This thesis investigated the relationship between community service involvement in curricular and cocurricular community service and students’ self-perceived citizenship. Community service involvement was addressed through four methods: community service as part of a class, with a student organization, as part of a work-study experience, and on one’s own. This study used data collected from 1,205 undergraduate students at the University of Maryland in spring 2006 as part of the Multi-Institutional Study of Leadership. The instrument employed in this study was based on a revised version of the Socially Responsible Leadership Scale (SRLS-Rev 2) and was designed to assess student leadership development within the framework of the social change model of leadership.
development (Higher Education Research Institute, 1996). Self-perceived citizenship scores differed significantly based on whether students participated in community service during college. Community service through student organizations and work-study experiences were found to be significant predictors of self-perceived citizenship.
DEVELOPING CITIZENSHIP THROUGH COMMUNITY SERVICE:
EXAMINING THE RELATIONSHIP BETWEEN COMMUNITY
SERVICE INVOLVEMENT AND SELF-PERCEIVED
CITIZENSHIP AMONG UNDERGRADUATES

by

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Figure 1  The Social Change Model of Leadership Development  

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CHAPTER 1

INTRODUCTION

In 2004, more than 30% of college students participated in some form of community service, an estimated value of $4.45 billion in community service each year as calculated by the Independent Sector’s value of volunteer time (Salgado). This statistic leads to questions of why students are involved in community service, what forms of community service students are involved in, and how this involvement impacts student development. Many studies have examined the relationship between community service involvement and student development (A. W. Astin & Sax, 1998; Berger & Milem, 2002; Dugan, 2006b; Eyler & Giles Jr., 1999; Giles Jr. & Eyler, 1994; Jones & Hill, 2001; Moely, McFarland, Miron, Mercer, & Ilustre, 2002; Neururer & Rhoads, 1998; Rockquemore & Schaffer, 2000; Vogelgesang & Astin, 2000).

One developmental outcome that emerges from community service involvement is citizenship development (Giles Jr. & Eyler, 1994; Moely et al., 2002; Musil, 2003; Vogelgesang & Astin, 2000). As one of the core values of the social change model of leadership development, citizenship represents one element of leadership (Higher Education Research Institute, 1996). Of the seven core values of the social change model, citizenship represents the value most closely aligned with the construct of civic engagement, which is of increasing interest in higher education (Colby, Ehrlich, Beaumont, & Stephens, 2003). This coincides with broader definitions of citizenship and leadership that aim toward creating social change (Higher Education Research Institute, 1996; Komives, Lucas, & McMahon, 1998).
This chapter provides a general background context for this study, including definition of terms, an overview of national initiatives and campus initiatives, and the theoretical and contextual frameworks for this study, followed by an explanation of the problem and ensuing research questions examined. The significance of this study to the field of higher education is then identified. This chapter concludes with a brief summary of the methodology to be implemented.

Definition of Terms

Before delving into the background of this study, it is important to first clarify terminology that will be utilized throughout this research study. Within the realm of citizenship and community service, many terms are used interchangeably and independently; no single term is consistent across all research and practice (B. Jacoby, personal communication, December 2, 2005). The terms community service, service-learning, and community service-learning are commonly used within research and practice in the field of higher education. While each of these terms has been defined in a variety of ways in the literature, the following definitions most closely relate to the purpose of this study.

*Community Service*

Community service is defined as activities that addresses human and community needs (B. Jacoby, personal communication, December 15, 2005). Within the context of this study, *curricular* community service represents experiences that occur within the framework of a credit-bearing academic course. On the other hand, *cocurricular* community service represents experiences that are not part of the academic curriculum,
such as involvement in community service through a student organization, employment, or individual initiative.

Service-learning builds upon community service activities through the incorporation of intentional reflection and reciprocity with the community service recipients into the service-learning experience (Jacoby, 1996a). Service-learning has been defined as “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development” (p. 5). Furthermore, the term community service-learning expands upon the definition of service-learning to include the importance of the community directly within the term rather than only in the definition.

The terms community service, service-learning, and community service-learning are often used interchangeably. While distinct in their definitions, this study does not distinguish between these terms and does not examine the specific content of the experience. Thus, the term community service will be employed within this study to encompass all forms of community service involvement.

**Leadership**

Leadership will be defined herein as a collaborative relationship among people who share a common vision and work to create some form of positive change (Komives, Lucas, & McMahon, 1998; Rost, 1991). This definition of leadership espouses values inherent within the social change model of leadership development that will be discussed later in this chapter (Higher Education Research Institute, 1996). Leadership is viewed as a collaborative process with the ultimate goal of initiating change for people and society.
Citizenship

As defined within the social change model, citizenship is “the process whereby the individual and the collaborative group become responsibly connected to the community and the society … to work for positive change on behalf of others and the community” (Higher Education Research Institute, 1996, p. 23). Civic engagement is one term that has been used both interchangeably with citizenship and as an outcome of citizenship development (B. Jacoby, personal communication, April 19, 2006). Civic engagement has been defined as “acting upon a heightened sense of responsibility to one’s communities. That includes a wide range of activities, including developing civic sensitivity, participation in building civil society, and benefiting the common good. Civic engagement encompasses the notions of global citizenship and interdependence. Through civic engagement, individuals … are empowered as agents of positive social change for a more democratic world” (Coalition for Civic Engagement and Leadership, 2005).

Background

Research has examined the decreasing commitment of higher education institutions to fulfilling their long-standing civic purposes of educating students to become civically engaged leaders (Boyer, 1987; Boyte & Kari, 2000; Ehrlich, 1999; Morse, 1989). In the 1980’s and 1990’s, the intentional effort of educating students to be responsible citizens that once existed was becoming increasingly scarce (Morse, 1989). Colby, Ehrlich, Beaumont, Rosner, and Stephens (2003) attribute this declining focus to the trend of political disengagement, the individualistic nature of American culture, and the decrease in the inclusion of education on moral and civic values in the curriculum.
In the recent past, many institutions focused more on increasing resources and improving reputations rather than enhancing the education of students and fostering service to society (A. W. Astin, 1999). A. W. Astin also calls for faculty, staff, and institutions to model the virtues of citizenship that they are encouraging among their students. Institutional and student involvement in community service promotes citizenship development at the institutional level. However, institutions need to do more than just educate students about citizenship; institutions need to encourage students to be active citizens working to generate positive social change.

Recently, many institutions have reconnected with their civic purpose through revisions to their institutional mission and learning outcomes, as well as increases in curricular and cocurricular programs that promote leadership and civic engagement among students (Boatman, 2003; Boyte & Kari, 2000; Checkoway, 2001; Musil, 2003; Salgado, 2004; Thomas, 2000). As a national organization, Campus Compact provides resources to assist campuses with processes of identifying or redefining their mission and outcomes. For example, among the 935 Campus Compact member campuses in 2004, 89% of institutions include a commitment to civic engagement and developing civically engaged leaders within their institutional mission statement (Salgado, 2004). In addition, many institutions have begun to combine their community service-learning and leadership offices, further illustrating the connections between community service involvement and leadership toward a broader goal of citizenship development.

National Initiatives

Established in 1985 through collaboration among the presidents of Brown University, Georgetown University, and Stanford University, and the president of the
Education Commission of the States, Campus Compact serves as a membership-based organization of college and university presidents dedicated to the civic purposes of higher education (Campus Compact, 2005). Over the past twenty years, Campus Compact has grown to include presidents from over 950 colleges and universities across the United States, representing over five million students. The University of Maryland is a member of Campus Compact. Providing numerous resources to institutions including community service-learning professionals, Campus Compact fosters putting the ideals of civic engagement into action on campuses and in communities across the country.

In response to decreasing levels of engagement among the American public during the 1990’s, a group of college and university presidents from Campus Compact member campuses developed the *Presidents’ Declaration on the Civic Responsibility of Higher Education* in 1999 (Ehrlich & Hollander, 2004). This document challenges all institutions of higher education to reconnect with the civic purposes of higher education and promote democracy and citizenship education.

Campus Compact’s Annual Member Survey addresses specific programs available to students that incorporate community service opportunities (Salgado, 2004). Responding campuses indicated more than 30% of students participated in community service for an average of 4 hours per week (Salgado). This survey does not examine general methods of community service involvement, such as curricular and cocurricular methods of community service.

Founded in 2003, the Center for Liberal Education and Civic Engagement emerged out of a partnership between Campus Compact and the American Association for Colleges and Universities (AAC&U) with the broad goal of supporting connections
between civic engagement, leadership, and student learning (American Association of Colleges and Universities & Campus Compact, 2003). The Center looks past student involvement during college toward larger impacts on student development that result in students’ active participation as citizens and leaders beyond their college experience. Additionally, the AAC&U sponsors a variety of other initiatives directed toward civic engagement.

The University of Maryland

As previously stated, an increasing number of institutions have revamped their institutional mission statements to include goals and objectives related to civic engagement and leadership (Boatman, 2003; Boyte & Kari, 2000; Checkoway, 2001; Musil, 2003; Salgado, 2004; Thomas, 2000). The University of Maryland’s President, Dr. C. D. Mote, Jr., is one of 536 presidents who have signed the Presidents’ Declaration on the Civic Responsibility of Higher Education (Ehrlich & Hollander, 2004); Dr. Mote was also one of the original signers of this document (B. Jacoby, personal communication, January 10, 2006). More recently, Dr. Mote, has identified the goal for every student who enters the University of Maryland in Fall 2005 and thereafter to “have the opportunity to engage in a special, extracurricular learning experience that complements the degree program” (Mote, 2005, p. 7) as one of the primary institutional goals within his President’s Promise initiative (Mote). Community service involvement (e.g., course-based service-learning, Alternative Spring Breaks, and America Reads*America Counts) represents one example of an extracurricular learning experience identified by the President’s Promise.
Intentional connections between civic engagement and leadership have been outlined by the Coalition for Civic Engagement and Leadership (CCEL) at the University of Maryland (Coalition for Civic Engagement and Leadership, 2005). CCEL has worked to integrate existing programs and develop new initiatives that link civic engagement and leadership. Emphasizing citizenship not only within the Maryland community but also with the local and national community, CCEL aims to “develop civically engaged citizens, scholars, and leaders in communities on campus and in Maryland, the nation, and the world” (p. 25).

