towards college students currently in student organizations. Most of the participants were around their group members more than other weeks due to preparation for the conference. Therefore, I argue that the values related to the group or the institution could rate higher than the self-component values not related to group work. During the conference, the attendees were encouraged to support their

institutions through clothing, cheers, and giveaway items. I believe this focus of the conference connects with the Citizenship value/Society component results.

Table 37 Values Definitions for the Social Change Model of Leadership Development

Value	**Definition**
Self Component Values	
Consciousness of Self	Awareness of the beliefs, values, attitudes, and emotions that motivate one to take action.
Congruence	Thinking, feeling, and behaving with consistency, genuineness, authenticity, and honesty towards others; actions are consistent with most deeply-held beliefs and convictions.
Commitment	The psychic energy that motivates the individual to serve and that drives the collective effort; implies passion, intensity, and duration, and is directed toward both the group activity as well as its intended outcomes.
Group Component Values	
Collaboration	To work with others in a common effort; constitutes the cornerstone value of the group leadership effort because it empowers self and others through trust.
Common Purpose	To work with shared aims and value; facilitates the group's ability to engage in collective analysis of issues at hand and the task to be undertaken.
Controversy with Civility	Recognizes two fundamental realities of any creative group effort; that differences in viewpoint are inevitable, and that such differences must be aired openly, but with civility. Civility implies respect for others, a willingness to hear each other's views, and the exercise of restraint in criticizing the views and actions of others.
Society Component Value	
Citizenship	The process whereby an individual and the collaborative group become responsibly connected to the community and the society through the leadership development activity. To be a good citizen is to work for positive change on the behalf of others and the community.
Overall Value	
Change	The ability to adapt to environments and situations that are constantly evolving, while maintaining the core functions of the group.

Note. Source: Higher Education Research Institute. (1996). as cited in Dugan, J. P. and Komives, S. R. (2010). Influences on college students' capacities for socially responsible leadership. *Journal of College Student Development, 51*(5), 525-549

Related research consistently had the Citizenship value as one of the three lowest values, along with the Controversy with Civility and Change values. The current study's results related to the Controversy with Civility and Change values are not surprising because related research show that those two values are consistently the lowest rated scores among college students (Buschlen, 2010; Dugan, 2006b; Dugan & Komives, 2007; Gerhardt, 2008; Haber, 2006; Nobbe, 2012; Slife, 2007; Trujillo, 2009).

I also ran multiple regressions with each single value and component as the independent variable after I split the data between participants involved in one organization and participants involved in multiple organizations. Similar to the overall SRLS score results, the nine predictors did not provide a significant explanation of the variance in any of the values or components for the participants involved in one organization. This is very likely due to the fact that size of the group (n=41) was smaller than 100. Data with less than 100 cases do not lead to accurate or significant results (Field, 2012). Therefore, further research is needed to realistically compare college students involved in one organization with students involved in multiple organizations.

Regressions run with the data from participants involved in multiple organizations showed that the nine predictors were able to significantly explain the variance in the Commitment value ($F(9, 136) = 2.025$, $p = .041$), Collaboration value ($F(9, 136) = 2.772$, $p = .005$), Common Purpose value ($F(9, 136) = 2.388$, $p = .015$), Citizenship value/Society component ($F(9, 136) = 1.971$, $p = .047$), and Group component ($F(9, 136) = 2.211$, $p = .025$). These are similar results to the entire sample results for the values and components. In fact, if you compare the *p*-values of each of these values and components and arrange them lowest to highest, the list would be the same for the entire sample and for the participants involved in multiple organizations (lowest to highest): Collaboration, Common Purpose, Group,

Commitment, and Citizenship. I do not find this surprising, though, since the participants involved in multiple organizations is 80% of the entire sample (163 of 204). Although the nine predictors were not able to substantially explain the variance in the overall SRLS score for participants involved in multiple organizations, the predictors were able to significantly explain the variance in four of the seven values and two of the three components. Furthermore, the EII was the predictor that significantly contributed to the variance in the four values and two components. Therefore, when the first research question is focused on the values and components of leadership development, there is support for significant position relationships between the EII and each of the four values and two components.

Research Question #2

In Astin's (1984) seminal work on the Student Involvement theory, he raised a question regarding a point in a student's involvement where an increase in involvement ceases to lead to an increase in development of a college student, or may become counterproductive. After thorough review of relevant research, there is no study that questions a point in a college student's college experience, in general or in student organizations, at which the increased involvement in activities no longer results in an increase in the student's development. The second part of this study focused on determining if there was a point, or score, in a college student's intensity of involvement that represents the point at which an increase in the intensity of involvement is less likely to result in an increase in the student's leadership development.

A college student's intensity of involvement, or Extracurricular Involvement Inventory (EII) score, is the sum of the scores of the student's intensity of involvement for each student organization in which the student is involved (Winston & Massaro, 1987). The student's intensity of involvement for an organization is determined by the student's answers on the

Involvement Index (INIX) that includes questions regarding the type of organization, the student's role, the number of hours dedicated to the organization during the most recent four weeks, and five questions about the quality of the involvement determined by the frequency of the activity (Very Often, Often, Occasionally, and Never). Table 38 lists the questions/statements included on the INIX.

Table 38 Questions and Statements from the Involvement Index

Statement	**Purpose**	**Possible Answers**
What type of organization is it?	Information only	13 options
In the last four weeks, . . .		
. . . for approximately how many hours have you been involved with this group or organization and its activities or programs?	Quantity	Self entry
. . . have you held an office in this organization or a position equivalent to one of the following offices?	Information only	7 options
. . . when I attended meetings, I expressed my opinion and/or took part in the discussion	Quality Question #1	Very Often, Often, Occasionally, Never*
. . . when I was away from members of the group/organization, I talked with others about the organization and its activities, or wore a pin, jersey, etc. to let others know about my membership.	Quality Question #2	Very Often, Often, Occasionally, Never
. . . when the group/organization sponsored a program or activity, I made an effort to encourage other students and/or members to attend.	Quality Question #3	Very Often, Often, Occasionally, Never*
. . . I volunteered or was assigned responsibility to work on something that the group/organization needed to have done.	Quality Question #4	Very Often, Often, Occasionally, Never
. . . I fulfilled my assigned duties or responsibilities to the group/organization on time.	Quality Question #5	Very Often, Often, Occasionally, Never*

*. Indicates additional options that were scored zero (0) in the calculation. See Appendix D.

The number of hours dedicated to an organization was scored 1-point for every eight hours (1-8 hours = 1 point; 9-16 hours = 2 points); so if a student recorded 15 hours, the quantity score would be 2. The five quality questions were scored 0-3, with 3 representing Very Often

and 0 representing Never. The INIX score was determined by multiplying the sum of the 5 quality scores by the quantity score. For example, the student who dedicated 15 hours to an organization marked Very Often for all 5 quality statements (3*5 = 15); the INIX score for the student would be 30 (2*15 = 30). The range for the quality of involvement is 0-15 and the range for the quantity is 0-10. Therefore, the maximum score for an INIX is 150. The maximum number of INIX a student could complete was six, so the maximum EII score is 900 (150*6 = 900).

Results from the multiple regression run to answer question two indicated that there was a point where an increase in the EII score was less likely to lead to an increase in the leadership development (overall SRLS score) for a college student. This point was determined by using a quadratic equation that integrated the square of the EII score (Aiken & West, 1991). The result of the equation indicated that the approximate EII score that corresponded to the "tipping point" for the entire sample was 219; 11 participants had an EII score higher than 219, or 5.39% of the 204 participants. When the participants were split between those involved in one organization and involved in multiple organizations, the results of the multiple regressions showed that there was no "tipping point" for the participants involved in one organization, however there was a point for the participants involved in multiple organizations. The approximate EII score corresponding to the "tipping point" for the participants involved in multiple organizations was 224; of the 163 participants in this group, 11 participants had an EII score higher than 224 (6.75%). These "tipping points" (219 and 224), when averaged (222), were approximately 62% of the maximum EII score for the sample (0-360). However, when compared to the possible maximum EII score of 900, 222 is approximately 25% of 900.

Although the "tipping point" is a larger percentage of the sample's EII scores, it is only a quarter of the general maximum score. This means 75% of the possible maximum range of EII scores (0-900) is higher than the average "tipping point". Even though the possible maximum score of 900 is theoretical, I argue that college students' EII scores could still be higher than the current study's "tipping point" of 222 since the majority of the possible range of EII scores is larger than the "tipping point". Therefore, students involved in two or more student organizations at the most extreme intensity level (INIX score = 150) could have an EII score larger than current study's the "tipping point". In reality, this does not mean all students involved in two or more organizations would have an EII score at that level, but knowing this information helps staff acknowledge that scoring an EII larger than 222 is more likely than not.

What do the EII scores of 219, 222 (the average), and 224 represent in relation to a college student's actual involvement in student organizations? The "tipping point" could potentially be reached by a college student who is involved in two organizations by spending 80 hours or more during the most recent 4 weeks (20 hours/week) at the highest level of quality (Very Often for all 5 questions) in one organization (INIX score = 150) and then spending 33-40 hours (~10 hours/week) during the most recent 4 weeks at almost the highest level of quality (14/15) in another organization (INIX score = 75). This intensity of involvement leads to an EII score of 225, which is three points higher than the average EII score. If this college student proceeded to become involved in another organization at the same intensity level as in the other organizations, it is likely the student's leadership development would not increase but may begin to decrease or remain stagnant. Furthermore, other aspects of the student's college experience may also be affected, most likely negatively; such as academic performance, healthy habits (e.g., eating, exercising, sleeping), or relationships with others (e.g., family, significant other, friends).

The unique aspect of using the intensity of involvement in student organizations as the independent variable is the multiple ways college students could reach the same level of involvement. For example, another way a college student could reach an EII score of ~222 is by being active in three organizations, but not necessarily at the highest level (12 or 13 instead of 15), and dedicating 10-12 hours per week (41-48 total hours in 4 weeks) in each of the organizations. Table 40 shows how the EII score would be calculated for this student.

Table 39 Example of a College Student's Overall Intensity of Involvement

Org.	**Total Hours**	**Quantity Score**	**Quality Q1 Score**	**Quality Q2 Score**	**Quality Q3 Score**	**Quality Q4 Score**	**Quality Q5 Score**
Org #1	43	**6**	3	2	3	2	3
INIX #1	= 78 (6*13)		Total Quality		3+2+3+2+3 = **13**		
Org #2	41	**6**	2	2	2	3	3
INIX #2	= 72 (6*12)		Total Quality		2+2+2+3+3 = **12**		
Org #3	48	**6**	1	2	3	3	3
INIX #3	= 72 (6*12)		Total Quality		1+2+3+3+3 = **12**		
EII Score	= **222** (78+72+72)						

Another example that is possibly more realistic involves spending, on average, 5 hours/week in an organization and the quality of the involvement is either Often (2) or Occasionally (1). For this type of involvement in one organization with a Quality score of 8 (2+2+2+1+1) and a Quantity score of 3 (20 hours in 4 weeks), the INIX score would be 24 (8*3). If a college student's total intensity of involvement in student organizations was at the "tipping point" level, EII = ~222, the student would need to be involved in 9 organizations (24*9 = 216). A student being involved in this number of organizations is unlikely. This example highlights that a college student who is moderately involved (approximately half of the maximum quality score of 15) in student organizations, up to nine of them, would continue to benefit from the involvement as it relates to leadership development. It also leads to the idea that the "tipping point" is more relevant for the college students whose quality of involvement score is higher than

8 (15/2 = 7.5, half of the maximum quality score), especially those who spend more time with the student organization and related events than potentially with other aspects of their lives, i.e., studying, exercising, sleeping, or visiting family.

