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# The Relationship Of Extracurricular Activity On Leadership Development: Comparing International And Domestic Students

JUHEE KIM
*Eastern Kentucky University*

THE RELATIONSHIP OF EXTRACURRICULAR ACTIVITY ON LEADERSHIP DEVELOPMENT: COMPARING INTERNATIONAL AND DOMESTIC STUDENTS

BY

JUHEE KIM

THESIS APPROVED:

William Phillips (Dec 10, 2020 09:00 EST)

Chair, Advisory Committee

A. William Place

A. William Place (Dec 10, 2020 10:10 EST)

Member, Advisory Committee

Charles Hausman (Dec 10, 2020 10:13 EST)

Member, Advisory Committee

Dean, Graduate School

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BY

JUHEE KIM

Submitted to the Faculty of the Graduate School of

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# DEDICATION

This dissertation is dedicated to my loving and patient parents, Jongho Kim and Suhwan Oh, who raised me to set high goals and to be resilient in my journey to accomplish them. Thank you not just for being my parents, but for your continued love and support in this process.

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# ABSTRACT

This study explores how extracurricular activities experiences affect students' leadership development outcomes. The current status of students' experiences of extracurricular activities and leadership development outcomes identified. Also, it analyzed the correlation, as well as how they contribute to the college students' leadership. Lastly, the result was compared between international students and domestic students. This study focuses on the individual, group, and community/society values of the Social Change Model of Leadership Development. Data was collected from 708 college students and analyzed using quantitative methodology.

The results showed that college students' participation in extracurricular organizations was relatively lower than high school students. Gender, class level, and student type were positively associated with student leadership development. Specifically, higher involvement in extracurricular activity produces higher leadership development outcomes. Students' self-perception of leadership skills were the most significant predictors of all values of leadership development outcomes.

Participation in extracurricular activities exerted a direct positive effect on leadership development outcomes. Educators should be challenged explicitly to enhance students' participation in leadership development and provide bridge programs that give domestic students more opportunities to participate in extracurricular activities with international students. This study can guide leaders in higher education to structure student participation opportunities that positively affect a student's leadership development outside the classroom.

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# CHAPTER ONE

# INTRODUCTION

Clubs and sports are a great way for students to meet people with common interests, stay out of trouble, and develop their creativity and confidence. Experiences in extracurricular or co-curricular activities improve student learning experiences and influence student leadership development (Foreman & Retallick, 2013; Komives et al., 2011). An analysis across studies relating to extracurricular activities reveals key predictors of college student leadership development. In this chapter, the study explained the research problem, conceptual framework, purpose and significance of the study, research questions, definitions of terms, and limitations and delimitations.

## Statement of the Problem

The purpose of this study is to explore how extracurricular organization experiences influence student leadership development for international students as compared to domestic students in the United States. Experiences in extracurricular activities and student organizations are becoming an essential and important part of campus life. Higher education has recognized participation in extracurricular activities to extend leadership development as a learning outcome. According to Dugan and Komives (2007), the work that purposefully develops socially responsible leaders is the responsibility of all members of the campus community.

The Council for the Advancement of Standards in Higher Education identified leadership as one of the student learning and development outcomes (Strayhorn, 2006). It is important to offer a variety of types of leadership programs with varied content and commitment requirements, but educators should direct much of their energy to ensure

that powerful leadership pedagogies are in place (Komives et al., 2011, p. 294). Identifying and marketing specific leadership learning outcomes will help students know how an event will enhance their leadership development. These initiatives serve as a valuable means for integrating intentional leadership outcomes into programs designed to enhance leadership among all students.

During the last decade, the educational reform movement has been affected by educational leadership (Foreman, 2012; Murphy, 1991). Several researchers discovered a relationship between extracurricular participation and leadership outcomes (Astin, 1999; Ewing et al., 2009; Foreman & Retallick, 2013; Hancock et al., 2012; Simonsen et al., 2014). However, little research has explored how collegiate experiences influence the outcomes of international students' leadership development.

Addressing this lack of research for international students is important because international students are increasing in our society, and higher education institutions need to meet their needs (Geary, 2016). The U.S. Department of Education and related associations (2016) indicate that colleges and universities are emphasizing that campus diversity identity can help to reach their institutional goals. To promote student diversity and inclusion on campus, it has been recommended that colleges and universities focus on institutional commitment to an inclusive campus climate.

Encouraging participation in extracurricular activities can critically help diverse students' academic development and persistence (U.S. Department of Education et al., 2016). However, international students tend to have lower rates of engagement in campus organizations because available activities do not reflect their cultural interests or a lack of sensitivity to international students' cultures. Multicultural clubs, unions,

associations, or other extracurricular activities can help with diversity, which benefits both international and domestic students (Luo & Drake, 2013). This might increase cultural awareness, satisfaction with the college experience, and desire to promote racial acceptance.

## Conceptual Framework

The conceptual framework for this study focuses on college student development by utilizing student development theory. Two topics centered on student development are co-curricular/extracurricular activity involvement and leadership. College students can increase their leadership skills during the college years (Dugan, 2006b: Pascarella & Terenzini, 2005), and this increase can be attributed in part to collegiate involvement (Astin, 1993). Meanwhile, the Social Change Model of Leadership Development (Higher Education Research Institute, 1996) provides the theoretical frame for this study as it was created specifically for college students and is consistent with the emerging leadership paradigm.

The social identity theory (SIT, Tajfel, 1981), and the international student identity model (ISIM, Kim, 2012) are an integral part of the study to compare international students with domestic students. Social identity is a person's sense of who they are based on their group membership (McLeod, 2019). The theory argues that groups are motivated to achieve a positively distinctive identity and highlights the varied effects of specific cross-cultural diversity on group membership, perceptions, and interactions (Zhou, et al., 2008).

**Student Involvement**

Astin (1984) is the main contributor to empirical knowledge regarding environmental influences on student development. This theory offers a foundation for the potential benefits of pre-college student participation in leadership development activities. He proposed College Impact Models, which have come to be known as the Inputs-Environment-Outcome (I-E-O) Model. The IEO Model controls what a student brings to campus such as demographics or pre-college experiences and examines proximal aspects of the environment such as the amount of involvement, leadership training, and discussions of socio-cultural issues. The IEO Model also predicts various leadership outcomes (Strayhorn, 2008).

The student involvement theory examines the student experience and learns how educational programs and policies are related to student development (Astin, 1999). It has been used for researchers and practitioners to carry out research, make administrative decisions, develop curriculums and programs. The involvement theory of Astin (1999), which covers student academic and social interaction, theorizes that the quality and quantity of student involvement in academic and social interactions influence student learning and development.

Astin (1984) also noticed that student involvement with their effort and energy in extracurricular activities resulted in the desired learning and development outcomes. Based on Astin's research topics, Foreman and Retallick (2013) explored that leadership scores were influenced by the number of organizations a student was involved in and the leadership role they took. They also suggested that involvement in three to four organizations is optimal. Besides, Foreman and Retallick (2016) indicated

that community values of leadership development outcomes had a strong relationship with extracurricular activities involvement.

In contrast with other theories related to students' development, the theory of involvement emphasizes students taking on an active role in their education (Astin, 1999). Astin's theory encourages educators to shift the focus from what teachers or administrators do to what the students do. Significantly, this theory not only explains the considerable findings that have emerged from decades of research on student development but also offers educators a tool for designing more effective learning environments.

The principal advantage of the student involvement theory over traditional pedagogical approaches is shifted from subject matter and technique toward students' motivation and behavior. It views student time and energy as institutional resources, although limited. Thus, most institutions changed the evaluation frame of policies and practices to increase students' involvement. Similarly, all college personnel including counselors, student personnel workers, faculty, and administrators can assess their activities in terms of their success in encouraging students to become more involved in the college experience.

Peer interactions that fostered leadership included curricular and co-curricular activities that have students engage with different ethnic groups (Astin 1993, as cited in Smith & Chenoweth, 2015). As the students planned and implemented activities, both peer-to-peer and faculty-to-student interactions were products of student organization involvement. Additionally, the faculty advisors provided oversight to the club and guidance to the club officers.

## Leadership Development

Previous studies have found that undergraduates develop leadership skills through extracurricular activities (Moore et al., 2008). Researchers (Buschlen & Dvorak, 2011; Dugan & Komives, 2010) view leadership development as a critical part of the undergraduate experience. Astin and his work with the Cooperative Institutional Research Program (CIRP) provide a crucial platform and data resource to explore the topic in greater depth (Komives et al*.,* 2011). Significantly, Astin provided the foundation on which contemporary theory and research on college student leadership have been constructed.

Most contemporary research on college student leadership has been theoretically grounded using the Social Change Model (SCM) of leadership development. This model is a leading theory of collegiate leadership development (Komives et al., 2011). This model encourages students to develop leadership as a process and highlights that leadership is inherently linked to social responsibility and creates change for the common good. However, it does not take into account cultural competence in these values (Komives et al., 2011). This study does not only focus on the Social Change Model but also studies cultural diversity influences on student leadership development through students' collegiate activities.

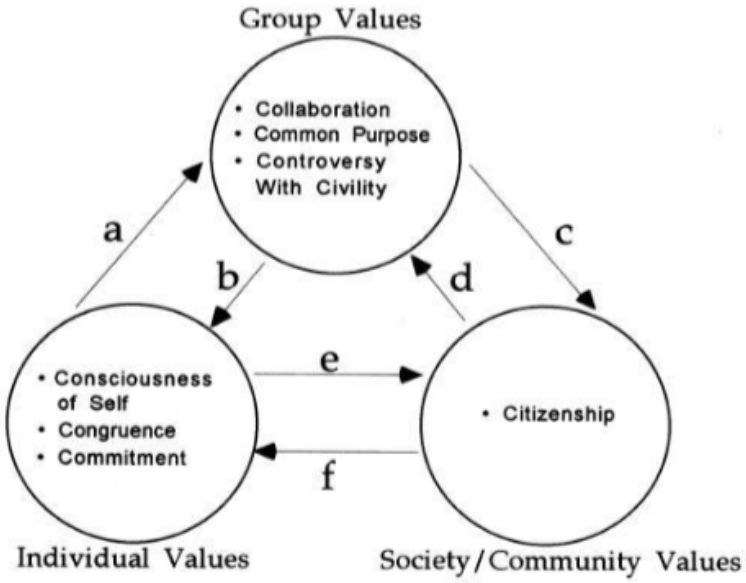
### *Social Change Model*

The Social Change Model of leadership (SCM, Higher Education Research Institute, 1996) was created specifically for use with college students. The SCM of leadership development has the individual, group, and society/community values level (figure 1.1). Under each level, SCM identifies seven core values that include the

consciousness of self, congruence, commitment for individuals; collaboration, common purpose, controversy with civility for groups; and citizenship for societies (Astin & Astin, 1996).

Figure 1. 1.

*Social Change Model of Leadership*




*Note*. Adapted from a social change model guidebook version III, Higher Education Research Institute, 1996, p. 19.

These values represent a student's leadership knowledge and capacity, and as a whole, contribute to community change for the common good. Social change can be reached through the purpose-driven, collaborative, value-based approach to leadership taken by this model (Dugan & Komives, 2007; Komives et al., 2009; Foreman & Retallick, 2013).

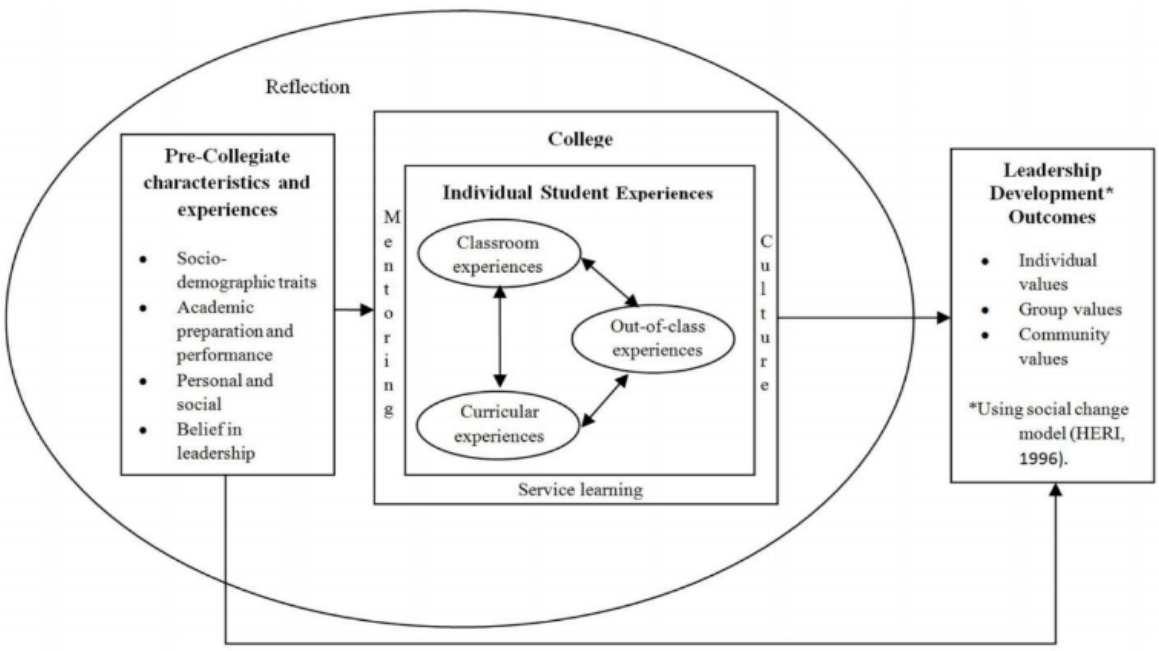
***Collegiate Leadership Development Model***

Reason et al. (2006) developed a model that examines the influences on student learning and persistence in the first year. This model, which was called a

comprehensive model of influences on student learning and persistence, expanded the inputs (I), environment (E), and outcomes (O) concepts found in the college impact model (Astin, 1991) and incorporated the organizational context (i.e., structure, policies and procedures, and faculty culture).

Figure 1. 2.

*Collegiate Leadership Development Model*




*Note.* Foreman & Retallick (2012) "Undergraduate involvement in extracurricular activities and leadership development in College of Agriculture and Life Sciences students" *Journal of Agricultural Education.* Permission to use for this study was obtained.

The Collegiate Leadership Development Model (Figure 1.2.) was adapted by Foreman and Retallick (2012). It has three elements in the same context as Astin's I-E-O Model (1991). The first two elements are pre-collegiate (Input) and college experiences (Environment), which previous literature suggested contribute to leadership

development in undergraduate college students. The third element, leadership development (Outputs), is the outcome of the model (Astin, 1991; Higher Education Research Institute, 1996).

**Social Identification and Interaction**

International students can benefit from interaction with host nations socially, psychologically, and academically (Zhou et al., 2008). Students view themselves in a much wider context during cross-cultural communication. Specifically, Tinto (1975) believed social integration leads to persistence which can help student retention rates (as cited in Turner, 2018). This social integration requires international students to adapt their learning both socially and culturally. In other words, they need to acquire the abilities of social skills and behavioral competence to adapt culturally.

Tajfel's (1981) Social Identification Theory (SIT) applies to students for social and behavioral adaptation. The SIT of Tajfel (1981) considers how group membership affects individual identity and highlights two aspects: "One is the role of social categorization and social comparison in relation to self-esteem, coupled with in-group favoritism and out-group derogation. The other is the varied effects of specific cross-cultural diversity on group membership, perceptions, and interactions" (as cited in Zhou et al, 2008, p. 67).

Interaction with international students allows students to develop a deeper understanding and communication skills regarding intercultural competence (Luo & Drake, 2013). This is one aspect of the person-environment interaction theory. Also, interaction with international students makes domestic students work effectively with

people who come from various backgrounds and benefits their employers as it leads them more sensitive to cultural differences.

Previous research has found that international students report a variety of integration issues stemming from stereotyping and racism (Poyrazli & Grahame, 2007) and negative interactions with both domestic students and staff (Rose-Redwood & Rose-Redwood, 2013). According to Lee & Rice (2007), international students have reported lower levels of confidence as compared to domestic students, which may preclude international students from engaging in class, campus, or community activities.

Kim's (2012) International Student Identity (ISI) Model builds upon existing research related to psychosocial identity development theory, racial and ethnic identity development models, and cross-cultural adjustment models. This model posited international students' progress through six phases in their development: Pre-exposure, Exposure, Enclosure, Emergence, Integration, and Internationalization. Kim (2012) found that most students are in the enclosure phase where students withdraw from their environment, socialize exclusively with those from their cultural group, lack confidence in their English, and are driven by routine. Their limited interaction with American students and American life often leaves them feeling isolated and lonely. Additionally, they are missing out on the enriching experiences of cultural immersion (Turner, 2018).

By the way, Collier et al. (2017) explored the effects of participation in formal leadership training in international students compared to domestic students. They found that international students' growth was statistically different in ethical leadership skills, affective identity motivation to lead, and leadership self-efficacy from domestic

students. They focused on the benefits of leadership development to international students and why campuses could build partnerships between units that serve international students and leadership educators to facilitate a more inclusive campus.

## Purpose and Significance of the Study

This study explores how extracurricular organization experiences influence student leadership development for international students as compared to domestic students. This empirical study utilizes the theory of involvement relating to participation in extracurricular activities to leadership development outcomes. International and domestic students in Kentucky are compared to each other.

Independent variables of participation in extracurricular activities are defined as the amount of time spent, leadership position, number of extracurricular clubs and organizations, and involvement level. Dependent variables are identified at the individual, group, and society/community levels of leadership development outcomes. The control and intervening variables are defined based on demographic general characteristics, the experience of pre-collegiate and collegiate extracurricular activities, and involvement levels.

This study includes five research sub-areas. First, the current status of student's experience of participating in extracurricular activities is described. It includes demographic characteristics such as gender, race, class level, and student type. And collegiate experiences of extracurricular organizations/clubs are explained by the type of organizations/clubs and the quantitative (e.g., amount of time spent, number of extracurricular clubs) and qualitative aspects (e.g., the highest level of participation) of involvement as well as pre-collegiate experiences.

Second, leadership development outcomes by general characteristics and experience of participating in extracurricular activities are identified. Leadership outcomes are determined using the National Clearinghouse for Leadership Programs' (NCLP) Responsible Leadership Scale Revised Version 2 (SRLS-R2, NCLP, 2009). This scale indicates how general characteristics, collegiate experiences of extracurricular organizations/clubs, leadership training, and participating with international students influence each individual, group, community values, and an omnibus of leadership development outcomes. In addition, it indicates how pre-collegiate experiences of extracurricular organizations/clubs, leadership training impact leadership development outcomes.

Third, the study examines the relationship between extracurricular involvement and leadership development outcomes demonstrated by the involvement experiences and index level. Involvement experiences of extracurricular activity regarding quantitative and qualitative aspects are indicated the differences in the mean of individual, group, and community values of leadership development outcomes. The involvement index is calculated by a combination of involved years and level of participation ranging while in college and high school and leadership self-perception.

Forth, the study analyzes the correlation between general characteristics, pre-collegiate, and collegiate experiences and leadership development outcomes, as well as how they contribute to the college students' individual, group, and community values of leadership development. Lastly, the study compares and analyzes the result of leadership development between international students and domestic students for the above purposes.

The examination of the effects of participating in extracurricular activities is important to this study because it helps to identify factors contributing to significant differences in leadership development outcomes. This study would be valuable as educators work with student leaders to create meaningful experiences for their development. To facilitate learning experiences, educators, and institutions of higher education might benefit from the knowledge that extracurricular activities enhance college students' leadership development. Ultimately, they can develop students' leadership and build effective partnerships between international students and domestic students.

According to the U.S. Department of Education et al., (2016), it is critical to understand advancing postsecondary diversity and inclusion. Moreover, the benefits of diversity in education, especially higher education, stretch far and wide — affecting students' academic and social experiences. In other words, diversity on college campuses enriches the educational experience (American Council on Education, 2012), and students should learn from those whose experiences, beliefs, and perspectives different from their own. These lessons can be taught best in a richly diverse intellectual and social environment.

## Definition of Terms

The following terms are used in this study.

1. Leadership - "An influential relationship among leaders and followers who intend real changes that reflect their mutual purposes" (Rost, 1991, p. 102).

2. Social Changes Model - Post-industrial model of leadership development. Leadership is relational, transformative, process-oriented, learned, and change-driven (Dugan & Komives, 2007).
3. Socially Responsible Leadership Scale (SRLS-R2) – This is an instrument designed to assess college students' leadership participation. The SRLS-R2 is a 68-item instrument that measures three values level associated with leadership development as defined by the Social Change Model (SCM) (Dugan, 2006a). SRLS-R2 Omnibus is measuring the overall construct of leadership development.
    - Individual values: consciousness of self, congruence, and commitment. What individual qualities should students learn? What personal qualities support effective collective action and social change?
    - Group values: collaboration, common purpose, controversy with civility. What processes do students need to learn to work effectively in groups? How can collaboration foster individual development and social change?
    - Social/Community values: citizenship. How involvement in positive change in the community can promote group collaboration and develop individual character?
4. Extracurricular activity - Out of classroom learning experiences, such as participation in university, college, academic major, sport and recreation, competitive teams, faith-based, and community organizations (Foreman, 2012).

5. International Student - The UNESCO Institute for Statistics, the OECD, and Eurostat define international students who have crossed borders for their study. They are not residents of their country of study or those who received their prior education in another country (OECD, 2013).

## Limitation and Delimitation

There are limitations to the study which should be taken into consideration. This study was completed at only three universities (Eastern Kentucky University, Berea College, and University of Kentucky) in only one state. As such, a study of this scope can limit the generalizability compared to studies that include larger samples from more universities.

The data used for this study were self-reported data by college students, which also is something to consider when using the data to make generalizations because the responses may not represent the truth of the respondents' situations. The population of international students and domestic students was also distinguished by their self-identified checking.

The study set a significance at .05. As far as error goes, 5% of the wrong conclusion can be drawn. So every test this study ran had a 5% chance of a false positive. Also, the study is only looking at a limited twelve predictor variables in pre-collegiate and collegiate experiences. There could be other variables that this study did not use that could impact the relationships, but these were the variables chosen for this study.

In this study, collegiate experiences were delimitated by extracurricular activities, co-curricular activities (e.g., internship, service-learning, etc. related to the major or subjects), and student organizations (e.g., student government association).

Despite these limitations, the findings of this study will further provide insights and valuable information for other institutions, researchers, educators, and administrators who aspire to increase student leadership outcomes as well as promote diversity and inclusion on campus. It might ultimately lead to institutions enhancing students' retention and graduation.

# CHAPTER TWO

# LITERATURE REVIEW

In this section, the study will review the relevant literature pertaining to collegiate activity experiences, and college student leadership as a category.

## Collegiate Activity Experience

Kuh and Umbach (2004) used data from the National Survey of Student Engagement and concluded that organizations should arrange activities both in-class and out-of-class to reveal a wide range of students' opportunities. Layfield, et al., (2000) found empirical evidence that experiential learning is key to building leadership skills. Students will not gain leadership skills without meaningful team leadership opportunities. To promote student leadership, this section of collegiate activity experiences will explain objective participation benefits through extracurricular activities, co-curricular activities, student organizations, and interaction with international students.