The Office of Community Service-Learning (CSL) at the University of Maryland conducts an annual assessment through surveys administered to students enrolled in credit-bearing service-learning courses, students involved in community service through Federal Work-Study positions with America Reads*America Counts, and students involved in community service through student organizations (Vogt, 2005). Of the 1,826 respondents from Spring 2003 to Spring 2005, 64.2% participated in service-learning courses, 14.7% held Federal Work-Study positions with America Reads* America Counts, and 21.1% participated in community service through student organizations (Vogt). In addition to these three methods of community service, many students participate in community service independent of institution-sponsored programs.

The CSL assessment examines three developmental outcomes: appreciation of diversity, leadership, and civic engagement (Vogt, 2005). Though each of these outcome measures is applicable to this study, the CSL outcomes of leadership and civic engagement are most closely aligned with this study’s central focus on citizenship as a dimension of leadership. Women, students of color, students who worked during the
week, and older students scored significantly higher than their counterparts on all three scales. This study will expand upon the data obtained by Maryland’s CSL office through students involved in CSL-affiliated programs by examining community service involvement across the entire undergraduate population.

National initiatives and specific institutional initiatives at the University of Maryland related to community service involvement and leadership have been presented. The social change model of leadership development and A. W. Astin’s (2001) inputs-environments-outcomes (I-E-O) college impact model will now be introduced as the theoretical and conceptual frameworks, respectively, for this study.

**Social Change Model of Leadership Development**

The social change model of leadership development intentionally links community service and leadership development in working toward achieving the goal of social change (Higher Education Research Institute, 1996). Two primary goals were posited by the Working Ensemble of UCLA faculty and student affairs professionals who developed the social change model: (1) to augment student learning through the development of increased self-knowledge and leadership competence; and (2) to initiate positive social change (Higher Education Research Institute). Furthermore, community service involvement is directly indicated as a mechanism for leadership development within the fundamental principles that guide the social change model. Tyree (1998) coined the term *socially responsible leadership* to represent the leadership for social change that is developed through the implementation of the social change model. Within the framework of the social change model, citizenship represents one element of socially responsible leadership (Tyree).
The social change model identifies leadership development as enhancing seven core values occurring within three perspectives, or levels, toward the culminating goal of social change (Higher Education Research Institute, 1996). The individual level consists of the values of consciousness or self, congruence, and commitment. The group level comprises the values of collaboration, common purpose, and controversy with civility. Influenced by individual and group perspectives, citizenship exists as the core value representing the community and society perspective. Therefore, while individual and group values play a role in leadership development through community service involvement, citizenship represents the element of socially responsible leadership most closely associated with examining leadership outcomes stemming from community service involvement for the purpose of this study.

I-E-O College Impact Model

A. W. Astin’s (1991) inputs-environments-outcomes (I-E-O) college impact model provides an appropriate conceptual framework for studying community service involvement and socially responsible leadership through citizenship. A. W. Astin proposes that students enter college with certain personal characteristics, experiences, and perceptions that impact both their involvement during college and their development. In addition, college experiences and characteristics of the college environment also influence developmental outcomes. Identified inputs can be controlled for to determine the direct impact of the college experience on development outcomes. Community service experiences serve as one element of the college environment. Citizenship serves as one outcome of socially responsible leadership influenced by inputs that students possess prior to college and environments associated with college experiences.
Problem Statement

As institutions renew their commitment to developing socially responsible leaders, research needs to address the methods through which campuses implement initiatives stemming from this commitment. The increasing prevalence of community service programs on college campuses represents one way institutions are investing considerable resources and impacting the college student experience. Research has shown a significant association between involvement in service and student development (A. W. Astin & Sax, 1998; Berger & Milem, 2002; Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001; Dugan, 2006b; Eyler & Giles Jr., 1999; Giles Jr. & Eyler, 1994; Jones & Hill, 2001; Moely et al., 2002; Neururer & Rhoads, 1998; Rockquemore & Schaffer, 2000; Vogelgesang & Astin, 2000). However, additional research relating to citizen participation through community service is still needed (Jacoby, 1996b), as well as the relationship to citizenship and leadership development.

This study examined different mechanisms of community service involvement through curricular and cocurricular community service experiences, and aimed to identify differences between these two formats of college experiences on outcomes associated with self-perceived citizenship, one key aspect of leadership. As previously stated, citizenship represents one aspect of leadership and was used within the context of this study as an indicator of student leadership development.

Research Questions

The purpose of this study was to examine the relationship between involvement in curricular and cocurricular community service and self-perceived citizenship among
undergraduate students at the University of Maryland. Specifically, this study sought to answer the following three research questions:

(1) Do any differences exist in students’ self-perceived citizenship based upon whether they participated in any community service during college?

(2) Do different methods of community involvement significantly predict students’ self-perceived citizenship?

(3) To what extent do students’ community involvement and self-perceived citizenship prior to college explain the variance in their community service involvement during college?

(4) Do any differences based upon gender or race exist in students’ community service involvement and self-perceived citizenship?

Significance of the Study

The results of this study have the potential to impact both theory and practice in a number of ways. This study contributes to higher education research in the fields of community service and the citizenship dimension of leadership development. Enhancing the existing research, this study draws the intentional connection between community service and citizenship development as a component of leadership development. Furthermore, this study yields practical data to aid student affairs professionals with program development and improvement strategies. This section will elaborate upon the following significances of this study: the need for research related to the social change model of leadership development and community service involvement; expansion of previous research to a sample representative of the undergraduate student population; the need for research that examines different methods of community service involvement;
providing data related to student involvement in community service programming;
presenting a practical example of the relationship between a college environment and
associated student development outcome; and data specifically related to civic
engagement and leadership initiatives at the University of Maryland.

Little research exists on the direct relationship between community service and
the social change model of leadership development (Higher Education Research Institute,
1996; Meixner, 2000; Morrison, 2001). This study looks specifically at community
service involvement as one element of the college environment within the broader
construct of citizenship as a dimension of leadership. In considering student learning
outcomes from involvement in community service experiences, this study specifically
addresses citizenship, one desired outcome of the social change model.

This study expands upon the work of Morrison’s (2001) thesis that examined
participation in service and students’ self-perceived citizenship among undergraduates at
the University of Maryland. Here, data was collected at one time and differences were
examined based upon respondents’ method of service participation, involvement in
service prior to college, and participants’ race and gender. One of the limitations of both
Meixner’s (2000) and Morrison’s studies was the use of a convenience sample of
students who chose to enroll in a particular leadership course. This study employed a
random sample of the entire undergraduate student population at the University of
Maryland, thus yielding a more representative analysis of student involvement across the
general undergraduate population and indicating not only the extent of involvement by
individual students but also the breadth of involvement among all participants.
While research has been done on the relationship between service participation and student development, little research exists that specifically examines different methods of community service involvement (Berger & Milem, 2002; Eyler & Giles Jr., 1999; Fitch, 1991; Vogelgesang & Astin, 2000; Vogt, 2005). Particularly, this study looked at differences across involvement in academic credit-bearing service-learning courses and cocurricular community service with a student organization, as part of a Federal Work-Study experience, and through students’ individual involvement. This study identified the relationships between each method of community service involvement and students’ self-perceived citizenship, while also identifying the relationship of community involvement prior to college to community service involvement during college. Results indicated the extent to which any of the four methods predict students’ self-perceived citizenship.

This study will benefit higher education professionals, both faculty and student affairs educators, by providing research related to curricular and cocurricular community service programming. Community service-learning professionals and leadership educators will gain an understanding of the relationship between community service and leadership, answering the question of whether a relationship does exist between these variables. For example, this study supports the notion that community service involvement is one mechanism for fostering citizenship development as indicated by the extent to which variances in self-perceived citizenship are explained by students’ community service involvement. The results of this study could be used to garner institutional support for community service programs, identify differences among curricular and cocurricular programs, and obtain data to support curricular and
cocurricular community service. Professionals can also identify programmatic changes to better meet the needs of the current student population.

Based on the concepts in the inputs-environments-outcomes (I-E-O) model (A. W. Astin, 1991), this study provides new connections between theory and practice as the relationship between one specific college environment and outcome are explored. Specifically, the college environment associated with various types of community service involvement and the outcome of citizenship as a component of leadership development are explored. Experiences prior to college, such as involvement in volunteer work and community service as a high school graduation requirement, were also considered through a modified pre-test for their potential impact on the outcomes of community service involvement and citizenship development.

In addition to the previously mentioned general contributions, this study is significant for initiatives specific to the University of Maryland. Through an informal survey on the University of Maryland’s Web site, the Coalition for Civic Engagement and Leadership (CCEL) found that providing opportunities for civic engagement was deemed very important or important by more than 90% of respondents, yet more than 66% of respondents felt that the University of Maryland did not adequately provide such opportunities for civic engagement among students (Coalition for Civic Engagement and Leadership, 2005). The results of this study associated with curricular and cocurricular community service involvement will contribute to the goals and objectives of CCEL in the areas of enhancing civic engagement and leadership through the curriculum and through cocurricular programming, respectively. This study will provide CCEL and the Office of Community Service-Learning (CSL) with data on Maryland students’
community service involvement and self-perceived citizenship as one method of leadership. Furthermore, this study will also be useful to programs on other campuses.

Summary of Methodology

Informed by gaps in the existing literature, this study examined students’ perceptions of citizenship development and four different methods of community service involvement: community service (1) as part of a class, (2) with a student organization, (3) as part of a Federal Work-Study experience, and (4) on one’s own. This research study utilized secondary data collected as part of the Multi-Institutional Study of Leadership (MSL) during spring 2006 at the University of Maryland (Komives & Dugan, 2005). The MSL is a national study of leadership development, informed by the social change model of leadership development and the Socially Responsible Leadership Scale-Revised 2 (SRLS-Rev2). The MSL seeks to produce a national normative data set of student leadership development across the 54 participating institutions (Komives & Dugan).

A simple random sample of 3,410 undergraduate students at the University of Maryland was obtained from the Office of the Registrar. This research study used the data obtained from students at the University of Maryland as part of the MSL and sought to answer the previously mentioned research questions across a sample representative of the overall undergraduate student population. Students were asked to participate in a Web-based survey containing a variety of questions related to pre-college involvement, involvement during college and the college environment, and outcomes associated with college involvement. For the purpose of this study, variables related to community service involvement prior to college, the four methods of community service involvement during college, and leadership outcomes associated with perceptions of citizenship
measured by the SRLS-Rev2 citizenship scale were analyzed. Chapter 3 provides a comprehensive discussion of the methodology employed in this research study.