I wanted to see how the "tipping point" of 219 (the calculated tipping point for the entire sample) compared to the average number of hours and average number of INIXs completed by the participants. The average number of hours the participants dedicated to an organization over a 4-week period was 19 hours (quantity score of 3) and the average number of INIXs completed was 3. When I calculated the EII score with the assumption that the quality of involvement score for each organization was the highest (5*3=15), the total EII score was 135 (15*3 = 45; 45*3 = 135), 84 points lower than the "tipping point" of 219, or 62% of the "tipping point". At first, I was concerned that this "average" EII score was much lower than the "tipping point", but then I realized that the number of organizations in which participants were involve was skewed towards the lower amounts; 71% of the participants completed one, two, or three INIXs, while 29% completed more than three. The amounts entered for the number of hours dedicated to organizations were also skewed more to the lower end for the entire sample; the mean was 19 hours over the 4 weeks, but the median was 28 hours. When the frequency of a variable is skewed it is likely that the average of that variable is also skewed in the same direction and is not an accurate average (Field, 2012). I decided to calculate the EII score with the median hours (28) and with the quality of involvement remaining the same; the EII score was 180 (45*4 – 180). Again, this EII score was lower than the "tipping point" of the EII score.

This leads to me to contend that determining a college student's intensity of involvement is more relevant for students who are actively involved in two or more organizations. The 11 participants whose EII score was higher than 222 were all involved in two or more organizations:

1 = 2 organizations; 4 = 3 organizations; 4 = 4 organizations; 1 = 5 organizations; 1 = 6 organizations. This analysis also supports the fact that students can reach a certain EII score in many ways. Therefore, there is no specific equation that leads to the potential of no longer developing leadership values through student organization involvement; instead, it is individually-based. At the same time, these results provide support that there is a limit to the amount of involvement that leads to positive development of leadership values.

When I began researching this topic, I used my own experiences, as an undergraduate student and as a student affairs professional, to guide my assumptions regarding a "tipping point" in college students' intensity of involvement in student organizations. I believed that a large number of our students, not the majority, would be close or over the calculated "tipping point." The results from this study adjusted my assumptions and beliefs regarding the number of students' who's EII score is larger than the "tipping point." Even though a smaller number of students (n=11) had EII scores larger than 219, this number of students provides evidence that further research in this area would be beneficial for college students.

Summary

The results from this study as they relate to the two research questions provided support that a college student's intensity of involvement influences the student's development of leadership values that are defined by the Social Change Model of Leadership Development (HERI, 1996). More specifically, the intensity of involvement influenced leadership development in the values of Commitment, Collaboration, Common Purpose, and Citizenship; all of which are related to being in a group. This influence supports the idea that being involved in student organizations increases the leadership development of college students (Cress et al.,

2001; Dugan, 2006b; Kezar et al., 2006; Kouzes & Posner, 2009; McIntire, 1989), especially students involved in multiple organizations.

Furthermore, a "tipping point" in the EII score was identified at which point an increase in the student's leadership development is less likely to occur, especially for students involved in multiple organizations. The results provided support for my original premise that there was a significant relationship between a college student's intensity of involvement (EII score) and leadership development (overall SRLS score), and that there would be a "tipping point" beyond which an increase in the intensity of involvement is less likely to lead to an increase in leadership development. These results also support Astin's (1984) suspicion of a limit to the benefit of involvement as it related to a college student's development. Although a small percentage of participants' EII scores were above the study's "tipping point", the study offers a starting point for future research on the benefits of being involved in student organizations and the concept of a "tipping point" at which benefits of that involvement on leadership values are no longer present.

Implications and Recommendations

This study has provided information useful to the field of student affairs and the professionals who work with college students, especially those involved in student organizations. One of the main goals of this study was to fill a gap in the literature on college students' involvement in student organizations and their leadership development. Most of the previous research on student organization involvement looked at the number of organizations in which students' are involved. This study looked at a combination of factors that make up college students' involvement, its quantity and quality, and the relationship between the combination of these factors, the intensity of involvement, and leadership development that is described by the Social Change Model (HERI, 1996). This section provides suggestions on how the results from

this study can be used by student affairs professionals and researchers. Recommendations for future research are also discussed.

Implications for Student Affairs Professionals

The results from this study provide several implications for student affairs professionals, especially those who directly interact with college students involved in student organizations. The study's results support the fact that the more a college student is involved in their college experience, the more likely they are to develop values related to leadership (Dugan, 2006b). In addition to supporting past research, the results also provide suggestions that relate to college students and their involvement in student organizations. First, college students need to be encouraged to get involved in at least one student organization. The study showed that being involved in at least one organization influenced the college student's leadership development, similar to what Dugan and Komives (2007) found. Although the predictors were not able to significantly explain the increase in the overall leadership development (overall SRLS score) for students involved in one organization, there were still signs that the relationship between the predictors and leadership development was positive. In other words, being involved in at least one organization is more likely to lead to overall leadership development. Therefore, student affairs professionals should continue to encourage college students to be involved in at least one student organization as a way to develop leadership values. With this said, the current study did not include college students who were not involved in any student organizations. This "control group" would have provided a "baseline" to which the EII and SRLS scores for participants involved in one organization could be compared. Therefore, the previous recommendations are based more on previous research (Dugan & Komives, 2007; Gerhardt, 2008) than on results from this study.

Second, the results imply that there is a point in the overall range of college students' intensity of involvement, the EII score (EII), that represents the level of involvement at which an increase in leadership development is less likely to occur as the intensity of involvement increases. This point is usually known as the tipping point; in the case of the current study, an EII of 222 represented the tipping point. College students are able to reach the intensity of involvement's tipping point through different involvement scenarios, such as being highly involved in two organizations or being moderately involved in four organizations. Students who are involved in more than one student organization are more likely to reach the EII tipping point since all of the participants whose EII was higher than the tipping point were involved in more than one organization.

Previous research supports the idea that being involved in more organizations leads to greater development of leadership values (Gerhardt, 2008); however, Gerhardt's (2008) study did not consider the effort college students put towards those organizations, or the quality of the involvement. Although the current study did not have the exact same variables that Gerhardt (2008) used, the current study's correlation between the number of organizations in which college students were involved and leadership development was not significant; this was different from Gerhardt's (2008) results. Therefore, the likelihood is slim that only the number of organizations in which students are involved has a significant influence on the students' leadership development. Including intensity of involvement in student organizations in research studies focused on the outcomes of being involved in student organizations provides more realistic results regarding the relationship between a college students' involvement in student organization and the students' leadership development. Knowing these results allows student affair professionals to focus more on a student's intensity of involvement in student

organizations, not just the number of student organizations, and how the intensity may be influencing the student's leadership development. In turn, this knowledge may alter how student affairs professionals talk to students about their involvement in student organizations as well as other aspects of their lives (i.e., academic performance, healthy behaviors).

Since college students' involvement in multiple organizations was the commonality among participants whose EII was higher than the "tipping point", student affairs professionals may want to focus more on the college students who are involved in more than one organization to ensure these students' leadership values are continuing to develop and are not remaining the same or decreasing. The results indicate students involved in one student organization are not likely to reach the "tipping point"; the development of their leadership values is continuing. Knowing a college student's EII in a specific student organizations provides details that student affairs professionals can use when talking with the student. If a student has an EII lower than 150, but has the desire to develop their leadership values, a student affairs professional can use the information about the student's current quality level to provide suggestions on how to increase the student's quality of involvement. For example, a student affairs professional could suggest the student volunteer for events or projects and attend more activities sponsored by the student organization. Additionally, the student affairs professional could ask the student to represent the student organization at an event. If a student has a higher EII, close to or over the tipping point of 222, student affairs staff members can use the EII as support to encourage the student to decrease their level of involvement by either reducing responsibilities or eliminating an organization.

The results show that an ideal way to use the EII is on an individual basis. For example, students involved in two student organizations are just as capable of surpassing the EII tipping

point as a student involved in six student organizations; while college students involved in three or more organizations are just as capable to have an EII well below the tipping point. Therefore, the EII is best used with each individual college student rather than providing examples of student involvement (number of organizations and hours involved and quality of effort) to groups of students and having each student estimate their own intensity of involvement. Using the EII in this way allows student affairs professionals the chance to discuss the student's reasons for the intensity level of involvement in student organizations as well as the potential outcomes as a result of the involvement. Furthermore, the student has the opportunity to analyze the reasons and outcomes hoped for and determine if his/her current level of involvement is reasonable and productive. The student affairs professional could facilitate a similar activity with a group of students, but the activity may not be as effective if it was completed in an individual meeting with each student.

The Social Change Model consists of seven values related to leadership (table 37). These values focus on either the student (individual component), student organization (group component), or the institution (society component). Although the values and components are separate, development in one value or component is likely to lead to development in the remaining values and components. When the data were analyzed at the Component level of the Social Change Model (Individual, Group, and Society), the results highlighted that the predictors were not able to explain the changes in the Individual component that includes the Consciousness of Self, Congruence, and Commitment values. When the data were analyzed at the individual value level, the predictors explained the change only in the Commitment value of the Individual component. Since Commitment focuses on the amount of effort a student puts towards a group/student organization, these results are not surprising because the Collaboration

and Common Purpose values, both in the group component, had similar results. Although the predictors were not able to explain the change in the Consciousness of Self and Congruence values, the results did indicate a positive relationship with the EII. The Consciousness of Self value represents the level of awareness a student has regarding their personal beliefs, values, attitudes, and emotions and how the awareness encourages the student to act on them (HERI, 1996). The Congruence value relates to the Consciousness of Self value because Congruence highlights how well a student's actions, thoughts, and feelings represent the student's beliefs, values, attitudes, and emotions (HERI, 1996). From these results, student affairs professionals need to offer additional opportunities, beyond being involved in the student organization, to develop the Consciousness of Self and Congruence values.

Student affairs professionals can assist in college students' development of these values in several ways. One way is to administer self-assessment instruments such as the Myers-Briggs Typology Inventory to the students and review the results with them. This provides students the opportunity to learn more about themselves, which leads to increasing the students' Consciousness of Self value. Another way practitioners can assist in the development of the Consciousness of Self value is through activities that require the students to think about and make more conscious their beliefs, values, attitudes, and emotions; for example, creating a personal creed or participating in a values auction that helps students connect their beliefs and values to actions, and as a result, will likely have a better understanding of them. These activities can be facilitated throughout the academic year, whenever staff, or a student, notices that students are struggling with knowing who they are or what they believe. Having a strong Congruence value would be beneficial in increasing the Consciousness of Self value.

In order to increase the Congruence value, students need to be aware of their actions and/or thoughts and how these connect with the students' own beliefs, values, attitudes, and emotions. Student affairs professionals can assist in the development of students' Congruence value by offering feedback regarding actions and comments that may contradict the students' beliefs and values. This feedback may be seen as a reality check for the students regarding the lack of connection, or level of connection, between actions, thoughts, beliefs, and values. If the connection is weak, then the student's Congruence value is likely low and the student needs to determine how to improve the connection, which will lead to an increase in the student's Congruence value. Another way to help students become aware of their level of congruence is by facilitating a value-laden scenario (e.g., shipwreck or survival exercise) in which a valid argument can be made in support of each option. Throughout the activity, students must decide how each will solve the problem (getting off the island or who are the people to save) and provide their explanations. These decisions and explanations give students the opportunity to connect their thoughts and actions to their own beliefs and values.