### Extracurricular Activities

Extracurricular activities are optional institutional activities that are separate from the required curriculum while enhancing students' experiences (Bartkus et al., 2012). Several researchers (e.g., Cooper et al., 1994; Rubin et al., 2002) found many dependent variables that were positively linked to involvement in extracurricular clubs and organizations. Rubin, et al. (2002) studied the relationship between involvement in extracurricular activities and interpersonal skills (e.g., oral communication, decision making, teamwork, conflict resolution, and initiative) and found that undergraduates who were involved in extracurricular activities had higher measures of interpersonal

skills than those who did not participate. Similarly, Cooper, et al. (1994) asserted that students who participated in extracurricular clubs and organizations had higher scores in developing purpose, establishing and clarifying purpose, and conflict resolution skills.

Student leadership development is often associated with activity participation and the extent of student engagement. Eccles and Barber (1999) analyzed the possible benefits and risks involved in participating in different types of activities. Positive educational trajectories and low rates of involvement in risky behaviors were associated with extracurricular involvement in prosocial activities. Their research revealed several positive benefits including reduced dropout rate, decreased substance abuse, and increased the development of self-concept, school engagement, and educational aspiration.

Furthermore, Lamborn, et al. (1992) examined the relationship between school-related clubs and non-athletic activities and found that both were positively related to the likelihood of attending college. When looking at broader measures of student engagement, Lamborn et al. noted leadership activities were better than solely sports when considering student growth. Wood, et al. (2009) also indicated that involvement in activity programs and a sense of heightened responsibility has also been investigated and there appears to be a link.

Involvement in extracurricular activities has been associated with several positive adolescent outcomes. For instance, adolescents involved in school and community-based civic activities reported more religiosity, academic engagement, and positive perceptions of parents and peers than uninvolved ones (Ludden, 2011). Moreover, Hancock et al. (2012) specifically examined adolescents' participation in

sports, school, and community extracurricular activities to assess the influence of different involvement roles and suggest adolescents' perceptions towards their leadership skills are influenced by extracurricular activity involvement role. In another study by Fredricks and Eccles (2008), organized activity participation indicates the link with higher-than-expected grades, self-esteem, resilience, school values, and prosocial peers.

Different types of extracurricular activities provide distinct patterns of experiences. Previous research by Eccles and Barber (1999), suggested that involvement in sports activities had positive self-esteem and negative effects of alcohol use on adolescents. More specifically, Linver et al. (2009) found that those who participated only in sports had more positive outcomes compared to those who had little or no involvement in organized activities, but less positive outcomes compared with those who participated in sports plus other activities. When gender was considered, sports involvement has been found to impact males and females differently. Girls were more likely to be in various organizations such as sports, schools, and religious group's clusters while boys were more likely to only participate in sports and be less involved in other clusters.

Researchers (Astin, 1993; Dugan & Komives, 2007; Pascarella & Terenzini, 2005) have examined the role of quantitative involvement features related to extracurricular experience, including "the number of clubs, which students participated, meeting participation and the number of hours students spent participating in club and organizations" (Foreman & Retallick, 2013, p 59).

Mahoney, Harris, and Eccles (2006) have also considered the number of times students spend in extracurricular activities. The more time students spend in structured extracurricular activities, the less time they have to become involved in unsupervised activities. However, Marsh (1992) found that extracurricular activity participation, when excessive, might result in decreased time spent on the academic study (as cited in Hancock et al., 2012). Mahoney et al. (2006) went on to say that over-scheduling extracurricular activities can result in a poor adjustment, higher stress, less time spent with family.

Involvement in too many different types of organizations was also negatively related to leadership outcomes (Dugan & Komives, 2007). The study of Foreman and Retallick (2013) supported Astin's assumption that there might be a desirable limit of involvement. The results indicated excessive involvement decreases the quality and outcomes of leadership. Although over-scheduling has been found to have negative effects on activity outcomes, the benefits of extracurricular activity involvement increased as the level of participation increased.

**Co-curricular and Student Organization Activities**

There is a growing research base on the process, impact, and participant outcomes of co-curricular leadership programs (Dugan et al., 2013); yet, little is known about effective facilitation in co-curricular leadership settings. The increased focus on student leadership development, paired with the movement in higher education to view co-curricular programs as a key component in the institution's learning goals, suggests the timeliness of the need to increase our understanding of effective facilitation in co-curricular leadership programs (Mcree & Haber-Curran, 2016).

Student involvement in co-curricular activities such as student organizations, leadership positions, and activity in campus residence halls has a positive correlation with retention and academic success (Komives et al., 2011). Because of the positive aspects of co-curricular involvement, universities have been encouraging students to become involved.

In summary previous research has indicated educators should provide a variety of leadership programs with varying content and commitment criteria, but they must focus on ensuring strong leadership pedagogies are in place first. Identifying and promoting specific learning outcomes for leadership helps students understand how an event can boost their leadership development. Such interventions serve as a powerful way of incorporating leadership results into programs aimed at improving leadership among all students.

An exploration of the literature on the influence of co-curricular opportunities on students' development of leadership skills indicated that students learn these skills at least in part by practicing them. According to Hackman and Wageman (2007), when students have the opportunity to work on projects and problems with the support of faculty and staff advisors, they can experience cognitive and behavioral leadership learning. Through the experience of student organization activities, students also develop peer interactions and leadership roles that provide the foundation for leadership training (Haber, 2011).

For relational leadership behaviors, students active in co-curricular organizations also assess themselves significantly more positively on having strong people skills, as serving as a model for others, dealing effectively with failure, dealing

well with stress, resolving conflict, communicating clearly, working effectively in teams, and being a good listener (Smith & Chenoweth, 2015). As a result, this study indicated that students involved in student organizations rate their leadership behaviors higher than those who do not engage in school organizations.

Extracurricular involvement covers a wide range of activities, and researchers have organized these activities into different groups. Dugan (2013) named different student groups. For example, "identity and expression" groups include theatre, arts organizations, and academic groups, including traditional campus-wide programming activities. Researchers Elkins et al. (2011) divided students' involvement into such activities as recreational sports, community service, conferences, student organizations or clubs, student government, Greek organizations, and faith-based organizations. They found that students with moderate to high involvement in student activities perceived a greater sense of community, with variables related to teaching and learning.

Dunkel and Schuh (1998) classified student groups of student government: Greek letter organization, residence hall organizations, honorary, military, sports, departmental/professional, and special-interest (as cited in Smith & Chenoweth, 2015). However, regardless of how student organizations/clubs/activities were described, all offered opportunities for team projects, executive roles, and leadership practice.

**Interaction with International Students**

In the past decade, researchers have also begun to examine the educational benefits of peer-pairing programs for domestic student participants. For example, Geelhoed et al. (2003) found that U.S. participants gained new cultural insights, built empathy, and improved their intercultural skills. Notably, ongoing interactions between

U.S. students and their international partners positively influenced the attitudes towards international students of U.S. students and friends. Also, in a study of the impact of intercultural business communication, Cheney (2001) noted that structured international interaction could generate two specific benefits for both groups of students: increased awareness of language usage in both English and foreign language and the development of international friendships. These benefits might "serve as a valuable source of social, cultural, political, and economic knowledge when U.S. students enter the workforce" (p. 99).

Moreover, domestic students could have a competitive advantage on the market with enhanced cultural sensitivities and skills needed to work successfully with people from different backgrounds, in an increasingly integrated, globalized world (Calleja, 2000; Montgomery, 2009). Interacting with international students seems to benefit domestic students in the development of their cognitive skills. In their study of the effects of diversity experiences, Pascarella, et al. (2001) found that having serious discussions with international students had a significant, positive effect on third-year critical thinking for Caucasian female students.

In a similar study on diversity impacts, Hu and Kuh (2003) noted that male students, juniors, and seniors were more likely than female students, freshmen, and sophomores to interact with international students. Also, they found that interactional diversity experiences had substantial, uniformly positive effects on all college outcome variables (i.e., general education, personal development, science and technology, vocational preparation, intellectual development, total gains, and diversity competence measures).

Through the use of alumni survey data and the documentation of the perceptions of three graduating cohorts on their collegiate diversity experiences, the study of Luo and Drake (2013) identifies the effects of international interaction for understanding the impact of international interaction on college outcomes. This study showed that substantial international interaction contributed to U.S. students' beliefs and values. Further analyses revealed that students' questioning their beliefs and values was positively related to their acquisition of leadership skills, intellectual development, and general education.

Longitudinal studies (Saenz et al., 2007) and cross-sectional studies (Trice, 2004) comparing the domestic students of varied ethnic backgrounds indicate diversity-related co-curricular activities are a significant predictor of social interaction between domestic and international students. Participation in co-curricular activities facilitates international students' social networking and provides opportunities to practice the language in a low-risk context (Gómez, 2002). International students who participate in collaborative, team-oriented campus leadership programs report more positive perceptions of the climate for diversity, and greater levels of personal and social development (Glass & Westmont, 2014). Furthermore, international students who participate in campus-wide cultural events, and socialize with other international students, also socialize more frequently with domestic students (Trice, 2004) and are more likely to persist through graduation (Severiens & Wolff, 2008).

Casual discussions outside of class, participation in religious-spiritual communities, and involvement in social community organizations have been documented to increase students' sense of campus belonging (Moores & Popadiuk,

2011). Despite the known benefits of co-curricular activities, one striking difference between domestic and international students is the relative amount of time each group spends socializing and relaxing among friends (Zhao et al., 2005). International students feel pressure to excel academically from family members back home or from the need to meet the academic requirements of their sponsoring agency; therefore, studying for long periods seems to be the most effective use of their time (Abel, 2002). The lack of leisure and relaxation, however, often hinders the formation of supportive social networks and inadvertently exacerbates an international student's sense of loneliness, depression, or stress (Glass & Westmont, 2014). In their study, participation in co-curricular activities exerted a direct positive effect on social belongingness.

## College Student Leadership

Leadership is one of the values for developing soft skills that enable someone to interact effectively and harmoniously with other people (Lippman et al., 2015). Students are facing changing issues in local communities as a new generation of leaders to build partnerships and take on leadership positions (Ewing et al., 2009). To meet this need, many institutions of higher education have focused on student development. Astin (1993) found that interaction between students had the strongest positive effects on leadership development as well as academic success and critical thinking.

Leadership experience includes any time that students have been responsible for a project or for guiding, motivating, or instructing others. Institutions of higher education desire student leadership abilities because they expect students in college leadership roles to make differences on a larger scale in academia and research in the future. Accordingly, showing that students have the sense of responsibility that leaders

require can be very attractive to such institutions. In this way, undertaking a leadership role helps students stand out from the group.

The section of "College Student Leadership" will clarify demographics and pre-college characteristics; dimensions of the collegiate context; leadership perception; leadership outcomes, including leadership characteristics and skills; and leadership roles.

**Demographics and Pre-college Characteristics**

Demographic characteristics have been studied and shown to be significant (Buschlen & Johnson, 2014; Pascarella & Terenzini, 2005) on college students' leadership development. Gender has been shown to support students' leadership development (Eagly, 2007; Haber, 2012; Rost, 1991). According to Buschlen and Johnson (2014), gender does mediate students' capacities for collaboration and citizenship. These findings support earlier research suggesting gender differences in leadership development (Eagly, 2007; Haber, 2012).

Kezar and Moriarty (2000) suggest both gender differences and the need to better align students' capacities with their sense of efficacy provide direction for targeting developmental interventions with college women and men. Zacherman and Foubert (2014) indicate that women seem to perform better academically when they are in co-curricular activities. This disparity showed that student affairs practitioners must be cognizant of how hours spent in student organizations impacted the development of men and women differently. Additionally, the SRLS was used in comparing gender differences in SCM outcomes (Dugan, 2006a; Haber & Komives, 2009).

Meanwhile, Dugan and Komives (2007) describe that African-American students indicated significantly higher and Asian Americans indicated lower scores on the Socially Responsible Leadership Scale. Also, Arminio and colleagues (2000) demonstrated the need to transform leadership training to include a variety of cultural perspectives. Campuses with leadership development programs should assess the population attending their programs to determine if students of color are adequately being served. Kezar and Moriarty (2000) illustrated that different strategies are necessary for the development of leadership among a diverse group of students. Specific extracurricular and co-curricular programs are recommended for meeting these needs. Komives et al., (2011) concluded that race appears to be a powerful influence on leadership development in both qualitative and quantitative research when racial categories are not used as proxies for the more powerful constructs associated with racial identity.

Students' pre-college leadership knowledge and skills are among the strongest predictors of their leadership capacity and efficacy (Komives et al., 2011). For this reason, colleges partnering with local schools to implement a peer leadership program could synergize both college students and high school students. Simonsen and colleagues (2014) sought to describe the potential relationship between student participation in activities during high school and the self-perceived leadership characteristics of first-time college students. The authors report community service during high school produced the highest participation rate among first-time college student respondents, followed by athletic participation. The level of student participation in both community service and athletics, based on the percentage of

respondents who served in a leadership role, suggests that students were also actively engaged in both activities.

Therefore, they insist that students should be encouraged to be active in these activities and possibly focus more on developing their leadership potential. These research outcomes provide insight regarding student activity and organization participation during high school and the relationship between participation and leadership characteristics such as charisma, determination, sociability, and integrity. The characteristic of sociability especially contributed to developing a positive social relationship between everyone involved.

**Dimensions of the Collegiate Context**

Colleges and universities have been committed to building students' leadership skills and abilities since their inception (Astin, 1996). Collegiate venues where students can learn and enhance their leadership skills include student service programs, collegiate organizations, and service-learning projects. For instance, Seemiller (2006) asserted that participation in a service-learning project encourages students to recognize the need for leadership in creating effective social change which supports the active utilization of these same leadership concepts in the future.

Astin (1999) indicated that there was a positive relationship between student participation in college, both academic and extracurricular, and student development. Boatman (1999) pointed out that colleges use both formal (instruction) and informal (extracurricular) methods to enhance student leadership abilities. Engbears (2006) also noted a significant increase in leadership development programs across college

campuses and ties this to a need for effective leadership development in preparing tomorrow's leaders and ultimately, the importance of leadership in society.

Students' experiences are important because student engagement in educationally purposeful activities has desirable effects on student learning and success during college (Kuh & Pike, 2005). Several consistent themes highlight important factors from the collegiate environment, such as efficacy, sociocultural discussion, involvement, and community service. These factors typically reflect a high impact on student learning. According to Dugan and Komives (2010), a strong indicator of socially responsible leadership was an emphasis on sociocultural conversations. Students identify an area of difference and then engage in a shared experience. Students should be taught how to engage in meaningful dialogue about and across differences and to purposefully create opportunities to do so in the context of leadership education. The degree to which students interact with and are mentored by faculty is positively related to their overall leadership capacity. However, further research is needed to unpack the specific types of interactions that are important.

Community service, service experiences, particularly those characterized by a deep partnership with communities, explorations of root causes of issues, and critical self-reflection, provide a platform to engage in social perspective-taking, collaborating, and expanding on worldviews. Komives et al. (2011) argued that the community service and leadership development offices on campus operate separately from one another except for a few collaborative programs. This involves encouraging students in the service area to make connections concerning leadership, social justice, and social

activism and support students in the leadership area with the infusion of service-based experiences into courses and training programs.

Several researchers examined the positional role as a leader/officer in an organization that is important to learning experiences and leadership development (Ewing et al., 2009; Dugan 2006b; Foreman & Retallick, 2013; Hancock et al., 2012). Students' general engagement in the collegiate environment and specifically their involvement as members of clubs and organizations and/or in positional leadership roles are positively associated with leadership capacity and efficacy (Astin, 1993; Dugan 2006b; Dugan & Komives, 2010; Komives et al., 2011). However, more work can be done to structure student organization involvement as developmental by encouraging the presence of other influential factors such as community service and sociocultural conversations. This enhances the potential impact of involvement in clubs and organizations on leadership development rather than relying on it as a by-product of working in a group context.

Komives et al. (2011) suggested that higher education is necessary to infuse high-impact learning strategies in their mission that include service-learning, sociocultural conversations across different cultures, mentoring relationships, efficacy-building experiences, and group involvement opportunities. It is worthwhile to lead the personal development of the next generation of societal leaders and change agents.

**Leadership Perception**

The study by Hancock et al., (2012) investigated students' participation in school, sports, and local community activities to evaluate the impacts of varying involvement roles on leadership ability. They concluded that a significant predictor of

recognition of their leadership abilities was adult support. Moreover, boys and girls who announced themselves as the captain had more positive perceptions towards their leadership abilities than members did, no matter what sort of activity they were involved in. This finding indicates that participation roles and the assistance of their teachers and parents influence students' perceptions of their leadership ability.

Furthermore, Lois and John's (2015) research demonstrated that students' perceptions of their activities influenced leadership skills. With significant differences, students who participated in school organizations were aware of their leadership traits including confidence, responsibility, persistence, optimism, and honesty. In the self-rankings of leadership characteristics for all measures of leadership traits, students who took part in student activities estimated their leadership abilities as stronger than those who did not. These results disclosed that students who were involved in extracurricular activities had more positive self-perceptions of leadership characteristics than students who were not engaged in activities.

According to Hannah et al. (2008), leadership efficacy is the belief that an individual possesses the skills and abilities needed to lead. This ability to facilitate the decision-making process and implement action is an important function of effective leadership. A leader must also be able to produce results, influence action, facilitate change, and build others. Simonsen et al. (2014) noted that the characteristics of leadership decision-making efficacy, the leader's ability to determine and communicate decisions, are viewed as components of effective leadership.

## Leadership Development

College student leadership development has increased attention since the early 1990s (Dugan & Komives, 2007). This attention included a paradigm shift in leadership to more relational, reciprocal models, and the development of new leadership models for college students (Higher Education Research Institute, 1996). Producing socially responsible leaders is the task of the entire campus community (Dugan & Komives, 2007).

The entire campus community has an obligation to produce socially responsible leaders. Most colleges and universities prioritize leadership development in their mission statements (Astin & Astin, 2000). This trend is consistent with the professional standards of the Council for the Advancement of Standards in Higher Education (CAS). One of the 16 learning and development outcomes, as identified by CAS (2006), is leadership development. The study includes leadership traits and skills as extended leadership development.

Early leadership philosophies were based upon a belief that leaders possessed personal characteristics or genetic traits that were perceived as prerequisites to leadership ability (Komives et al., 2007). More recently, philosophical leadership paradigms based on transformational, servant, authentic, and relational theories have emerged (Simonsen et al., 2014). A major paradigm shift was that leadership knowledge and skills were not viewed as inherited traits but as knowledge and skills that could be learned as well as taught (Eich, 2008; Komives et al., 2007). Therefore, as Cress, et al. (2001) have noted, a foundational principle for this framework was the belief that leadership potential exists within every student.

Students' leadership development is a significant result of higher education experience. Foreman and Retallick's (2013) study is consistent with previous research on the importance of participating in extracurricular clubs and organizations. Involvement in these activities has a strong relationship with leadership development. When designing executive plans, institutions should consider how extracurricular activities help to achieve success in leadership development outcomes.

### *Leadership Traits and Skill*

Simonsen et al. (2014) examined the connection between extracurricular activity participation and self-perceived leadership traits. According to the data of correlation, it is evaluated that designated areas such as leadership efficacy, charisma, and sociability elements displayed the most powerful factors between school activity participation points and group leader scores. Based on the results, educators need to actively promote and facilitate the expansion of leadership traits through activity programs.

The Social Change Model (SCM) is a popular guide that promotes higher education student leadership (Haber & Komives, 2009). Eight core values are used to evaluate levels of self-awareness and willingness of the individual to collaborate with others for the common good. The SCM views leadership as an ongoing process and supports leadership development in all members regardless of their position. It promotes values that include: equality, social justice, self-knowledge, personal empowerment, collaboration, citizenship, and service (Astin & Astin, 1996).

Significant research supports the relationship between engagement in student clubs and the development of positive leadership traits and behaviors. For example, students who reported any amount of involvement in campus clubs had significantly

higher scores across social change values for leadership development including collaboration, common purpose, and controversy with civility, individual values, and citizenship (Dugan & Komives, 2007). These results were generally not dependent on the type of student organization or club.

Researchers of Pascarella and Terenzini (2005) and Northouse (2013) have noted that employing self-ratings of student's perceptions of strengths and abilities is a common method for assessing leadership traits and behaviors. Haber (2011) insisted that the evolution of the definition of leadership began with the qualities or characteristics of a person or a position. Over the past decades, leadership as a concept evolved to be more relational, process-oriented and systems-focused, emphasizing aspects of team-building, and social interaction. Leadership identity development looked at the processes by which individuals became leaders through peer interactions and ongoing membership in groups (Dugan & Komives, 2007).

Moreover, Northouse (2013) acknowledged that research has produced an extensive list of leadership traits and characteristics, which he synthesized into six characteristics as keys to effective leadership: intelligence, confidence, charisma, determination, sociability, and integrity. Simonsen et al. (2014) also determined the relationship between student activity participation and leadership characteristics. This study revealed that incoming college students participated more in community service and athletics than any other activities during their high school experience. Students rated themselves highest in the leadership constructs of integrity and intelligence, and the lowest regarding leadership efficacy and charisma. The strongest positive

relationship with high school activity participation was indicated in leadership efficacy, sociability, and charisma constructs.

The importance of participation in student organizations to develop leadership skills has also been reported in several studies. Rutherford et al. (2002) concluded that everyone can be a leader, but individuals do not possess all the skills or expertise to always lead. Birkenholz and Schumacher (1994) found that participation in multiple extracurricular activities positively influenced perceived leadership skills (as cited in Ewing et al., 2009). Extracurricular sports activities showed that those who were assisting as a leader in more than one sports activity meaningfully indicated having a more positive awareness of their leadership ability (Hancock et al., 2012).

Informal, non-academic settings contributed substantially to students' career skills, according to self-reports and ratings of skills (Pascarella & Terenzini, 2005). When college students were engaged in social aspects of campus life, they advanced their learning and their personal development, and the relationship between academic success and co-curricular involvement (Huang & Chang, 2004).

**Leadership Roles**

Another important aspect of involvement in extracurricular organizations is the impact of serving in a positional leadership role. In college, holding a leadership position in an extracurricular activity, club or organization will encourage personal development, increase decision making, and offer opportunities for learning experiences (Astin, 1999; Ewing et al., 2009; Dugan, 2006b; Rubin et al., 2002). A leadership role in an organization led to higher rates of: life management, development of purpose,

educational involvement, and cultural participation (Cooper et al, 1994; Foreman & Retallick, 2012; Foubert & Grainger, 2006; Kuh, 1995)

Astin (1993) addressed that elected student offices, public-speaking ability, leadership ability, and interpersonal skills were all correlated with the hours per week spent in student organizations. Serving as an officer has also been associated with spending more time participating in extracurricular clubs and organizations. Both independent variables were related to increased leadership development. Undergraduate students who acted as team leaders also showed higher scores on the group and societal values of SRLS (Dugan, 2006b).

Similar findings have been reported concerning the impact of serving as a club officer on a student's initiative, and the perception of belonging to the organization had a positive impact on leadership development (Rubin et al., 2002; Ewing et al., 2009). College graduates self-reported that extracurricular leadership roles significantly impacted their development of leadership skills and interpersonal abilities that improve their work performance (Smith & Chenoweth, 2015).