Chapter Summary

This chapter has provided a general context and outlined the research question employed in this study. The purpose of this study is to examine the relationship between involvement in curricular and cocurricular community service and self-perceived citizenship among undergraduate students at the University of Maryland. Elaborating on the variables used in this study, the next chapter discusses relevant theoretical literature and research related to leadership as manifested through citizenship and community service, as well as the intersection of these two constructs.
CHAPTER 2
LITERATURE REVIEW

The purpose of this literature review is to present a framework for leadership development through the variables of citizenship development and community service. This chapter will begin with an examination of leadership through a broad overview of leadership theory and developmental outcomes. Citizenship will then be examined as one element of leadership development. The next part of this chapter will explore literature related to community service as one mechanism for fostering citizenship development among college students. Research related to both curricular and cocurricular community service will be identified. Broader implications will stem from connections drawn between citizenship and community service involvement.

Leadership

Leadership is manifested in a wide variety of disciplines with thousands of books and articles published on this topic (Komives, Lucas, & McMahon, 1998). However, no single definition of leadership or unifying approach to leadership exists (Rost, 1991). Komives et al. pose the question, “leadership for what purpose?” (p. 26). Understanding the context for leadership should precede delving into defining and understanding leadership.

As a multidisciplinary concept, a variety of leadership theories exist and many of these theories have been characterized within two divergent paradigms: industrial and post-industrial (Rost, 1991). The industrial paradigm prevailed over leadership for the greater part of the twentieth century. With a focus on individuals as leaders who effect change and motivate followers, leadership theories such as the great man theory, trait
theory, behavioral theory, contingency/situational theory, excellence theory, and influence theory comprise the industrial paradigm (Komives et al., 1998; Rost).

The central focus of leadership theories experienced a transformation in recent years. Shifting from traditional perspectives of leadership as something demonstrated by individuals, the post-industrial paradigm is characterized by an increasing focus on leadership as a reciprocal relationship (Komives et al., 1998; Rost, 1991). Much of the literature emerging from the field of leadership education and development over the past twenty years examines leadership as a collaborative process among individuals seeking intentional change, thus moving away from the traditional focus of leadership as a positional role (A. W. Astin & Astin, 2000; H. S. Astin & Leland, 1991; Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001; Dugan, 2006a; Higher Education Research Institute, 1996; Kezar & Moriarty, 2000; Komives et al., 1998; Rost, 1991). Leadership theories and models such as transformational leadership (Burns, 1978), servant leadership (Greenleaf, 1977), the relational leadership model (Komives et al.), and the social change model of leadership development (Higher Education Research Institute) are examples of theories and models comprising the post-industrial paradigm.

A number of developmental outcomes have been associated with college students’ participation in leadership programs (Cress et al., 2001). Cress et al. studied leadership outcomes through five composite measures: leadership understanding and commitment ($\alpha = .69$), leadership skills ($\alpha = .78$), personal and societal values ($\alpha = .72$), civic responsibility ($\alpha = .80$), and multicultural awareness and community orientation ($\alpha = .80$). Interestingly, no significant differences based on gender were identified; thus, males and females were equally likely to report leadership skill development through
participation in leadership programs. Furthermore, respondents’ race/ethnic identity was not found to contribute to leadership skill development with the exception of Mexican American/Chicano students who reported significant differences on the multicultural awareness and community orientation measure.

Cress et al.’s (2001) findings illustrate the impact of student experiences in leadership development programs on enhancing student development within the identified leadership outcomes. Participants in leadership programs reported significantly higher scores than nonparticipants on all five composite measures ($p < .01$ for personal and societal values, and multicultural awareness and community orientation; $p < .001$ for leadership understanding and commitment, leadership skills, and civic responsibility). This provides further support for the emerging belief from the post-industrial paradigm that any person can develop leadership skills, not just certain individuals in positional leadership roles.

In their study of 77 women leaders’ accomplishments, H. S. Astin and Leland (1991) identified collective action, passionate commitment, and consistent performance as three key aspects of leadership. This process-oriented, non-positional approach to leadership served as the foundation for the conception of the social change model of leadership development (Higher Education Research Institute, 1996). The following section will examine the social change model in depth, drawing connections between leadership development and community service.

Social Change Model of Leadership Development

Developed by a Working Ensemble of 15 individuals representing student affairs professionals and leadership educators, the social change model of leadership
development is grounded in the premise that leadership is nonhierarchical and emerges through groups of people working toward a shared goal of change (Higher Education Research Institute, 1996). The integration of community service and leadership is inherent within the principles of the social change model. A primary premise of the social change model identifies the strong impact of service on leadership development through the “7 C’s of leadership development and social change” (p. 21). Six assumptions underlie the social change model:

1. “Leadership” is concerned with effecting change on behalf of others and society.
2. Leadership is collaborative.
3. Leadership is a process rather than a position.
4. Leadership should be value-based.
5. All students (not just those who hold formal leadership positions) are potential leaders.
6. Service is a powerful vehicle for developing students’ leadership skills.

(Higher Education Research Institute, 1996, p. 10)

Collaboration, consciousness of self, commitment, congruence, common purpose, controversy with civility, and citizenship represent the seven core values of the social change model that lead to achieving the overall goal of change (Higher Education Research Institute, 1996). The seven core values can be further grouped into three primary perspectives: the individual, the group, and the community and society. Figure 1 presents a visual representation of the 7 C’s of the social change model within the three perspective levels. Change, considered the eighth C, sits at the hub of this model and
represents the culminating goal of leadership development. The arrows connecting each of the three perspectives visually represent the inherent connections between individual, group, and community values. Each core value will be discussed briefly before focusing primarily on the construct of citizenship.

Figure 1.

![Diagram of the Social Change Model of Leadership Development](Higher Education Research Institute, 1996, p. 20-26)

**Individual Values**

The individual values of consciousness of self, congruence, and commitment provide an essential foundation for increased levels of leadership among students (Higher Education Research Institute, 1996). Students must first understand who they are, their personality, values, and beliefs, before they can demonstrate leadership. Once this level of self-understanding is reached, students begin to identify their personal passions and
motivations. In turn, students identify what they are willing to put their time and energy into and make a commitment to those purposes.

*Consciousness of Self*

Consciousness of self refers to an individual’s self-awareness and self-concept as the initial components to leadership development (Higher Education Research Institute, 1996). Individuals must know themselves and their own personalities, but also be able to observe their own behaviors and states of mind. This fundamental value provides the initial step to recognizing the other values within the social change model.

*Congruence*

Congruence is “thinking, feeling, and behaving with consistency, genuineness, authenticity, and honesty towards others” (Higher Education Research Institute, 1996, p. 36). Individuals must as act in accordance with their personal values to achieve an individual state of congruence. However, congruence can also be manifested within a group environment where the group acts consistently with the group’s values.

*Commitment*

Commitment represents the value of persistence within leadership development (Higher Education Research Institute, 1996). In essence, commitment is the motivation within an individual that drives that person to act; thus, commitment is an individual value essential for change. Commitment is characterized by both passion and determination. Three basic elements comprise the value of commitment: knowing, being, and doing (Higher Education Research Institute).


Group Values

The group values of collaboration, common purpose, and controversy with civility further promote leadership development as these are collaborative processes that involve both the leader and the group (Higher Education Research Institute, 1996). Collaboration is a key element of leadership development as students learn to work with others with mutual interests and goals (i.e., a common purpose) to create positive change. It is inevitable that group members will have differing opinions; thus, it is the leader’s role to handle controversy with civility by identifying and exploring group members’ values and opinions in a positive manner.

Collaboration

Collaboration stems from the integration of diverse sets of knowledge, skills, and attitudes across members of a group (Higher Education Research Institute, 1996). Leadership is a process that occurs within a group and collaboration is the key to developing positive relationships within groups. As trust develops within the group, individuals and the group as a whole are empowered to act.

Common Purpose

Common purpose represents the group value of working toward a shared goal (Higher Education Research Institute, 1996). Definitions of leadership focus on the collaborative nature of leadership as groups of people work together to achieve some common goal (Komives et al., 1998; Northouse, 2004; Rost, 1991). For groups to be fully successful, all participants should be fully engaged in the group process and be invested in the group’s common purpose.
Controversy with Civility

Within any group, differences of opinion are likely to occur; the manner in which groups work with these controversies can hinder or foster the leadership development process (Higher Education Research Institute, 1996). The social change model uses the word controversy in lieu of the word conflict because controversy is a more positive term that represents disagreements and discussions where as conflict is more negative, hostile term. An understanding the individual and group values previously mentioned is essential for groups to process and resolve controversies with civility.

Community Values

Citizenship

As the single value within the community/society level, citizenship can be interpreted as the outcome of leadership development most closely connected with community service experiences. While each of the seven core values of the social change model is fostered through community service involvement, citizenship development is evident as a central goal within many community service programs. Citizenship builds upon each of the other six core values, and the individual and group values fostered through community service involvement contribute to the development of citizenship. Once students understand themselves and their group, they can progress to a level of intentional action and civic engagement to effect change (Higher Education Research Institute, 1996). According to the social change model, citizenship “implies active engagement of the individual (and the leadership group) in an effort to serve that community, as well as a ‘citizens mind’ – a set of values and beliefs that connects an individual in a responsible manner to others” (p. 65).
**Change**

Though not one of the seven core values, the goal of change serves as the hub of the social change model (Higher Education Research Institute, 1996). The individual, group, and community values previously discussed all intersect to foster the creation of social change. This value, an eighth C, can be placed within the community values since change represents social change at the society or community level.

**Socially Responsible Leadership**

Upon reviewing existing leadership development measures, Tyree (2001) found that few are specifically designed to examine leadership development among college students. Dugan (2006b) further noted that much of the college student leadership development research does not examine leadership development within the framework of leadership models employed in practice. Tyree’s dissertation research yielded an instrument to measure what she defined as socially responsible leadership within the theoretical framework of the social change model of leadership development (Higher Education Research Institute, 1996; Tyree, 1998). The Socially Responsible Leadership Scale (SRLS) measures leadership across the eight constructs espoused within the social change model, the seven C’s plus change (Tyree, 1998; 2001). Though much research using this instrument has not yet been published, a few studies support the validity and reliability of this instrument and warrant the use of the SRLS in future research (Appel-Silbaugh, 2005; Dugan, 2006a; Dugan, 2006b; Komives & Dugan, 2005; Meixner, 2000; Morrison, 2001; Tyree, 1998).