The nine predictors were able to significantly explain the variance in the Group component of the Social Change Model, but not the variance in the Controversy with Civility value. Even though involvement in student organizations leads to an increase in the Controversy with Civility value (Gerhardt, 2008), the result's from this study indicated that the intensity of involvement was not able to substantially explain the variance in the value. In order to assist in the development of this value in college students, student affairs professionals can use similar activities that were suggested for developing Congruence, as well as problem-based case studies related to college student leaders (Marshall & Hornak, 2008). Once each student has completed the activity individually, the group then determines one "answer" to the exercise. In these group

activities, establishing ground rules regarding behaviors is crucial. The ground rules provide a level playing field for providing feedback and receiving feedback. The rules can also focus on creating an environment that is open to all suggestions and encourages a win-win mentality. Another suggestion for increasing the Controversy with Civility value is using the Restorative Justice concept in group sessions. Restorative Justice focuses on ways to restore harm caused by a crime (Centre for Justice and Reconciliation, 2014). The people involved meet and determine how to repair the damage done to the community. Even though it may not be an actual crime committed in a student organization, this concept can be used when students need to reach an agreement for a situation. Since Restorative Justice centers on a win-win result, this concept can be beneficial in developing the Controversy with Civility value in college students.

The survey was administered during an on-campus housing student conference. This allowed me to collect the amount of data that I did (243 initial participants). From my previous experience in advising on-campus housing student organizations, I am aware that the amount of hours spent roughly four weeks before the conference working with RHAs is typically larger than the amount spent during weeks following the conference. Therefore, the EII for the housing-related organization is likely to be skewed higher than normal. From this information, I suggest that student affairs professionals administer the EII multiple times during the year. If it is administered as a pre-test and post-test (4 weeks into each semester or quarter), student affairs professionals can compare the EIIs and observe any changes from the pre-test to the post-test. These changes, if any, provide information about the students' quantity and quality of involvement in student organizations and the development of their leadership values. This, in turn, allows the student affairs professionals to have intentional conversations with students

regarding organizational involvement, encouraging more or less involvement, depending on the results of the EII and SRLS.

Although the study may not have looked at the relationship between the quantity and quality of involvement in student organizations, the results from the study support the idea that the relationship between these two aspects of involvement is directly proportional. If a college student is actively involved in an organization (e.g., holding a position, attending activities, fulfilling responsibilities), the likelihood the student is spending a lot of time in an organization is high. Furthermore, if a student's quality of involvement is low, it is likely that the amount of time spent in the organization will also be low since the student is not necessarily attending activities or fulfilling responsibilities. When a student affairs professional is aware that a college student is either spending a large amount of time in an organization or responsible for several duties for the organization, the professional can infer the student's EII is high and possibly close to the tipping point. This may lead to administering the EII to the student in order to identify the student's actual intensity of involvement in not only that one organization but also any other organization in which the student is involved. The results from the EII can lead to a discussion the professional has with the student regarding his/her involvement in student organizations, hopefully leading to the student deciding how to manage the involvement, which may mean decreasing the number of organizations. As a result of taking action, the student's development of leadership values is more likely to increase and not remain static.

The current study was developed with the student affairs professional in mind, especially those working with on-campus housing organizations, and providing empirical support for Astin's (1984) question about a point where an increase in involvement no longer leads to positive results in the student's development. The implications shared provide ways that student

affairs practitioners can incorporate the interpretations of these results into their daily work with college students.

Implications for Researchers

Literature based on involvement in student organizations rarely discusses the possible outcomes for college students who are involved in more than one organization (Fitch, 1991; Gerhardt, 2008; Logue, Hutchens, & Hector, 2005). Student affairs practitioners are aware, anecdotally, that there is a limit to the benefit of being involved in multiple organizations. However, there is limited research that supports this assumption (Dugan & Komives, 2007; Fitch, 1991). The current study furthers the literature related to involvement in multiple student organizations and outcomes related to leadership development. The study's results suggest that researchers need to develop studies focused on the influence involvement in multiple student organizations has on college students' development in a variety of areas, e.g., moral development, psychosocial development, overall college experience. Since approximately one-third of college students are involved in "many" student organizations (Dugan & Komives, 2007), additional research focused on the influence of involvement in multiple student organizations on students' development is recommended. As a result, researchers and student affairs professionals will learn more about the relationship between a student's intensity of involvement and his/her development in a certain area, i.e., leadership.

The results from the study also support the inclusion of the EII in studies related to involvement in student organizations. The EII provides data related to the quantity of a college student's involvement as well as the quality of the involvement. The results show that including these two parts of a college student's involvement provides a more accurate view of the relationship between involvement and student development, specifically in leadership values.

Additionally, a student's leadership development has a stronger and substantial connection with the EII score when compared to its connection with the number of organizations in which the student is involved. Studies that continue to use only the number of organizations in which a student is involved as the independent variable are not providing realistic results regarding college students' development. I am not suggesting that the number of organizations should be removed from analyses, but encouraging the inclusion of the EII in future research on college students' involvement in student organizations and its relationship with college students' development in other areas such as cognitive, moral, or psychosocial. This study did not look at these areas of college student development, however the results provide support to study these different relationships.

The current study's participants were involved in at least one on-campus housing organization that is seen as the governing body for the students living on campus. Additionally, roughly 80% of the participants were involved in more than one organization. Therefore, the current study's results include participants' intensity of involvement in non on-campus housing organizations. Researchers can use these results to inform future studies on the outcomes from being involved in similar organizations such as the campus-wide student government or the social Greek community's governing bodies. Furthermore, researchers could incorporate the intensity of involvement in studies that look at academic and non-academic related organizations in order to determine if there are differences between these two types of organizations. Ultimately, including intensity of involvement in student organizations in future studies on student organization involvement will provide additional information to assist student affairs professionals in their interactions with college students and advising student organizations.

Recommendations for Future Research

This is the first study that examined the relationship between the intensity of involvement in multiple student organizations and leadership development. Furthermore, it is the first to determine if there is a point in the intensity of involvement in student organizations where an increase in the intensity is less likely to result in an increase in a student's development, especially leadership development. The results from the current study not only support my assumption regarding a limit to the benefits of involvement in student organizations as it relates to leadership development, but the results open the door to future research related to the topic.

The current study focused on the relationship between the intensity of involvement in student organizations and leadership development for the entire sample and when the sample was divided between participants involved in one organization and those involved in multiple organizations. Additional analyses of these data could entail dividing the data by varying independent variables such as gender, year in college, type of RHA position, or years in RHA. The results from these analyses could provide further information regarding the relationship between the intensity of involvement and leadership as well as determining a "tipping point" for a particular demographic, i.e., females, sophomores, or RHA presidents.

The participants for this study were from a variety of colleges and universities from Indiana, Illinois, Michigan, Wisconsin, and Ontario, Canada. Additional research with the same instrument could be conducted at a single institution with students in a variety of organizations (i.e., no involvement to involvement in six organizations) to determine the experiences of that institution's college students. The results from this study would provide professional staff information about their students' experiences and allow the staff to develop interventions or support systems to assist in their students' development, leadership and otherwise. Another

recommendation is to focus on collecting data from more than 100 students involved in one organization or none. There was only a small number of participants in the group involved in only one organization; therefore, the results were less likely to represent the population. Although all of my participants were involved in at least one organization, a recommendation can be made to administer the instrument to students not involved in any organization to serve as a control group, ensuring there are more than 100 students who meet that requirement.

Since this survey was administered at an annual conference that is held around the same time each year, I recommend researchers using this survey to administer the instrument at another time of the year. Doing so would provide information about students' involvement level at varying times in the academic calendar. For example, a researcher could begin administering the survey instrument via the internet during October to a variety of institutions, either state-, region-, or nation-wide. Although students would be able to complete the survey during the same timeframe in October, that time period would fall at different points in the students' academic terms. Therefore, the "busyness" of the participants would fluctuate and potentially lead to typical levels of intensity in their student organization involvement.

The Involvement Indexes (INIXs) that make up the EII score ask students to share if they hold a position and which type. Further research on how holding a position in the organization or not, the number of positions held, or the type of position held influences the relationship between intensity of involvement and leadership development is recommended. The data could be split between holding and not holding a position, the different positions, or the number of positions held, or to determine if there is a notable difference in the leadership development. The data could also be sorted by the type of organization, or extracurricular activity, to see if

involvement in one type of organization leads to higher leadership development (overall SRLS score) than another type of organization, or determine there is no difference.

This research focused on the maximum level of the intensity of involvement in student organizations and college students' development of leadership values. Literature supports the idea that involvement in at least one organization leads to development of these values (Dugan, 2006b; Dugan & Komives, 2007). The results from this study highlight that students involved in the same number of organizations can have different EII scores as well as development of their leadership values. Therefore, I recommend that future research looks at the concept of a minimum level of intensity of involvement in student organizations at which point an increase in leadership values is likely to occur. This research would provide administrators support for encouraging students to become involved a student organization at a certain level.

The data collected for the study was done at one point in the participants' college experience. This led to not truly measuring the participants' development of leadership values, but more what was their current "score" for each value. In order to assess the development of the SCM leadership values, administering the instrument as part of a longitudinal study is recommended. The pre- and post-tests can be varied between years in college (e.g., end of first year and end of second year) or between semesters (e.g., beginning of the fall semester and end of spring semester). This research would provide further support for the idea of a "tipping point" between a college student's intensity of involvement and leadership development.

Finally, I recommend further research look at the relationship between the intensity of involvement and other types of development (e.g., psychosocial, academic development, cognitive, moral). Related studies focus on college student psychosocial development and the influence involvement in student organizations has on that development (Cooper et al., 1994;

Foubert & Grainger, 2006). However, in both of these studies the researchers compared the psychosocial development of first year students with either juniors or seniors. Imagine what could be learned if a study similar to Cooper et al., (1994) or Foubert and Grainger (2006) was done comparing the relationship between the EII and psychosocial development and then splitting the data by class level. Furthermore, future research looking at how the intensity of involvement in student organization influences college students' persistence and time to degree would provide additional evidence to support Astin's Student Involvement Theory (1984; 1994).

Conclusion

Leadership development can be found in a variety of activities and environments on a college campus and faculty and staff can assist in that development. However, during the past 30 years, college administrators and faculty have relied on student affairs professionals to provide most of the leadership development initiatives for college students through student organizations (McIntire, 1989). Research has shown that being involved in student organizations leads to students developing skills required for future careers, persisting to graduation, and improving leadership values (Astin, 1993; Dugan, 2006b). With that said, many student affairs professionals wonder if there is a point at which the level of involvement in student organizations no longer is of benefit. The results from the current confirm there is a significant positive relationship between a college student's intensity of involvement and leadership development. More importantly, the results identified a point in the intensity of involvement at which an increase in leadership development is less likely to occur. Further research in this area will continue to provide crucial information on the outcomes of being involved in multiple student organizations.

APPENDICES

Appendix A

Figure 2 Approval to use Extracurricular Involvement Inventory

Sheila Coressel

From: Roger Winston <rwinston512@gmail.com>
Sent: Thursday, July 18, 2013 1:13 PM
To: Sheila Coressel <coressel@msu.edu>
Subject: Re: Student Affairs Inventory

SysUserProp: 88334F2CCA0D8E51C8530404366F9B82

Good luck. You have permission
to create an electronic version.--Roger

++++++++++++++++++++++++++++++
On Jul 15, 2013, at 2:43 PM, Sheila Coressel wrote:

> Dr. Winston,
>
> Are you agreeable if I create an electronic version of the EII?
>
> -Sheila Coressel
>
> --
> Sheila M. Coressel
> EAD Program Graduate Assistant
> MSU Golden Key International Honour Society Primary Advisor Doctoral
> Student, Higher, Adult, and Lifelong Education (HALE) Michigan State
> University coressel@msu.edu
>
> -----Original Message-----
> From: Roger Winston [mailto:rwinston512@gmail.com]
> Sent: Monday, July 1, 2013 12:52 PM
> To: coressel@msu.edu
> Subject: Student Affairs Inventory
>
> Sheila,
>
> I got your message. Feel free to contact me by email.
>
> You have my permission to use the Extra Curricular Involvement
> Inventory. I have nothing on the Inventory except what has been published.
>
> Roger Winston
> 120 Featherwood Hollow
> Athens, GA 30601
>
> 706-549-8927

Appendix B

Figure 3 Approval to use Socially Responsible Leadership Scale, Revision 2

Sheila Coressel

From: Craig Slack <cslack@umd.edu>
Sent: Wednesday, July 31, 2013 12:34 PM
To: Sheila Coressel <coressel@msu.edu>
Subject: RE: SRLS-R2 Request
Attachments: SRLS Research Guidebook - For Distribution.pdf

SysUserProp: 88334F2CCA0D8E51C8530404366F9B82

Sheila, here is the SRLS Research Guidebook. You have permission to use the SRLS for the study outlined below. For any other future use please again request approval. Best with your study. Craig

CRAIG E. SLACK, Ph. D. | Assistant Director | Adele H. Stamp Student Union – Center for Campus Life
Leadership & Community Service-Learning | Director| National Clearinghouse for Leadership Programs|
University of Maryland | 301.314.7164 | cslack@umd.edu

www.thestamp.umd.edu/lcsl | www.nclp.umd.edu | www.socialchangemodel.org

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

From: Sheila Coressel [mailto:coressel@msu.edu]
Sent: Wednesday, July 31, 2013 12:02 PM
To: Craig Slack
Subject: RE: SRLS-R2 Request

Craig-

Thank you for the document. My research question is: how does the intensity of involvement in multiple student organizations, one of which is the campus-wide on-campus housing student government/organization (RHA), influence college students' leadership development?