Furthermore, Logue, et al. (2005) emphasized in interviews, Student leaders in extracurricular activities indicated that their roles have improved their jobs, academic success, and skills. Phillips, et al. (2015) also revealed that students indicated that involvement in a professional organization strongly impacts their leadership, teamwork, confidence, and time-management skills. Meanwhile, Petriglieri and Wood (2011) summarized the relationship between classroom leadership content learning and experiential learning as an active, personal, and social process. They suggested that the personalization process allows management education to provide the foundations for

leaders' development by transforming potentially regressive experiences into material for participants' personal learning, experimentation, and growth.

Leadership, though often hard to define concretely, in its most basic form can be described as influencing others towards achieving a common goal. Astin (1996) and Van Linden and Fertman (1998) observed that leadership is needed in all organizations and at all levels of government. Individuals, including those students that are pursuing higher education, must be allowed to lead during their everyday lives. Without the opportunity to practice leading a group, skill growth may not occur. Layfield, et al. (2000) summarized ways in which faculty worked to help students develop leadership skills; one of the most important being the inclusion of leadership opportunities in and outside of the classroom.

Shertzer and Schuh (2004) deduced that those students holding leadership positions while in college were often given additional leadership development opportunities when compared to those members that did not hold leadership positions. These findings imply participation in activities has a positive impact on the students' leadership development. These studies all support the positive relationship between leadership development and student's involvement in activities.

Pascarella and Terenzini (2005) and Rubin et al. (2002) analyzed an extracurricular index score such as the number of clubs, the role of officers, and the hours spent. In Foreman and Retallick's (2013) study, they suggested that the quality of involvement is more important than how much time students participate. Extracurricular leadership correlated to higher scores in the individual value categories of the Social Change Model. Consequently, the improved capabilities often related to serving as an

officer may be correlated with more opportunities to obtain leadership training. Both kinds of research showed that the combination of frequency and quality of students' involvement was linked to higher rates of diverse leadership and interpersonal skills.

# CHAPTER THREE

# METHODOLOGY

## Research Design

The study used quantitative data to identify relations between extracurricular activities and leadership development outcomes. Information was gathered about the role of extracurricular activities in enhancing leadership development. A web-based questionnaire was administered to identify specific traits and experiences that are associated with higher levels of leadership outcomes. In this chapter, the population and sampling procedures were described, the instrument and data collection were clarified, and data analysis was explained.

## Population and Sampling Procedures

The target population of this study is undergraduate college students from Eastern Kentucky University, Berea College, and the University of Kentucky. To learn more about students' extracurricular experiences, a purposive sampling technique was used. As a non-probability sampling method, Black (2010) defines the purposive sampling method that allows the researcher a choice of elements selected for the sample. Thus, the study surveys students who are upperclassmen and have more opportunities to be involved in extracurricular activities.

Contact email information for these students was received from the university's registrar office, institutional research center, the office of international student services, and the multicultural students' office. Among the 9,882 email lists of students, 710 college students (7.1%) responded to this online survey to answer the research

questions. After eliminating incomplete data and response set errors, 703 data samples were analyzed actually.

**Instrumentation**

Researcher-designed questions for extracurricular activities experiences were developed to meet the research objectives. The study created a list of information that is needed to support the thesis and a set of questions that will solicit that data. Group questions with a set of predefined choices were used. The study broke long questionnaires into separate pages to avoid overwhelming the respondents and to provide the opportunity of submitting their responses in smaller sets of questions. This helped maintain focus and to avoid losing data if they leave the survey unfinished.

The survey combined existing instruments for leadership development outcomes and the researcher-designed questions about extracurricular activities experiences (Appendix A). Following the study's conceptual framework, the instrument was organized into collegiate experiences, leadership development, and pre-collegiate experiences. Each section included a brief introduction. The survey questionnaire was tested before collecting data. Pretesting and piloting identified survey questions that did not make sense to participants or problems with the questionnaire that might lead to biased answers.

Then, *Qualtrics*, a web-based survey instrument, was used because of the program's capabilities to improve the flow of the instrument. Based on initial responses, a subject was asked additional questions related to their experiences.

### *Pre-collegiate experiences*

Researcher-designed questions were developed to collect data related to the following pre-collegiate or high school experiences variables: involvement in extracurricular activities, level of extracurricular involvement, leadership training, and perceived leadership skills when they entered college. Subjects were asked to indicate whether or not they participated in extracurricular activities or leadership training activities while in high school. Based on the responses to these questions, subjects were asked additional questions to find out additional information about these experiences.

Subjects who report that they participated in extracurricular activities while in high school were asked to indicate the number of years they were involved in each organization and their level of participation, ranging from member to state/national leadership. Subjects who indicated that they had participated in leadership training before attending college were asked by a dichotomous variable (i.e., 0 = no, 1 = yes). Regardless of their participation in extracurricular activities experiences, all subjects were asked to rate their leadership skills when they entered college using a Likert-type scale.

### *Collegiate experiences*

Researcher-designed questions were used to collect data about collegiate experiences. While the purpose of this study is to learn more about the role of extracurricular activities on leadership development, questions about additional collegiate experiences that have been previously linked to leadership experiences are included to control for the effects of these variables.

Subjects were asked to indicate whether they participated in extracurricular organizations, whether they completed any off-campus internships, if they participated in any leadership training other than classwork while in college, and if they participated in any extracurricular club/organization with international students. Based on their answers to the question about participation, subjects were asked additional questions to learn more about their experiences.

The categories of clubs/organizations students participated in were containing the student council, judging or other competitive teams, the government of the student body, university-related organizations/clubs, social or recreational organizations/clubs, faith or religious-based organizations, community-based organizations, and the Greek system. Another category was also included to allow participants to check additional organizations not included on the list. The study developed the categories of clubs and organizations with literature reviews and input from current students, academic advisors, and college and university websites.

Next, subjects were asked to indicate how many organizations or clubs they were involved in organizations or clubs, the amount of time spent per week in the organizations or clubs, the number of years they were involved, and their highest level of participation in those.

***Leadership development***

Leadership development was assessed using the Socially Responsible Leadership Scale (SRLS-R2). The scale includes 68 Likert-type items, which includes eight separate scales that measure three specific constructs of the Social Change Model (SCM). SCM core values are detailed in the following table (Table 3.1).

Table 3. 1.

*Seven C's: The Critical Values of the Social Change Model*

| | |
|---|---|
| **Individual Values** | |
| Consciousness of Self | Being self-aware of the beliefs, values, attitudes, and emotions that motivate you to take action. Being mindful, or aware of your current emotional state, behavior, and perceptual lenses. |
| Congruence | Acting in ways that are consistent with your values and beliefs. Thinking, feeling, and behaving with consistency, genuineness, authenticity, and honesty toward others. |
| Commitment | Having significant investment in an idea or person, both in terms of intensity and duration. Having the energy to serve the group and its goals. Commitment originates from within, but others can create an environment that supports an individual's passions. |
| **Group Values** | |
| Collaboration | Working with others in a common effort, sharing responsibility, authority, and accountability. Multiplying group effectiveness by capitalizing on various perspectives and talents, and on the power of diversity to generate creative solutions and actions. |
| Common Purpose | Having shared aims and values. Involving others in building a group's vision and purpose. |
| Controversy with Civility | Recognizing two fundamental realities of any creative effort: 1) that differences in viewpoint are inevitable, and 2) that such differences must be aired openly but with civility. |
| **Community values** | |
| Citizenship | Believing in a process whereby an individual and/or a group become responsibly connected to the community and to society through some activity. Recognizing that members of communities are not independent, but interdependent. Recognizing individuals and groups have responsibility for the welfare of others. |
| *Since it is a Key assumption of the SCM that the ultimate goal of leadership is positive social change, "change" is considered to be at the "hub" of the model* | |
| Change | Believing in the importance of making a better world and a better society for oneself and others. Believing that individuals, groups, and communities have the ability to work together to make that change. |

*Note*. Adapted from a social change model guidebook version III, Higher Education Research Institute, 1996, p.21, used with permission from the National Clearinghouse for Leadership Programs

These constructs are divided into three value levels. Specifically, Individual value includes the consciousness of self, congruence, and commitment variables. The group values consist of collaboration, common purpose, and controversy with civility and the society/community level has citizenship variable. As each value begins with the letter C, these have come to be known as the "Seven C's." Since change is an assumption of the model as well, the SRLS-R2 also measures the value of change. Each of the eight scales had six to nine questions. In addition, SRLS-R2 Omnibus was used to measure the overall construct of leadership development.

Table 3. 2.

*Reliability levels for Socially Responsible Leadership Scale (SRLS-R2)*

| Scale | Multi-Institutional Study of Leadership | Current study |
|---|---|---|
| Individual Values | | .88 |
| Consciousness of self | .79 | .75 |
| Congruence | .80 | .82 |
| Commitment | .83 | .83 |
| Group Values | | .89 |
| Collaboration | .82 | .78 |
| Common Purpose | .82 | .81 |
| Controversy with Civility | .77 | .74 |
| Community values | | .88 |
| Citizenship | .77 | .87 |
| Change | .81 | .81 |
| Omnibus | | .95 |

*Note*. Permission to use the instrument for this study was obtained

The reliability of each SRLS-R2 scale was computed for this study using Cronbach's alpha (Table 3.2). As a result, it was found to be similar to 0.7 or higher in all areas of SRLS-R2, which satisfied the confidence level. The study obtained permission to use the SRLS-R2 for this study.

### *Validity*

Face validity, content validity, and internal validity were established by a group of students similar to those in the sample. Expert panels of staff and faculty who had experience as leaders in the extracurricular/co-curricular activity/student organizations composed of both males and females viewed the survey. A group of doctoral students and professors were asked for their input regarding face validity. This expert panel included members of faculty members in Educational Leadership and Policy Studies, graduate students, and extension staff members at Eastern Kentucky University.

After careful consideration of the suggestions of both student panels and the professional panel, changes were made to the instrument, including both content and question format. The order of the questionnaire also was changed. Subjects were asked about college experiences first, followed by the leadership development (SRLS-R2) instrument. Finally, they were asked about pre-collegiate experiences.

## Data Process

### Data Collection

The study received Institutional Review Board (IRB) approval from Eastern Kentucky University to conduct the study (Appendix B). To receive this approval, the study provided the IRB information and documentation to ensure that the rights and safety of participants were protected, including a clear explanation of the purpose of the

research, participant selection, research plan, consent process, data analysis, and confidentiality.

The subjects were contacted via University email and the purpose of the study was explained as well as statements about voluntary participation. Students were also informed that subjects who participate in the study will be entered into a random drawing for twelve $10.00 gift certificates.

For the surveys confidential, the study has created two different questionnaires using *Qaltrics*. One of the questionnaires has questions related to this study, and the last question is whether they would be interested to participate in the raffle for a gift card. If the answer is "yes," it would take responses to a separate link for the second questionnaire; then they would be asked to fill in their e-mail in order to send the e-gift card to them if they have won the prize. Therefore, since they don't mention any of their personal information in the first questionnaire, and their answers to be used for this dissertation cannot be connected to responses personal information from the second questionnaire, they will remain anonymous.

The subjects were contacted via Eastern Kentucky University e-mail including the online survey link by the Dean of Student's Office and Office of Enrollment Management Operations & Communications (international student coordinator). E-mails were sent up to 3 times and repeated every 7 days to decrease non-response. Email contacts were made to subjects over 14 days. Besides, subjects were instructed to follow a link to *Qualtrics* where general consent is explained and asked to select the "Next" button to consent to participate in the survey. Then, the survey instrument will make available.

**Data Analyses**

Survey responses were automatically recorded by *Qualtrics* as subjects completed the survey. Once data collection was completed, raw data was checked for missing data and obvious errors.

Table 3. 3.

*All Variables*

| Variables | | |
|---|---|---|
| Demographic data | | Gender<br>Race<br>Class level<br>Student type (International, USA Domestic)<br>Regions of international students |
| Independent variables | Extracurricular Activity | Type of organizations/clubs (College)<br>Number of extracurricular organizations/clubs<br>Amount of time spent<br>Leadership position |
| | Involvement Index (1-3 level) | Involved year (High school, College)<br>Level of participation ranging (High school, College)<br>Leadership self-perception |
| | Pre-collegiate experiences | High school extracurricular participation<br>High school leadership training |
| | Collegiate experiences | Extracurricular<br>Leadership training<br>Off-campus internships<br>Participation with international students |
| Dependent variables | Individual | Consciousness of self<br>Congruence<br>Commitment |
| | Group | Collaboration<br>Common Purpose<br>Controversy with civility |
| | Society/Community | Citizenship<br>Change |
| Control variables | | Gender<br>Class level<br>Student type<br>Pre-collegiate experiences<br>Collegiate experiences<br>Involvement index |

Incomplete data and response set errors were documented and eliminated from the dataset. The SPSS (Version 24) program was used to analyze the data. For the references, all data variables of demographic, independent, dependent, and control variables are briefed in the table (Table. 3.3) and the survey is 86 items including 68 Likert-type scale of leadership development outcomes by the SRLS-R2.

***Research objective 1***

Regarding the first objective of this study, it was described the demographics of students who participate in extracurricular activities and the extracurricular experiences of undergraduate students. Demographic information was collected from the web-based survey instrument. This information was included gender, race, class level, student type of international or domestic, and region of international students coming from. To describe the subjects and the students' experiences, it was addressed using descriptive statistics including frequencies, means, and standard deviations.

***Research objective 2***

To identify leadership development outcomes by general characteristics and experience of participating in extracurricular activities and those relationships with leadership development, a t-test and ANOVA were calculated to determine if there were mean differences in the dependent variable based on the independent variables.

Inferential statistics were calculated to determine the role of gender, class level, and student type as independent variables on leadership development outcomes. A t-test with a simple dichotomous variable (i.e., 0 = no and 1 = yes) was used to determine the differences in the mean of leadership development outcomes (SRLS-R2) by collegiate

experiences of extracurricular organizations/clubs, leadership training, off-campus internships, participating with international students.

Moreover, pre-collegiate experiences of participating in extracurricular organizations/clubs and leadership training were also measured by a simple dichotomous variable. The type of organizations/clubs students participated in while in college was analyzed to examine the differences in the mean of leadership development by ANOVA.

The dependent variable is the value of leadership development that was measured using the SRLS-R2 scale. The scale consists of 68 Likert-type questions which include eight separate scales that measure three specific constructs of the Social Change Model (SCM). These constructs are divided into three value levels. Specifically, Individual value includes the consciousness of self, congruence, and commitment variables. The group values consist of collaboration, common purpose, and controversy with civility. And the society/community level has a citizenship variable. The extent to which students believe they are connected to their community and society. Also, the questions assess to what extent they believed that members of a community are interconnected and that individuals have responsibilities for the wellbeing of others.

***Research objective 3***

To examine the quantitative and qualitative aspects of involvement experiences in extracurricular clubs and organizations and those relationships with leadership development, the inferential statistics, *t*-test and ANOVA were calculated to determine if there were mean differences in the dependent variable based on the independent variables.

The number of clubs and organizations students participated in was calculated based on the clubs and organizations in which students indicated they participated. This variable was recoded into four categories (0 clubs, 1-2 clubs, 3-4 clubs, and 5 or more clubs). An ANOVA was computed using the recoded number of clubs and organizations as the independent variable and each individual, group, and community values of leadership development as the dependent variable to determine the relationship between the number of clubs a student participated in and each individual, group, and community values leadership development.

The average hours per week spent in extracurricular clubs and organizations was a categorical variable with many possible answers. This variable was recoded into four categories (0-1 hour per week, 2-3 hours per week, 4-6 hours per week, and 7 or more hours per week). An ANOVA was computed using the recoded average hours per week as the independent variable and each individual, group, and community values of leadership scale as the dependent variable to determine the relationship between the amounts of time spent in extracurricular clubs and organizations and each individual, group, and community values of leadership development. A Tukey post hoc test was conducted to compare and contrast the mean differences between groups.

Moreover, the extracurricular involvement index was calculated by adding the number of years students indicated they were involved in extracurricular activities as well as their highest level of involvement in that activity (ranging from member = 1 to state or national leadership = 5). To measure the relationship between this construct and leadership development (measured by SRLS-R2), the involvement score was categorized into three-level groups and used as the independent variable. An ANOVA

was calculated using the involvement index as the independent variable and the individual, group, and community leadership scale as the dependent variable.

***Research objective 4***

Correlation analysis was used to identify the relationship between related variables and regression analysis was used to examine the influence of the independent variable on the dependent variable. This is indicated the correlations respectively between several variables: high school extracurricular participation, high school leadership training, college extracurricular participation (i.e., college leadership training, internships, and activity with international students), and individual, group, and community values of leadership development outcomes.

Hierarchical regression was the primary statistical technique. Variable blocking reflected the conceptual framework and influenced by past research. Two independent blocks were used to compare the effects of independent variables. Block one included characteristics identified as pre-collegiate characteristics in the collegiate leadership development model. This first block containing general characteristics and pre-collegiate experiences (i.e., gender, student type, pre-collegiate extracurricular involvement, pre-collegiate leadership training, and leadership self-perception) explained the percentage of the variance of the dependent variable community values. Block two included curricular and extracurricular experiences from the portion of the collegiate experience of the model. The dependent variable, leadership development, was the outcome construct. The second block, containing collegiate experiences (i.e., extracurricular involvement, leadership training, internships, and activity with international students) indicated the explained variance by percentage for the model.

**Block one's variables (Model 1)**. Information on general characteristics: gender, class level, and student type from the web-based survey was entered into the regression. Also, it was used to assess pre-collegiate experiences of extracurricular organizations/clubs and leadership training, and a self-perception of leadership ability when students entered college.

Participation in high school extracurricular organizations/clubs and leadership training was measured by a simple dichotomous variable (i.e., 0 = no and 1 = yes). An extracurricular activity level construct was created by adding the amount of years a student had participated in each activity (i.e., 1 = 1 year, 2 = 2 years, 3 = 3 years, 4 = 4 years, 5 = 5 or more years) with a score for their highest level of involvement (i.e., 1 = member, 2 = committee member, 3= event or committee chair, 4 = officer or team captain, 5 = state or national leadership). Leadership self-perception was measured with a single Likert-scale question that asked how students would rate their leadership when they entered college compared to their peers (i.e., 1 = well below average to 5 = well above average.)

**Block two variables (Model 2)**. Constructs in block two were included in individual college experiences. Extracurricular experiences, leadership training, off-campus internship, and participation in extracurricular organizations/clubs with international students were used to assess out-of-classroom experiences and measured by a dichotomous variable (i.e., 0 = no, 1 = yes) and entered in the regression.

As the involvement level construct of extracurricular activity while in college, the number of years a student had participated in activities (i.e., 1 = 1 year, 2 = 2 years, 3 = 3 years, 4 = 4 years, 5 = 5 or more years) and their highest level of involvement

(i.e., 1 = member, 2 = committee member, 3= event or committee chair, 4 = officer or team captain, 5 = state or national leadership) were also included.

***Research objective 5***

The study compared the result of leadership development outcomes between international students and domestic students. The study analyzed the significant differences between extracurricular involvement and leadership outcomes demonstrated by the quantitative and qualitative aspects of involvement in extracurricular activities based on the student type. Student type was reported with the results of research questions first through fourth related to individual, group, and community values of leadership development. A t-test was computed to determine if participation in extracurricular activities varied based on student type. Moreover, student type of international or domestic students was included as a predictor variable to be analyzed the contribution to the college students' individual, group, and community values of leadership development outcomes.

# CHAPTER FOUR

# RESULTS

This study examined the relationship between the involvement in extracurricular activities and leadership development comparing international and domestic college students. Based on the purpose of the study, the specific empirical analysis method used for the recovered data is as follows.

First, frequency analysis and descriptive analysis were performed to find out the general characteristics of the subjects. Second, t-test and one-way ANOVA were conducted to determine the mean difference, and the Scheffe test was performed as a post-test. Third, correlation analysis was used to identify the relationship between related variables. Fourth, regression analysis was used to examine the influence of the independent variable on the dependent variable. All empirical analyses of this study were verified at the significance level $p<.05$, and statistical processing was analyzed using the SPSSWIN 21.0 program.

## General Status

### Demographic Characteristics

The gender demographics of the survey represented 186 men (26.3%, table 4.1), 517 women (73.2%), and 3 non-binary (0.4%). With ethnic background, white/Caucasian 601 (81.9%), Asian American/Asian 42 (5.7%), and African American/Black 36 (4.9%) were surveyed in that order. For current class level, there were 371 seniors/others (52.5%), 161 juniors (22.8%), 135 sophomores (19.1%), and 39 freshmen (5.5%). In the case of international students, 57 (8.1%) were surveyed: 28 (49.1%) from Asia, 13 (22.8%) from the Middle East, and 5 (8.8%) from Europe.

Table 4. 1.

*Demographic Characteristics*

| Demographic Variables | | Count | % |
|---|---|---|---|
| gender | Male | 186 | (26.3) |
| | Female | 517 | (73.2) |
| | Other | 3 | (.4) |
| | Total | 706 | (100.0) |
| ethnic background (Multiple responses) | White/Caucasian | 601 | (81.9) |
| | African American/Black | 36 | (4.9) |
| | Asian American/Asian | 42 | (5.7) |
| | Native Hawaiian/Pacific Islander | 5 | (.7) |
| | Latino/Latina | 18 | (2.5) |
| | Multiracial | 18 | (2.5) |
| | Other | 14 | (1.9) |
| | Total | 734 | (100.0) |
| current class level | First-year/freshman | 39 | (5.5) |
| | Sophomore | 135 | (19.1) |
| | Junior | 161 | (22.8) |
| | Senior/Other | 371 | (52.5) |
| | Total | 706 | (100.0) |
| International Student | Yes | 57 | (8.1) |
| | No | 649 | (91.9) |
| | Total | 706 | (100.0) |
| region | Africa | 2 | (3.5) |
| | Asia | 28 | (49.1) |
| | Europe | 5 | (8.8) |
| | Middle East | 13 | (22.8) |
| | North America | 3 | (5.3) |
| | Oceania | 1 | (1.8) |
| | South America | 5 | (8.8) |
| | Total | 57 | (100.0) |

## Collegiate Experiences

When asked, 'Have you participated in any extracurricular organizations/clubs (i.e., university, social, recreational, religious, or community-based organizations, etc.) in experiences while in college?' (See table 4.2), 453 people (64.2%) responded 'Yes' and 253 people (35.8%) responded 'No'. For the question, 'Have you participated in any leadership training other than classwork (i.e., ambassador retreat, state leadership

experience, etc.)?' 210 people (29.8%) responded 'Yes' and 494 people (70.2%) responded 'No'. When asked 'Have you completed any off-campus internships?' 151 people (21.4%) responded 'Yes' and 553 people (78.6%) responded 'No'. For the question, 'Have you participated in any extracurricular organizations/clubs with international students?' 184 (26.1%) answered 'Yes' and 520 (73.9%) answered 'No'. These results indicate that extracurricular experiences while in college were relatively high.