The Socially Responsible Leadership Scale (SRLS) was developed in 1998 as an instrument to measure socially responsible leadership among college students (Tyree,
Containing 103 items in her final study, the SRLS consisted of eight scales designed to measure leadership development along the eight core values of the social change model (Higher Education Research Institute, 1996). Tyree obtained strong internal consistency for the citizenship scale ($\alpha = .91$) in the final iteration of the 103-item SRLS tested with a sample of 342 undergraduate students. The development of the SRLS as an instrument to measure socially responsible leadership will be elaborated upon in Chapter 3.

Expanding upon Tyree’s (1998) work, Meixner (2000) conducted her research on sex differences in students’ self-perceptions of socially responsible leadership. Meixner and others administered the Socially Responsible Leadership Scale (SRLS) developed by Tyree to students enrolled in a leadership course at a large, public, mid-Atlantic research university. However, this study did not include responses from students of color, nor was the sample representative of different academic class standings with the majority of participants being seniors. Though Meixner did not find a significant difference among undergraduate students’ approaches to leadership on the basis of their sex, the study generated additional validity and reliability for the SRLS as a measurement of socially responsible leadership.

Furthermore, Dugan (2006a; 2006b) utilized the SRLS in a study of leadership at a large, doctoral/research intensive university in the west. Stemming from the same research study, these two analyses provide further credibility for the SRLS as a measurement of leadership development within the framework of the social change model. In the first study, Dugan (2006a) sought to examine differences in leadership development among college men and women. Significant differences ($p < .05$) were
found with women indicating higher scores on six of the eight constructs within the SRLS; no significant differences based on sex for the constructs of collaboration and controversy with civility were found. More specifically, Dugan (2006a) found that women ($M = 3.84, SD = 0.58$) reported significantly higher scores than men ($M = 3.61, SD = 0.60$) on the citizenship scale ($t = -5.69, p < .05$), but this was the lowest score for men and the second lowest score for women across all eight scales. In the second analysis, Dugan (2006b) sought to examine the relationship between student involvement, specifically through community service, positional roles, student organizations, and formal leadership program, and leadership. Students involved in community service ($M = 3.89, SD = 0.55$) scored significantly higher than students not involved in community service ($M = 3.53, SD = 0.60$) on the citizenship scale ($t = -9.26, p < .05$). Results of these analyses will be elaborated upon in subsequent sections.

Citizenship

As the core value of the social change model within the community level, citizenship represents one manifestation of leadership (Higher Education Research Institute, 1996). This section will present three models of citizenship, followed by research related to the outcome of citizenship and citizenship development.

Models of Citizenship

This section presents three different models of citizenship. First, models connecting democracy and citizenship in three different ways will be presented (Boyte & Kari, 2000). Second, a proposed six-phase citizenship development model will be discussed. This section concludes with a presentation of three different types of citizens, the only model discussed in this section developed through empirical research
Democracy and Citizenship

A variety of citizenship models exist that are applicable to this research study. Different types of democracy in history fall into three models of citizenship, with the first two models being more prevalent (Boyte & Kari, 2000). The first model represents a civics view that focuses on democracy as a political process. The civics view is closely aligned with more traditional civic education around government, political and civil rights and the democratic political process. The second model of citizenship proposed by Boyte and Kari encompasses a more communitarian philosophy with an emphasis on shared values, the importance of communities, and a central focus on the common good. Community service-learning developed within the framework of this communitarian model, encouraging citizenship at a more intense level than governmental participation.

Boyte and Kari (2000) support the third model of citizenship that focuses on citizenship as public work, extending beyond the specific focuses of the civics view and the communitarian models. The public work model is based on the empowerment of citizens to create communities and support democratic movements that provide power to previously marginalized groups. This third model provides a complete view of citizenship in that it incorporates personal and civic values into democratic actions within the political process. Though Boyte and Kari propose these models of citizenship, they have not conducted any formal research on these models. While this conceptual framework supports the notion of three distinct models of citizenship, future research should...
examine ways to measure citizenship within this framework to support Boyte and Kari’s discussion of the need for a more inclusive public work view of citizenship.

Connections can be drawn between Boyte and Kari’s (2000) communitarian model and the eight values of the social change model of leadership development (Higher Education Research Institute, 1996). Boyte and Kari identify the communitarian model of citizenship within the framework of shared values among communities and a central focus on the common good. The social change model’s depiction of the interaction between the three individual values, three group values, and the community value and the overarching focus on the central goal of social change coincides with Boyte and Kari’s communitarian model (Higher Education Research Institute, 1996). Both of these models are value-based, both recognize the role of the individual within a group and within the larger community, and both are essentially focused on social change for the common good. The social change model does not explicitly link with the broader goals of political movements proposed by Boyte and Kari in the public work model of citizenship. However, the eighth “C” of change within the social change model could possibly link with the public work model as social change affecting the democratic process in certain instances.

Citizenship Development Model

Though not yet empirically researched, Musil (2003) provides a developmental learning model of citizenship through six distinct phases of citizenship. Musil’s model illustrates a progression through these phases that coincides with increased development from new understandings, advanced knowledge, and new level of moral and civic learning.
First, the Exclusionary phase is based upon one’s individual community and perceptions (Musil, 2003). This phase of citizenship is promoted by institutions that separate students from the community in such a manner that students see the community as disconnected, unsafe, or not worthy of interaction with the institution, thus allowing a sense of civic disengagement among students.

Second, the Oblivious phase involves minimal student interaction in the community where students perceive their experiences merely as educational opportunities (Musil, 2003). A sense of civic detachment emerges in this phase as students see the community as something to learn from and not something to be involved with.

Civic amnesia emerges during the third phase, the Naïve phase (Musil, 2003). Students begin to see the benefits of engaging with the community but lack the foundational knowledge and understanding of community issues and needs. Students take the initiative for leadership, but their purpose is not necessarily effective for the community.

The Charitable phase serves as the fourth phase and is the most widespread among college students (Musil, 2003). Many community service and leadership development programs foster this phase among student populations. Through their direct involvement with the community, students begin to understand the services provided for the community. A sense of civic altruism transpires as students see how they help provide lacking services to the community.

A sense of civic engagement begins to emerge as students enter the Reciprocal phase, the fifth phase of citizenship (Musil, 2003). Students recognize the reciprocal relationship between them and the community that results from their positive service-
learning experiences. Progressing beyond the Naïve phase, students in the Reciprocal phase come to understand the community, its history, inequalities, and benefits, as well as increase their multicultural awareness.

Lastly, students in the Generative phase of citizenship reach a level of civic prosperity (Musil, 2003). This phase is characterized by students’ long-term dedication to creating societal changes for future generations beyond meeting the immediate needs of today’s society. These social changes result from collaboration between individuals and the community, as well as the individual’s increased understanding of the community’s historical struggles, multicultural awareness, and vision toward structural change.

Similarities among this citizenship development model and the social change model also exist (Higher Education Research Institute, 1996; Musil, 2003). Within the first two phases of Musil’s model, the exclusionary and oblivious phases, individuals are more focused on themselves and their individual values within their community interactions. As individuals become more attuned to community needs and their relationships with others engaged in service, they progress into the naïve and charitable phases and begin to identify shared values through their membership in service-based groups and their interactions with the community. When individuals come to see the interconnectedness among themselves, groups they are a part of, and society as a whole and come to recognize the larger social issues faced by society and communities, they move into the reciprocal phase (Musil). When this understanding of larger social issues becomes the impetus for individual and collective action toward social change, the generative phase becomes intertwined with the core values espoused within the social change model (Musil; Higher Education Research Institute).
Visions of Good Citizens

Part of a broader study of ten programs intended to foster good citizenship, two high school programs served as the primary data sources for Westheimer and Kahne’s (2002) study that proposed three different kinds of citizens. Though this study related directly to high school programs, Westheimer and Kahne’s study also applies to citizenship development as presented within the current study and it is the only citizenship model presented that is grounded in research. Each of the three visions of good citizens identified will be briefly discussed with connections drawn among the two models previously presented (Boyte & Kari, 2000; Musil, 2003).

Personally responsible citizens are aware of social problems in their communities and volunteer occasionally to meet community needs (Westheimer & Kahne, 2002). This citizen vision includes individuals who seek to improve society through direct community service but who do not have a full grasp of the underlying causes of social problems. Additionally, the personally responsible citizen could be indicative of the exclusionary, oblivious, naïve, and charitable phases of citizenship development (Musil, 2003).

Participatory citizens are knowledgeable about community issues and are actively engaged in their communities toward the goal of creating societal change (Westheimer & Kahne, 2002). Beyond personally responsible citizens, participatory citizens take more leadership roles within their communities while remaining involved in direct community service. This type of citizen relates to the charitable and reciprocal phases of citizenship (Musil, 2003) as well as the communitarian view of citizenship (Boyte & Kari, 2000).
Justice oriented citizens address social issues by determining their root causes and actively working to change systems in society that perpetuate social injustice (Westheimer & Kahne, 2002). Similar to the generative phase of Musil’s (2003) citizenship development model and Boyte and Kari’s (2000) model of citizenship as public work, this type of citizen addresses the key to social problems rather than providing service to meet the immediate needs of the community.

Research on Citizenship Outcomes

Following the previous section’s identification of three different citizenship models, this section will present research studies with specific citizenship outcomes. In their mixed methods study of student experiences in service-learning programs, Eyler and Giles, Jr. (1999) identified five elements of citizenship acquired through service-learning experiences. These elements emerged from data collected through qualitative focus groups and interviews with 66 students that complemented the quantitative surveys. The five elements included values coinciding with a connection to social responsibility, knowledge about ways to understand social problems, skills to work with others to create social change, personal and community efficacy, and commitment to continual work toward social justice and active citizenship. All five of these elements connect with the core values of the social change model and serve as language to connect individual, group, and community values (Higher Education Research Institute, 1996).

In reference to personal, interpersonal, and intellectual development, Eyler and Giles, Jr. stated that “service-learning provides an ideal environment for connecting these disparate elements of student development into effective citizenship development” (p. 157). Eyler and Giles, Jr. appropriately noted that a longitudinal study would be
necessary to completely understand the direct implications for service-learning leading to
citizenship development.