I'm using the Social Change Model for Leadership Development as my conceptual framework and would like to use the SRLS to determine leadership development. I'm also using Winston & Massaro's (1987) Extracurricular Involvement Inventory (EII) to determine the intensity of involvement of students in organizations. I received permission to create an electronic version of that and would like to also have the SRLS electronically. I have access to Qualtrics, an online survey program, through MSU and will be using that for the EII. It would be helpful to incorporate the SRLS into the same survey.

I hope this provides more context. If you need additional information, please let me know. I'll work on the form and get that faxed to you soon.

-Sheila:)

Appendix C

Involvement Index (Extracurricular Involvement Inventory)

Please indicate: (1) the type of organizations it is, (2) the approximate number of hours you have been involved (for example, attending meetings, working on projects, or playing games) with this group or organization in the *last four weeks*, and (3) leadership position held, if any. Then, answer questions 1 through 5 below.

What type of organization is it? (Check one.)

( ) Social Fraternity/Sorority	( ) Intercollegiate Athletic Team
( ) Religious	( ) Academic (academic department or major related) Club or Society
( ) Academic Honorary	( ) Programming (e.g., Student Center/Union, lecture or concert committee)
( ) Intramural Sports Team	( ) Student Publication (e.g., newspaper, magazine, or yearbook)
( ) Service or Philanthropic	( ) Performing Group (e.g., choir, drama production, debate team)
( ) Governance (hall council, RHA)	( ) Governance (student government, student judiciary)

( ) Other (Please Specify): _____

In the last four weeks, for approximately how many hours have you been involved with this group or organization and its activities or programs? _____Hours

In the last four weeks, have you held an office in this organization or a position equivalent to one of the following offices? *(Check one.)*

( ) President/Chairperson/Team Captain/Editor	( ) Treasurer
( ) Vice-President/Vice Chairperson	( ) Committee/Task Force/Project Chairperson
( ) Secretary	( ) I held no office or leadership position.

( ) Other Office, Please specify: _____

Please respond to the following statements about your involvement in the above student organization or group. **Check the one best** response for each statement.

1. When I attended meetings, I expressed my opinion and/or took part in the discussions.
   ( ) Very Often ( ) Often ( ) Occasionally ( ) Never
   ( ) I attended no meetings in the past four weeks.
   ( ) The group/organization held no meetings in the past four weeks.

2. When I was away from members of the group/organization, I talked with others about the organization and its activities, or wore a pin, jersey, etc. to let others know about my membership.
   ( ) Very Often ( ) Often ( ) Occasionally ( ) Never

3. When the group/organization sponsored a program or activity, I made an effort to encourage other students and/or members to attend.
   ( ) Very Often ( ) Often ( ) Occasionally ( ) Never
   ( ) The organization had no programs or activity during the past four weeks.

4. I volunteered or was assigned responsibility to work on something that the group/organization needed to have done.
   ( ) Very Often ( ) Often ( ) Occasionally ( ) Never

5. I fulfilled my assigned duties or responsibilities to the group/organization on time.
   ( ) Very Often ( ) Often ( ) Occasionally ( ) Never
   ( ) I had no duties or responsibilities except to attend meetings.

Please continue until you have completed an Involvement Index for every student group or organization in which you have been involved in the last four weeks.

Winston, R. B., & Massaro, A. V. (1987). Extracurricular involvement inventory: An instrument for assessing intensity of student involvement. *Journal of College Student Personnel, 28*(2), 169-175.

Appendix D

The SRLS Scale

The reliability testing for this instrument was conducted with the questions in the order provided below. Changing the order of the questions could result in an "order effect" which would need to be accounted for in the study.

Note: A negative sign (**-**) in front of a question number indicates a negative response question. Scores for these items should be reversed BEFORE running any statistical analysis.

The following scale should be provided along with each question:

1 = Strongly Disagree
2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree

Table 40 SRLS Items Sorted in Order

1	I am open to others' ideas	Controversy with Civility
2	Creativity can come from conflict	Controversy with Civility
3	I value differences in others	Controversy with Civility
4	I am able to articulate my priorities	Consciousness of Self
5	Hearing differences in opinions enriches my thinking	Controversy with Civility
-6	I have a low self esteem	Consciousness of Self
-7	I struggle when group members have ideas that are different from mine	Controversy with Civility
-8	Transition makes me uncomfortable	Change
9	I am usually self confident	Consciousness of Self
10	I am seen as someone who works well with others	Collaboration
11	Greater harmony can come out of disagreement	Controversy with Civility
12	I am comfortable initiating new ways of looking at things	Change
13	My behaviors are congruent with my beliefs	Congruence
14	I am committed to a collective purpose in those groups to which I belong	Common Purpose
15	It is important to develop a common direction in a group in order to get anything done	Common Purpose
16	I respect opinions other than my own	Controversy with Civility
17	Change brings new life to an organization	Change
18	The things about which I feel passionate have priority in my life	Consciousness of Self
19	I contribute to the goals of the group	Common Purpose
20	There is energy in doing something a new way	Change
-21	I am uncomfortable when someone disagrees with me	Controversy with Civility
22	I know myself pretty well	Consciousness of Self

Table 40 (cont'd)

23	I am willing to devote time and energy to things that are important to me	Commitment
24	I stick with others through the difficult times	Commitment
-25	When there is a conflict between two people, one will win and the other will lose	Controversy with Civility
-26	Change makes me uncomfortable	Change
27	It is important to me to act on my beliefs	Congruence
28	I am focused on my responsibilities	Commitment
29	I can make a difference when I work with others on a task	Collaboration
30	I actively listen to what others have to say	Collaboration
31	I think it is important to know other people's priorities	Common Purpose
32	My actions are consistent with my values	Congruence
33	I believe I have responsibilities to my community	Citizenship
34	I could describe my personality	Consciousness of Self
35	I have helped to shape the mission of the group	Common Purpose
-36	New ways of doing things frustrate me	Change
37	Common values drive an organization	Common Purpose
38	I give time to making a difference for someone else	Citizenship
39	I work well in changing environments	Change
40	I work with others to make my communities better places	Citizenship
41	I can describe how I am similar to other people	Consciousness of Self
42	I enjoy working with others toward common goals	Collaboration
43	I am open to new ideas	Change
44	I have the power to make a difference in my community	Citizenship
45	I look for new ways to do something	Change
46	I am willing to act for the rights of others	Citizenship
47	I participate in activities that contribute to the common good	Citizenship
48	Others would describe me as a cooperative group member	Collaboration
49	I am comfortable with conflict	Controversy with Civility
50	I can identify the differences between positive and negative change	Change
51	I can be counted on to do my part	Commitment
52	Being seen as a person of integrity is important to me	Congruence
53	I follow through on my promises	Commitment
54	I hold myself accountable for responsibilities I agree to	Commitment
55	I believe I have a civic responsibility to the greater public	Citizenship
-56	Self-reflection is difficult for me	Consciousness of Self
57	Collaboration produces better results	Collaboration
58	I know the purpose of the groups to which I belong	Common Purpose
59	I am comfortable expressing myself	Consciousness of Self

Table 40 (cont'd)

60	My contributions are recognized by others in the groups I belong to	Collaboration
61	I work well when I know the collective values of a group	Common Purpose
62	I share my ideas with others	Controversy with Civility
63	My behaviors reflect my beliefs	Congruence
64	I am genuine	Congruence
65	I am able to trust the people with whom I work	Collaboration
66	I value opportunities that allow me to contribute to my community	Citizenship
67	I support what the group is trying to accomplish	Common Purpose
68	It is easy for me to be truthful	Congruence

National Clearinghouse for Leadership Programs. (n.d.). Socially responsible leadership scale revised version 2: Using the SRLS-R2 for research and assessment. College Park, MD: University of Maryland College Park.

Appendix E

SRLS Constructs and the Individual Items

Table 41 Correlations between the sum of the scores for each construct and the individual items

Consciousness of Self		**Congruence**		**Commitment**		**Collaboration**	
Item	r	Item	r	Item	r	Item	r
6	.5856*	13	.5807*	23	.4369*	8	.4452*
7	.5923*	21	.5043*	26	.5346*	20	.6021*
12	.7236*	28	.6176*	30	.5987*	49	.5574*
17	.4556*	47	.5242*	35	.6013*	50	.5682*
18	.6804*	53	.6895*	38	.6980*	52	.5956*
34	.4447*	58	.6958*	43	.6544*	55	.4213*
41	.3635*	68	.5470*	44	.5453*	59	.5829*
42	.5923*	79	.4763*	48	.6876*	67	.6889*
55	.6711*	83	.4235*	74	.3635*	84	.5660*
66	.6030*	88	.5622*	78	.6769*	87	.5881*
89	.4948*	97	.7484*	81	.6946*	93	.5259*
92	.6922*	98	.6108*	82	.7058*	99	.5414*
105	.5399*	100	.6539*			102	.0100
						96	.2718*
Common Purpose		**Controversy with Civility**		**Citizenship**		**Change**	
Item	r	Item	r	Item	r	Item	r
3	.5666*	1	.4671*	5	.5891*	16	.5624*
9	.5717*	2	.4650*	11	.7326*	22	.3741*
29	.6667*	4	.5317*	15	.6990*	25	.5548*
31	.5871*	10	.5544*	19	.7270*	33	.5088*
36	.6736*	14	.4421*	27	.5076*	37	.5373*
40	.5638*	24	.4412*	54	.7548*	46	.6767*
51	.5482*	32	.4946*	61	.6842*	57	.5740*
56	.6390*	39	.4355*	63	.6247*	62	.7026*
60	.5192*	45	.3749*	65	.7636*	69	.5989*
64	.2839*	76	.5598*	70	.7088*	71	.5813*
91	.6701*	80	.4663*	72	.6702*	77	.4503*
94	.7066*	89	.3822*	73	.7650*	90	.4779*
103	.6181*	95	.5267*	85	.7224*		
				101	.7701*		

*$p \leq .01$

(NCLP, n.d.)

APPENDIX F

Demographic Questions from Survey Instrument

* Questions required to use SRLS-R2

What year are you in college?

Options: 1st, 2nd, 3rd, 4th, 5th, 6th or more

***What is your current class level?**

Options: First year/freshman, Sophomore, Junior, Senior, Graduate Student, other

Please identify your current field of study, or your major. (Check all that apply).