'University-related organizations/clubs' had the highest rate of participation with 239 (25.9%) students have participated, followed by social or recreational organizations/clubs' and faith or religious-based organizations: each was high at about 18%. Also, 311 (68.8%) students answered that they participated in 1-2 organizations/clubs, followed by 116 (25.7%) of students who participated in 3-4 organizations/clubs. The majority of students (166, 37.1%) spent 1-2 hours in their organizations/clubs, followed by 136 (30.4%) students who spent 3-4 hours in their organizations/clubs. Also, 130 (30.1%) students were actively involved in their organizations/clubs for 1 year or less, followed by 117 (27.1%) students who were actively involved for 2 years. It can be seen that more than half of these results were 2 years. The highest level of participation was 192(46.2%) students who were ordinary members, and 146 (35.1%) of students who were officers or team captains.

Table 4. 2.

*Collegiate Experiences of Extracurricular Activities*

| Extracurricular Experiences while in college | | | n | % |
|---|---|---|---|---|
| 6.experiences while in college | Have you participated in any extracurricular organizations/clubs (i.e., University, social, recreational, religious, or community-based organizations, etc.)? | Yes | 453 | (64.2) |
| | | No | 253 | (35.8) |
| | | Total | 706 | (100.0) |
| | Have you participated in any leadership training other than classwork (i.e., Ambassador Retreat, State leadership experience, etc.)? | Yes | 210 | (29.8) |
| | | No | 494 | (70.2) |
| | | Total | 704 | (100.0) |
| | Have you completed any off-campus internships? | Yes | 151 | (21.4) |
| | | No | 553 | (78.6) |
| | | Total | 704 | (100.0) |
| | Have you participated in any extracurricular organizations/clubs with international students? | Yes | 184 | (26.1) |
| | | No | 520 | (73.9) |
| | | Total | 704 | (100.0) |
| 7. participated while in college | The Student Council | | 19 | (2.0) |
| | Judging or competitive teams | | 32 | (3.4) |
| | Government of the Student Body | | 21 | (2.2) |
| | University-related organizations/clubs | | 239 | (25.6) |
| | Social or recreational organizations/clubs | | 175 | (18.7) |
| | Faith or religious-based organizations | | 171 | (18.3) |
| | Community-based organization | | 106 | (11.3) |
| | Greek Life | | 94 | (10.1) |
| 8. extracurricular activities while in college | 1.Number of Organizations/Clubs you were actively involved | 0 organization/club | 78 | (8.3) |
| | | 1-2 organization/club | 311 | (68.8) |
| | | 3-4 organization/club | 116 | (25.7) |
| | | 5 or more | 10 | (2.2) |
| | | Total | 452 | (100.0) |
| | 2.Amount of time spent per week | 0 organization/club | 66 | (14.7) |
| | | 1-2 organizations/clubs | 166 | (37.1) |
| | | 3-4 organizations/clubs | 136 | (30.4) |
| | | 5 or more | 80 | (17.9) |
| | | Total | 448 | (100.0) |
| 9.organizations/clubs while in college | 1. Number of years you were actively involved | 1 year or less | 130 | (30.1) |
| | | 2 years | 117 | (27.1) |
| | | 3 years | 82 | (19.0) |
| | | 4 years | 86 | (19.9) |
| | | 5 or more years | 17 | (3.9) |
| | | Total | 432 | (100.0) |
| | 2. Highest level of your participation | Member | 192 | (46.2) |
| | | Committee member | 50 | (12.0) |
| | | Event or committee chair | 24 | (5.8) |
| | | Officer or team captain | 146 | (35.1) |
| | | State / national leadership | 4 | (1.0) |
| | | Total | 416 | (100.0) |

**Pre-collegiate Experiences**

When asked, ‘Did you participate in extracurricular activities (including school and community activities while in high school?’ 598 people (85.2%) responded 'Yes' and 104 people (14.8%) responded 'No' (See table 4.3).

Table 4. 3.

*Pre-collegiate Experiences of Extracurricular Activities*

| Extracurricular Experiences while in high school | | | n | % |
|---|---|---|---|---|
| 14. experiences while in high school | Did you participate in extracurricular activities (including school and community activities)? | yes | 598 | (85.2) |
| | | no | 104 | (14.8) |
| | | Total | 702 | (100.0) |
| | Did you participate in any leadership training (i.e., 4-H officer training, student council training, chapter FFA officer retreat, etc.)? | yes | 316 | (45.1) |
| | | no | 385 | (54.9) |
| | | Total | 701 | (100.0) |
| 15. extracurricular activity while in high school | Number of years you were actively involved | 1 year or less | 40 | (6.7) |
| | | 2 years | 81 | (13.6) |
| | | 3 years | 77 | (13.0) |
| | | 4 years | 350 | (58.9) |
| | | 5 or more years | 46 | (7.7) |
| | | Total | 594 | (100.0) |
| | Highest level of your participation | Member | 207 | (35.9) |
| | | Committee member | 63 | (10.9) |
| | | Event or team captain | 33 | (5.7) |
| | | officer or team captain | 254 | (44.1) |
| | | state or national leadership | 19 | (3.3) |
| | | Total | 576 | (100.0) |
| 16. leadership skills (compared to your peers) | Well above average | | 86 | (12.2) |
| | Above average | | 280 | (39.8) |
| | Average | | 279 | (39.6) |
| | Below average | | 45 | (6.4) |
| | Well below average | | 14 | (2.0) |
| | Total | | 704 | (100.0) |

316 (45.1%) students participated in leadership training (i.e., 4-H officer training, student council training, chapter FFA officer retreat, etc.)', 350 (58.9%) students responded that they had participated in their extracurricular activities for 4

years and 13% for 2 years and 3 years respectively. For the question, 'highest level of your participation', 254 (44.1%) students were officers or team captains, and 207 (35.9%) students were ordinary members. When asked about their self-perception of leadership skills compared to their peers, More than half of respondents (366, 52%) answered that they were above average or even well above average.

## Leadership Development Outcomes

### General Characteristics

To examine the difference in the mean of leadership development by general characteristics such as gender, class level, student type, a t-test and one-way ANOVA were conducted, and the Scheffe test was performed as a post-test.

#### *Gender*

Women scored higher than men in the congruence and commitment, which showed significant differences ($p<.05$, table 4.4). When it came to citizenship, women scored relatively higher than men ($p<.05$). It can be seen that the difference in leadership development (SRLS-R2) according to gender is not significant.

Table 4. 4.

*Differences in Leadership Development (SRLS-R2) by Gender*

| | Q1 | N | M | SD | F | p |
|---|---|---|---|---|---|---|
| Consciousness of Self | Male | 186 | 3.84 | .55 | .996 | .319 |
| | Female | 517 | 3.79 | .50 | | |
| Congruence | Male | 186 | 4.12 | .55 | -2.970** | .003 |
| | Female | 517 | 4.24 | .47 | | |
| Commitment | Male | 186 | 4.32 | .50 | -3.105** | .002 |
| | Female | 517 | 4.44 | .46 | | |
| Individual Values Total | Male | 186 | 4.06 | .47 | -1.529 | .127 |
| | Female | 517 | 4.11 | .41 | | |
| Collaboration | Male | 186 | 4.07 | .49 | -.969 | .333 |
| | Female | 517 | 4.11 | .43 | | |

Table 4. 4. (continued)

| | Q1 | N | M | SD | F | p |
|---|---|---|---|---|---|---|
| Common Purpose | Male | 186 | 4.06 | .50 | -1.379 | .168 |
| | Female | 517 | 4.11 | .41 | | |
| Controversy with Civility | Male | 186 | 3.92 | .45 | -.275 | .783 |
| | Female | 517 | 3.93 | .43 | | |
| Group Values Total | Male | 186 | 4.01 | .42 | -.955 | .340 |
| | Female | 517 | 4.04 | .36 | | |
| Citizenship | Male | 186 | 4.01 | .59 | -2.387* | .017 |
| | Female | 517 | 4.13 | .52 | | |
| Change | Male | 186 | 3.86 | .48 | 1.540 | .124 |
| | Female | 517 | 3.80 | .51 | | |
| community values Total | Male | 186 | 3.93 | .48 | -.330 | .742 |
| | Female | 517 | 3.94 | .45 | | |
| Omnibus total | Male | 186 | 4.00 | .41 | -1.047 | .296 |
| | Female | 517 | 4.04 | .36 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

***Class Level***

At the class level, first-year/freshman and senior/other scored high in the total of the individual values, and sophomore and junior scored relatively low, showing a significant difference (p<.05, Table 4.5). The consciousness of self, a sub-variable of individual values, was a significant difference, indicating that senior/other was high, and the sophomore was relatively low (p<.05). In the group values total, there was no significant difference. In the community values total, senior/other and junior were relatively high, and first-year/freshman and sophomore were relatively low, showing a significant difference (p<.05).

The difference in leadership development (SRLS-R2) according to the class level was significant, and senior/other, junior, and first-year/freshman were relatively high, and the sophomore was relatively low.

Table 4. 5.

*Differences in Leadership Development (SRLS-R2) by Class Level*

| | | N | M | SD | F | p | scheffe |
|---|---|---|---|---|---|---|---|
| Consciousness of Self | First-year/freshman(a) | 39 | 3.79 | .53 | 7.279*** | .000 | d>a,c>b |
| | Sophomore(b) | 135 | 3.65 | .46 | | | |
| | Junior(c) | 161 | 3.76 | .55 | | | |
| | Senior/Other(d) | 371 | 3.88 | .51 | | | |
| | Total | 706 | 3.80 | .52 | | | |
| Congruence | First-year/freshman | 39 | 4.31 | .47 | 1.742 | .157 | |
| | Sophomore | 135 | 4.14 | .48 | | | |
| | Junior | 161 | 4.20 | .53 | | | |
| | Senior/Other | 371 | 4.23 | .48 | | | |
| | Total | 706 | 4.21 | .49 | | | |
| Commitment | First-year/freshman | 39 | 4.44 | .41 | .912 | .435 | |
| | Sophomore | 135 | 4.35 | .49 | | | |
| | Junior | 161 | 4.43 | .51 | | | |
| | Senior/Other | 371 | 4.42 | .46 | | | |
| | Total | 706 | 4.41 | .48 | | | |
| Individual Values Total | First-year/freshman(a) | 39 | 4.13 | .40 | 3.968** | .008 | a,d>b,c |
| | Sophomore(b) | 135 | 4.00 | .38 | | | |
| | Junior(c) | 161 | 4.08 | .45 | | | |
| | Senior/Other(d) | 371 | 4.14 | .43 | | | |
| | Total | 706 | 4.10 | .42 | | | |
| Collaboration | First-year/freshman | 39 | 4.10 | .43 | 1.677 | .171 | |
| | Sophomore | 135 | 4.02 | .43 | | | |
| | Junior | 161 | 4.12 | .45 | | | |
| | Senior/Other | 371 | 4.12 | .45 | | | |
| | Total | 706 | 4.10 | .44 | | | |
| Common Purpose | First-year/freshman | 39 | 4.10 | .39 | 2.110 | .098 | |
| | Sophomore | 135 | 4.02 | .41 | | | |
| | Junior | 161 | 4.08 | .47 | | | |
| | Senior/Other | 371 | 4.13 | .44 | | | |
| | Total | 706 | 4.10 | .44 | | | |
| Controversy with Civility | First-year/freshman | 39 | 3.89 | .48 | .748 | .524 | |
| | Sophomore | 135 | 3.90 | .40 | | | |
| | Junior | 161 | 3.97 | .45 | | | |
| | Senior/Other | 371 | 3.92 | .43 | | | |
| | Total | 706 | 3.92 | .43 | | | |
| Group Values Total | First-year/freshman | 39 | 4.02 | .38 | 1.369 | .251 | |
| | Sophomore | 135 | 3.97 | .35 | | | |
| | Junior | 161 | 4.05 | .39 | | | |
| | Senior/Other | 371 | 4.04 | .38 | | | |
| | Total | 706 | 4.03 | .38 | | | |

Table 4. 5. (continued)

| | | N | M | SD | F | p | scheffe |
|---|---|---|---|---|---|---|---|
| Citizenship | First-year/freshman | 39 | 4.07 | .55 | 2.158 | .092 | |
| | Sophomore | 135 | 3.99 | .53 | | | |
| | Junior | 161 | 4.11 | .59 | | | |
| | Senior/Other | 371 | 4.13 | .52 | | | |
| | Total | 706 | 4.10 | .54 | | | |
| Change | First-year/freshman | 39 | 3.71 | .49 | 2.349 | .071 | |
| | Sophomore | 135 | 3.73 | .46 | | | |
| | Junior | 161 | 3.83 | .53 | | | |
| | Senior/Other | 371 | 3.85 | .51 | | | |
| | Total | 706 | 3.81 | .50 | | | |
| community values Total | First-year/freshman(a) | 39 | 3.87 | .45 | 2.824* | .038 | c,d>a,b |
| | Sophomore(b) | 135 | 3.85 | .45 | | | |
| | Junior(c) | 161 | 3.96 | .49 | | | |
| | Senior/Other(d) | 371 | 3.97 | .45 | | | |
| | Total | 706 | 3.94 | .46 | | | |
| Omnibus total | First-year/freshman(a) | 39 | 4.02 | .36 | 2.782* | .040 | a,c,d>b |
| | Sophomore(b) | 135 | 3.95 | .35 | | | |
| | Junior(c) | 161 | 4.04 | .40 | | | |
| | Senior/Other(d) | 371 | 4.06 | .38 | | | |
| | Total | 706 | 4.03 | .38 | | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

***Student Type***

Responses to the question “Are you an international student?” indicated that the frequency of answering 'No' in individual values total was relatively higher than that of answering 'Yes', showing a significant difference (p<.05, Table 4.6). In sub-variables of individual values, congruence and commitment were also showed significant differences (p<.05). In the group values total, the case of responding with 'No' was relatively higher than the case of responding with 'Yes', showing a significant difference (p<.05). There were also significant differences in collaboration, common purpose, and controversy with civility in the sub-variables of group values. In the community values total, the case of answering 'No' was relatively higher than that of answering 'Yes', but

there was no significant difference (p>.05). The difference in leadership development (SRLS-R2) according to student type was higher in domestic students than in international ones (p<.05).

Table 4. 6.

*Differences in Leadership Development (SRLS-R2) by Student Type*

| | Q4 | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Consciousness of Self | Yes | 56 | 3.73 | .50 | -1.062 | .289 |
| | No | 649 | 3.81 | .52 | | |
| Congruence | Yes | 56 | 3.92 | .56 | -4.643*** | .000 |
| | No | 649 | 4.23 | .48 | | |
| Commitment | Yes | 56 | 4.16 | .52 | -4.224*** | .000 |
| | No | 649 | 4.43 | .47 | | |
| Individual Values Total | Yes | 56 | 3.91 | .46 | -3.519*** | .000 |
| | No | 649 | 4.11 | .42 | | |
| Collaboration | Yes | 56 | 3.98 | .48 | -2.015* | .044 |
| | No | 649 | 4.11 | .44 | | |
| Common Purpose | Yes | 56 | 3.94 | .49 | -2.898** | .004 |
| | No | 649 | 4.11 | .43 | | |
| Controversy with Civility | Yes | 56 | 3.69 | .44 | -4.274*** | .000 |
| | No | 649 | 3.94 | .43 | | |
| Group Values Total | Yes | 56 | 3.85 | .41 | -3.666*** | .000 |
| | No | 649 | 4.04 | .37 | | |
| Citizenship | Yes | 56 | 3.87 | .64 | -3.235*** | .001 |
| | No | 649 | 4.12 | .53 | | |
| Change | Yes | 56 | 3.86 | .48 | .719 | .472 |
| | No | 649 | 3.81 | .51 | | |
| community values Total | Yes | 56 | 3.87 | .51 | -1.198 | .231 |
| | No | 649 | 3.95 | .45 | | |
| Omnibus total | Yes | 56 | 3.88 | .42 | -3.165** | .002 |
| | No | 649 | 4.04 | .37 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

**Collegiate Experiences**

A t-test was conducted to examine the difference in the mean of leadership development (SRLS-R2) by collegiate experiences such as participating in extracurricular activities, leadership training, internships, and organizations/clubs with

international students. Also, the study focused on the type of organizations/clubs students participated in while in college.

This study discusses only the results that indicate significant differences in the mean of leadership development (SRLS-R2), otherwise, it is omitted from the table. Interestingly, completing off-campus internships resulted in no significant difference. Also, the type of organizations/clubs students participated in, judging, competitive teams, or the government of the student body, also did not indicate a significant difference.

One-way ANOVA was conducted to examine the difference in the mean of leadership development (SRLS-R2) by following variables: the number of organizations/clubs, amount of time spent per week, the number of years student was actively involved, and the highest level of participation. The Scheffe test was also performed as a post-test.

***Extracurricular Organization/Clubs***

Students who responded that they participated in extracurricular organizations/clubs while in college scored relatively higher in individual values total of leadership development outcomes, showing a significant difference ($p<.05$, table 4.7). There was also a significant difference in the consciousness of self, a sub-variable of individual values ($p<.05$). Those who participated in extracurricular organizations/clubs also scored relatively higher in the group values total, showing a significant difference ($p<.05$), and the same trend was observed in collaboration and common purpose. In the community values total and citizenship, students who participated in extracurricular organizations/clubs scored relatively higher than those who did not, showing a

significant difference (p<.05). It can be seen that the difference in leadership development (SRLS-R2), according to experiences of extracurricular organizations/clubs while in college, was higher for 'Yes' than 'No' (p<.05).

Table 4. 7.

*Differences in Leadership Development by Extracurricular Organizations/Clubs*

| | Q6 1 | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Consciousness of Self | Yes | 453 | 3.84 | .52 | 2.354* | .019 |
| | No | 253 | 3.74 | .51 | | |
| Congruence | Yes | 453 | 4.23 | .48 | 1.777 | .076 |
| | No | 253 | 4.16 | .51 | | |
| Commitment | Yes | 453 | 4.44 | .47 | 1.799 | .072 |
| | No | 253 | 4.37 | .48 | | |
| Individual Values Total | Yes | 453 | 4.13 | .42 | 2.369* | .018 |
| | No | 253 | 4.05 | .42 | | |
| Collaboration | Yes | 453 | 4.15 | .45 | 4.214*** | .000 |
| | No | 253 | 4.01 | .42 | | |
| Common Purpose | Yes | 453 | 4.16 | .45 | 4.950*** | .000 |
| | No | 253 | 3.99 | .39 | | |
| Controversy with Civility | Yes | 453 | 3.95 | .44 | 1.838 | .066 |
| | No | 253 | 3.88 | .43 | | |
| Group Values Total | Yes | 453 | 4.07 | .38 | 4.097*** | .000 |
| | No | 253 | 3.95 | .35 | | |
| Citizenship | Yes | 453 | 4.18 | .54 | 5.252*** | .000 |
| | No | 253 | 3.96 | .51 | | |
| Change | Yes | 453 | 3.84 | .51 | 1.610 | .108 |
| | No | 253 | 3.77 | .49 | | |
| community values Total | Yes | 453 | 3.99 | .46 | 3.727*** | .000 |
| | No | 253 | 3.85 | .44 | | |
| Omnibus total | Yes | 453 | 4.07 | .38 | 3.748*** | .000 |
| | No | 253 | 3.96 | .36 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

### *Leadership Training*

Students who participated in leadership training while in college scored higher in individual values total than those who did not, showing a significant difference (p<. 05). Significant differences were also shown in the sub-areas of consciousness of self

and congruence. In group values total, participants in leadership training scored relatively higher than non-participants, showing a significant difference ($p<.05$). In the sub-areas, collaboration and common purpose were also significant differences. Participants scored relatively higher in the community values total than non-participants, showing a significant difference ($p<.05$). There was also a significant difference in citizenship ($p<.05$). Overall, it can be seen that those who participated in leadership training while in college scored higher than non-participants on the leadership development (SRLS-R2), and that showed a significant difference ($p<.05$).

Table 4. 8.

*Differences in Leadership Development by Leadership Training*

| | Q6 2 | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Consciousness of Self | Yes | 210 | 3.89 | .54 | 2.882** | .004 |
| | No | 494 | 3.77 | .50 | | |
| Congruence | Yes | 210 | 4.27 | .50 | 2.247* | .025 |
| | No | 494 | 4.18 | .49 | | |
| Commitment | Yes | 210 | 4.43 | .51 | .582 | .561 |
| | No | 494 | 4.41 | .46 | | |
| Individual Values Total | Yes | 210 | 4.16 | .44 | 2.449* | .015 |
| | No | 494 | 4.07 | .41 | | |
| Collaboration | Yes | 210 | 4.18 | .47 | 3.032** | .003 |
| | No | 494 | 4.07 | .43 | | |
| Common Purpose | Yes | 210 | 4.22 | .48 | 4.746*** | .000 |
| | No | 494 | 4.05 | .41 | | |
| Controversy with Civility | Yes | 210 | 3.97 | .44 | 1.908 | .057 |
| | No | 494 | 3.90 | .43 | | |
| Group Values Total | Yes | 210 | 4.11 | .40 | 3.675*** | .000 |
| | No | 494 | 4.00 | .36 | | |
| Citizenship | Yes | 210 | 4.20 | .58 | 3.421*** | .001 |
| | No | 494 | 4.05 | .52 | | |
| Change | Yes | 210 | 3.86 | .53 | 1.438 | .151 |
| | No | 494 | 3.80 | .49 | | |
| community values Total | Yes | 210 | 4.01 | .49 | 2.709** | .007 |
| | No | 494 | 3.91 | .44 | | |
| Omnibus total | Yes | 210 | 4.10 | .41 | 3.277*** | .001 |
| | No | 494 | 4.00 | .36 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

### *Participating with International Students*

Students' experiences participating in extracurricular organizations/clubs with international students while in college did not show any significant difference in individual values total. There was no significant difference in group values total, but in collaboration and common purpose, those who participated with international students scored higher, showing a significant difference ($p<.05$, table 4.9).

Table 4. 9.

*Differences in Leadership Development by Extracurricular Organizations/Clubs with International Students*

| Q64 | | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Consciousness of Self | Yes | 184 | 3.86 | 0.55 | 1.759 | .079 |
| | No | 520 | 3.78 | 0.50 | | |
| Congruence | Yes | 184 | 4.21 | 0.53 | .143 | .886 |
| | No | 520 | 4.21 | 0.48 | | |
| Commitment | Yes | 184 | 4.39 | 0.50 | -.770 | .442 |
| | No | 520 | 4.42 | 0.46 | | |
| Individual Values Total | Yes | 184 | 4.12 | 0.46 | .702 | .483 |
| | No | 520 | 4.09 | 0.41 | | |
| Collaboration | Yes | 184 | 4.16 | 0.47 | 2.058* | .040 |
| | No | 520 | 4.08 | 0.43 | | |
| Common Purpose | Yes | 184 | 4.17 | 0.46 | 2.515* | .012 |
| | No | 520 | 4.07 | 0.43 | | |
| Controversy with Civility | Yes | 184 | 3.92 | 0.47 | -.050 | .961 |
| | No | 520 | 3.92 | 0.42 | | |
| Group Values Total | Yes | 184 | 4.07 | 0.41 | 1.626 | .104 |
| | No | 520 | 4.02 | 0.36 | | |
| Citizenship | Yes | 184 | 4.17 | 0.59 | 2.165* | .031 |
| | No | 520 | 4.07 | 0.52 | | |
| Change | Yes | 184 | 3.84 | 0.54 | .770 | .442 |
| | No | 520 | 3.81 | 0.49 | | |
| community values Total | Yes | 184 | 3.99 | 0.51 | 1.624 | .105 |
| | No | 520 | 3.92 | 0.44 | | |
| Omnibus total | Yes | 184 | 4.06 | 0.42 | 1.443 | .149 |
| | No | 520 | 4.02 | 0.36 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

There was no significant difference in the community values total ($p>.05$). Just in citizenship, those who participated with international students scored higher, showing a significant difference ($p<.05$). Overall, those who participated in extracurricular activities with international students scored higher on leadership development (SRLS-R2), but that there was no significant difference ($p>.05$).