Before two studies directly related to citizenship are presented, general results
from Dugan’s (2006a) study of sex differences in leadership styles will be presented
again. Considering the eight constructs of the SRLS, the citizenship scale was the lowest
score among men ($M=3.61, SD=0.60$) and the second lowest score among women
($M=3.84, SD=0.58$) as noted earlier in this chapter. Both women and men scored lower
on action-based items than on items related to their attitudes and beliefs, thus resulting in
responses to ‘knowing’ and ‘being’ statements that are inconsistent with responses to
‘doing’ statements (Dugan, 2006a; Higher Education Research Institute, 1996).

Rather than examining data across all scales of socially responsible leadership,
Morrison (2001) selected to focus on just one scale, the citizenship scale of the SRLS.
Using the same data set as Meixner (2000), Morrison examined the relationship between
students’ self-perceived citizenship and their participation in service. The results of this
study indicate a positive correlation between service and citizenship, suggesting that
students involved in service reported higher self-perceptions of citizenship than students
not involved in service. Similar to Astin and Sax’s (1998) findings, stronger self-
perceptions of citizenship were reported by students who spent more time participating in
service (Morrison, 2001).

Similar to Meixner’s (2000) study, the sample in Morrison’s (2001) study
consisted of a convenience sample of 85 students enrolled in a particular leadership
course who selected to participate in the study. After controlling for the influence of
participants’ prior service involvement, gender, race, parental education, self-perception
of citizenship during the pre-test was the only significant predictor of self-perception of citizenship during the post-test ($\beta = .613, p < .001$). Race and gender were not found to be significant predictors of self-perceived citizenship. Furthermore, no significant differences in community service involvement were found based on participants’ gender ($F (2, 82) = 1.116, p = .333$) or race ($F (2, 82) = 1.571, p = .214$).

Due to the convenience sample used in Morrison’s study, the results cannot be generalized to the entire undergraduate student population. Additional research necessitates an expansion of Morrison’s study to include a representative sample of the entire undergraduate student population and to include students from different institutions. A more diverse sample would also strengthen analyses for different racial groups and may yield significant differences based on race and gender.

The focus on the citizenship scale of the Socially Responsible Leadership Scale in Morrison’s (2001) study informs this research study. This study expands upon Morrison’s (2001) study through examining the relationship between four different types of community service participation and self-perceived citizenship among a sample representative of the overall undergraduate student population. The methodology of the current study will be elaborated upon in Chapter 3.

In another study related to citizenship outcomes, Sax (2000) addressed increases in civic responsibility as a result of involvement during college through students’ civic values and behaviors. Specifically, changes in values and behaviors were identified through three outcome measures associated with citizenship: commitment to social activism, sense of empowerment, and community involvement. Data was obtained through the Cooperative Institutional Research Program (CIRP) Freshman Survey and a
longitudinal study conducted over a period of nine years. The outcome of community involvement serves as the behavioral measure of citizenship, relating specifically to the number of hours of volunteer work or community service (Sax). Interestingly, 72.1% of participants volunteered for some form of community service during their senior year in high school, but this number decreased to 35.7% during college and increased to 46.1% during the years following college. In addition, Sax found that students were strongly influenced by their peers’ commitment to activism in continuing to be civically engaged citizens beyond college.

*Citizenship as a Component of Leadership*

Leadership is not merely about the positions people hold; rather, leadership is best identified as a relationship (Althaus, 1997; Higher Education Research Institute, 1996; Komives et al., 1998). Many aspects of leadership warrant further study, including the element of citizenship as a component of the construct of leadership. Morrison (2001) and Shannon (2004) examined citizenship within the context of involvement in community service. Morrison’s study was based around the Socially Responsible Leadership Scale (SRLS) developed by Tyree (1998) and utilized a sample of undergraduate students from a large, public, research university. Shannon utilized a sample of undergraduate students from four religious-affiliated, Jesuit institutions to explore the relationship between citizenship confidence and values that emerge through service-learning involvement.

Citizenship and leadership need to be thought of as correlated rather than separate entities (Mabey, 1995). Citizenship represents a key component of leadership for the development of citizen leaders, those individuals who act to improve social problems
without necessarily seeking the power associated with more traditional views of leadership characteristic of the industrial paradigm of leadership (Couto, 1995). Citizen leaders are characterized by knowledge acquisition and action; they embrace the need for socially responsible leaders who will act to improve society for future generations (Mabey).

Citizenship is not something that can simply be taught. Citizenship education fails when students are only taught about political culture and democracy in the classroom (Berman, 1990). Rather, education for citizenship in the academic curriculum should be enhanced through experiences outside the classroom that increase students’ understanding of society, illustrate mechanisms through which they can create social change, and foster the development of student relationships with society (Berman, 1990; Newmann, 1990). Through education about social issues and direct action, students develop the knowledge and skills to continue as citizen leaders beyond the college experience.

However, the development of citizen leaders often becomes a secondary function of higher education when other institutional goals take priority (Cress et al., 2001). Using A. W. Astin’s (1991) I-E-O model as a conceptual framework, Cress et al. sought to examine the impact of leadership programs on outcomes associated with developing students’ leadership understanding and commitment, leadership skills and knowledge, civic responsibility, personal and social values, and multicultural awareness. Through a hierarchical regression analysis, student characteristics and college experiences were controlled for their potential impact on student development to ascertain whether participation in leadership programs directly affects a set of developmental outcomes.
Students from ten different institutions were included in this longitudinal study using the College Student Survey (CSS) and additional supplemental questions, providing a sample of 875 students from a diverse scope of institutions (Cress et al., 2001; Higher Education Research Institute, 2005). Of these 875 participants in the study, 425 participated in some form of leadership education or training program and 450 did not participate in any leadership program. Significant differences were found in leadership program participants’ report of greater leadership skills and understanding, civic responsibility, and multicultural awareness than non-participants. Civic responsibility was measured through a scale ($\alpha = .80$) that contained a series of questions around community service involvement and values related to helping others, social justice, and political action. Additionally, performing volunteer work was strongly correlated with growth in each of the five development outcomes. The variables of gender and race/ethnic identity did not enter the regression equations, indicating that participants’ gender and race were not significant predictors of their leadership development. It is important to note that the majority of the participants in Cress et al.’s study were female (68%) and White (78%), limiting the effectiveness of additional analyses based on gender and race.

While including participants from ten different institutions yielded a more diverse sample than examining students at only one institution, the content of the various leadership programs were not examined by Cress et al. (2001) and thus student experiences could vary greatly by institution. Additional research should focus on examining the experiences of students at individual institutions within the context of specific programs at that institution. Furthermore, future national studies should include
more than ten institutions to garner a sample more representative of the national undergraduate student population and of the diverse institutional types.

The previous sections focused on the construct of leadership, specifically presenting citizenship as one aspect of leadership development. The next section will address community service as one mechanism of college student involvement that contributes to citizenship development.

**Community Service**

This section will present relevant literature from the field of community service. First, a general foundation of the field of community service will be presented. The first section discusses two developmental models associated with community service and service-learning. An analysis of different aspects of students’ community service involvement, including high school involvement, student development in college, and post-college outcomes follows. Research related to different methods of curricular and cocurricular community service is then presented. This section on community service concludes with a discussion of resistance to community service and identification of areas for future research.

As discussed in Chapter 1, existing research uses a variety of terms, such as community service, service-learning, and community service-learning. Community service was defined in Chapter 1 as activities that address human and community needs (B. Jacoby, personal communication, December 15, 2005). Building upon this definition, service-learning can be defined as “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development”
Furthermore, service-learning builds upon community service through incorporating the key concepts of reflection and reciprocity. Throughout this literature review, the terminology utilized within each study will be presented.

Models of Community Service and Service-Learning

This section will present two primary models, the service-learning model developed by Delve, Mintz, and Stewart (1990) and the paradigms of service model developed by Morton (1995). Two empirical research studies that examined the service-learning model will also be presented. This section concludes with a connections drawn between these two models, the citizenship models previously discussed (Musil, 2003; Westheimer & Kahne, 2002), and the social change model (Higher Education Research Institute, 1996).

Service-Learning Model

Several models of community service and service-learning are based upon a continuum where individuals progress from a charity-based perspective to a social justice-based perspective (Wang & Jackson, 2005). In their book, Community Service as Values Education, Delve, Mintz, and Stewart (1990) present the service-learning model. The service-learning model serves as a five-phase model of student development occurring through service-learning involvement. This model is based upon a value-based continuum through which students move from random acts of charity to intentional acts of social justice as their service-learning involvement fosters their personal, cognitive, and citizenship development.

Exploration serves as the first phase of the service-learning model and often emerges through a one-time community service-learning experience (Delve, et al., 1990).
Students rarely identify issues of importance to them nor do they form a genuine interaction with the community, largely as a result of the infrequent commitment in this stage.

The second phase of the service-learning model is characterized by Clarification (Delve et al., 1990). Students begin to seek a variety of community service-learning experiences and begin to identify social issues of importance to them. In addition, students connect with peer groups who offer experiences related to these issues of importance, such as student or religious-based organizations with service components. A genuine desire to help others closely represents this stage.

Realization occurs during the third phase of the service-learning model (Delve et al., 1990). At this phase in the model, students ‘get it’ and come to realize the diversity within their community. This new awareness leads students to commit to specific social issues or populations in need. Students begin moving away from the charity end of the service-learning continuum in this phase and start to recognize the intersections of their community involvement with larger social issues (Wang & Jackson, 2005).

Students’ commitment to both specific local issues and complex societal issues characterizes the fourth phase of the service-learning model, Activation (Delve et al., 1990). Collaboration, as one of the seven core values of the social change model of leadership (Higher Education Research Institute, 1996), is evident within the Activation phase of service-learning as collaboration not only within the student population but with the community.

The fifth and final phase of the service-learning model occurs when students reach a level of Internalization (Delve et al., 1990). Students have identified issues of
importance to them and progress into a phase of Internalization when they recognize ways through which they can continue to create social change beyond a single, isolated service-learning experience. Students develop the knowledge and awareness that leads to long-term engagement as civically engaged leaders.