Agriculture
Biological/life sciences (biology, biochemistry, botany, zoology, etc.)
Business (accounting, business administration, marketing, management, etc.)
Communication (speech, journalism, television/radio, etc.)
Computer and information sciences
Education
Engineering
Ethnic, cultural studies, and area studies
Foreign languages and literature (French, Spanish, etc.)
Health-related fields (nursing, physical therapy, health technology, etc.)
History
Humanities (English, literature, philosophy, religion, etc.)
Liberal/general studies
Mathematics
Multi/interdisciplinary studies (international relations, ecology, environmental studies, etc.)
Parks, recreation, leisure studies, sports management
Physical sciences (physics, chemistry, astronomy, earth sciences, etc.)
Pre-professional (pre-dental, pre-medical, pre-veterinary)
Public administration (city management, law enforcement, etc.)
Social sciences (anthropology, economics, political science, psychology, sociology, etc.)
Visual and performing arts (art, music, theater, etc.)
Undecided
Other

***What is your best estimate of your grades as far in college? (Assume 4.00 = A).**

Options: 3.50-4.00; 3.00-3.49; 2.50-2.99; 2.00-2.49; 1.99 or less; No college GPA

***What is your age?** (open answer)

***What is your gender? (Check all that apply)**

Options: Male; Female; Transgender

***What is your sexual orientation? (Mark all that apply)**

Options: Heterosexual; Bisexual; Bay/Lesbian; Rather not say

***Please indicate your ethnic background. (Mark all that apply)**

Options: White/Caucasian; African American/Black; Asian American/Asian; Native Hawaiian/Pacific Islander; Latino/Latina; Multiracial; Race/ethnicity not included above

Are you considered an international student?

Options: Yes; No

Describe your institution

Options: 2-year institution; 4-year institution; Public; Private

In what state/province is your institution?

Options: Indiana; Illinois; Michigan; Ontario; Wisconsin; Other

Describe your institution enrollment and on-campus housing population size.

Institution enrollment options: 1,000-2,999; 3,000-9,999; 10,000-19,999; > 19,999

On-campus housing population options: < 1,000; 1,000-2,999; 3,000-4,999; 5,000-9,999; > 9,999

How many years have you been involved with your hall government and/or RHA?

Options: 1, 2, 3, 4, 5, 6 or more

What position do you hold in your hall government or RHA?

Options: No position-general member; Area/Hall Representative to RHA; Hall Government President; Hall Government Vice President; Hall Government Secretary; Hall Government Treasurer; Hall Government other (please specify); RHA President; RHA Vice President; RHA Secretary; RHA Treasurer; NCC; RHA other (please specify)

How many registered student organizations are you currently involved in? (RHA and hall government count as one.)

Options: 1; 2; 3; 4; 5; 6

APPENDIX G

Consent Form

Research Participant Information and Consent Form

You are being asked to participate in a research study looking at the relationship between the intensity of involvement in multiple registered student organizations and leadership development. In order to participate in the study, you must be an undergraduate student who is involved in either a residence hall government or residence hall association, or both. Involvement in additional registered student organizations is preferred, but not required. You must be at least 18 years old to participate in this research. You will need to complete the three sections of the following survey, which will take you about 10 minutes.

Participation in this research project is completely voluntary. We do not anticipate any risks to you participating in this study other than those encountered in day-to-day life. You have the right to say no. You may change your mind at any time and withdraw. You may choose not to answer specific questions or to stop participating at any time. If you decide not to take part or to skip some of the questions, it will not affect your current or future relationship with the Great Lakes Affiliate of College and University Residence Halls (GLACURH) or with Michigan State University.

There is no cost to the participant to be part of this research project. Participants who complete the survey will have the choice to opt-in to a drawing for 5 $20 Amazon.com gift cards at the end of the survey. Participants who complete the survey during the annual GLACURH conference will receive a coupon to a well-known chain restaurant, i.e., McDonald's, Dunkin' Donuts, or Coldstone Creamery.

The researcher conducting this study is Sheila Coressel. If you have questions later, you may contact Sheila Coressel at coressel@msu.edu or at 419-494-4558. If you have any questions or concerns regarding your rights as a subject in this study, you may contact Dr. Marilyn Amey, professor, at amey@msu.edu or at 517- 432-1056.

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 207 Olds Hall, MSU, East Lansing, MI 48824.

By clicking on the "Accept" button below, you indicate your voluntary agreement to participate in this online survey.

APPENDIX H

Multiple Regression Results for SCM Values and Components

Consciousness of Self value Regression

Table 42 Correlations with Regression Predictors (Consciousness of Self)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.240	.001**
Gender	-.021	.388
Sexual Orientation	-.010	.447
Ethnicity	.067	.182
RHA Position	-.019	.398
GPA	.047	.264
Class Level	.106	.077
Number of RHA Years	.066	.187
Institution Enrollment	.061	.206

**. Correlations significant at .01 (1-tailed)

Table 43 Regression Model Summary with the EII Score (Consciousness of Self)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.267	.071	.023	.469

Table 44 ANOVA with the EII Score (Consciousness of Self)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.939	9	.327	1.485	.157n
Residual	38.260	174	.220		
Total	41.199	183			

Table 45 Coefficients with the EII Score (Consciousness of Self)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.765	.228		16.511	.000
EII	.002	.001	.232	3.024	.003**
Gender	-.034	.076	-.034	-.444	.6567
S. Orientation	.038	.089	.034	.427	.670
Ethnicity	.096	.095	.077	1.014	.312
RHA Position	-.005	.084	-.005	-.062	.951
GPA	.005	.043	.009	.115	.909
Class Level	.054	.050	.119	1.092	.277
RHA Years	-.037	.055	-.075	-.682	.496
Institution	.016	.036	.033	.441	.660

**. $p < .01$ level

Congruence value Regression

Table 46 Correlations with Regression Predictors (Congruence)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.248	.000**
Gender	-.064	.194
Sexual Orientation	-.003	.481
Ethnicity	-.054	.235
RHA Position	.016	.415
GPA	.045	.271
Class Level	.015	.421
Number of RHA Years	.070	.171
Institution Enrollment	.052	.240

**. Correlations significant at .01 (1-tailed)

Table 47 Regression Model Summary with the EII Score (Congruence)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.272	.074	.026	.463

Table 48 ANOVA with the EII Score (Congruence)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.968	9	.330	1.541	.137
Residual	37.230	174	.214		
Total	40.197	183			

Table 49 Coefficients with the EII Score (Congruence)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.319	.225		19.201	.000
EII	.002	.001	.249	3.255	.001**
Gender	-.058	.075	-.060	-.775	.440
S. Orientation	.056	.088	.050	.632	.528
Ethnicity	-.065	.093	-.053	-.693	.489
RHA Position	.013	.082	.012	.158	.875
GPA	-.013	.042	-.025	-.317	.752
Class Level	-.039	.049	-.086	-.796	.427
RHA Years	.044	.054	.090	.822	.412
Institution	.012	.035	.026	.344	.731

**. p < .01 level

Commitment value Regression

Table 50 Correlations with Regression Predictors (Commitment)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.267	.000**
Gender	-.011	.440
Sexual Orientation	-.041	.290
Ethnicity	-.076	.154
RHA Position	-.072	.167
GPA	-.022	.383
Class Level	-.052	.241
Number of RHA Years	.004	.476
Institution Enrollment	-.039	.300

**. Correlations significant at .01 (1-tailed)

Table 51 Regression Model Summary with the EII Score (Commitment)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.328	.108	.062	.394

Table 52 ANOVA with the EII Score (Commitment)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.259	9	.362	2.335	.017*
Residual	26.987	174	.155		
Total	30.246	183			

*. p < .05 level

Table 53 Coefficients with the EII Score (Commitment)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.752	.192		24.814	.000
EII	.002	.000	.303	4.029	.000**
Gender	.012	.064	.014	.191	.849
S. Orientation	-.029	.075	-.030	-.390	.697
Ethnicity	-.105	.080	-.099	-1.325	.187
RHA Position	-.078	.070	-.081	-1.117	.265
GPA	-.045	.036	-.096	-1.242	.216
Class Level	-.059	.042	-.151	-1.416	.159
RHA Years	.024	.046	.057	.528	.598
Institution	-.023	.030	-.056	-.762	.447

**. p < .01 level

Self Values Component Regression

Table 54 Correlations with Regression Predictors (Self Component)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.294	.000**
Gender	-.039	.301
Sexual Orientation	-020	.394
Ethnicity	-.021	.390
RHA Position	-.027	.359
GPA	.030	.344
Class Level	.031	.337
Number of RHA Years	.057	.220
Institution Enrollment	.033	.330

**. Correlations significant at .01 (1-tailed)

Table 55 Regression Model Summary with the EII Score (Self Component)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.301	.091	.043	.376

Table 56 ANOVA with the EII Score (Self Component)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.445	9	.272	1.924	.051
Residual	24.567	174	.141		
Total	27.012	183			

Table 57 Coefficients with the EII Score (Self Component)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.279	.183		23.416	.000
EII	.002	.000	.304	4.001	.000**
Gender	-.027	.061	-.033	-.436	.663
S. Orientation	.022	.072	.023	.301	.764
Ethnicity	-.025	.076	-.024	-.326	.745
RHA Position	-.024	.067	-.026	-.351	.726
GPA	-.018	.034	-.040	-.516	.606
Class Level	-.015	.040	-.039	-.367	.714
RHA Years	.010	.044	.026	.238	.812
Institution	.002	.029	.004	.058	.954

**. p < .01 level

Collaboration value Regression

Table 58 Correlations with Regression Predictors (Collaboration)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.328	.000**
Gender	-.019	.399
Sexual Orientation	-.075	.155
Ethnicity	-.038	.306
RHA Position	-.089	.115
GPA	.152	.020*
Class Level	.006	.466
Number of RHA Years	.013	.433
Institution Enrollment	.075	.155

*. Correlations significant at .05 (1-tailed)

**. Correlations significant at .01 (1-tailed)

Table 59 Regression Model Summary with the EII Score (Collaboration)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.360	.129	.084	.443

Table 60 ANOVA with the EII Score (Collaboration)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	5.076	9	.564	2.875	.003**
Residual	34.143	174	.196		
Total	39.219	183			

**. p < .01 level

Table 61 Coefficients with the EII Score (Collaboration)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.162	.215		19.319	.000
EII	.002	.000	.320	4.304	.000**
Gender	.015	.072	.015	.203	.839
S. Orientation	-.041	.084	-.037	-.483	.630
Ethnicity	-.019	.090	-.016	-.213	.832
RHA Position	-.098	.079	-.090	-1.248	.214
GPA	.043	.041	.080	1.051	.295
Class Level	-.018	.047	-.039	-.373	.710
RHA Years	-.024	.052	-.050	-.472	.637
Institution	.014	.034	.029	.402	.688

**. p < .01 level

Common Purpose value Regression

Table 62 Correlations with Regression Predictors (Common Purpose)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.344	.000**
Gender	-.059	.214
Sexual Orientation	-.031	.337
Ethnicity	.012	.436
RHA Position	-.045	.272
GPA	.066	.187
Class Level	.046	.266
Number of RHA Years	.101	.085
Institution Enrollment	.050	.248

**. Correlations significant at .01 (1-tailed)

Table 63 Regression Model Summary with the EII Score (Common Purpose)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.356	.127	.082	.402

Table 64 ANOVA with the EII Score (Common Purpose)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.077	9	.453	2.807	.004**
Residual	28.075	174	.161		
Total	32.151	183			

**. p < .01 level

Table 65 Coefficients with the EII Score (Common Purpose)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.221	.195		21.608	.000
EII	.002	.000	.342	4.595	.000**
Gender	-.045	.065	-.051	-.681	.497
S. Orientation	.031	.076	.031	.408	.684
Ethnicity	.016	.081	.015	.198	.844
RHA Position	-.041	.072	-.041	-.571	.569
GPA	-.005	.037	-.010	-.125	.901
Class Level	-.032	.043	-.078	-.743	.459
RHA Years	.037	.047	.084	.783	.435
Institution	.006	.031	.014	.194	.846