***Type of Organizations/Clubs***

The type of organizations/clubs students participated in while in college was analyzed to examine the differences in the mean of leadership development (SRLS-R2). These include student council, judging or competitive teams, the government of the student body, university-related organizations/clubs, social or recreational organizations/clubs, faith or religious-based organizations, community-based organization, and Greek life. Overall, the type of organizations/clubs students participated in while in college resulted in no significant difference in the individual values of leadership development (SRLS-R2). However, several types of organizations/clubs indicated significant differences in group and community values.

Students who participated in university-related organizations/clubs scored higher in the group values total, showing a significant difference ($p<.05$, table 4.10). In the sub-variables, collaboration and controversy with civility also showed significant differences ($p<.05$). The same trend was observed for the total community values ($p<.05$). Citizenship and change were also significant differences in the sub-variables of community values. Overall, students who participated in university-related organizations/clubs showed significant differences ($p<.05$) on the leadership development (SRLS-R2) scale.

Table 4. 10.

*Differences in Leadership Development by University-related Organizations/Clubs*

| Q74 | | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Collaboration | No | 212 | 4.10 | 0.46 | -2.129* | .034 |
| | Yes | 239 | 4.20 | 0.44 | | |
| Common Purpose | No | 212 | 4.13 | 0.48 | -1.266 | .206 |
| | Yes | 239 | 4.18 | 0.42 | | |
| Controversy with Civility | No | 212 | 3.89 | 0.45 | -2.748** | .006 |
| | Yes | 239 | 4.00 | 0.42 | | |
| Group Values Total | No | 212 | 4.03 | 0.40 | -2.440* | .015 |
| | Yes | 239 | 4.11 | 0.36 | | |
| Citizenship | No | 212 | 4.10 | 0.59 | -2.776** | .006 |
| | Yes | 239 | 4.24 | 0.49 | | |
| Change | No | 212 | 3.79 | 0.50 | -2.094* | .037 |
| | Yes | 239 | 3.89 | 0.51 | | |
| community values Total | No | 212 | 3.93 | 0.47 | -2.764** | .006 |
| | Yes | 239 | 4.05 | 0.44 | | |
| Omnibus total | No | 212 | 4.03 | 0.39 | -2.120* | .035 |
| | Yes | 239 | 4.10 | 0.37 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

Students who participated in social or recreational organizations/clubs scored higher in the community values total (Table 4.11), showing a significant difference ($p<.05$). In the sub-variables, citizenship and change were also significant differences. Overall, students who participated in social or recreational organizations/clubs while in college did not show significant differences in the SRLS-R2 ($p>.05$).

Table 4. 11.

*Differences in Leadership Development by Social or Recreational Organizations/Clubs*

| Q75 | | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Collaboration | No | 276 | 4.14 | 0.44 | -.549 | .583 |
| | Yes | 175 | 4.17 | 0.48 | | |
| Common Purpose | No | 276 | 4.15 | 0.45 | -.404 | .687 |
| | Yes | 175 | 4.17 | 0.45 | | |
| Controversy with Civility | No | 276 | 3.91 | 0.43 | -1.918 | .056 |
| | Yes | 175 | 4.00 | 0.45 | | |
| Group Values Total | No | 276 | 4.06 | 0.38 | -1.173 | .241 |
| | Yes | 175 | 4.10 | 0.40 | | |

Table 4. 11. (continued)

| Q7 5 | | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Citizenship | No | 276 | 4.14 | 0.54 | -2.015* | .044 |
| | Yes | 175 | 4.24 | 0.53 | | |
| Change | No | 276 | 3.79 | 0.50 | -2.614** | .009 |
| | Yes | 175 | 3.92 | 0.51 | | |
| community values Total | No | 276 | 3.95 | 0.44 | -2.699** | .007 |
| | Yes | 175 | 4.06 | 0.47 | | |
| Omnibus total | No | 276 | 4.04 | 0.37 | -1.747 | .081 |
| | Yes | 175 | 4.11 | 0.39 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

There was no significant difference in the group values total (p>.05) for students who participated in faith or religious-based organizations/clubs while in college (Table 4.12). However, controversy with civility, a sub-variable of group values, was a significant difference (p<.05).

Table 4. 12.

*Differences in Leadership Development by Faith or Religious-based Organizations*

| Q7 6 | | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Collaboration | No | 280 | 4.16 | 0.44 | .522 | .602 |
| | Yes | 171 | 4.14 | 0.46 | | |
| Common Purpose | No | 280 | 4.15 | 0.47 | -.583 | .560 |
| | Yes | 171 | 4.17 | 0.42 | | |
| Controversy with Civility | No | 280 | 3.99 | 0.42 | 2.971** | .003 |
| | Yes | 171 | 3.87 | 0.45 | | |
| Group Values Total | No | 280 | 4.09 | 0.39 | 1.283 | .200 |
| | Yes | 171 | 4.04 | 0.38 | | |
| Citizenship | No | 280 | 4.16 | 0.55 | -.805 | .421 |
| | Yes | 171 | 4.20 | 0.52 | | |
| Change | No | 280 | 3.88 | 0.50 | 2.255* | .025 |
| | Yes | 171 | 3.77 | 0.50 | | |
| community values Total | No | 280 | 4.01 | 0.46 | .983 | .326 |
| | Yes | 171 | 3.96 | 0.45 | | |
| Omnibus total | No | 280 | 4.07 | 0.39 | .362 | .717 |
| | Yes | 171 | 4.06 | 0.38 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

There was no significant difference in the community values total, but students who participated in faith or religious-based organizations scored higher in change than non-participants, showing a significant difference ($p<.05$). Overall, students who participated in faith or religious-based organizations/clubs did not show any significant differences in leadership development (SRLS-R2) ($p>.05$).

For students who participated in community-based organizations (Table 4.13), there was also a significant difference in group values total ($p<.05$). In other words, students who participated in community-based organizations scored relatively higher than non-participants. In the sub-variable, there was a significant difference in controversy with civility ($p<.05$).

Table 4. 13.

*Differences in Leadership Development by Community-based Organizations*

| Q7 7 | | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Collaboration | No | 345 | 4.14 | .44 | -1.064 | .288 |
| | Yes | 106 | 4.19 | .48 | | |
| Common Purpose | No | 345 | 4.14 | .46 | -1.662 | .097 |
| | Yes | 106 | 4.22 | .43 | | |
| Controversy with Civility | No | 345 | 3.92 | .45 | -2.520* | .012 |
| | Yes | 106 | 4.04 | .39 | | |
| Group Values Total | No | 345 | 4.05 | .39 | -2.109* | .035 |
| | Yes | 106 | 4.14 | .37 | | |
| Citizenship | No | 345 | 4.14 | .55 | -3.107** | .002 |
| | Yes | 106 | 4.32 | .48 | | |
| Change | No | 345 | 3.81 | .50 | -2.024* | .044 |
| | Yes | 106 | 3.93 | .51 | | |
| community values Total | No | 345 | 3.96 | .46 | -2.913** | .004 |
| | Yes | 106 | 4.10 | .44 | | |
| Omnibus total | No | 345 | 4.05 | .39 | -2.316* | .021 |
| | Yes | 106 | 4.14 | .36 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

There was also a significant difference in community values total ($p<.05$). Citizenship and change, sub-variables, also showed a significant difference. Overall, students who participated in community-based organizations while in college showed a significant difference in leadership development (SRLS-R2) ($p<.05$).

Participating in Greek Life (Table 4. 14) showed a significant difference in group values total ($p<.05$). In other words, students who participated in Greek Life scored relatively higher than those who did not. Overall, however, participation in Greek Life did not lead to a significant difference in leadership development (SRLS-R2) ($p>.05$).

Table 4. 14.

*Differences in Leadership Development by Greek Life*

| Q78 | | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Collaboration | No | 357 | 4.14 | 0.46 | -1.114 | .266 |
| | Yes | 94 | 4.20 | 0.40 | | |
| Common Purpose | No | 357 | 4.14 | 0.46 | -1.433 | .153 |
| | Yes | 94 | 4.22 | 0.42 | | |
| Controversy with Civility | No | 357 | 3.92 | 0.45 | -2.547* | .011 |
| | Yes | 94 | 4.05 | 0.36 | | |
| Group Values Total | No | 357 | 4.05 | 0.40 | -2.051* | .041 |
| | Yes | 94 | 4.15 | 0.33 | | |
| Citizenship | No | 357 | 4.16 | 0.56 | -1.393 | .164 |
| | Yes | 94 | 4.25 | 0.47 | | |
| Change | No | 357 | 3.85 | 0.51 | .305 | .761 |
| | Yes | 94 | 3.83 | 0.48 | | |
| community values Total | No | 357 | 3.99 | 0.47 | -.531 | .595 |
| | Yes | 94 | 4.01 | 0.40 | | |
| Omnibus total | No | 357 | 4.06 | 0.39 | -1.255 | .210 |
| | Yes | 94 | 4.11 | 0.34 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

## Pre-collegiate Experiences

A t-test was conducted to examine the difference in the mean of leadership development (SRLS-R2) by pre-collegiate experiences, such as participating in an extracurricular activity and leadership training.

### *High School Extracurricular organization/clubs*

Students who participated in extracurricular activities while in high school scored relatively higher in individual values total (See table 4.15), showing a significant difference ($p<.05$).

Table 4. 15.

*Differences in Leadership Development by High School Extracurricular Activity*

| Q14 1 | | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Consciousness of Self | Yes | 598 | 3.81 | .50 | 1.022 | .307 |
| | No | 104 | 3.76 | .59 | | |
| Congruence | Yes | 598 | 4.23 | .46 | 2.583** | .010 |
| | No | 104 | 4.10 | .61 | | |
| Commitment | Yes | 598 | 4.43 | .46 | 2.469* | .014 |
| | No | 104 | 4.30 | .57 | | |
| Individual Values Total | Yes | 598 | 4.11 | .40 | 2.215* | .027 |
| | No | 104 | 4.01 | .53 | | |
| Collaboration | Yes | 598 | 4.12 | .44 | 2.856** | .004 |
| | No | 104 | 3.98 | .48 | | |
| Common Purpose | Yes | 598 | 4.13 | .42 | 4.397*** | .000 |
| | No | 104 | 3.93 | .48 | | |
| Controversy with Civility | Yes | 598 | 3.94 | .43 | 2.178* | .030 |
| | No | 104 | 3.84 | .43 | | |
| Group Values Total | Yes | 598 | 4.05 | .37 | 3.603*** | .000 |
| | No | 104 | 3.91 | .40 | | |
| Citizenship | Yes | 598 | 4.13 | .53 | 4.019*** | .000 |
| | No | 104 | 3.90 | .58 | | |
| Change | Yes | 598 | 3.81 | .51 | .000 | 1.000 |
| | No | 104 | 3.81 | .48 | | |
| community values Total | Yes | 598 | 3.95 | .46 | 2.106* | .036 |
| | No | 104 | 3.85 | .46 | | |
| Omnibus total | Yes | 598 | 4.05 | .37 | 2.962** | .003 |
| | No | 104 | 3.93 | .43 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

In the sub-variables, congruence and commitment were also significant differences. Those who participated in extracurricular activities while in high school also scored higher in the group values total, showing a significant difference ($p<.05$), and all sub-variables, collaboration, common purpose, and controversy with civility, were also significant differences. In the community values total, students who participated in extracurricular activities while in high school also scored higher than those who did not, showing a significant difference ($p<.05$). A significant difference was also shown in citizenship, a sub-variable of community values ($p<.05$). Overall, it can be seen that those who participated in extracurricular organizations/clubs in high school scored higher significantly on the SRLS ($p<.05$).

***High School Leadership Training***

Students who participated in leadership training while in high school scored higher in individual values total than those who did not (Table 4.16), showing a significant difference ($p<.05$). Significant differences were also shown in consciousness of self and congruence ($p<.05$). In the group values total, participants in leadership training scored higher than non-participants, showing a significant difference ($p<.05$). All sub-variables of group values: collaboration, common purpose, and controversy with civility were also significant differences. Participants scored higher in community values total than non-participants, showing a significant difference ($p<.05$). Citizenship, a sub-variable of community values, showed the same trend ($p<.05$). Overall, it can be seen that those who participated in leadership training while in high school scored higher than non-participants on the leadership development (SRLS-R2), and that showed significant differences ($p<.05$).

Table 4. 16.

*Differences in Leadership Development by High School Leadership Training*

| Q142 | | N | M | SD | t | p |
|---|---|---|---|---|---|---|
| Consciousness of Self | Yes | 316 | 3.86 | .49 | 2.534* | .011 |
| | No | 385 | 3.76 | .53 | | |
| Congruence | Yes | 316 | 4.25 | .50 | 2.064* | .039 |
| | No | 385 | 4.18 | .48 | | |
| Commitment | Yes | 316 | 4.44 | .48 | 1.591 | .112 |
| | No | 385 | 4.39 | .47 | | |
| Individual Values Total | Yes | 316 | 4.14 | .42 | 2.528* | .012 |
| | No | 385 | 4.06 | .42 | | |
| Collaboration | Yes | 316 | 4.14 | .45 | 2.367* | .018 |
| | No | 385 | 4.06 | .43 | | |
| Common Purpose | Yes | 316 | 4.16 | .44 | 3.201*** | .001 |
| | No | 385 | 4.05 | .43 | | |
| Controversy with Civility | Yes | 316 | 3.96 | .44 | 2.270* | .024 |
| | No | 385 | 3.89 | .43 | | |
| Group Values Total | Yes | 316 | 4.08 | .39 | 3.038** | .002 |
| | No | 385 | 3.99 | .36 | | |
| Citizenship | Yes | 316 | 4.20 | .51 | 4.499*** | .000 |
| | No | 385 | 4.01 | .55 | | |
| Change | Yes | 316 | 3.85 | .51 | 1.693 | .091 |
| | No | 385 | 3.78 | .50 | | |
| community values Total | Yes | 316 | 4.00 | .46 | 3.407*** | .001 |
| | No | 385 | 3.89 | .45 | | |
| Omnibus total | Yes | 316 | 4.08 | .38 | 3.256*** | .001 |
| | No | 385 | 3.99 | .37 | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

**Involvement of Extracurricular activity**

***Involvement Experiences***

There are four involvement sections to examine the difference in the mean of leadership development by the number of organizations/clubs participated in, the amount of time dedicated to them per week, the number of years involved, and the highest level of participation while in college.

The number of organizations/clubs that students were actively involved in resulted in no significant difference in individual values total. In the group values total

(Table 4.17), there were significant differences ($p<.05$). Collaboration and common purpose, sub-variables of group values, also showed significant differences ($p<.05$). That is, it can be seen that students who are involved in 5 or more organizations/clubs (d) scored relatively higher than those who were not involved in organizations/clubs (a) or 1-2 organizations/clubs (b). There was also a significant difference in community values total ($p<.05$) and citizenship, a sub-variable of community values ($p<.05$).

Overall, students who were involved in 5 or more organizations/clubs while in college scored relatively higher than those who were not involved or involved in 1-2 organizations/clubs that dealt with leadership development (SRLS-R2), showing a significant difference ($p<.05$).

Table 4. 17.

*Differences in Leadership Development by Number of Organizations/Clubs*

| | | N | M | SD | F | p | Scheffe |
|---|---|---|---|---|---|---|---|
| Collaboration | 0 organization/club(a) | 15 | 4.03 | .52 | 3.711* | .012 | d>c>b>a |
| | 1-2 organization/club(b) | 311 | 4.12 | .43 | | | |
| | 3-4 organization/club(c) | 116 | 4.23 | .48 | | | |
| | 5 or more organization/club(d) | 10 | 4.45 | .38 | | | |
| | Total | 452 | 4.15 | .45 | | | |
| Common Purpose | 0 organization/club(a) | 15 | 3.99 | .43 | 2.800* | .040 | d,c>b>a |
| | 1-2 organization/club(b) | 311 | 4.13 | .44 | | | |
| | 3-4 organization/club(c) | 116 | 4.24 | .46 | | | |
| | 5 or more organization/club(d) | 10 | 4.29 | .56 | | | |
| | Total | 452 | 4.16 | .45 | | | |
| Controversy with Civility | 0 organization/club | 15 | 3.92 | .51 | 1.603 | .188 | |
| | 1-2 organization/club | 311 | 3.92 | .43 | | | |
| | 3-4 organization/club | 116 | 4.02 | .42 | | | |
| | 5 or more organization/club | 10 | 4.04 | .47 | | | |
| | Total | 452 | 3.95 | .44 | | | |
| Group Values Total | 0 organization/club(a) | 15 | 3.97 | .42 | 3.206* | .023 | d,c>b,a |
| | 1-2 organization/club(b) | 311 | 4.04 | .38 | | | |
| | 3-4 organization/club(c) | 116 | 4.15 | .38 | | | |
| | 5 or more organization/club(d) | 10 | 4.24 | .40 | | | |
| | Total | 452 | 4.07 | .39 | | | |

Table 4. 17. (continued)

| | | N | M | SD | F | p | Scheffe |
|---|---|---|---|---|---|---|---|
| Citizenship | 0 organization/club(a) | 15 | 3.71 | .69 | 10.842*** | .000 | d>c>b>a |
| | 1-2 organization/club(b) | 311 | 4.12 | .52 | | | |
| | 3-4 organization/club(c) | 116 | 4.35 | .52 | | | |
| | 5 or more organization/club(d) | 10 | 4.56 | .45 | | | |
| | Total | 452 | 4.18 | .54 | | | |
| Change | 0 organization/club | 15 | 3.72 | .58 | .948 | .417 | |
| | 1-2 organization/club | 311 | 3.82 | .49 | | | |
| | 3-4 organization/club | 116 | 3.90 | .54 | | | |
| | 5 or more organization/club | 10 | 3.90 | .64 | | | |
| | Total | 452 | 3.84 | .51 | | | |
| community values Total | 0 organization/club(a) | 15 | 3.72 | .58 | 5.187** | .002 | d,c>b>a |
| | 1-2 organization/club(b) | 311 | 3.96 | .44 | | | |
| | 3-4 organization/club(c) | 116 | 4.10 | .48 | | | |
| | 5 or more organization/club(d) | 10 | 4.19 | .45 | | | |
| | Total | 452 | 3.99 | .46 | | | |
| Omnibus total | 0 organization/club(a) | 15 | 3.93 | .42 | 3.258* | .021 | d>c>b,a |
| | 1-2 organization/club(b) | 311 | 4.04 | .37 | | | |
| | 3-4 organization/club(c) | 116 | 4.14 | .40 | | | |
| | 5 or more organization/club(d) | 10 | 4.24 | .34 | | | |
| | Total | 452 | 4.07 | .38 | | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

There was no significant difference in individual values total by the amount of time spent per week on extracurricular activities while in college. Therefore those are omitted from table 4. 18. In the group values total, there was no significant difference (Table 4.18), but the sub-variable, common purpose, showed a significant difference ($p<.05$). Students who spent 7 or more hours per week scored high, and those who spent 1 or fewer hours per week appeared relatively low. For the community values total, there was no significant difference. However, in citizenship, students who spent 7 or more hours per week scored high, and those who spent 1 or fewer hour per week was relatively low, showing a significant difference ($p<.05$). Overall, there was no significant difference in leadership development (SRLS-R2) according to the amount of time spent per week on extracurricular activities while in college ($p>.05$).

Table 4. 18.

*Differences in Leadership Development by the Amount of Time Spent per Week*

| | | N | M | SD | F | p | Scheffe |
|---|---|---|---|---|---|---|---|
| Collaboration | 1 or less hour per week | 66 | 4.06 | .45 | 2.302 | .077 | |
| | 2-3 hours per week | 166 | 4.19 | .46 | | | |
| | 4-6 hours per week | 136 | 4.10 | .44 | | | |
| | 7 or more hours per week | 80 | 4.21 | .43 | | | |
| | Total | 448 | 4.15 | .45 | | | |
| Common Purpose | 1 or less hour per week(a) | 66 | 4.03 | .46 | 4.217** | .006 | d>b,c>a |
| | 2-3 hours per week(b) | 166 | 4.15 | .48 | | | |
| | 4-6 hours per week(c) | 136 | 4.14 | .40 | | | |
| | 7or more hours per week(d) | 80 | 4.29 | .44 | | | |
| | Total | 448 | 4.16 | .45 | | | |
| Controversy with Civility | 1 or less hour per week | 66 | 3.94 | .45 | 1.064 | .364 | |
| | 2-3 hours per week | 166 | 3.90 | .43 | | | |
| | 4-6 hours per week | 136 | 3.98 | .42 | | | |
| | 7 or more hours per week | 80 | 3.98 | .47 | | | |
| | Total | 448 | 3.95 | .44 | | | |
| Group Values Total | 1 or less hour per week | 66 | 4.01 | .40 | 1.651 | .177 | |
| | 2-3 hours per week | 166 | 4.06 | .40 | | | |
| | 4-6 hours per week | 136 | 4.07 | .35 | | | |
| | 7 or more hours per week | 80 | 4.15 | .39 | | | |
| | Total | 448 | 4.07 | .39 | | | |
| Citizenship | 1 or less hour per week(a) | 66 | 4.02 | .57 | 2.836* | .038 | d>b,c>a |
| | 2-3 hours per week(b) | 166 | 4.18 | .58 | | | |
| | 4-6 hours per week(c) | 136 | 4.19 | .50 | | | |
| | 7or more hours per week(d) | 80 | 4.28 | .50 | | | |
| | Total | 448 | 4.17 | .54 | | | |
| Change | 1 or less hour per week | 66 | 3.82 | .50 | .140 | .936 | |
| | 2-3 hours per week | 166 | 3.85 | .51 | | | |
| | 4-6 hours per week | 136 | 3.82 | .49 | | | |
| | 7 or more hours per week | 80 | 3.86 | .55 | | | |
| | Total | 448 | 3.84 | .51 | | | |
| community values Total | 1 or less hour per week | 66 | 3.91 | .47 | 1.038 | .375 | |
| | 2-3 hours per week | 166 | 4.00 | .47 | | | |
| | 4-6 hours per week | 136 | 3.98 | .43 | | | |
| | 7 or more hours per week | 80 | 4.04 | .48 | | | |
| | Total | 448 | 3.99 | .46 | | | |
| Omnibus total | 1 or less hour per week | 66 | 4.01 | .38 | 1.287 | .278 | |
| | 2-3 hours per week | 166 | 4.07 | .39 | | | |
| | 4-6 hours per week | 136 | 4.06 | .36 | | | |
| | 7 or more hours per week | 80 | 4.13 | .40 | | | |
| | Total | 448 | 4.07 | .38 | | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

The number of years that students were actively involved in extracurricular organizations/clubs while in college (Table 4.19) resulted in a significant difference in individual values total ($p<.05$). There was also a significant difference in the sub-variable, consciousness of self ($p<.05$). In other words, 5 or more years was high, and 3 years or fewer was relatively low.