*Community Service Involvement Preference Inventory.* Payne (1993) developed the Community Service Involvement Preference Inventory (CSIPI) as an instrument to measure student preferences for involvement in community service (as cited in Payne, 2000). Stemming from the service-learning model’s five phases (Delve et al., 1990), the CSIPI identifies four types of involvement preferences: exploration, affiliation, experimentation, and assimilation (Payne, 2000; Payne & Bennett, 1999).

Significant differences were found in the mean scores for the Exploration and Assimilation Involvement Preferences, indicating that the curricular service-learning experience extended students’ preference for involvement beyond simply helping others and toward a lifelong commitment (Payne, 2000). This supports the notion that involvement in community service-learning fosters student development of socially responsible citizenship toward leadership. While this study yields results supportive of community service-learning, it is important to note that the CSIPI is still a very new instrument. Furthermore, Payne examined changes in involvement preferences only over a ten-week period; additional research should examine longer time periods.

*Scale of Service Learning Involvement.* The Scale of Service Learning Involvement (SSLI) was developed to determine the effects of community service and service-learning involvement on the development of social responsibility among college students (Olney & Grande, 1995). Olney and Grande developed the SSLI through the
lens of the developmental sequence proposed in the service-learning model (Delve et al., 1990). The SSLI contained 60 items reflecting participants’ “feelings about volunteer work” (p. 44) in a 4-item Likert scale format. Due to similarities between the first and second stages of exploration and clarification and between the last two stages of activation and internalization, Olney and Grande divided the 60 items in the SSLI into three subscale measurements that produced strong internal consistency: exploration (α = .84), realization (α = .70), and internalization (α = .74). Validity for these scales was supported through the negative correlation between the exploration and realization stages and the stronger positive correlation between the realization and internalization scales, as well as comparisons to other measures to assess cognitive and moral development. This supported the service-learning model’s notion that students in these two stages may participate in the same quantity of service but are set apart through an increased understanding of the complexity of social issues within the later stage of internalization. It is important to note that Olney and Grande administered the SSLI to 285 sophomore students during an annual assessment day at one institution. While the reliability and validity measures employed supported the SSLI, the inclusion of more diverse student and institution populations would provide additional support for this instrument.

Paradigms of Service

Morton (1995) presents a model of service that expresses three different paradigms: charity, project, and social change. These three paradigms have been previously considered as a continuum from charity to social justice, but Morton views the continuum as differing spans along increasing investment in relationships and concerns with root causes. Community service involvement advances students from episodic acts
of kindness in which they have little investment in relationships and little concern for the
deeper cause toward longer involvement in more intense initiatives of social change in
which they have a strong investment in relationships and a strong concern for the root
causes of social problems.

Reaching beyond this idea of a continuum, Morton (1995) explored each of these
three critical elements as distinct paradigms of community service involvement. Within
each paradigm, individuals enter with limited depth and integrity and grow to develop
more integrity as they move deeper into the focus of a paradigm. Morton developed the
notion that an internal range exists within each paradigm that coincides with this growth,
using the terms thin and thick to depict this range of progression.

Within the charity paradigm, the student directly controls the service being
provided. This is contrary to the first of Sigmon’s (1990) principles of service-learning
that identifies the recipient of the service (i.e., the community) as controlling the service.
Thus, the charity paradigm represents a very basic perspective of service as doing good
for others. Connections can be made between Morton’s charity paradigm and exploration
and clarification, the first two phases of the service-learning model (Delve et al., 1990).

The project development paradigm encourages students to develop definitions of
social problems (Morton, 1995). Service is viewed as a mechanism through which
students solve these social problems. The realization phase of the service-learning model
(Delve, Mintz, & Stewart, 1990) relates to the project paradigm, through which students
become aware of the larger impact of their service and commit to working towards
solving social problems.
The final paradigm of social change concentrates on forming mutually beneficial relationships and clearly articulating the learning environment within the service experience (Morton, 1995). This paradigm relates to the direct action inherent within the activation and internalization phases within the service-learning model (Delve et al., 1990). Even more than direct action, this paradigm is about a larger commitment to prolonged social justice and rests towards the far end of the charity to social justice continuum previously discussed.

*Connections with Citizenship Models*

Connections can be drawn between the two models presented within this section, Delve et al.’s (1990) service-learning model and Morton’s (1995) paradigms of service, and the two models of citizenship presented earlier in this chapter, Musil’s (2003) citizenship development model and Westheimer and Kahne’s (2002) types of citizens. All four models propose stages or phases of development and many similarities within the stages exist across all four models. Using a community service involvement example, all four models begin with stages that would be illustrated through a student occasionally involved in episodic community service for the purpose doing a good deed or as a form of involvement with peers. Similarly, all four identify the developmental progression differently but ultimately culminate in students developing a greater sense of social problems, the impetus behind these problems, and a commitment to continual work towards social change. Table 2.1 illustrates the overlapping sequence of these four models.

Additionally, these four models represent the core values of the social change model presented in the first section of this chapter. Within these service models, students
Table 2.1

*Connections among Citizenship and Community Service Models*

<table>
<thead>
<tr>
<th>Citizenship Development Model</th>
<th>Service-Learning Model</th>
<th>Paradigms of Service</th>
<th>Visions of Good Citizens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusionary</td>
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<tr>
<td>Oblivious</td>
<td>Exploration</td>
<td>Charity</td>
<td>Personally Responsible Citizen</td>
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<td>Naïve</td>
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<tr>
<td>Charitable</td>
<td>Realization</td>
<td>Project</td>
<td>Participatory Citizen</td>
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<tr>
<td>Reciprocal</td>
<td>Activation</td>
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<tr>
<td>Generative</td>
<td>Internalization</td>
<td>Social Change</td>
<td>Justice-Oriented Citizen</td>
</tr>
</tbody>
</table>

begin by becoming aware of their individual values of consciousness of self, congruence, and commitment (Delve et al., 1990; Higher Education Research Institute, 1996; Morton, 1995; Musil, 2003; Westheimer & Kahne, 2002). Through increased connections with peers involved in community service and relationships with their communities, students can increase collaborations, identify common purposes within their groups, and possibly experience some controversy (Higher Education Research Institute). All four of models share a common goal of an intentional commitment to creating social change, indicative of the citizenship and change dimensions of the social change model.

*Community Service Involvement*

This section will address the inputs and outcomes elements of A. W. Astin’s (1991) inputs-environments-outcomes (I-E-O) college impact model, specifically the inputs prior to college and the college outcomes associated with the environment of community service involvement. Literature related to the impact of community service involvement during high school on community service involvement during college will be presented. These pre-college inputs will be followed by literature related to outcomes emerging from community service involvement during college, such as citizenship development, cognitive development, interpersonal development, and an increased appreciation of diversity.

*High School Involvement*

Community service involvement during college may be impacted by a number of factors prior to college, including attending high schools with community service requirements for graduation, community service involvement during high school, and perceptions of citizenship prior to college. Involvement in experiential education during
high school enhances the social, psychological, and intellectual development of student participants (Hedin & Conrad, 1990). Marks and Jones (2004) found that women and students from higher socioeconomic backgrounds were more likely to continue their community service involvement form high school into college. An increasing number of high schools have implemented a community service requirement for graduation (Marks & Jones, 2004; Morrison, 2001). Furthermore, Morrison notes that Maryland was the first state to implement a state-wide community service requirement for high school graduation in 1993.

Studies have found contradictory results regarding the relationship of community service involvement during high school, such as through volunteer work, to involvement in community service during college (A. W. Astin & Sax, 1998; Berger & Milem, 2002; Eyler & Giles Jr., 1999; Eyler, Giles Jr., & Braxton, 1997; Marks & Jones, 2004; Vogelgesang & Astin, 2000). Some researchers have found a positive relationship between community service involvement during high school and during college. A. W. Astin and Sax (1998) found volunteering in high school to be the most significant predictor for students to become involved in service during college. This was further confirmed in a later study that found volunteering in high school and being a woman to be two characteristics that significantly predict community service involvement during college (Vogelgesang & A. W. Astin, 2000).

Similarly, Eyler and Giles, Jr. (1999) found that students’ most active in community service involvement during high school increase the chance that they will seek out opportunities for community service involvement during college. In their study of students enrolled in service-learning courses at 20 colleges and universities, Eyler and
Giles, Jr. found that 78% of the 1,544 participants indicated some community service involvement during their junior or senior year of high school. However, this number decreased slightly to 67% of participants who indicated at least some community service involvement during college.

Other researchers have found no relationship between community service involvement in high school and involvement during college. Students who were required to participate in some form of community service during high school were more likely to discontinue their volunteer work in college (Marks & Jones, 2004). On the contrary, Marks and Jones speculated that students who were encouraged to become involved in community service may see the importance of service more readily than students seeking to fulfill a community service requirement and thus may be more likely to continue their community service involvement during college. In a study of civic and community engagement after college, Vogelgesang and A. W. Astin (2005) found that while 80.3% of alumni participants in the study indicated that they participated in community service during the year prior to college, the percentage of students who indicated involvement in community service during college decreased to 74.4%. Little empirical research was available that examined specific influences on students’ decision to discontinue their community service involvement in the transition from high school to college.

*Student Development in College*

This section examines three aspects of student development closely linked with experiences through community service involvement. First, research supporting citizenship as a developmental outcome of community service involvement is presented. Second, cognitive development is presented through existing research that has examined
this dimension of development. Lastly, an appreciation of diversity will be explored as the third area of student development common to community service research.

Citizenship. Eyler, Giles. Jr., and Braxton (1997) found that involvement in a service-learning course was significantly related to students’ citizenship confidence. Within their study, Eyler, et al. determined citizenship confidence through a scale that included items such as “a sense of personal efficacy in affecting community issues, a belief that the community itself can be effective in solving its problems, and feeling connected to the community” (p. 6). The instrument used also assessed students’ belief that community service should be a required experience and their perceptions of the importance of community service by individuals. After controlling for background variables and pre-test measures, Eyler et al. found service-learning to be a significant predictor of citizenship confidence ($p < .001$). More specifically, service-learning was found to be a significant predictor for the following elements of citizenship confidence: personal efficacy ($\beta = .136$), community efficacy ($\beta = .113$), community connectedness ($\beta = .098$), and the belief that individuals should volunteer ($\beta = .145$). Specific background variables and pre-test measures controlled for within the hierarchical linear multiple regression analysis included race, gender, parental income, age, prior community service during college, and pre-test measures of citizenship confidence.