**. p < .01 level

Controversy with Civility value Regression

Table 66 Correlations with Regression Predictors (Controversy with Civility)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.129	.041*
Gender	-.031	.336
Sexual Orientation	-.109	.070
Ethnicity	.108	.073
RHA Position	-.050	.251
GPA	.034	.323
Class Level	.057	.220
Number of RHA Years	.065	.192
Institution Enrollment	.018	.404

*. Correlations significant at .05 (1-tailed)

Table 67 Regression Model Summary with the EII Score (Controversy with Civility)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.202	.041	-.009	.432

Table 68 ANOVA with the EII Score (Controversy with Civility)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.375	9	.153	.820	.599
Residual	32.431	174	.186		
Total	33.806	183			

Table 69 Coefficients with the EII Score (Controversy with Civility)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.949	.210		18.809	.000
EII	.001	.000	.111	1.424	.156
Gender	-.012	.070	-.013	-.165	.869
S. Orientation	-.095	.082	-.093	-1.160	.248
Ethnicity	.134	.087	.119	1.541	.125
RHA Position	-.035	.077	-.034	-.457	.648
GPA	.009	.039	.019	.235	.814
Class Level	.005	.046	.012	.105	.916
RHA Years	.000	.050	.000	-.003	.998
Institution	.001	.033	.001	.017	.986

Group Values Component Regression

Table 70 Correlations with Regression Predictors (Group Component)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.320	.000**
Gender	-.043	.282
Sexual Orientation	-.087	.121
Ethnicity	.031	.339
RHA Position	-.074	.158
GPA	.103	.083
Class Level	.043	.282
Number of RHA Years	.069	.175
Institution Enrollment	.058	.216

**. Correlations significant at .01 (1-tailed)

Table 71 Regression Model Summary with the EII Score (Group Component)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.337	.113	.068	.353

Table 72 ANOVA with the EII Score (Group Component)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.778	9	.309	2.474	.011*
Residual	21.709	174	.125		
Total	24.487	183			

*. $p < .05$ level

Table 73 Coefficients with the EII Score (Group Component)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.111	.172		23.930	.000
EII	.002	.000	.309	4.121	.000**
Gender	-.014	.058	-.018	-.240	.810
S. Orientation	-.035	.067	-.040	-.520	.604
Ethnicity	.044	.071	.046	.614	.540
RHA Position	-.058	.063	-.067	-.924	.357
GPA	.016	.032	.037	.488	.626
Class Level	-.015	.037	-.042	-.394	.694
RHA Years	.004	.041	.011	.098	.922
Institution	.007	.027	.018	.249	.804

**. p < .01 level

Citizenship value/Society Values Component Regression

Table 74 Correlations with Regression Predictors (Citizenship/Society Component)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.308	.000**
Gender	-.020	.395
Sexual Orientation	-.098	.094
Ethnicity	-.007	.463
RHA Position	-.031	.336
GPA	.085	.126
Class Level	.009	.453
Number of RHA Years	.055	.228
Institution Enrollment	.051	.247

**. Correlations significant at .01 (1-tailed)

Table 75 Regression Model Summary with the EII Score (Citizenship/Society Component)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.322	.104	.058	.448

Table 76 ANOVA with the EII Score (Citizenship/Society Component)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	4.045	9	.449	2.241	.022*
Residual	34.894	174	.201		
Total	38.939	183			

*. p < .05 level

Table 77 Coefficients with the EII Score (Citizenship/Society Component)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.342	.218		19.937	.000
EII	.002	.000	.304	4.026	.000**
Gender	.015	.073	.015	.203	.839
S. Orientation	-.074	.085	-.067	-.866	.387
Ethnicity	.002	.091	.001	.017	.986
RHA Position	-.033	.080	-.030	-.416	.678
GPA	.008	.041	.015	.197	.844
Class Level	-.042	.048	-.094	-.881	.380
RHA Years	.020	.052	.041	.379	.705
Institution	.004	.034	.009	.126	.900

**. p < .01 level

Change value Regression

Table 78 Correlations with Regression Predictors (Change)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.172	.010**
Gender	-.112	.065
Sexual Orientation	-.101	.086
Ethnicity	.057	.222
RHA Position	-.182	.007**
GPA	.098	.094
Class Level	.034	.323
Number of RHA Years	.047	.264
Institution Enrollment	.032	.335

**. Correlations significant at .01 (1-tailed)
RHA Position (Single Position = 0; Dual Position = 1)

Table 79 Regression Model Summary with the EII Score (Change)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.287	.082	.035	.488

Table 80 ANOVA with the EII Score (Change)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.735	9	.415	1.730	.085
Residual	41.732	174	.240		
Total	45.467	183			

Table 81 Coefficients with the EII Score (Change)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.036	.238		16.946	.000
EII	.001	.001	.152	1.989	.048*
Gender	-.095	.080	-.091	-1.186	.237
S. Orientation	-.059	.093	-.050	-.637	.525
Ethnicity	.103	.099	.079	1.045	.298
RHA Position	-.204	.087	-.173	-2.344	.020
GPA	.033	.045	.057	.726	.469
Class Level	-.012	.052	-.024	-.222	.825
RHA Years	-.005	.057	-.010	-.094	.925
Institution	.010	.037	.021	.278	.781

*. $p < .05$ level

APPENDIX I

Multiple Regression Results for SCM Values and Components for Participants Involved in One Organization

Overall SRLS score Regression

Table 82 Correlations with Regression Predictors (One Org.; Overall SRLS score)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.407	.006**
Gender	-.101	.274
Sexual Orientation	.134	.211
Ethnicity	.118	.241
RHA Position	.228	.084
GPA	-.136	.207
Class Level	-.035	.417
Number of RHA Years	.050	.383
Institution Enrollment	.064	.352

**. Correlations significant at .01 (1-tailed)

Table 83 Regression Model Summary with the EII Score (One Org.; Overall SRLS score)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.495	.245	.002	.345

Table 84 ANOVA with the EII Score (One Org.; Overall SRLS score)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.080	9	.120	1.008	.457
Residual	3.335	28	.119		
Total	4.415	37			

Table 85 Coefficients with the EII Score (One Org.; Overall SRLS score)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.966	.376		10.536	.000
EII	.005	.002	.376	2.101	.045*
Gender	-.092	.117	-.135	-.786	.438
S. Orientation	.074	.160	.088	.463	.648
Ethnicity	.138	.193	.124	.716	.480
RHA Position	.165	.167	.176	.987	.332
GPA	-.026	.072	-.064	-.366	.717
Class Level	-.012	.082	-.037	-.147	.884
RHA Years	-.024	.125	-.056	-.188	.852
Institution	.022	.067	.061	.326	.747

*. $p < .05$ level

Consciousness of Self value Regression

Table 86 Correlations with Regression Predictors (One Org.; Consciousness of Self)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.375	.010**
Gender	-.195	.121
Sexual Orientation	-.081	.315
Ethnicity	.123	.232
RHA Position	.232	.080
GPA	-.054	.374
Class Level	.151	.183
Number of RHA Years	.191	.125
Institution Enrollment	-.095	.285

**. Correlations significant at .01 (1-tailed)

Table 87 Regression Model Summary with the EII Score (One Org.; Consciousness of Self)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.521	.272	.038	.484

Table 88 ANOVA with the EII Score (One Org.; Consciousness of Self)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.447	9	.272	1.160	.357
Residual	6.562	28	.234		
Total	9.009	37			

Table 89 Coefficients with the EII Score (One Org.; Consciousness of Self)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.848	.528		7.287	.000
EII	.007	.003	.370	2.106	.044*
Gender	-.158	.165	-.161	-.958	.346
S. Orientation	-.094	.225	-.078	-.417	.680
Ethnicity	.347	.271	.219	1.283	.210
RHA Position	.219	.234	.164	.934	.358
GPA	.052	.101	.088	.511	.613
Class Level	.031	.116	.067	.270	.789
RHA Years	.031	.176	.052	.179	.859
Institution	-.079	.093	-.155	-.850	.402

*. $p < .05$ level

Congruence value Regression

Table 90 Correlations with Regression Predictors (One Org.; Congruence)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.278	.046*
Gender	-.148	.188
Sexual Orientation	.153	.179
Ethnicity	.090	.297
RHA Position	.296	.036
GPA	-.266	.054
Class Level	.036	.415
Number of RHA Years	.134	.211
Institution Enrollment	.125	.228

*. Correlations significant at .05 (1-tailed)

Table 91 Regression Model Summary with the EII Score (One Org.; Congruence)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.513	.263	.026	.504

Table 92 ANOVA with the EII Score (One Org.; Congruence)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.538	9	.282	1.109	.389
Residual	7.212	28	.254		
Total	9.658	37			

Table 93 Coefficients with the EII Score (One Org.; Congruence)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.054	.550		7.370	.000
EII	.003	.003	.161	.910	.371
Gender	-.182	.172	-.179	-1.058	.299
S. Orientation	.253	.234	.205	1.082	.288
Ethnicity	.074	.282	.045	.262	.795
RHA Position	.369	.244	.267	1.512	.142
GPA	-.139	.105	-.229	-1.318	.198
Class Level	-.007	.120	-.015	-.061	.952
RHA Years	.013	.183	.021	.072	.943
Institution	.060	.097	.114	.620	.450

Commitment value Regression

Table 94 Correlations with Regression Predictors (One Org.; Commitment)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.294	.037*
Gender	.107	.260
Sexual Orientation	.324	.024
Ethnicity	.109	.257
RHA Position	.203	.111
GPA	-.140	.201
Class Level	-.265	.054
Number of RHA Years	-.123	.231
Institution Enrollment	-.053	.377

*. Correlations significant at .05 (1-tailed)

Table 95 Regression Model Summary with the EII Score (One Org.; Commitment)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.544	.296	.070	.397

Table 96 ANOVA with the EII Score (One Org.; Commitment)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.856	9	.206	1.310	.276
Residual	4.407	28	.157		
Total	6.263	37			

Table 97 Coefficients with the EII Score (One Org.; Commitment)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.374	.433		10.108	.000
EII	.003	.003	.207	1.199	.240
Gender	.057	.135	.070	.426	.674
S. Orientation	.259	.184	.260	1.409	.170
Ethnicity	.103	.222	.078	.466	.645
RHA Position	.241	.192	.217	1.255	.220
GPA	-.062	.083	-.127	-.750	.460
Class Level	-.117	.095	-.302	-1.236	.227
RHA Years	.053	.144	.104	.365	.718
Institution	-.049	.077	-.114	-.634	.531

Self Values Component Regression

Table 98 Correlations with Regression Predictors (One Org.; Self Component)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.374	.010**
Gender	-.106	.263
Sexual Orientation	.143	.196
Ethnicity	.126	.225
RHA Position	.291	.038*
GPA	-.183	.135
Class Level	-.014	.468
Number of RHA Years	.094	.288
Institution Enrollment	-.004	.490

*. Correlations significant at .05 (1-tailed)

**. Correlations significant at .01 (1-tailed)

Table 99 Regression Model Summary with the EII Score (One Org.; Self Component)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.511	.261	.024	.395

Table 100 ANOVA with the EII Score (One Org.; Self Component)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.541	9	.171	1.099	.395
Residual	4.363	28	.156		
Total	5.904	37			

Table 101 Coefficients with the EII Score (One Org.; Self Component)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.092	.431		9.504	.000
EII	.004	.003	.292	1.650	.110
Gender	-.094	.134	-.119	-.700	.490
S. Orientation	.140	.183	.144	.763	.452
Ethnicity	.175	.221	.136	.792	.435
RHA Position	.276	.191	.256	1.446	.159
GPA	-.050	.082	-.105	-.604	.551
Class Level	-.031	.094	-.083	-.329	.744
RHA Years	.032	143	.066	.226	.823
Institution	-.023	.076	-.054	-.296	.769