Table 4. 19.

*Differences in Leadership Development by Number of Years*

| | | N | Mean | Std. Deviation | F | p | Scheffe |
|---|---|---|---|---|---|---|---|
| Consciousness of Self | 1 year or less(a) | 130 | 3.77 | .51 | 4.124** | .003 | e>d>a,b,c |
| | 2 years(b) | 117 | 3.78 | .52 | | | |
| | 3 years(c) | 82 | 3.84 | .56 | | | |
| | 4 years(d) | 86 | 3.98 | .48 | | | |
| | 5 or more years(e) | 17 | 4.16 | .49 | | | |
| | Total | 432 | 3.84 | .52 | | | |
| Congruence | 1 year or less | 130 | 4.19 | .45 | 1.989 | .095 | |
| | 2 years | 117 | 4.18 | .50 | | | |
| | 3 years | 82 | 4.28 | .46 | | | |
| | 4 years | 86 | 4.32 | .45 | | | |
| | 5 or more years | 17 | 4.36 | .66 | | | |
| | Total | 432 | 4.24 | .48 | | | |
| Commitment | 1 year or less | 130 | 4.44 | .48 | 1.122 | .345 | |
| | 2 years | 117 | 4.41 | .49 | | | |
| | 3 years | 82 | 4.40 | .47 | | | |
| | 4 years | 86 | 4.50 | .43 | | | |
| | 5 or more years | 17 | 4.60 | .46 | | | |
| | Total | 432 | 4.44 | .47 | | | |
| Individual Values Total | 1 year or less(a) | 130 | 4.09 | .40 | 3.153* | .014 | e>d>a,b,c |
| | 2 years(b) | 117 | 4.08 | .43 | | | |
| | 3 years(c) | 82 | 4.13 | .43 | | | |
| | 4 years(d) | 86 | 4.23 | .39 | | | |
| | 5 or more years(e) | 17 | 4.34 | .49 | | | |
| | Total | 432 | 4.13 | .42 | | | |
| Collaboration | 1 year or less(a) | 130 | 4.07 | .42 | 3.738** | .005 | e>d>b,c>a |
| | 2 years(b) | 117 | 4.16 | .48 | | | |
| | 3 years(c) | 82 | 4.16 | .44 | | | |
| | 4 years(d) | 86 | 4.23 | .45 | | | |
| | 5 or more years(e) | 17 | 4.44 | .39 | | | |
| | Total | 432 | 4.16 | .45 | | | |

Table 4. 19. (continued)

| | | N | Mean | Std. Deviation | F | p | Scheffe |
|---|---|---|---|---|---|---|---|
| Common Purpose | 1 year or less(a) | 130 | 4.08 | .43 | 6.192*** | .000 | e>c,d>a,b |
| | 2 years(b) | 117 | 4.08 | .49 | | | |
| | 3 years(c) | 82 | 4.23 | .43 | | | |
| | 4 years(d) | 86 | 4.29 | .40 | | | |
| | 5 or more years(e) | 17 | 4.46 | .43 | | | |
| | Total | 432 | 4.17 | .45 | | | |
| Controversy with Civility | 1 year or less | 130 | 3.90 | .40 | 1.307 | .267 | |
| | 2 years | 117 | 3.93 | .47 | | | |
| | 3 years | 82 | 3.96 | .43 | | | |
| | 4 years | 86 | 4.01 | .43 | | | |
| | 5 or more years | 17 | 4.09 | .42 | | | |
| | Total | 432 | 3.95 | .43 | | | |
| Group Values Total | 1 year or less(a) | 130 | 4.01 | .36 | 4.115** | .003 | e>d>a,b,c |
| | 2 years(b) | 117 | 4.04 | .41 | | | |
| | 3 years(c) | 82 | 4.10 | .39 | | | |
| | 4 years(d) | 86 | 4.16 | .35 | | | |
| | 5 or more years(e) | 17 | 4.31 | .34 | | | |
| | Total | 432 | 4.08 | .38 | | | |
| Citizenship | 1 year or less(a) | 130 | 4.07 | .58 | 6.048*** | .000 | e>d>c>a,b |
| | 2 years(b) | 117 | 4.14 | .49 | | | |
| | 3 years(c) | 82 | 4.27 | .53 | | | |
| | 4 years(d) | 86 | 4.32 | .44 | | | |
| | 5 or more years(e) | 17 | 4.55 | .55 | | | |
| | Total | 432 | 4.20 | .53 | | | |
| Change | 1 year or less | 130 | 3.79 | .45 | 1.220 | .302 | |
| | 2 years | 117 | 3.85 | .49 | | | |
| | 3 years | 82 | 3.84 | .53 | | | |
| | 4 years | 86 | 3.89 | .54 | | | |
| | 5 or more years | 17 | 4.04 | .63 | | | |
| | Total | 432 | 3.85 | .50 | | | |
| community values Total | 1 year or less(a) | 130 | 3.92 | .45 | 3.690** | .006 | e>a,b,c,d |
| | 2 years(b) | 117 | 3.97 | .43 | | | |
| | 3 years(c) | 82 | 4.03 | .47 | | | |
| | 4 years(d) | 86 | 4.09 | .44 | | | |
| | 5 or more years(e) | 17 | 4.27 | .51 | | | |
| | Total | 432 | 4.00 | .45 | | | |
| Omnibus total | 1 year or less(a) | 130 | 4.01 | .36 | 4.256** | .002 | e>d,c>a,b |
| | 2 years(b) | 117 | 4.04 | .39 | | | |
| | 3 years(c) | 82 | 4.10 | .39 | | | |
| | 4 years(d) | 86 | 4.16 | .35 | | | |
| | 5 or more years(e) | 17 | 4.31 | .39 | | | |
| | Total | 432 | 4.08 | .38 | | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

There was also a significant difference in the group values total ($p<.05$). The sub-variables of the group values, collaboration and common purpose, showed significant differences. Students who involved for 5 or more years scored high in the group values of leadership, and those who were involved for 3 years or less scored relatively low. There was also a significant difference in community values total ($p<.05$). Citizenship, a sub-variable of community values, was also significant ($p<.05$). In other words, students who were involved for 5 or more years scored high in citizenship and those who response 4 or fewer years were relatively low. Overall, students who were actively involved for 5 or more years (e) in extracurricular organizations/clubs while in college showed a high score significantly in leadership development (SRLS-R2) ($p<.05$).

According to the differences in the Socially Responsible Leadership Scale (SRLS-R2) by the highest level of participation in extracurricular activity organizations/clubs while in college (Table 4.20), there was no significant difference in individual values total. However, there was a significant difference in consciousness of self, a sub-variable of individual values ($p<.05$). In other words, students who were involved in state or national leadership (e) scored high, followed by an officer or team captain (d), and those who were members (a) scored relatively low.

In the group values total, there was also a significant difference ($p<.05$). Collaboration, common purpose, and controversy with civility indicated significant differences, Students who were involved in state or national leadership scored high, and those who were members, committee members were relatively low. There was also a significant difference in community values total ($p<.05$). Citizenship, a sub-variables,

was also significant (p<.05). That is, students who were involved in the state or national level leadership scored high, and those who were members, committee members scored relatively low. Overall, the difference in leadership development (SRLS-R2) according to the highest level of participation in extracurricular activity organizations/clubs while in college showed significant differences (p<.05).

Table 4. 20.

*Differences in Leadership Development by the Highest Level of Participation*

| | | N | Mean | Std. Deviation | F | p | Scheffe |
|---|---|---|---|---|---|---|---|
| Consciousness of Self | Member(a) | 192 | 3.76 | .53 | 2.944* | .020 | e>d>c,b,a |
| | Committee member(b) | 50 | 3.87 | .44 | | | |
| | Event or committee chair(c) | 24 | 3.80 | .54 | | | |
| | Officer or team captain(d) | 146 | 3.94 | .53 | | | |
| | state or national leadership(e) | 4 | 4.15 | .62 | | | |
| | Total | 416 | 3.84 | .52 | | | |
| Congruence | Member | 192 | 4.21 | .46 | .702 | .591 | |
| | Committee member | 50 | 4.22 | .46 | | | |
| | Event or committee chair | 24 | 4.16 | .54 | | | |
| | Officer or team captain | 146 | 4.29 | .49 | | | |
| | state or national leadership | 4 | 4.17 | 1.11 | | | |
| | Total | 416 | 4.24 | .48 | | | |
| Commitment | Member | 192 | 4.42 | .47 | 2.352 | .054 | |
| | Committee member | 50 | 4.38 | .46 | | | |
| | Event or committee chair | 24 | 4.29 | .65 | | | |
| | Officer or team captain | 146 | 4.52 | .44 | | | |
| | state or national leadership | 4 | 4.67 | .47 | | | |
| | Total | 416 | 4.45 | .47 | | | |
| Individual Values Total | Member | 192 | 4.08 | .41 | 2.340 | .055 | |
| | Committee member | 50 | 4.12 | .38 | | | |
| | Event or committee chair | 24 | 4.05 | .51 | | | |
| | Officer or team captain | 146 | 4.21 | .42 | | | |
| | state or national leadership | 4 | 4.30 | .63 | | | |
| | Total | 416 | 4.13 | .42 | | | |
| Collaboration | Member(a) | 192 | 4.09 | .42 | 3.543** | .007 | e>d>c,b,a |
| | Committee member(b) | 50 | 4.15 | .44 | | | |
| | Event or committee chair(c) | 24 | 4.09 | .52 | | | |
| | Officer or team captain(d) | 146 | 4.26 | .46 | | | |
| | state or national leadership(e) | 4 | 4.44 | .66 | | | |
| | Total | 416 | 4.16 | .45 | | | |

Table 4. 20. (continued)

| | | N | Mean | Std. Deviation | F | p | Scheffe |
|---|---|---|---|---|---|---|---|
| Common Purpose | Member(a) | 192 | 4.05 | .46 | 8.392*** | .000 | e,d>c,b>a |
| | Committee member(b) | 50 | 4.15 | .38 | | | |
| | Event or committee chair(c) | 24 | 4.14 | .48 | | | |
| | Officer or team captain(d) | 146 | 4.33 | .42 | | | |
| | state or national leadership(e) | 4 | 4.31 | .85 | | | |
| | Total | 416 | 4.17 | .46 | | | |
| Controversy with Civility | Member(a) | 192 | 3.90 | .43 | 2.416* | .048 | |
| | Committee member(b) | 50 | 3.88 | .45 | | | |
| | Event or committee chair(c) | 24 | 3.99 | .45 | | | |
| | Officer or team captain(d) | 146 | 4.02 | .41 | | | |
| | state or national leadership(e) | 4 | 4.14 | .60 | | | |
| | Total | 416 | 3.95 | .43 | | | |
| Group Values Total | Member(a) | 192 | 4.00 | .37 | 5.633*** | .000 | e>d>c,b,a |
| | Committee member(b) | 50 | 4.04 | .36 | | | |
| | Event or committee chair(c) | 24 | 4.07 | .43 | | | |
| | Officer or team captain(d) | 146 | 4.19 | .37 | | | |
| | state or national leadership(e) | 4 | 4.29 | .60 | | | |
| | Total | 416 | 4.08 | .38 | | | |
| Citizenship | Member(a) | 192 | 4.09 | .52 | 6.728*** | .000 | e>d>b>c,a |
| | Committee member(b) | 50 | 4.18 | .52 | | | |
| | Event or committee chair(c) | 24 | 4.02 | .71 | | | |
| | Officer or team captain(d) | 146 | 4.36 | .49 | | | |
| | state or national leadership(e) | 4 | 4.50 | .58 | | | |
| | Total | 416 | 4.20 | .54 | | | |
| Change | Member | 192 | 3.81 | .51 | .948 | .436 | |
| | Committee member | 50 | 3.84 | .42 | | | |
| | Event or committee chair | 24 | 3.74 | .58 | | | |
| | Officer or team captain | 146 | 3.88 | .50 | | | |
| | state or national leadership | 4 | 4.10 | .60 | | | |
| | Total | 416 | 3.84 | .50 | | | |
| community values Total | Member(a) | 192 | 3.93 | .44 | 3.659** | .006 | e>d>c,b,a |
| | Committee member(b) | 50 | 3.99 | .41 | | | |
| | Event or committee chair(c) | 24 | 3.86 | .60 | | | |
| | Officer or team captain(d) | 146 | 4.10 | .44 | | | |
| | state or national leadership(e) | 4 | 4.26 | .54 | | | |
| | Total | 416 | 4.00 | .45 | | | |
| Omnibus total | Member(a) | 192 | 4.01 | .37 | 4.426** | .002 | e>d>c,b,a |
| | Committee member(b) | 50 | 4.05 | .36 | | | |
| | Event or committee chair(c) | 24 | 4.01 | .48 | | | |
| | Officer or team captain(d) | 146 | 4.17 | .36 | | | |
| | state or national leadership(e) | 4 | 4.29 | .59 | | | |
| | Total | 416 | 4.07 | .38 | | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

### *Involvement Index Level*

The extracurricular involvement index was calculated by adding the number of years a student indicated they were involved in a specific extracurricular activity, their highest level of involvement in that activity while in college and high school, and leadership self-perception. To measure the relationship between this construct and leadership development outcomes measured by the SRLS-R2 scale, the involvement score was categorized into three approximately equal groups and used as the independent variable. An ANOVA was calculated using the involvement index as the independent variable and the leadership development (SRLS-R2) as the dependent variable.

Looking at the difference in leadership development (SRLS-R2) according to the involvement index level (Table 4.21), there was no significant difference in individual values total, but there was a significant difference in commitment, a sub variable of individual values ($p<.05$). In other words, it can be seen that when the involvement index is high, commitment is also high, and the middle or low index level scored relatively low. In the group values total, there was a significant difference ($p<.05$). Common purpose, a sub-variable of group values, also showed a significant difference ($p<.05$). In other words, it can be seen that when students who had a high involvement index level scored higher, and those who were in the middle or low index level scored relatively low.

When it came to community values total, there was no significant difference ($p>.05$). However, citizenship showed a significant difference ($p<.05$). In other words, it could be seen that when students' involvement index level was high, their citizenship

scored high in leadership development (SRLS-R2), and those who had middle or low involvement levels scored relatively low. Overall, the differences in the mean of leadership development (SRLS-R2) according to the involvement index showed a significant difference ($p<.05$). It can be seen that when the involvement index is high, so is leadership development, and the middle or low involvement index showed relatively low leadership scores.

Table 4. 21.

*Differences in Leadership Development by Involvement Index Level*

| | | N | M | S.D | F | p | Scheffe |
|---|---|---|---|---|---|---|---|
| Consciousness of Self | low | 203 | 3.80 | .54 | .261 | .770 | |
| | middle | 299 | 3.79 | .51 | | | |
| | high | 203 | 3.83 | .52 | | | |
| | Total | 705 | 3.80 | .52 | | | |
| Congruence | low | 203 | 4.19 | .49 | 2.205 | .111 | |
| | middle | 299 | 4.18 | .49 | | | |
| | high | 203 | 4.27 | .50 | | | |
| | Total | 705 | 4.21 | .49 | | | |
| Commitment | low(a) | 203 | 4.42 | .47 | 4.061* | .018 | c>a,b |
| | middle(b) | 299 | 4.36 | .50 | | | |
| | high(c) | 203 | 4.48 | .43 | | | |
| | Total | 705 | 4.41 | .48 | | | |
| Individual Values Total | low | 203 | 4.09 | .43 | 1.994 | .137 | |
| | middle | 299 | 4.07 | .43 | | | |
| | high | 203 | 4.15 | .41 | | | |
| | Total | 705 | 4.10 | .42 | | | |
| Collaboration | low | 203 | 4.07 | .45 | 1.571 | .208 | |
| | middle | 299 | 4.09 | .42 | | | |
| | high | 203 | 4.14 | .47 | | | |
| | Total | 705 | 4.10 | .45 | | | |
| Common Purpose | low(a) | 203 | 4.04 | .44 | 12.200*** | .000 | c>a,b |
| | middle(b) | 299 | 4.05 | .43 | | | |
| | high(c) | 203 | 4.22 | .42 | | | |
| | Total | 705 | 4.10 | .44 | | | |
| Controversy with Civility | low | 203 | 3.89 | .44 | 1.586 | .205 | |
| | middle | 299 | 3.92 | .43 | | | |
| | high | 203 | 3.96 | .43 | | | |
| | Total | 705 | 3.92 | .43 | | | |

Table 4. 21. (continued)

| | | N | M | S.D | F | p | Scheffe |
|---|---|---|---|---|---|---|---|
| Group Values Total | low(a) | 203 | 3.99 | .38 | 5.137** | .006 | c>a,b |
| | middle(b) | 299 | 4.01 | .38 | | | |
| | high(c) | 203 | 4.10 | .37 | | | |
| | Total | 705 | 4.03 | .38 | | | |
| Citizenship | low(a) | 203 | 4.02 | .59 | 8.872*** | .000 | c>a,b |
| | middle(b) | 299 | 4.06 | .52 | | | |
| | high(c) | 203 | 4.23 | .50 | | | |
| | Total | 705 | 4.10 | .54 | | | |
| Change | low | 203 | 3.83 | .49 | .344 | .709 | |
| | middle | 299 | 3.80 | .50 | | | |
| | high | 203 | 3.82 | .53 | | | |
| | Total | 705 | 3.81 | .50 | | | |
| community values Total | low | 203 | 3.92 | .47 | 2.696 | .068 | |
| | middle | 299 | 3.91 | .45 | | | |
| | high | 203 | 4.00 | .45 | | | |
| | Total | 705 | 3.94 | .46 | | | |
| Omnibus total | low(a) | 203 | 4.00 | .38 | 3.653* | .026 | c>a,b |
| | middle(b) | 299 | 4.00 | .39 | | | |
| | high(c) | 203 | 4.09 | .36 | | | |
| | Total | 705 | 4.03 | .38 | | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

**Correlational Analysis**

According to the correlation analysis of related variables (Table 4.22) for participating in extracurricular organizations/clubs while in college, there was a significant positive correlation with individual values total (r=.089, p<.05) and group values total (r=.153, p<.05). There was also a significant positive correlation with community values total (r=.139, p<.05). Overall, there was a significant positive correlation with leadership development (r=.140, p<.05).

Participating in leadership training in college showed a significant positive correlation with individual values total (r=.092, p<.05), group values total (r=.137,

p<.05), and community values total (r=.102, p<.05). Throughout all values levels, there was a significant positive correlation with leadership development (r=.123, p<.05).

Extracurricular activities while in high school showed a significant positive correlation with individual values total (r=.083, p<.05). There was also a significant positive correlation with group values total (r=.135, p<.05), as well as a positive correlation with community values total (r=.079, p<.05). Overall, there was a significant positive correlation (r=.111, p<.05) with the omnibus of leadership development (SRLS-R2).

Also, leadership training while in high school showed a significant positive correlation with individual values total (r=.095, p<.05). There was also a significant positive correlation with group values total (r=.114, p<.05) and community values total (r=.128, p<.05). Overall, leadership training while in high school showed a significant positive correlation (r=.122, p<.05) with the omnibus of leadership development (SRLS-R2).

However, completing internships or participating in extracurricular activities with international students showed no significant correlation with the individual, group, and community values total. Overall, there is no significant correlation with the omnibus of leadership development (SRLS-R2). Interestingly, participating in extracurricular organizations/clubs with international students while in college showed a significant positive correlation with involvement in extracurricular organizations (r=.392), leadership training (r=.276), and off-campus internship (r=.162) while in college. The same trend was indicated in experiencing extracurricular activities while in high school as well (r=.127, p<.05).

Table 4. 22.

*Correlation Analysis of Related Variables*

| | Q6_1: Extra clubs | Q6_2: Leadership training | Q6_3: Internship | Q6_4: International | Q14_1: HS Extra activities | Q14_2: HS Leadership training | Individual Values Total | Group Values Total | community values Total | total |
|---|---|---|---|---|---|---|---|---|---|---|
| Q6_1: Extra clubs | 1 | | | | | | | | | |
| | | | | | | | | | | |
| Q6_2: Leadership training | .359*** | 1 | | | | | | | | |
| | .000 | | | | | | | | | |
| Q6_3: Internship | .168*** | .211*** | 1 | | | | | | | |
| | .000 | .000 | | | | | | | | |
| Q6_4: International | .392*** | .276*** | .162*** | 1 | | | | | | |
| | .000 | .000 | .000 | | | | | | | |
| Q14_1: HS Extra activities | .325*** | .165*** | .060 | .127*** | 1 | | | | | |
| | .000 | .000 | .115 | .001 | | | | | | |
| Q14_2: HS Leadership training | .138*** | .292*** | .082* | .096* | .290*** | 1 | | | | |
| | .000 | .000 | .030 | .011 | .000 | | | | | |
| Individual Values Total | .089* | .092* | .041 | .026 | .083* | .095* | 1 | | | |
| | .018 | .015 | .276 | .483 | .027 | .012 | | | | |
| Group Values Total | .153*** | .137*** | .026 | .061 | .135*** | .114** | .745*** | 1 | | |
| | .000 | .000 | .497 | .104 | .000 | .002 | .000 | | | |
| Community values Total | .139*** | .102** | .070 | .061 | .079* | .128*** | .689*** | .813*** | 1 | |
| | .000 | .007 | .064 | .105 | .036 | .001 | .000 | .000 | | |
| Omnibus | .140*** | .123*** | .048 | .054 | .111** | .122*** | .890*** | .942*** | .904*** | 1 |
| | .000 | .001 | .201 | .149 | .003 | .001 | .000 | .000 | .000 | |

* $p<.05$, ** $p<.01$, *** $p<.001$

**Hierarchical Regression Analysis**

To diagnose multicollinearity between variables, the variable inflation factor (VIF) and tolerance were examined. In general, if the dispersion expansion coefficient is more than 10 or the allowable value is less than 0.1, it is judged that there is a

problem of multi-collinearity. In this analysis, the VIF values of all variables were less than 10, and the tolerance was greater than 0.1, indicating that the problem of multicollinearity did not occur. However, due to the high correlation between participating in extracurricular organizations/clubs while in college and high school and each value of the SRLS-R2 variable, it was automatically excluded from the regression analysis.

***Individual Values***

Model 1 comprises gender, class level, student type, leadership training, number of years involved, the highest level of participation, and leadership perception of college students while they are in high school, and is significant collectively.

Table 4. 23.

*Impact on Individual Values Total Regression Analysis Model Summary*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .280a | .178 | .160 | .38741 | .078 | 4.362 | 7 | 360 | .000 |
| 2 | .297b | .188 | .157 | .38805 | .010 | .765 | 5 | 355 | .576 |

Table 4. 24.

*Impact on Individual Values Total Regression Analysis ANOVA*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 4.583 | 7 | .655 | 4.362 | .000 |
| | Residual | 54.032 | 360 | .150 | | |
| | Total | 58.615 | 367 | | | |
| 2 | Regression | 5.159 | 12 | .430 | 2.855 | .001 |
| | Residual | 53.456 | 355 | .151 | | |
| | Total | 58.615 | 367 | | | |

$^{*}$ $p$<.05, $^{**}$ $p$<.01, $^{***}$ $p$<.001

Model 1 predicts the individual value of leadership outcomes (F= 4.362, P<.05, $R^2$=.178). The above seven predictor variables account for 17.8% of the variance in individual value of leadership development outcomes. Meanwhile, it can be seen that there were no significant variables in Model 2.