Connections with faculty and with the community were also both related to students’ citizenship confidence (Eyler, et al., 1997). Students who participate in service-learning may be more likely to seek out these relationships or these relationships may be an effect of the service-learning experience. Causal relationships were not determined in this study.
Participation in service-learning was not a significant predictor of students’ value of future community service and involvement. Rather, Eyler et al. found that service-learning was a significant predictor of students’ value for influencing public policy. Thus, it can be proposed that the service-learning experience enhanced students’ understanding of larger social issues and the long-term impact of being active citizens and leaders in the democratic political system to create positive social change.

Though Musil’s (2003) citizenship development model was proposed after Eyler et al.’s (1997) study, connections can be drawn between the results of Eyler et al.’s study and citizenship development. Musil proposed that citizenship development occurs through a progress from service to the community toward service as mechanism for increasing individuals’ long-term commitment to service with the community and to larger issues of social justice. Eyler et al. found service-learning to be a significant predictor of students’ citizenship confidence and value for influencing public policy. Thus, it can be inferred that service-learning possibly serves as a mechanism through which citizenship development occurs as students progress toward a generative phase of long-term commitment to social change (Musil).

While involvement in community service has positive effects on student development, it may be that a certain type of student pursues such experiences rather than the community service experience alone impacting student development (A. W. Astin & Sax, 1998; Eyler & Giles Jr., 1999). Students who select service-learning courses were found to be more likely to engage in community service prior to the course with 90.7% of service-learning students participating in volunteer work during the year preceding the service-learning course (Shannon, 2004). Students who chose to participate in service-
learning courses reported higher levels of citizenship confidence, values, and skills prior to the course than students who did not choose to participate in service-learning courses (Eyler, Giles Jr., & Braxton, 1997). This provides support for the possibility that students who have higher perceptions of citizenship seek out community service experiences. Eyler et al. (1997) report that community service through academic courses and cocurricular programming may not be reaching those students who could most benefit from the citizenship and social responsibility developed through this type of experience, as these students may not be as likely to select to participate in this type of experience.

*Cognitive development.* Much research has examined student attitudes and perceptions in relation to community service and service-learning involvement. Fewer studies have examined the cognitive development that occurs through community service-learning experiences (Berger & Milem, 2002; Giles Jr. & Eyler, 1994; Rockquemore & Schaffer, 2000). Though learning occurs both in community service and service-learning experiences, learning is an intentional outcome of service-learning experiences. The learning that occurs through service-learning experiences contributes to the cognitive dimension of citizenship development (Eyler & Giles Jr., 1999; Giles Jr. & Eyler, 1994).

In examining how learning occurs through community service experiences, cognitive development has been illustrated through a three-stage model of engagement (Rockquemore & Schaffer, 2000). As students develop the cognitive understanding associated with the broader implications of their service experiences, they progress from a stage of shock, through a stage of normalization, and ultimately to a stage of
engagement. It is important to note that Rockquemore and Schaffer’s study was conducted with a homogenous sample of students at one institution.

*Appreciation of diversity.* One of the consistent outcomes associated with community service and service-learning experiences is an increased appreciation or understanding of diversity (Eyler & Giles Jr., 1999; Giles Jr. & Eyler, 1994; Jones & Hill, 2001; Levine & Cureton, 1998). It is important to note that women and students from middle and upper class backgrounds are more likely to engage in community service during college (Marks & Jones, 2004; O'Grady, 2000). Community service involvement affords students the opportunity to meet and work with community members very different from them and such experiences are often the first time students have interacted with people from different racial, ethnic, and socioeconomic backgrounds (Neururer & Rhoads, 1998; Rhoads, 1997a). Community service and service-learning experiences can enhance students’ understanding of others and larger social issues if structured properly (Jones & Hill, 2001).

Eyler and Giles, Jr. (1999) indicate increases in students’ appreciation of diversity as emerging from the opportunity to interact with different people; 63% of participants in Eyler and Giles, Jr.’s study had direct interaction with the recipients of their community service fairly often or often. In addition to interactions with diverse populations, students develop an increased appreciation of diversity through a reduction in perceived stereotypes. In the pilot test of their instrument, Giles and Eyler found that 75% of participants developed more positive views of others and 3.5% developed more negative views of others. Similarly, Neururer and Rhoads (1998) suggest that students develop a greater appreciation for diversity through community service experiences in which they
work directly with community members and develop connections through these shared experiences.

Post-College Effect

While many studies have focused on the impact of community service on students’ development through their college experiences, few studies have examined the long-term effects of these college experiences (Vogelgesang & Astin, 2005). Stemming from increased institutional commitment to fostering civic responsibility and engagement among students, Vogelgesang and Astin sought to explore the effects of institutional environments and student characteristics on students’ post-graduate civic engagement. Participants in this study were surveyed when they entered college in 1994, when they graduated in 1998, and six years after graduating in 2004.

Many students (80.3%) in this longitudinal study participated in some form of community service before entering college (Vogelgesang & Astin, 2005). However, 74.4% of these students participated in some form of community service during college and only 68.1% participated in community service during the six years after graduating from college. Though more than half of these students were civically engaged in some way, this decreasing figure contradicts institutions of higher education that tout their purpose of enhancing student development and civic engagement. Respondents identified increased levels of civic values during their college experience, however lower levels of civic values were identified after completing college. This fluctuation illustrates that college experiences do foster some increase in civic engagement but that the learning and development through these experiences does not necessarily continue beyond the scope of college.
This section discussed outcomes associated with community service involvement during and after college. The following section will address specific methods of community service involvement.

Methods of Community Service Involvement

Community service exists in a variety of different forms on campus, however few studies have examined different methods of community service (Berger & Milem, 2002; Fitch, 1991; Vogt, 2005). As previously defined, community service is any activity that addresses human and community needs. Community service can be examined from two different forms of student involvement, curricular and cocurricular formats. Studies focusing on each of these two perspectives will be presented following a discussion of studies that examine both curricular and cocurricular community service.

Berger and Milem (2002) examined the impact of community service involvement on the development of self-concept among undergraduate students at six United Methodist-affiliate institutions. Specifically, Berger and Milem measured student involvement across four types of community service: academic community service, religiously based community service, cocurricular community service, and off-campus community service. Three outcome measures of the development of self-concept were utilized within Berger and Milem’s study: academic ability, achievement orientation, and psycho-social wellness.

Greater frequencies of community service involvement did not positively effect the development of self-concept among participants (Berger & Milem, 2002). Involvement in religiously based community service was the only one of the four methods that yielded significant results toward achievement orientation ($p \leq .05$), defined
by the researchers as students’ perceptions of their leadership skills and potential for a successful life. Furthermore, involvement in academic community service was the only one of the four methods that had a positive influence on the development of psycho-social wellness. While this study measured the frequency of community service involvement, no analysis examined the impact of the specific community service placement or project on students’ self-concept. In addition, this study was conducted with students during their fourth year of college and only represents a small section of the general undergraduate student population.

Additionally, Berger and Milem’s (2002) design resembles A. W. Astin’s (1991) I-E-O model in that they controlled for the possible impact of characteristics prior to entering college (input) on their analysis of how community service involvement (environment) influences students’ development of self-concept (outcome). Of the 441 participants in the study, 67% identified as female and 89% identified as White. Berger and Milem found that White students and students who had been involved in community service prior to college had positive effects on the development of self-concept ($p \leq .01$), however female students indicated less development of self-concept ($p. \leq .05$) through their community service involvement. Differences in responses to individual questions based upon differences in race and gender were not presented.

The University of Maryland’s Office of Community Service-Learning’s (CSL) annual assessment provides additional support for curricular and cocurricular methods of community service (Vogt, 2005). Through surveys administered to students participating in three types of community service programs, CSL examines student characteristics, community service involvement, and outcomes appreciation of diversity, leadership, and
civic engagement. Student involvement in curricular community service is examined through students enrolled in academic service-learning courses. Conversely, student involvement in cocurricular community service is assessed through students participating in community service through a student organization and through Federal Work-Study positions with the America Reads*Amercia Counts program. A total of 1,145 students responded to the CSL survey from spring 2003 to spring 2005. Vogt’s analysis presents 63.9% of the student respondents as women and 61.8% of the respondents as Caucasian/White.

Curricular Community Service

Curricular community service represents experiences that occur within the framework of a credit-bearing academic course. At many colleges and universities, curricular community service, commonly through academic service-learning courses, seems to be the most widespread form of community service (Berger & Milem, 2002). Of the 1,145 students who responded to the University of Maryland’s Office of Community Service-Learning’s (CSL) annual survey from spring 2003 through spring 2005, 64.2% participated in curricular community service (Vogt, 2005).

For curricular community service experiences to have a positive impact on student development, faculty need to intentionally and frequently connect students’ service experiences with the academic material (A. W. Astin, Vogelgesang, Ikeda, & Yee, 2000). A. W. Astin et al. found that frequent connections by faculty strengthened the reciprocal relationship between understanding the academic material and enhancing the service experience for the students.
Moely et al. (2002) proposed that students involved in curricular community service through service-learning courses would demonstrate higher satisfaction with their learning experience than students not enrolled in service-learning courses. Moely et al. developed the Civic Attitudes and Skills Questionnaire (CASQ) to assess student attitudes on six scales along three dimensions: (1) self-enhancement, including interpersonal and problem solving skills, political awareness, and leadership skills scales, (2) understanding of self and world, including social justice attitudes and diversity attitudes scales, and (3) value-expression, including the civic action plan scale.

In their study of 541 students enrolled in 26 courses at Tulane University, Moely et al. (2002) found that students participating in service-learning courses demonstrated more positive attitudes throughout the semester than students enrolled in non-service-learning courses. Students in service-learning courses had higher scores on all six scales than students not enrolled in service-learning courses. Additionally, students in service-learning courses increased their scores from the pre-test to the post-test administration on all scales except the diversity attitudes scale.

*Cocurricular Community Service*

Cocurricular community service represents experiences that are not part of the academic curriculum, such as involvement in community service through a student organization, employment, or individual initiative. Among the 35.8% of student respondents to the University of Maryland’s CSL survey students who indicated they participated in cocurricular community service, 21.1% participated in cocurricular community service through a student organization while 14.7% participated in
cocurricular community service through Federal Work-Study positions with the America Reads*America Counts program (Vogt, 2005).