Collaboration value Regression

Table 102 Correlations with Regression Predictors (One Org.; Collaboration)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.335	.020*
Gender	-.120	.236
Sexual Orientation	.158	.171
Ethnicity	-.076	.324
RHA Position	.140	.201
GPA	-.076	.326
Class Level	-.174	.149
Number of RHA Years	-.144	.194
Institution Enrollment	-.011	.474

*. Correlations significant at .05 (1-tailed)

Table 103 Regression Model Summary with the EII Score (One Org.; Collaboration)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.468	.219	-.032	.425

Table 104 ANOVA with the EII Score (One Org.; Collaboration)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.422	9	.158	.873	.560
Residual	5.068	28	.181		
Total	6.490	37			

**. $p < .01$ level

Table 105 Coefficients with the EII Score (One Org.; Collaboration)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.481	.464		9.656	.000
EII	.005	.003	.340	1.869	.072
Gender	-.136	.145	-.164	-.941	.355
S. Orientation	.096	.197	.094	.485	.631
Ethnicity	-.119	.238	-.088	-.500	.621
RHA Position	.140	.206	124	.680	.502
GPA	-.035	.089	-.070	-.392	.698
Class Level	-.017	.102	-.044	-.170	.866
RHA Years	-.123	.155	-.239	-.795	.433
Institution	.037	.082	.086	.453	.654

**. p < .01 level

Common Purpose value Regression

Table 106 Correlations with Regression Predictors (One Org.; Common Purpose)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.386	.008**
Gender	-.074	.330
Sexual Orientation	.143	.195
Ethnicity	.040	.406
RHA Position	.305	.031*
GPA	-.143	.197
Class Level	-.020	.452
Number of RHA Years	.134	.211
Institution Enrollment	.163	.164

*. Correlations significant at .05 (1-tailed)
**. Correlations significant at .01 (1-tailed)

Table 107 Regression Model Summary with the EII Score (One Org.; Common Purpose)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.515	.265	.029	.428

Table 108 ANOVA with the EII Score (One Org.; Common Purpose)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.860	9	.207	1.124	.379
Residual	5.145	28	.184		
Total	7.005	37			

Table 109 Coefficients with the EII Score (One Org.; Common Purpose)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.935	.468		8.415	.000
EII	.005	.003	.300	1..698	.101
Gender	-.108	.146	-.125	-.738	.467
S. Orientation	.178	.199	.169	.894	.379
Ethnicity	.026	.240	.018	.108	.915
RHA Position	.264	.208	.224	1.273	.214
GPA	-.043	.089	-.084	-.486	.630
Class Level	-.046	.102	-.113	-.451	.655
RHA Years	.048	.156	.089	.306	.762
Institution	.058	.083	.129	.706	.486

Controversy with Civility value Regression

Table 110 Correlations with Regression Predictors (One Org.; Controversy with Civility)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.233	.080
Gender	-.078	.321
Sexual Orientation	-.018	.458
Ethnicity	.232	.080
RHA Position	.058	.365
GPA	-.084	.309
Class Level	.019	.454
Number of RHA Years	.065	.349
Institution Enrollment	.233	.080

*. Correlations significant at .05 (1-tailed)

Table 111 Regression Model Summary with the EII Score (One Org.; Controversy with Civility)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.436	.190	-.071	.402

Table 112 ANOVA with the EII Score (One Org.; Controversy with Civility)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.059	9	.118	.728	.680
Residual	4.524	28	.162		
Total	5.583	37			

Table 113 Coefficients with the EII Score (One Org.; Controversy with Civility)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.524	.438		8.039	.000
EII	.004	.003	.286	1.543	.134
Gender	-.092	.137	-.119	-.673	.506
S. Orientation	-.123	.186	-.131	-.658	.516
Ethnicity	.302	.225	.241	1.342	.190
RHA Position	-.003	.195	-.003	-.017	.987
GPA	-.017	.084	-.037	-.206	.838
Class Level	.018	.096	.049	.186	.854
RHA Years	-.080	.146	-.168	-.550	.587
Institution	.108	.078	.268	1.392	.175

Group Values Component Regression

Table 114 Correlations with Regression Predictors (One Org.; Group Component)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.395	.007**
Gender	-.112	.252
Sexual Orientation	.121	.235
Ethnicity	.075	.327
RHA Position	.212	.101
GPA	-.125	.227
Class Level	-.073	.331
Number of RHA Years	.023	.446
Institution Enrollment	.156	.176

**. Correlations significant at .01 (1-tailed)

Table 115 Regression Model Summary with the EII Score (One Org.; Group Component)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.504	.254	.014	.334

Table 116 ANOVA with the EII Score (One Org.; Group Component)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.060	9	.118	1.058	.422
Residual	3.117	28	.111		
Total	4.177	37			

*. $p < .05$ level

Table 117 Coefficients with the EII Score (One Org.; Group Component)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.980	.364		10.936	.000
EII	.005	.002	.381	2.141	.041*
Gender	-.112	.113	-.168	-.986	.333
S. Orientation	.050	.155	.062	.325	.748
Ethnicity	.069	.187	.064	.373	.712
RHA Position	.134	.162	.147	.827	.415
GPA	-.032	.070	-.080	-.458	.651
Class Level	-.015	.080	-.048	-.191	.650
RHA Years	-.052	.121	-.126	-.428	.672
Institution	068	.064	.195	1.054	.301

**. p < .01 level

Citizenship value/Society Values Component Regression

Table 118 Correlations with Regression Predictors (One Org.; Citizenship/Society Component)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.302	.033*
Gender	.027	.436
Sexual Orientation	.106	.264
Ethnicity	-.032	.425
RHA Position	.179	.141
GPA	-.203	.111
Class Level	.012	.471
Number of RHA Years	.096	.283
Institution Enrollment	.034	.419

**. Correlations significant at .01 (1-tailed)

Table 119 Regression Model Summary with the EII Score (One Org.; Citizenship/Society Component)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.379	.144	-.131	.469

Table 120 ANOVA with the EII Score (One Org.; Citizenship/Society Component)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.035	9	.115	.523	.845
Residual	6.158	28	.220		
Total	7.194	37			

*. p < .05 level

Table 121 Coefficients with the EII Score (One Org.; Citizenship/Society Component)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.258	.512		8.324	.000
EII	.003	.003	.217	1.139	.264
Gender	.016	.159	.019	.102	.920
S. Orientation	.132	.218	.123	.605	.550
Ethnicity	-.073	.262	-.052	-.279	.782
RHA Position	.167	.227	.140	.736	.468
GPA	-.088	.098	-.168	-.897	.377
Class Level	-.016	.112	-.039	-.146	.885
RHA Years	.023	.170	.043	.135	894
Institution	.006	.091	.014	.069	.946

Change value Regression

Table 122 Correlations with Regression Predictors (One Org.; Change)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.336	.020*
Gender	-.072	.334
Sexual Orientation	.172	.151
Ethnicity	.193	.123
RHA Position	.055	.372
GPA	.048	.388
Class Level	-.096	.283
Number of RHA Years	-.110	.255
Institution Enrollment	-.024	.444

*. Correlations significant at .05 (1-tailed)

Table 123 Regression Model Summary with the EII Score (One Org.; Change)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.469	.220	-.030	.448

Table 124 ANOVA with the EII Score (One Org.; Change)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.585	9	.176	.879	.555
Residual	5.614	28	.200		
Total	7.199	37			

Table 125 Coefficients with the EII Score (One Org.; Change)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.634	.488		7.441	.000
EII	.007	.003	.406	2.231	.034*
Gender	-.100	.152	-.114	-.657	.516
S. Orientation	.046	.208	.043	.221	.827
Ethnicity	.313	.250	.221	1.251	.221
RHA Position	.046	.217	.038	.211	.834
GPA	.064	.093	.123	.687	.498
Class Level	.013	.107	.032	.124	.902
RHA Years	-.101	.163	-.187	-.624	.538
Institution	.000	.086	.000	.001	.999

*. $p < .05$ level

APPENDIX J

Multiple Regression Results for SCM Values and Components for Participants Involved in Multiple Organizations

Overall SRLS score Regression

Table 126 Correlations with Regression Predictors (Multi-Orgs)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.293	.000**
Gender	-.058	.244
Sexual Orientation	-.126	.064
Ethnicity	.018	.415
RHA Position	-.154	.032*
GPA	.130	.059
Class Level	.059	.238
Number of RHA Years	.061	.232
Institution Enrollment	.065	.217

*. Correlations significant at .05 (1-tailed)
**. Correlations significant at .01 (1-tailed)

Table 127 Regression Model Summary with the EII Score (Multi-Orgs)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.335	.112	.054	.357

Table 128 ANOVA with the EII Score (Multi-Orgs)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.199	9	.244	1.914	.055
Residual	17.361	136	.128		
Total	19.560	145			

Table 129 Coefficients with the EII Score (Multi-Orgs)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.174	.197		21.205	.000
EII	.001	.000	.265	3.054	.003**
Gender	-.002	.068	-.002	-.025	.980
S. Orientation	-.061	.077	-.069	-.791	.430
Ethnicity	.023	.079	.025	.288	.774
RHA Position	-.112	.070	-.131	-1.593	.114
GPA	.023	.038	.054	.600	.550
Class Level	-.008	.044	-.022	-.178	.859
RHA Years	-.007	.046	-.019	-.155	.877
Institution	.003	.031	.007	.083	.934

**. p < .01 level

Consciousness of Self value Regression

Table 130 Correlations with Regression Predictors (Multi-Orgs; Consciousness of Self)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.222	.004**
Gender	.018	.416
Sexual Orientation	.010	.450
Ethnicity	.067	.212
RHA Position	-.086	.150
GPA	.069	.205
Class Level	.092	.134
Number of RHA Years	.029	.365
Institution Enrollment	.119	.077

**. Correlations significant at .01 (1-tailed)

Table 131 Regression Model Summary with the EII Score (Multi-Orgs; Consciousness of Self)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.275	.076	.015	.466

Table 132 ANOVA with the EII Score (Multi-Orgs; Consciousness of Self)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.418	9	.269	1.240	.276
Residual	29.470	136	.217		
Total	31.888	145			

Table 133 Coefficients with the EII Score (Multi-Orgs; Consciousness of Self)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.663	.256		14.284	.000
EII	.001	.001	.195	2.202	.029*
Gender	.003	.089	.003	.031	.975
S. Orientation	.062	.100	.055	.619	.537
Ethnicity	.090	.104	.076	.874	.384
RHA Position	-.083	.091	-.076	-.905	.367
GPA	.017	.049	.032	.347	.729
Class Level	.056	.057	.124	.992	.323
RHA Years	-.056	.060	-.117	-.928	.355
Institution	.040	.041	.084	.975	.332

*. $p < .05$ level

Congruence value Regression

Table 134 Correlations with Regression Predictors (Multi-Orgs; Congruence)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.213	.005**
Gender	-.061	.231
Sexual Orientation	-.045	.296
Ethnicity	-.068	.207
RHA Position	-.072	.195
GPA	.124	.068
Class Level	.006	.472
Number of RHA Years	.037	.331
Institution Enrollment	.067	.211

**. Correlations significant at .01 (1-tailed)

Table 135 Regression Model Summary with the EII Score (Multi-Orgs; Congruence)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.247	.061	-.001	.450

Table 136 ANOVA with the EII Score (Multi-Orgs; Congruence)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.796	9	.200	.985	.455
Residual	27.555	136	.203		
Total	29.351	145			