In the regression analysis about the impact on the total of individual values, as a result of inputting variables in Model 1 (Table 4.25), the class level ( β=.105), and the student type ( β=.106) were significant variables (p<.05). In the case of self-perception ( β=.248), it can be seen that has a significant positive effect (p<.05).

Table 4. 25.

*Impact on Individual Values Total Regression Analysis Coefficients*

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | VIF |
|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | |
| 1 | (Constant) | 4.024 | .225 | | 17.868 | .000 | |
| | Q1: Gender(M0, F1) | -.003 | .048 | -.003 | -.053 | .957 | 1.044 |
| | Q3: Class level | .048 | .024 | .105 | 2.032* | .043 | 1.036 |
| | Q4: Student type(Yes0, No1) | .171 | .086 | .106 | 1.986* | .048 | 1.108 |
| | Q14 2: HS Leadership training | -.039 | .047 | -.048 | -.824 | .410 | 1.328 |
| | Q15 1: HS Number of years | .005 | .024 | .012 | .204 | .838 | 1.309 |
| | Q15 2: HS Highest level | -.021 | .018 | -.073 | -1.152 | .250 | 1.577 |
| | Q16: Perception | .114 | .025 | .248 | 4.478*** | .000 | 1.193 |
| 2 | (Constant) | 4.177 | .257 | | 16.263 | .000 | |
| | Q1: Gender(M0, F1) | .001 | .048 | .001 | .023 | .982 | 1.059 |
| | Q3: Class level | .022 | .031 | .048 | .723 | .470 | 1.723 |
| | Q4: Student type(Yes0, No1) | .179 | .091 | .111 | 1.964* | .050 | 1.240 |
| | Q14 2: HS Leadership training | -.026 | .049 | -.033 | -.538 | .591 | 1.442 |
| | Q15 1: HS Number of years | .007 | .024 | .018 | .302 | .763 | 1.368 |
| | Q15 2: HS Highest level | -.026 | .019 | -.090 | -1.370 | .172 | 1.688 |
| | Q16: Perception | .108 | .026 | .235 | 4.214*** | .000 | 1.211 |
| | Q6 2: Leadership training | -.030 | .048 | -.038 | -.640 | .523 | 1.358 |
| | Q6 3: Internship | -.041 | .051 | -.045 | -.809 | .419 | 1.227 |
| | Q6 4: International | -.028 | .045 | -.035 | -.632 | .528 | 1.166 |
| | Q9 1: Number of years | .004 | .024 | .014 | .188 | .851 | 2.067 |
| | Q9 2: Highest level | .017 | .019 | .058 | .895 | .371 | 1.607 |

* $p$<.05, ** $p$<.01, *** $p$<.001

These results show that the total of the individual values is relatively higher in senior students, domestic students, and students with a high self-perception of leadership skills. In other words, class level, student type, and leadership perception were significant predictors of the individual value of leadership development outcomes. The above three significant predictors were all positively related to individual values total. As they increase, the individual values total increases. The best predictor of individual values total was leadership self-perception ( β=.248), followed by the student type ( β=.106), a small to moderate predictor, and the class level ( β=.105), a small predictor.

***Group Values***

There was a significant correlation in Model 1 with group values of leadership. The aforementioned variables allowed Model 1 to predict group values of leadership development better than not knowing these variables (F= 3.740, P<.05, $R^2$=.168). The R-Square value indicates that 16.8% of the variance in group values is explained by the above seven predictors.

Table 4. 26.

*Impact on Group Values Total Regression Analysis Model Summary*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .260a | .168 | .150 | .36074 | .068 | 3.740 | 7 | 360 | .001 |
| 2 | .314b | .199 | .168 | .35719 | .031 | 2.439 | 5 | 355 | .034 |

Model 2 comprises collegiate leadership training, internship, experiences with international students, number of years involved, and the highest level of participation

in extracurricular organizations/clubs, and was significant collectively. Model 2 predicts the group value of leadership outcomes (F= 3.241, P<.05, $R^2$=.199). The above five predictor variables account for 19.9% of the variance in the group values of leadership development outcomes.

Table 4. 27.

*Impact on Group Values Total Regression Analysis ANOVA*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 3.407 | 7 | .487 | 3.740*** | .001 |
| | Residual | 46.847 | 360 | .130 | | |
| | Total | 50.254 | 367 | | | |
| 2 | Regression | 4.962 | 12 | .414 | 3.241*** | .000 |
| | Residual | 45.292 | 355 | .128 | | |
| | Total | 50.254 | 367 | | | |

* $p$<.05, ** $p$<.01, *** $p$<.001

As a result of inputting variables in Model 1 (Table 4. 28), student type ( $\beta$ =.109) was found to be a significant variable (p<.05). Self-perception of leadership skills ( $\beta$=.143) was also found to have a significant positive effect (p<.05). In Model 2, the highest level ( $\beta$=.161) was significant (p<.05). These results showed that group values total relatively increased in domestic students, students with a high self-perception of leadership skills, and high participation level.

In other words, student type, leadership perception, and highest participation level were significant predictors of group value of leadership development outcomes. The above three significant predictors were all positively related to group values total. As they increase, the group values total increases. The best predictor of group values total was the highest level participated ( $\beta$=.161), followed by self-leadership perception

( β=.143), a small to moderate predictor, and the student type ( β=.109), a small predictor.

Table 4. 28.

*Impact on Group Values Total Regression Analysis Coefficients*

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | VIF |
|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | |
| 1 | (Constant) | 3.949 | .210 | | 18.830 | .000 | |
| | Q1: Gender(M0, F1) | -.069 | .045 | -.081 | -1.551 | .122 | 1.044 |
| | Q3: Class level | .039 | .022 | .092 | 1.775 | .077 | 1.036 |
| | Q4: Student type(Yes0, No1) | .164 | .080 | .109 | 2.043* | .042 | 1.108 |
| | Q14 2: HS Leadership training | -.073 | .044 | -.099 | -1.688 | .092 | 1.328 |
| | Q15 1: HS Number of years | .023 | .022 | .059 | 1.018 | .309 | 1.309 |
| | Q15 2: HS Highest level | -.005 | .017 | -.020 | -.320 | .749 | 1.577 |
| | Q16: Perception | .061 | .024 | .143 | 2.576** | .010 | 1.193 |
| 2 | (Constant) | 4.070 | .236 | | 17.212*** | .000 | |
| | Q1: Gender(M0, F1) | -.061 | .044 | -.071 | -1.370 | .172 | 1.059 |
| | Q3: Class level | .004 | .028 | .010 | .147 | .883 | 1.723 |
| | Q4: Student type(Yes0, No1) | .170 | .084 | .114 | 2.027* | .043 | 1.240 |
| | Q14 2: HS Leadership training | -.061 | .045 | -.082 | -1.358 | .175 | 1.442 |
| | Q15 1: HS Number of years | .024 | .022 | .063 | 1.076 | .283 | 1.368 |
| | Q15 2: HS Highest level | -.016 | .017 | -.061 | -.928 | .354 | 1.688 |
| | Q16: Perception | .051 | .024 | .120 | 2.171* | .031 | 1.211 |
| | Q6 2: Leadership training | -.025 | .044 | -.034 | -.572 | .567 | 1.358 |
| | Q6 3: Internship | -.023 | .047 | -.028 | -.498 | .619 | 1.227 |
| | Q6 4: International | -.046 | .041 | -.061 | -1.117 | .265 | 1.166 |
| | Q9 1: Number of years | .002 | .022 | .008 | .109 | .914 | 2.067 |
| | Q9 2: Highest level | .043 | .017 | .161 | 2.514* | .012 | 1.607 |

* $p<.05$, ** $p<.01$, *** $p<.001$

***Community values***

Model 1 was significant collectively. All seven variables entered allowed Model 1 to predict community values of leadership development (F=2.469, P<.05, $R^2$=.146). Seven predictor variables account for 14.6% of the variance in the community values of leadership development. The same trend was seen in Model 2 (F=1.980, P<.05,

$R^2$=.163) and the entered five predictor variables account for 16.3% of the variance in the community values of leadership development (SRLS-R2).

Table 4. 29.

*Impact on Community Values Total Regression Analysis Model Summary*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | .214a | .146 | .127 | .42933 | .046 | 2.469 | 7 | 360 | .017 |
| 2 | .250b | .163 | .131 | .42849 | .017 | 1.281 | 5 | 355 | .272 |

Table 4. 30.

*Impact on Community Values Total Regression Analysis ANOVA*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 3.186 | 7 | .455 | 2.469* | .017 |
| | Residual | 66.356 | 360 | .184 | | |
| | Total | 69.542 | 367 | | | |
| 2 | Regression | 4.362 | 12 | .363 | 1.980* | .025 |
| | Residual | 65.181 | 355 | .184 | | |
| | Total | 69.542 | 367 | | | |

* $p$<.05, ** $p$<.01, *** $p$<.001

In the regression analysis, as a result of inputting variables in Model 1 (Table 4.31), it can be seen that self-perception ( $\beta$=.151) had a positive significant effect (p<.05). When the self-perception of leadership skills is high, the total community values increases. It can be seen that there are no significant variables in Model 2.

Namely, leadership perception is the only significant predictor of community values of leadership development outcomes. Also, leadership perception was positively related to community values total. As this increases, the community values total increases.

Table 4. 31.

*Impact on Community Values Total Regression Analysis Coefficients*

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | VIF |
|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | |
| 1 | (Constant) | 4.095 | .250 | | 16.409 | .000 | |
| | Q1: Gender(M0, F1) | -.022 | .053 | -.022 | -.421 | .674 | 1.044 |
| | Q3: Class level | .036 | .026 | .072 | 1.377 | .169 | 1.036 |
| | Q4: Student type(Yes0, No1) | .020 | .095 | .011 | .207 | .836 | 1.108 |
| | Q14 2: HS Leadership training | -.072 | .052 | -.082 | -1.382 | .168 | 1.328 |
| | Q15 1: HS Number of years | .028 | .026 | .063 | 1.068 | .286 | 1.309 |
| | Q15 2: HS Highest level | .008 | .020 | .025 | -.392 | .695 | 1.577 |
| | Q16: Perception | .076 | .028 | .151 | 2.690** | .007 | 1.193 |
| 2 | (Constant) | 4.287 | .284 | | 15.115*** | .000 | |
| | Q1: Gender(M0, F1) | -.013 | .053 | -.013 | -.250 | .803 | 1.059 |
| | Q3: Class level | -.007 | .034 | -.013 | -.192 | .848 | 1.723 |
| | Q4: Student type(Yes0, No1) | .013 | .101 | .007 | .130 | .896 | 1.240 |
| | Q14 2: HS Leadership training | -.062 | .054 | -.071 | -1.148 | .252 | 1.442 |
| | Q15 1: HS Number of years | .030 | .027 | .067 | 1.110 | .268 | 1.368 |
| | Q15 2: HS Highest level | -.016 | .021 | -.052 | -.781 | .435 | 1.688 |
| | Q16: Perception | .068 | .028 | .136 | 2.405* | .017 | 1.211 |
| | Q6 2: Leadership training | -.008 | .053 | -.009 | -.157 | .875 | 1.358 |
| | Q6 3: Internship | -.072 | .056 | -.073 | -1.280 | .201 | 1.227 |
| | Q6 4: International | -.019 | .049 | -.021 | -.380 | .704 | 1.166 |
| | Q9 1: Number of years | .016 | .026 | .045 | .612 | .541 | 2.067 |
| | Q9 2: Highest level | .027 | .020 | .085 | 1.301 | .194 | 1.607 |

* $p<.05$, ** $p<.01$, *** $p<.001$

***Omnibus of All Values***

Model 1 was significant collectively. All inputted variables allow Model 1 to predict the omnibus of leadership development (F=3.990, P<.000, $R^2$=.172). The seven predictor variables account for 17.2% of the variance in the omnibus of leadership development. The same trend showed in Model 2 (F=3.052, P<.000, $R^2$=.194) and the entered five predictor variables account for 19.4% of the variance in the omnibus of leadership development (SRLS-R2).

Table 4. 32.

*Impact on Omnibus Regression Analysis Model Summary*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics | | | | | Durbin-Watson |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | R Square Change | F Change | df1 | df2 | Sig. F Change | |
| 1 | .268a | .172 | .054 | .35063 | .072 | 3.990 | 7 | 360 | .000 | |
| 2 | .306b | .194 | .063 | .34897 | .022 | 1.686 | 5 | 355 | .137 | 1.929 |

Table 4. 33.

*Impact on Omnibus Regression Analysis ANOVA*

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 3.434 | 7 | .491 | 3.990*** | .000 |
| | Residual | 44.258 | 360 | .123 | | |
| | Total | 47.692 | 367 | | | |
| 2 | Regression | 4.461 | 12 | .372 | 3.052*** | .000 |
| | Residual | 43.232 | 355 | .122 | | |
| | Total | 47.692 | 367 | | | |

* $p<.05$, ** $p<.01$, *** $p<.001$

Only self-perception ($\beta$=.197) in Model 1 was a significant predictor of the omnibus of leadership development ($p<.05$, table 4. 34) in the regression analysis. The other, six variables, were non-significant. Meanwhile, there were no significant variables in Model 2.

These results showed that students' self-perception of leadership skills was a significant predictor and positively related to the omnibus of leadership development (SRLS-R2). As the self-perception of leadership skill increases, the omnibus of leadership development increases.

Table 4. 34.

*Impact on Omnibus Values Total Regression Analysis Coefficients*

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | VIF |
|---|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | | |
| 1 | (Constant) | 4.009 | .204 | | 19.670 | .000 | |
| | Q1: Gender(M0, F1) | -.035 | .043 | -.042 | -.818 | .414 | 1.044 |
| | Q3: Class level | .041 | .022 | .100 | 1.926 | .055 | 1.036 |
| | Q4: Student type(Yes0, No1) | .131 | .078 | .090 | 1.675 | .095 | 1.108 |
| | Q14 2: HS Leadership training | -.062 | .042 | -.086 | -1.462 | .145 | 1.328 |
| | Q15 1: HS Number of years | .018 | .021 | .048 | .832 | .406 | 1.309 |
| | Q15 2: HS Highest level | -.011 | .016 | -.044 | -.684 | .494 | 1.577 |
| | Q16: Perception | .082 | .023 | .197 | 3.561*** | .000 | 1.193 |
| 2 | (Constant) | 4.159 | .231 | | 18.005 | .000 | |
| | Q1: Gender(M0, F1) | -.029 | .043 | -.034 | -.657 | .512 | 1.059 |
| | Q3: Class level | .007 | .028 | .018 | .267 | .790 | 1.723 |
| | Q4: Student type(Yes0, No1) | .134 | .082 | .092 | 1.633 | .103 | 1.240 |
| | Q14 2: HS Leadership training | -.050 | .044 | -.069 | -1.144 | .253 | 1.442 |
| | Q15 1: HS Number of years | .020 | .022 | .054 | .905 | .366 | 1.368 |
| | Q15 2: HS Highest level | -.019 | .017 | -.075 | -1.148 | .252 | 1.688 |
| | Q16: Perception | .074 | .023 | .179 | 3.210*** | .001 | 1.211 |
| | Q6 2: Leadership training | -.022 | .043 | -.031 | -.520 | .603 | 1.358 |
| | Q6 3: Internship | .042 | .046 | .051 | .916 | .360 | 1.227 |
| | Q6 4: International | .033 | .040 | .045 | .818 | .414 | 1.166 |
| | Q9 1: Number of years | .007 | .021 | .022 | .303 | .762 | 2.067 |
| | Q9 2: Highest level | .030 | .017 | .116 | 1.809 | .071 | 1.607 |

* $p<.05$, ** $p<.01$, *** $p<.001$

# CHAPTER FIVE

## DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to examine the relationship between the involvement of extracurricular activities and leadership development comparing international and domestic college students. Specifically, the study conducted statistical analyses to answer the following research questions:

1. What is the current status of students' participation in extracurricular activities while in college and high school?
2. Are there significant differences in leadership development outcomes by general characteristics (gender, class level, and student type) and experiences of participating in extracurricular activities (pre-collegiate, collegiate)?
3. Are there significant differences in leadership development outcomes by involvement experiences of extracurricular activities and the involvement index level?

4-1. Are there significant correlations between experiences of extracurricular activity and each individual, group, and community value of leadership development outcomes?

4-2. Does the relationship between experiences of extracurricular activity and leadership development outcomes differ, after accounting for the control measures?

5. Are there significant differences between international and domestic students type on leadership development outcomes?

This chapter provides a discussion of the results of these research questions regarding extracurricular activity on student's leadership development outcomes and suggests several important conclusions. It offers guidelines for leadership educators to consider and integrate with specifics and policies for their institution. This chapter also recommends applications of the results in light of recent development in higher education for future research.

## Discussion

### Status of Experiences of Extracurricular Activities

Extracurricular activities are available to all college students. They typically take place on campus, but they are optional and do not interfere with their required courses. Extracurricular activities can include social clubs, sports teams, student government associations, volunteer experiences, or even internships (World Education Services, 2019). Results from this study provide the current status of students' experience at these schools of participating in extracurricular activities while in college and high school.

Nearly two-thirds of college students have participated in extracurricular organizations/clubs. Students favor extracurricular organizations/clubs over leadership training and off-campus internships. The highest rate of participation among extracurricular activities was in university-related organizations/clubs followed by social or recreational and faith or religious-based organizations. Most of the students had 1-2 organization/club (68.8%), dedicated 2-3 hours to these organizations per week, and stayed actively involved in them for 1 or 2 years.

Meanwhile, 85.2 percent of students participated in extracurricular organizations/clubs while in high school. Most of them were actively involved in extracurricular activities for 4 years and served as an officer or team captain (44.1%) while the involvement period of college students was relatively short and most of them served as ordinary members (46.2%). In addition, more than half of students perceived their leadership skills as above average.

**Leadership Development Outcomes**

There were significant differences in leadership development outcomes by general characteristics, experiences of participating in extracurricular activities, and involvement of extracurricular activity as follows.

***General Characteristics***

Gender and class level were positively associated with student leadership development. Women scored higher than men in the congruence and commitment, sub-variables of the individual values on the leadership development (SRLS-R2), and showed significant differences ($p<.05$, table 4.4) between groups. This finding may reflect previous research of Haber and Komives (2009). They noted that the predictors used in the regression analysis were more relevant for women than men in the individual value of leadership development. This could be because women may be more intentional about their leadership development, and may seek out opportunities to develop their leadership skills. However, the omnibus' total indicates that the difference in the SRLS-R2 according to gender is not significant.

In the class level, senior/other and junior levels of leadership outcomes were relatively high, and the sophomore was relatively low. Specifically, consciousness of

self in individual values showed a significant difference (P<.05, table 4.5). This result is consistent with previous research (Pascarella & Terenzini, 2005) that upperclassmen tended to report higher leadership development outcomes than their first-year counterparts. This is important as it provides some empirical support for the "value-added effect" of college on students; that is, the study's results suggest that educational benefits may cascade over time.

***Experiences of Extracurricular activity***

Participation in extracurricular activities exerted a direct positive effect on leadership development outcomes. This finding is consistent with the previous study of Foreman and Retallick (2013) on the importance of participating in extracurricular clubs and organizations. They noticed that involvement in these activities had a strong relationship with leadership development.

When students have experiences participating in extracurricular organizations/clubs or leadership training while in college, their group and community values of leadership development are indicated relatively higher than those who do not have experience. Specifically, common purpose and citizenship showed significant differences between groups (p<.05, table 4.7, 4.8).

According to the type of organizations/clubs students participated in while in college, students who participated in university-related, social, recreational, or community-based organizations/clubs indicated relatively higher leadership outcomes in community values total, including citizenship and change value.

While in high school, if students participate in extracurricular activities, they have higher leadership outcomes in most of the values except change. Specifically,

there was a significant difference in group values total ($p<.05$, table 4.15) and all sub-variables of group values, which were: collaboration, common purpose, and controversy with civility. Also, students who have experience in leadership training have higher leadership outcomes than those who do not ($p<.05$, table 4.16).

**Involvement of Extracurricular Activity**

The study identified the experiences of extracurricular involvement that lead to leadership development outcomes. The college students' relationship between extracurricular involvement and leadership outcomes demonstrated by the quantitative aspects: the number of extracurricular organizations/clubs, the amount of time spent, the number of years involved, and qualitative aspect: participation level/leadership position aspects of involvement in extracurricular activities.

The result from this study provides new evidence of the empirical link between student involvement in an extracurricular activity and student leadership development outcomes, perceived or objectively measured. For instance, when students were actively involved in an extracurricular activity with 5 or more organizations/clubs, they had relatively higher leadership outcomes than students who had no involvement or 1-2 organizations/clubs. In particular, citizenship in the community values showed a significant difference ($p<.05$, table 4.17). In the case of active involvement for 5 or more years in extracurricular organizations/clubs, students have higher leadership outcomes than other groups in all value levels.

This reflects Astin's (1993) conclusion that student clubs and organizations positively influenced growth in leadership abilities. Involvement in student organizations as a key experience is also consistent with Byer's (1988) finding that

student organization involvement contributes to a greater sense of responsibility which reflects commitment. It is also consistent with Cooper and his colleagues' (1994) study which indicated that those students who were involved in student organizations in comparison with those who were not demonstrated higher scores in leadership outcomes including developing purpose. This reflects the outcome measures of the individual value of leadership development outcomes.

However, there was no significant difference relatively in the omnibus total leadership outcomes by the amount of time spent per week on extracurricular activities while in college.

This finding supports Astin's (1999) concept of purposeful interaction. He "believed that it was not just the amount of time spent, but the quality of the time" (Simonsen et al., 2014, p. 210). Though time spent as a quantitative measure was not associated with increased leadership development, serving as an officer was associated.

Students who participated at the state or national leadership level scored relatively higher than the rest of the levels of participation, such as member or committee member. Results of Foreman and Retallick's (2013) study also suggested that the quality of involvement might be more important than the time spent participating. Therefore, the increased skills often attributed to the involvement level role in a club or organization may be associated with the additional training that officers receive.

The involvement index is calculated by adding the number of years and the highest level of involvement during high school and college, and leadership self-perception. Students who have a high involvement index level showed significantly high commitment, common purpose, and citizenship in leadership outcomes ($p<.05$,

table 4.21). In other words, higher involvement produces higher leadership development outcomes. Based on these findings, educators might pay attention to the various ways in which extracurricular activities increase leadership outcomes through extended student participation and the taking of state and national leadership roles. With this information, high school educators might also encourage students to engage in extracurricular activities to help develop students' leadership self-perception, which proves to be the main contributor to positive leadership outcomes for college students. These active involvements are likely to yield citizenship growth and leadership development for meaningful social change.

However, these findings were not consistent with the previous study of Astin (1999) and Foreman and Retallick (2013). Their results indicate a law of diminishing returns. Higher levels of leadership were found at each increasing level of involvement except the highest level, at which leadership decreased. It means that when the quantitative measures of involvement exceed the desirable limit, then the quality of the involvement is less and the positive outcomes are reduced.