Table 137 Coefficients with the EII Score (Multi-Orgs; Congruence)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.347	.248		17.530	.000
EII	.001	.001	.200	2.240	.027*
Gender	-.016	.086	-.017	-.191	.849
S. Orientation	.007	.096	.006	.072	.943
Ethnicity	-.067	.100	-.059	-.668	.505
RHA Position	-.068	.088	-.065	-.765	.446
GPA	.028	/047	.055	.595	.553
Class Level	-.037	.055	-.085	-.671	.503
RHA Years	.020	.058	.044	.350	.727
Institution	.008	.039	.017	.200	.842

*. p < .05 level

Commitment value Regression

Table 138 Correlations with Regression Predictors (Multi-Orgs; Commitment)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.248	.001**
Gender	-.060	.237
Sexual Orientation	-.133	.055
Ethnicity	-.101	.113
RHA Position	-.148	.038*
GPA	.001	.497
Class Level	.002	.490
Number of RHA Years	.017	.419
Institution Enrollment	-.013	.438

*. Correlations significant at .05 (1-tailed)

**. Correlations significant at .01 (1-tailed)

Table 139 Regression Model Summary with the EII Score (Multi-Orgs; Commitment)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.344	.118	.060	.390

Table 140 ANOVA with the EII Score (Multi-Orgs; Commitment)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.777	9	.309	2.025	.041*
Residual	20.720	136	.152		
Total	23.498	145			

*. p < .05 level

Table 141 Coefficients with the EII Score (Multi-Orgs; Commitment)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.873	.215		22.663	.000
EII	.002	.000	.277	3.198	.002**
Gender	.006	.075	.007	.080	.937
S. Orientation	-.109	.084	-.114	-1.302	.195
Ethnicity	-.144	.087	-.141	-1.656	.100
RHA Position	-.126	.077	-.135	-1.648	.102
GPA	-.051	.041	-.111	-1.237	.218
Class Level	-.031	.048	-.081	-.659	.511
RHA Years	.005	.050	.013	.108	.914
Institution	-.022	.034	-.054	-.638	.525

**. p < .01 level

Self Values Component Regression

Table 142 Correlations with Regression Predictors (Multi-Orgs; Self Component)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.266	.001**
Gender	-.038	.323
Sexual Orientation	-.061	.233
Ethnicity	-.036	.335
RHA Position	-.117	.080
GPA	.078	.174
Class Level	.041	.310
Number of RHA Years	.033	.348
Institution Enrollment	.071	.196

**. Correlations significant at .01 (1-tailed)

Table 143 Regression Model Summary with the EII Score (Multi-Orgs; Self Component)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.290	.084	.023	.372

Table 144 ANOVA with the EII Score (Multi-Orgs; Self Component)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.721	9	.191	1.385	.201
Residual	18.780	136	.138		
Total	20.501	145			

Table 145 Coefficients with the EII Score (Multi-Orgs; Self Component)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.294	.205		20.978	.000
EII	.001	.000	.260	2.944	.004**
Gender	-.003	.071	-.003	-.036	.971
S. Orientation	-.013	.080	-.015	-.168	.867
Ethnicity	-.040	.083	-.042	-.484	.629
RHA Position	-.092	.073	-.106	-1.263	.209
GPA	-.002	.039	-.004	-.048	.962
Class Level	-.004	.045	-.011	-.087	.931
RHA Years	-.010	.048	-.026	-.208	.835
Institution	.009	.032	.023	.264	.792

**. p < .01 level

Collaboration value Regression

Table 146 Correlations with Regression Predictors (Multi-Orgs; Collaboration)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.340	.000**
Gender	.000	.498
Sexual Orientation	-.126	.064
Ethnicity	-.026	.378
RHA Position	-.138	.048*
GPA	.200	.008**
Class Level	.047	.286
Number of RHA Years	.036	.331
Institution Enrollment	.104	.106

*. Correlations significant at .05 (1-tailed)

**. Correlations significant at .01 (1-tailed)

Table 147 Regression Model Summary with the EII Score (Multi-Orgs; Collaboration)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.394	.155	.099	.450

Table 148 ANOVA with the EII Score (Multi-Orgs; Collaboration)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	5.060	9	.562	2.772	.005**
Residual	27.582	136	.203		
Total	32.643	145			

**. p < .01 level

Table 149 Coefficients with the EII Score (Multi-Orgs; Collaboration)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.058	.248		16.357	.000
EII	.002	.001	.308	3.632	.000**
Gender	.080	.086	.080	.933	.352
S. Orientation	-.089	.096	-.079	-.925	.357
Ethnicity	-.015	.100	-.013	-.153	.878
RHA Position	-.131	.088	-.120	-1.485	.140
GPA	.067	.048	.124	1.409	.161
Class Level	-.015	.055	-.032	-.265	.792
RHA Years	-.022	.058	-.046	-.379	.705
Institution	.008	.039	.017	.212	.833

**. p < .01 level

Common Purpose value Regression

Table 150 Correlations with Regression Predictors (Multi-Orgs; Common Purpose)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.348	.000**
Gender	-.066	.214
Sexual Orientation	-.076	.182
Ethnicity	.016	.423
RHA Position	-.135	.052
GPA	.115	.083
Class Level	.063	.224
Number of RHA Years	.085	.153
Institution Enrollment	.039	.321

**. Correlations significant at .01 (1-tailed)

Table 151 Regression Model Summary with the EII Score (Multi-Orgs; Common Purpose)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.369	.136	.079	.398

Table 152 ANOVA with the EII Score (Multi-Orgs; Common Purpose)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.397	9	.377	2.388	.015*
Residual	21.499	136	.158		
Total	24.896	145			

*. p < .05 level

Table 153 Coefficients with the EII Score (Multi-Orgs; Common Purpose)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.284	.219		19.558	.000
EII	.002	.000	.339	3.957	.000**
Gender	-.019	.076	-.022	-.252	.801
S. Orientation	-.005	.085	-.005	-.061	.952
Ethnicity	.013	.088	.012	.146	.884
RHA Position	-.103	.078	-.108	-1.327	.187
GPA	.015	.042	.031	.353	.725
Class Level	-.021	.048	-.052	-.429	.669
RHA Years	.013	.051	.031	.257	.798
Institution	-.012	.035	-.028	-.340	.734

**. p < .01 level

Controversy with Civility value Regression

Table 154 Correlations with Regression Predictors (Multi-Orgs; Controversy with Civility)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.118	.078
Gender	-.025	.382
Sexual Orientation	-.129	.060
Ethnicity	.090	.139
RHA Position	-.075	.186
GPA	.058	.244
Class Level	.065	.216
Number of RHA Years	.061	.233
Institution Enrollment	-.022	.398

Table 155 Regression Model Summary with the EII Score (Multi-Orgs; Controversy with Civility)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.204	.041	-.022	.446

Table 156 ANOVA with the EII Score (Multi-Orgs; Controversy with Civility)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.168	9	.130	.653	.749
Residual	27.007	136	.199		
Total	28.175	145			

Table 157 Coefficients with the EII Score (Multi-Orgs; Controversy with Civility)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.026	.245		16.399	.000
EII	.001	.001	.093	1.030	.305
Gender	.011	.085	.012	.129	.898
S. Orientation	-.116	.095	-.111	-1.216	.226
Ethnicity	.106	.099	.095	1.073	.285
RHA Position	-.048	.087	-.047	-.550	.583
GPA	.022	.047	.045	.479	.633
Class Level	.012	.054	.028	.216	.829
RHA Years	-.008	.057	-.018	-.144	.886
Institution	-.021	.039	-.048	-.551	.582

Group Values Component Regression

Table 158 Correlations with Regression Predictors (Multi-Orgs; Group Component)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.319	.000**
Gender	-.034	.340
Sexual Orientation	-.132	.055
Ethnicity	.031	.357
RHA Position	-.138	.048*
GPA	.150	.035*
Class Level	.069	.203
Number of RHA Years	.071	.197
Institution Enrollment	.050	.275

*. Correlations at .05 (1-tailed)

**. Correlations significant at .01 (1-tailed)

Table 159 Regression Model Summary with the EII Score (Multi-Orgs; Group Component)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.357	.128	.070	.360

Table 160 ANOVA with the EII Score (Multi-Orgs; Group Component)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.578	9	.286	2.211	.025*
Residual	17.618	136	.130		
Total	20.196	145			

*. $p < .05$ level

Table 161 Coefficients with the EII Score (Multi-Orgs; Group Component)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.123	.198		20.792	.000
EII	.001	.000	.293	3.397	.001**
Gender	.024	.069	.031	.350	.727
S. Orientation	-.070	.077	-.079	-.910	.364
Ethnicity	.035	.080	.037	.433	.666
RHA Position	-.094	.071	-.109	-1.335	.184
GPA	.035	.038	.082	.915	.362
Class Level	-.008	.044	-.022	-.179	.858
RHA Years	-.006	.046	-.015	-.123	.902
Institution	-.008	.031	-.022	-.264	.792.

**. p < .01 level

Citizenship value/Society Values Component Regression

Table 162 Correlations with Regression Predictors (Multi-Orgs; Citizenship/Society Component)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.301	.000**
Gender	-.045	.295
Sexual Orientation	-.145	.041*
Ethnicity	.010	.455
RHA Position	-.087	.149
GPA	.147	.038*
Class Level	.006	.471
Number of RHA Years	.036	.335
Institution Enrollment	.075	.184

*. Correlations significant at .05 (1-tailed)

**. Correlations significant at .01 (1-tailed)

Table 163 Regression Model Summary with the EII Score (Multi-Orgs; Citizenship/Society Component)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.340	.115	.057	.451

Table 164 ANOVA with the EII Score (Multi-Orgs; Citizenship/Society Component)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.612	9	.401	1.971	.047*
Residual	27.693	136	.204		
Total	31.304	145			

*. p < .05 level

Table 165 Coefficients with the EII Score (Multi-Orgs; Citizenship/Society Component)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.347	.249		17.486	.000
EII	.002	.001	.281	3.239	.002**
Gender	.028	.086	.028	.324	.747
S. Orientation	-.113	.097	-.102	-1.165	.246
Ethnicity	.023	.100	.019	.227	.821
RHA Position	-.073	.088	-.068	-.823	.412
GPA	.040	.048	.075	.838	.404
Class Level	-.045	.055	-.101	-.827	.410
RHA Years	.007	.058	.014	.117	.907
Institution	.001	.039	.003	.037	.970

**. p < .01 level

Change value Regression

Table 166 Correlations with Regression Predictors (Multi-Orgs; Change)

Predictor	Pearson Correlation	Significance (1-tailed)
EII	.164	.024*
Gender	-.126	.065
Sexual Orientation	-.159	.027*
Ethnicity	.037	.330
RHA Position	-.230	.003**
GPA	.107	.099
Class Level	.063	.225
Number of RHA Years	.072	.193
Institution Enrollment	.049	.280

**. Correlations significant at .01 (1-tailed)
RHA Position (Single Position = 0; Dual Position = 1)

Table 167 Regression Model Summary with the EII Score (Multi-Orgs; Change)

R	R Squared	Adjusted R Square	Std. Error of the Estimate
.315	.099	.039	.503

Table 168 ANOVA with the EII Score (Multi-Orgs; Change)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.786	9	.421	1.661	.104
Residual	34.448	136	.253		
Total	38.235	145			

Table 169 Coefficients with the EII Score (Multi-Orgs; Change)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.107	.277		14.814	.000
EII	.001	.001	.112	1.278	.203
Gender	-.088	.096	-.081	-.912	.364
S. Orientation	-.114	.108	-.093	-1.059	.291
Ethnicity	.072	.112	.055	.642	.533
RHA Position	-.252	.099	-.212	-2.552	.012*
GPA	.025	.053	.043	.470	.639
Class Level	-.004	.061	-.008	-.069	.945
RHA Years	-.006	.065	-.011	-.092	.927
Institution	.017	.044	.033	.384	.702

*. $p < .05$ level

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