**Correlation and Contribution to Leadership Development Outcomes**

The study examined the correlation between pre-collegiate and collegiate experiences on leadership outcomes. There was a significant positive correlation between the experience of participating in extracurricular organizations/clubs and leadership training and individual, group, and community values of leadership development outcomes. However, completing an internship and extracurricular activity with international students did not show a significant correlation with those leadership values.

Additionally, participating in extracurricular activities and leadership training while in high school showed a significant positive correlation with all leadership values. Theoretically speaking, student development is the product of the multidimensional and reciprocal interaction between an individual and his/her environment. The present findings show the relationship between participation in extracurricular activities and students' leadership developmental outcomes.

In the same context, these results support Astin's involvement theory regarding the core concepts such as 'input', 'environment', and 'outcome' for student development. He suggests the concept of student involvement as a pedagogical theory to examine how educational programs and policies are related to student development (Astin, 1999). These findings provide an important foundation from which to increase the understanding of patterns of student involvement and their influence on critical leadership development outcomes.

Moreover, the study examined which variables contributed to college students' leadership outcomes in each individual, group, and community value of SRLS-R2. The results indicated that leadership self-perception, highest participation level, class level, and student type are predictors of leadership development outcomes among variables.

Class level, student type, and leadership perception were significant predictors of individual values of leadership development outcomes. The best predictor of individual values total was leadership self-perception ( $\beta$=.248, table 4.25), followed by student type and class level. Based on the findings of this study and Simonsen et al., (2014), there may be opportunities for high school teachers, advisors, mentors, and coaches of activities to enhance student perceptions of their own leadership abilities.

The significant predictors of group value of leadership development outcomes were student type, leadership perception, and highest participation level while in college. These significant predictors were all positively related to group values total. The best predictor of group values total was the highest participation level ( β=.161, table 4.28), followed by self-leadership perception and type of student. The finding regarding the highest participation level was consistent with previous research (Astin, 1999; Ewing et al., 2009; Dugan, 2006b; Rubin et al., 2002) that students who served as officers in a club or organization showed increased outcomes compared to those who did not serve as an officer.

The self-perception of leadership skills was the only significant predictor of community values and the omnibus of leadership development outcomes, and it was positively related. In other words, as students' leadership perception increases, the community values and omnibus of leadership development outcomes increase.

However, leadership training did not significantly contribute to the leadership development outcomes of this study. This is consistent with Dugan (2006b) and Haber & Komives (2009)'s finding that formal leadership programming was not a significant variable for the individual values of the SCM.

Overall, there was a significant correlation in Model 1 (controlling high school experience) and Model 2 (controlling collegiate experience) with omnibus value and all predictors based on the significance value level (P=.000). Model 1, accounts for 17.2%, and Model 2, accounts for 19.4% (Table 4.32) of the variance in the omnibus value of leadership development outcomes.

**International Students vs. Domestic Students**

The study compared and analyzed the result of leadership development outcomes between international students and domestic students for the above purposes. The result indicated that only 26% of college students participated in any extracurricular organizations/clubs with international students. This can be reflected that international undergraduates have experienced various challenges to build relationships that impact their success at American universities (Fass-Homnes, 2016; Gautam et al., 2016; Ozturgut & Murphy 2009; Wu et al., 2015). Getting involved in activities outside of campus can help these students meet new people with whom they share interests and improve their social skills as a result.

There were significant differences between international and domestic students on leadership development outcomes. The effects of participating in an extracurricular activity were higher for domestic students than international students regarding each value of leadership development. The type of students showed significant differences in individual and group values. Mostly, domestic students have higher leadership outcomes than international students ($p<.05$). Also, students who participate in extracurricular organizations/clubs with international students while in college indicated high leadership outcomes in collaboration, common purpose, and citizenship ($p<.05$).

According to the study by Collier, et al. (2017), immersive leadership development programs allow international students to engage with and report generally similar developmental outcomes to domestic students. Despite the general lack of differences in growth, international students are signaling that leadership development programs are establishing environments where they usually feel comfortable, safe, and

supported in their interactions with domestic students. These signals suggest that leadership development could be a useful tool for campuses in supporting their growing international student populations' integration and in building more inclusive communities

Participating in extracurricular organizations/clubs with international students while in college showed a significant positive correlation with involving extracurricular organizations ($r=.392$), leadership training ($r=.276$), and off-campus internships ($r=.162$), showing all significant differences ($p<.05$). This finding reflects that participating in extracurricular activities, leadership training, and off-campus internship programs might encourage domestic students to expand their network to include international students, which is beneficial for finding career opportunities after graduation (World Education Services, 2019).

Experiencing extracurricular activities while in high school also indicated a significant positive correlation with students who participated in extracurricular organizations/clubs with international students while in college ($r=.127$, $p<.05$). However, participating in extracurricular activities with international students led to no significant correlation with leadership development overall.

Finally, through regression analysis, it was indicated that the student type, whether international or domestic was a significant variable to predict students' individual values total ( $\beta=.106$, $p<.05$) of leadership development as well as group values ( $\beta=.109$, $p<.05$).

## Conclusions

As colleges and universities continue to emphasize the importance of leadership development in college students, and as the need for assessment and accountability grows (CAS, 2006, Haber & Komives, 2009), there is a great need to understand students' leadership development and the activity experiences that contribute to their outcomes of leadership development. The current study revealed the relationship between extracurricular activity and leadership development. It also indicated how extracurricular involvement contributed to college students' leadership development relating to individual, group, and community values of the Socially Responsible Leadership Scale (SRLS-R2). The main findings are as follows:

First, the examination of college students' experiences of extracurricular activities indicated current status with real data comparing pre-collegiate experiences of those activities. The highest rate of participation among extracurricular activities was in university-related organizations/clubs. 85.2% of high school students participated in extracurricular organizations/clubs and most served as an officer or team captain, while 64.2% of college students participated in similar organizations/clubs, and most of them were ordinary members.

Second, extracurricular activities significantly affected students' individual, group, and community values of leadership development. Women had relatively higher leadership development than men and showed significant differences in congruence, commitment, and citizenship. Senior students indicated relatively higher leadership development than sophomores. In addition, both high school and college students who participated in extracurricular organizations/clubs or leadership training showed

relatively higher leadership development outcomes than those who did not have these experiences.

Moreover, students who participated in university-related, social, recreational, or community-based organizations/clubs indicated relatively higher leadership outcomes in community values total ($p<.05$), including citizenship and change value. As extracurricular activity remains crucial to leadership development and student life on campus, institutions in higher education need to structure student extracurricular activity programs that positively affect student's leadership development individually, as well as enrich their contribution to groups and communities with socially changed leadership. These results offer valuable information for other institutions that aspire to increase student leadership outcomes.

Third, extracurricular involvement affects leadership development outcomes. A higher involvement level produces higher leadership development outcomes. Though time spent per week as a quantitative measure was not associated with increased leadership development, serving as an officer or having a higher participation level was. Specifically, students who served at the state or national leadership level or were officers/team captains scored relatively higher than the ordinary members. Also, students who had a high involvement index level showed relatively high common purpose and citizenship in leadership outcomes significantly ($p<.05$).

Based on these findings, it is clear that the experiences and involvement in extracurricular activities impact college students' leadership development outcomes. Therefore, educators in higher education must understand how to support students' involvement in extracurricular activities linked to students' group and community

values of leadership development. They must assess the influence extracurricular activities have on student leadership development outcomes and provide intentional programs and services that create a meaningful experience for all students involved.

Fourth, educators should be challenged explicitly to enhance students' participation in extracurricular activities for their leadership development. There were significant positive correlations between both pre-collegiate and collegiate participation in extracurricular organizations/clubs and leadership training and all individual, group, and community values of leadership development outcomes. Also, this study revealed that pre-collegiate and collegiate experiences explained differences in all values of leadership.

In addition to both model one and model two being significant, the change between Model 1 (containing demographic and pre-collegiate experiences) and Model 2 (adding collegiate experience) was significant. Specifically, domestic student type, self-perception of leadership skills, and involvement level while in college were significant predictors of group values of leadership development outcomes. Engaging with peers and others in organizational settings might provide an opportunity to examine self-perception in the context of others and promotes self-leadership development.

Lastly, students who participate in extracurricular organizations/clubs with international students while in college indicated high leadership outcomes in collaboration, common purpose, and citizenship. Therefore, educators might want to consider providing bridge programs that increase intercultural awareness and skills while enhancing understanding and connection through extracurricular activities. This

will give domestic students more opportunities to participate in extracurricular activities with international students.

Extracurricular activity is a great way for college students to showcase their leadership development. It is imperative for college administrators to create a system or standard of measurement (metrics) to demonstrate their extracurricular activity in organizations/clubs as it relates to student leadership development. This study revealed that student experiences and involvement in extracurricular activities were an important factor in their leadership development outcomes. Therefore, it is up to colleges and education leaders to continue encouraging student involvement in extracurricular activities and to create a meaningful student experience that enhances their success during and after college.

Education leaders who support students' extracurricular activities must be intentional when it comes to supporting extracurricular organizations/clubs that influence student leadership development. The findings of this study will hopefully guide leaders in higher education to structure student participation opportunities in a way that positively affects a student's leadership outside the classroom.

As the use of the Social Change Model (Higher Education Research Institute, 1996) of leadership development continues to expand both across educational contexts and globally, so does the need to understand how best to advance the theory, research, and practices that inform it. The primary vehicle for this is the SRLS. This study offered awareness into the nature of the measurement tool, considerations for its use, and results from validation studies attempting to expand the understanding of how it best functions.

These perceptions have direct implications for research and assessment as well as future theory building.

## Recommendations

The biggest issue with contemporary civic life in America is that very few people are actively engaged in efforts to effect positive social change (Astin & Astin, 2000). It is the role of leading educators to help provide opportunities to develop and empower students to engage in and be effective in leadership that leads to positive social change.

This study offers educators insights into how to relate extracurricular activities and college student leadership and more importantly, considerations regarding the degree to which these findings may be transferable to their professional practice. Based on the findings, educators need to amplify opportunities for participating experiences in extracurricular activities. It might influence to increase student self-perceptions of their leadership skills and abilities. Secondary educators who supervise student activities should be challenged to more explicitly and intentionally seek to engage student participation for potential leadership development.

Educators and activity sponsors who are purposeful in their interaction with students and recognize the need for leadership development have a unique opportunity to develop leadership qualities among their student participants. This will enable colleges to build upon a leadership foundation, which may coincidentally produce better leaders and contribute to enhanced student retention. Furthermore, researchers should continue investigating relationships between student activity participation and leadership constructs among other populations as well as, with samples that better

represent students at two-year institutions, non-traditional-aged students, and part-time students.

The results of this study support the critical role of extracurricular activities on the individual, group, and community values of student leadership development and highlight the need for future research to consider the nature of after-school activities. Practically, this may serve as an indicator of student development in terms of their personal and family well-being. Practitioners and educators can use these indicators when designing high-quality and structured extracurricular or co-curricular activity programs that meet the individual needs and characteristics for social changing in the future.

Researchers should also consider qualitative approaches to replicating the model, which would allow for a substantively deeper understanding of the latent benefits and patterns of student involvement in extracurricular activities. In-depth interviews and prolonged observations can be used to study how students make meaning of their experiences in college (Strayhorn, 2008). Qualitative research might also add enough dimensions to determine the extent to which the extracurricular activity represents leadership developmental outcomes. If a developmental progression emerges, it would need to be considered in the context of students' cognitive, psychosocial, and social identity development. Characteristics of the environment (e.g., campus climate, available opportunities, structural and compositional diversity) that support or hinder progression should also be taken into account. Qualitative or mixed-method approaches would be better suited for accurately capturing these complex and fluid variables.

Moreover, researchers should consider collecting data to capture other dimensions of extracurricular activity involvement. For example, studies should collect longitudinal and multi-informant data from adults and parents instead of relying on students' reports to determine levels of leadership development and involvement. Additional research is also required to explore factors related to student activity and organization participation that may be positively and negatively linked to leadership development. Specifically, researchers should explore whether or not co-curricular activities have similar effects, and continue investigating relationships between student activity participation and leadership constructs among other populations.

Finally, further researches should be conducted to profile students within each of the latent classes identified in this research. Implications for practice will increase as it becomes more clear who it is that occupies these subgroups of the student population. Researchers need to be encouraged to explore descriptions involving more traditional student demographic variables (e.g., age, race, socio-economic status, transfer status, college generational status) as well as those that are absent in the literature (e.g., sexual orientation, disability status, religious affiliation, political orientation). Additionally, data in this study represented patterns that had emerged during pre-college and college experiences. Research would be beneficial that examined how these patterns evolved throughout college to better understand how patterns influence students over time.

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# APPENDICES

[Appendix A. Survey Instrument]

## [Appendix A. Survey Instrument]

### Questionnaire

Thank you for participating in this research study about extracurricular and leadership experiences. Participation in this study is voluntary and you may withdraw from this study at any time and skip any questions that you do not feel comfortable answering. Please select the "NEXT" button to consent to participate in the survey.

**PART A.**

1. What is your gender?

- Female
- Male
- Not include above

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

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

3. What is your current class level?

- First-year/freshman
- Sophomore
- Junior
- Senior
- Other

4. What is your student type?

- International
- Domestic/USA

5. If you are an international student, please indicate the region you are coming from.

- Africa
- Asia
- Europe
- Middle East
- North America
- Oceania
- South America
- Not included above

**PART B. College Experiences**

This section focuses on leadership involvement during your college experience. Please answer these questions based on your **actual experiences**.

6. Please indicate whether or not you have participated in the following experiences while in college, including experiences at previous colleges.

| | YES | NO |
|---|---|---|
| Have you participated in any **extracurricular organizations/clubs**? (University organizations, social or recreational organizations/clubs, religious or community-based organizations, etc.)? | | |
| Have you participated in any **leadership training other than classwork** (i.e., Ambassador Retreat, State leadership experience, etc.)? | | |
| Have you completed any **off-campus internships** (Including summer, 6 months, 9months, or other)? | | |
| Have you participated in any **extracurricular activities with international students**? | | |

7. Please select the organizations/clubs' categories that you participated in while in College, including those at previous colleges. (Mark all that apply)

- ☐ The Student Council
- ☐ Judging or competitive teams
- ☐ Government of the Student Body
- ☐ University-related organizations/clubs
- ☐ Social or recreational organizations/clubs
- ☐ Faith or religious-based organizations
- ☐ Community-based organization
- ☐ The Greek system
- ☐ Not included above

8. Please select a drop-down list about your extracurricular activities while in College, including those at previous colleges?

| Number of organizations/clubs you were actively involved | Amount of time spent per week |
|---|---|
| ☐ 0 organizations/clubs | ☐ 1 or less hour per week |
| ☐ 1-2 organizations/clubs | ☐ 2-3 hours per week |
| ☐ 3-4 organizations/clubs | ☐ 4-6 hours per week |
| ☐ 5 or more organizations/clubs | ☐ 7 or more hours per week |

9. Please indicate the number of years you were active in the organization and your highest level of participation.

| Number of years | Highest level of your participation |
|---|---|
| ☐ 1 or less year | ☐ Member |
| ☐ 2 year | ☐ Committee member |
| ☐ 3 year | ☐ Event or committee chair |
| ☐ 4 year | ☐ Officer or team captain |
| ☐ 5 or more years | ☐ State or national leadership |

## PART C. Leadership

The following 4 pages relate to leadership development. Please indicate the **extent to which you agree or disagree** with the following items by choosing the response that most closely represents your opinion about that statement.

10. Please indicate the degree to **which you agree or disagree** with the following items by choosing the response that most closely represents your opinion about that statement.

For the statements that refer to a group, thinking of the **most effective, functional group** of which you have been a part. This might be a formal organization or informal study group. For consistency, Use the same group in all your response.

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I am open to others' ideas. | | | | | |
| Creativity can come from conflict. | | | | | |
| I value differences in others. | | | | | |
| I am able to articulate my priorities | | | | | |
| Hearing differences in opinions enriches my thinking. | | | | | |
| I have low self-esteem | | | | | |
| I struggle when group members have ideas that are different than mine | | | | | |
| Transition makes me uncomfortable | | | | | |
| I am usually self-confident. | | | | | |
| I am seen as someone who works well with others | | | | | |
| Greater harmony can come out of disagreement | | | | | |
| I am comfortable initiating new ways of looking at things. | | | | | |
| My behaviors are congruent with my beliefs. | | | | | |
| I am committed to a collective purpose in those groups to which I belong. | | | | | |
| It is important to develop a common direction in a group to get anything done. | | | | | |
| I respect opinions other than my own. | | | | | |
| Change brings new life to an organization. | | | | | |

11. Please indicate the degree to **which you agree or disagree**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| The things about which I feel passionate have priority in my life | | | | | |
| I contribute to the goals of the group. | | | | | |
| There is energy in doing something a new way. | | | | | |
| I am uncomfortable when someone disagrees with me. | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| I know myself pretty well. | | | | | |
| I am willing to devote time and energy to things that are important to me. | | | | | |
| I sick with others through a difficult time. | | | | | |
| When there is a conflict between two people, one will win and the other will lose. | | | | | |
| Change makes me uncomfortable | | | | | |
| It is important for me to act on my beliefs. | | | | | |
| I am focused on my responsibilities. | | | | | |
| I can make a difference when I work with others on tasks. | | | | | |
| I actively listen to what others have to say. | | | | | |
| I think it important to know other people's priorities. | | | | | |
| My actions are consistent with my values. | | | | | |
| I believe I have responsibilities to my community. | | | | | |
| I could describe my personality. | | | | | |

12. Please indicate the degree to **which you agree or disagree**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| I have helped to shape the mission of the group. | | | | | |
| New ways of doing things frustrate me. | | | | | |
| Common values drive an organization. | | | | | |
| I give time to making a difference for someone else. | | | | | |
| I work well in changing environments. | | | | | |
| I work with others to make my communities better places. | | | | | |
| I can describe how I am similar to other people. | | | | | |
| I enjoy working with others toward common goals. | | | | | |
| I am open to new ideas. | | | | | |
| I have the power to make a difference in my community. | | | | | |
| I look for new ways to do something. | | | | | |
| I am willing to act for the rights of others. | | | | | |
| I participate in activities that contribute to the common good. | | | | | |
| Others would describe me as a cooperative group member. | | | | | |
| I am comfortable with conflict. | | | | | |
| I can identify the differences between positive and negative change. | | | | | |
| I can be counted on to do my part. | | | | | |

13. Please indicate the degree to **which you agree or disagree**

| | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| Being seen as a person of integrity is important to me | | | | | |
| I follow through on my promises. | | | | | |
| I hold myself accountable for responsibilities I agree to. | | | | | |
| I believe myself I have a civic responsibility to the greater public. | | | | | |
| Self-reflection is difficult for me. | | | | | |
| Collaboration produces better results. | | | | | |
| I know the purpose of the groups to which I belong. | | | | | |
| I am comfortable expressing myself. | | | | | |
| My contributions are recognized by others in the groups I belong to. | | | | | |
| I work well when I know the collective values of a group. | | | | | |
| I share my ideas with others. | | | | | |
| My behaviors reflect my beliefs. | | | | | |
| I am genuine. | | | | | |
| I am able to trust the people with whom I work. | | | | | |
| I value opportunities that allow me to contribute to my community. | | | | | |
| I support what the group is trying to accomplish. | | | | | |
| It is easy for me to be truthful. | | | | | |

## PART D. High School Experiences

This is the last section. It focuses on **extracurricular** and **leadership** experiences before attending college.

14. Please indicate whether or not you participated in the following activities/events while in high school.

| | YES | NO |
|---|---|---|
| Did you participate in **extracurricular activities** (including school and community activities)? | | |
| Did you participate in any **leadership training** (i.e., 4-H officer training, student council training, chapter FFA officer retreat, etc.)? | | |

15. Please list the number of years you were extracurricular active in the organizations/clubs as well as your level of participation.

| Number of years | Highest level of your participation |
|---|---|
| □ 1 or less year | □ Member |
| □ 2 year | □ Committee member |
| □ 3 year | □ Event or committee chair |
| □ 4 year | □ Officer or team captain |
| □ 5 or more years | □ State or national leadership |

16. Looking back, how would you rate your leadership skills (compared to your peers) when you entered college?

- Well above average
- Above average
- Average
- Below average
- Well below average

We thank you for your time spent taking this survey. Your response has been recorded.

[Appendix B. Institutional Review Board Approval]

## [Appendix B. Institutional Review Board Approval]

### Application Summary

#### Competition Details

| | |
|---|---|
| **Competition Title:** | IRB Limited Review Application for Exemption Determination |
| **Category:** | Institutional Review Board (Human Subjects Research) |
| **Award Cycle:** | All |
| **Submission Deadline:** | 06/30/2021 11:59 PM |

#### Application Information

| | |
|---|---|
| **Submitted By:** | Juhee Kim |
| **Appplication ID:** | 3434 |
| **Application Title:** | The Relationship of Extracurricular Activity on Leadership Development Comparing International and Domestic Students |
| **Date Submitted:** | 08/3/2020 11:17 AM |

#### Personal Details

| | |
|---|---|
| **Applicant First Name:** | Juhee |
| **Applicant Last Name:** | Kim |
| **Email Address:** | juhee_kim12@mymail.eku.edu |
| **Phone Number:** | (859) 544- |
| **Mailing Address:** | |
| **Applicant Type:** | EKU Student |

#### Application Details

**Proposal Title**
The Relationship of Extracurricular Activity on Leadership Development Comparing International and Domestic Students

**Name of Faculty Research Advisor (required for student submissions)**
Phillips, Bill

**Name of Department Chair/Unit Director**
Deters, Faye

**Notes/Comments**

**Status (IRB Use Only)**
Approved

**Approval Date (IRB Use Only)**

[Appendix C. Permission to Use Model & SRLS-R2]

## [Appendix C. Permission to Use Collegiate Leadership Development Model & Socially Responsible Leadership Scale]

F

Foreman, Beth A [AGLS] <bforeman@iastate.edu>
Fri 8/28/2020 12:43 PM
To: Kim, Juhee

Juhee,

I am sorry. I thought I responded to your message. But, it is still in my "inbox". I am happy to allow you to use the model below. The citation is Foreman & Retallick 2012.

Thanks,

*Beth*

Beth Foreman, Ph.D.
College of Agriculture and Life Sciences
Student Services
0217F Curtiss Hall
Iowa State University
Ames, IA 50011
phone: (515) 294-4548
fax: (515) 294-2844

CYCLONES CARE

CS

Craig Eister Slack <cslack@umd.edu>
Tue 9/17/2019 3:30 PM
To: Kim, Juhee


SRLS Research Guidebook Sh...
97 KB

2 attachments (105 KB) Download all Save all to OneDrive - Eastern Kentucky University

Juhee, yes you can use the SRLS. I attached the SRLS guidebook for your use for your dissertation. 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|
Affiliate Assistant Professor | CHSE| College of Education
University of Maryland | 301.314.7164 | cslack@umd.edu
www.thestamp.umd.edu/lcsl | www.nclp.umd.edu
*• LCSL ENGAGES STUDENTS IN EXPERIENTIAL AND COMMUNITY-BASED LEARNING TO FOSTER SOCIALLY RESPONSIBLE LEADERSHIP •*

NCLP
National Clearinghouse for Leadership Programs Description: LCSL-header-summer