In Fitch’s (1991) study of student involvement in cocurricular and service-based cocurricular activities, only 16% of respondents were involved in service-based cocurricular activities whereas 48% were involved in other cocurricular activities and 36% were not involved in any activities. Fitch’s study was conducted with a sample of 285 students at one southeastern university, 92% of whom were White. Though Fitch’s study was conducted 15 years ago, it serves as an indication of growth in student involvement in community service and is one of the few studies to date that examines specific methods of community service.

However, one important caveat to Fitch’s (1991) data is that service-based cocurricular activities included only those activities based on campus or sponsored by campus; in essence, involvement in off campus community service was not considered in Fitch’s study. Fitch also made a strong assertion in the discussion of findings that “the fact that 72% of Black students in this sample were not involved in any activities lends credence to the belief that many Blacks on a predominantly White campus tend to be uninvolved” (p. 538). The restrictions placed on the definition of involvement may have had an effect on how students are really involved. A major limitation of Fitch’s study, involvement in community service outside of campus-based involvement is another method of community service involvement for future exploration.

Another method of cocurricular community service exists in the form of student employment in community service-based Federal Work-Study positions. Institutions of higher education are required to utilize 7% of their Federal Work-Study funding to
support students working in community service positions (Bowley, 2003). Fifty-two institutions participated in focus groups conducted by Campus Compact in 2002, indicating that community service Federal Work-Study students serve as tutors, office assistants for non-profit organizations, mentors, and office assistants on campus (Bowley).

Vogt (2005) found that students participating in Federal Work-Study positions as America Reads*America Counts (AR*AC) student mentors at the University of Maryland scored significantly higher on the three scales of appreciation of diversity, leadership, and civic engagement. Students participating in cocurricular community service through a student organization scored the lowest on these three scales.

**Resistance to Community Service**

Though much of the literature thus far promotes the benefits of community service for students within their college experiences, new literature on student resistance to service-learning is emerging (Jones, 2002; Jones, Gilbride-Brown, & Gasiorski, 2005). The “underside” of service-learning emerges when students confront intricate social issues through their relationships with the community, often confronting their existing stereotypes and prejudices (Jones, Gilbride-Brown, & Gasiorski). Students who elect to participate in community service experiences for the purpose of doing well for others may become resistant when their personal assumptions, prejudices, and privileges are unexpectedly brought to the forefront (Jones; Jones, Gilbride-Brown, & Gasiorski).

Little research has examined the question of how students “get it,” in other words how students understand the broader implications for their limited involvement in the community (Jones, 2002). As a service-learning educator, Jones posits that students’
personal backgrounds, levels of development, openness to new learning, and reasons for participating in community service-learning all contribute to the broader understanding and knowledge that emerges from the community service-learning experience. Students need to recognize and acknowledge the privileges they bring to a community service-learning experience that may involve working with individuals from diverse backgrounds (Jones, 2002; Nieto, 2000). Qualitative research would provide an appropriate method for researchers to understand the complexity of student learning through community service-learning experiences.

Community Service Enhancing Citizenship Development

Many studies on community service identify leadership skills as one outcome of community service involvement (Giles Jr. & Eyler, 1994; Moely et al., 2002; Musil, 2003; Vogelgesang & Astin, 2000). As discussed previously, citizenship represents one component of leadership. This section will present research that directly links community service involvement with citizenship development outcomes.

In his research, Dugan (2006b) investigated the influence of community service involvement on socially responsible leadership. Using data collected through the Socially Responsible Leadership Scale (SRLS), this analysis yielded the lowest scores on the controversy with civility and citizenship scales. The mean score for the citizenship scale was 3.73 ($SD = 0.60$), based upon a 5-item Likert scale from (1) strongly disagree to (5) agree. Due to the developmental nature of the social change model, Dugan notes that lower scores on the community value of citizenship may merely be an indication of students’ developmental levels. Specifically regarding community service involvement, participants who indicated that they were involved in some form of community service
produced significantly higher scores on the scales of consciousness of self, congruence, commitment, collaboration, common purpose, and citizenship than students not involved in community service. Of these significant influences, citizenship was the value of the social change model most significantly influenced by community service involvement \((t = -9.26, p < 0.05)\).

Shannon (2004) examined citizenship confidence and values emerging through service-learning involvement among undergraduate students at four religiously-affiliated, Jesuit institutions. Women reported significantly higher pre- and post-test scores of citizenship values and perceptions of social justice. Shannon also discusses the limited growth between the pre- and post-tests, in large part because of the single semester duration between data collection. This coincides with the Eyler and Giles, Jr. (1994) caveat that citizenship development occurs over time and is influenced by many factors beyond a single service-learning course.

Furthermore, Shannon (2004) attributes the slight decline in scores of citizenship values for first-year students over the semester to the potential cognitive development presented by Rockquemore and Shaffer (2000). It is possible that students do not move through the three stages of shock, normalization, and engagement within a single semester. Seniors reported higher levels of citizenship and perceptions of social justice. Thus, development through this three-stage model of engagement may occur over the collective college experience, but not through a single semester.

While Shannon’s (2004) study lends credence to the impact of service-learning experiences on citizenship development, this study only examines students involved in service-learning within a given semester. Further research should examine the
relationship between the overall college experience and citizenship development beyond the experiences of a single semester. In addition, the term citizenship needs to be clearly defined because people can define this term in different ways, even when it exists as a central tenet of Jesuit education (Shannon).

Both leadership development and community service programs positively impact student development. However, neither program alone effectively contributes to the development of civically engaged leaders (Delve & Rice, 1990; Stanton, 1990). Delve and Rice identify community service as a powerful mechanism through which leadership development is encouraged among students not involved in traditional cocurricular student organizations. Furthermore, Stanton advocates that community service can fill the void between leadership education and citizenship education by providing students with practical experiences in public service and leadership. The combination of leadership development and community service will encourage students to develop the skills and motivation to become civically engaged leaders, such as the cognitive initiative to facilitate social change and enable others to be active citizens.

Now that relevant theoretical literature and research has been presented and connections between community service and citizenship development have been identified, the final section of this chapter will present A. W. Astin’s (1991) inputs-environments-outcomes (I-E-O) model as a conceptual framework for operationalizing community service and citizenship development among college students.

Inputs-Environments-Outcomes College Impact Model

A. W. Astin’s (1991) inputs-environments-outcomes (I-E-O) college impact model provides an appropriate conceptual framework for this study. A. W. Astin
identified inputs, environments, and outcomes as three types of variables serving as crucial components in educational assessment. These three types of variables will be explained with examples from the literature presented previously in this chapter.

Input variables signify personal characteristics (e.g., race, gender, sexual orientation, religious beliefs, political beliefs, etc.) and experiences prior to college that may impact students’ involvement and development during college (A. W. Astin, 1991). As previously discussed, community service involvement prior to college and attending a high school with a community service requirement for graduation influence students’ community service involvement during college, thus representing input variables (A. W. Astin & Sax, 1998; Berger & Milem, 2002; Eyler & Giles Jr., 1999; Eyler, Giles Jr., & Braxton, 1997; Marks & Jones, 2004; Vogelgesang & Astin, 2000).

Environment variables represent aspects of the college experience, such as programs in which students are involved and the overall campus climate’s influence on student experiences (A. W. Astin, 1991). Community service involvement serves as one type of college environment, including curricular and cocurricular experiences previously discussed. However, in considering community service involvement as an aspect of the college environment, the overall campus climate and other campus programs need to be considered for their potential influence on student outcomes. To determine the direct effects of the environment on identified outcomes, inputs such as experiences, personal characteristics, and other campus experiences are often controlled for within the data analysis process.

Outcome variables can represent the development that occurs during college and as a result of the environment and some inputs (A. W. Astin, 1991). Leadership outcomes
such as leadership understanding and commitment, leadership skills, personal and societal values, civic responsibility, and multicultural awareness and community orientation represent examples of outcome variables (Cress et al., 2001). Research already cited in this literature review identifies outcomes associated with community service involvement such as citizenship development (Eyler & Giles Jr., 1999; Eyler, Giles Jr., & Braxton, 1997; Shannon, 2004), cognitive development (Berger & Milem, 2002; Eyler & Giles Jr., 1999; Giles Jr. & Eyler, 1994; Rockquemore & Schaffer, 2000), and appreciation of diversity (Eyler & Giles Jr., 1999; Giles Jr. & Eyler, 1994; Jones & Hill, 2001; Levine & Cureton, 1998; Neururer & Rhoads, 1998; O'Grady, 2000; Rhoads, 1997a; Vogelgesang & Astin, 2000), among others.

A. W. Astin and Sax (1998) examined the effect of participation in community service on student development and based their research design on the conceptual framework of A. W. Astin’s (1991) I-E-O model. In their study, A. W. Astin and Sax identified the service experience as the environment variable and controlled for student input characteristics including outcome measure pre-test scores, demographic variables, and other variables indicating an inclination toward participation in service. Results indicated that volunteer service during high school was the strongest predictor of involvement in service during college. Participation in community service significantly influenced student development along 35 outcomes measures encompassing the areas of academic development, civic responsibility, and life skills.

Input variables can affect college environments and outcomes directly in addition to being controlled for in examining the impact of environments on outcomes (A. W. Astin, 1991; Komives & Dugan, 2005). For example, community service involvement
prior to college and attending a high school with a community service requirement for graduation can directly influence both community service involvement in college and individuals' citizenship development as a result of these experiences. Additionally, these two input variables can be controlled for to ascertain the direct effect of community service involvement during college on citizenship development. The incorporation of this model within this research study will be expanded upon in the discussion of the study methodology in Chapter 3.

Summary of the Literature Review

While this chapter has addressed literature related to citizenship development and community service, gaps in the existing literature guide this research study. Little research has examined leadership among college students within the framework of the social change model (Dugan, 2006b), warranting additional research that examines different forms of student involvement and the eight outcomes of the social change model. Many of the research studies previously discussed were conducted with samples of students involved in leadership, community service, or service-learning programs (Berger & Milem, 2002; Eyler & Giles Jr., 1999; Giles Jr. & Eyler, 1994; Meixner, 2000; Morrison, 2001; Payne, 2000; Payne & Bennett, 1999; Rockquemore & Schaffer, 2000; Shannon, 2004; Vogt, 2005). While these studies support the impact of community service involvement on student development outcomes, these studies do not address community service involvement among the general student population.

This chapter presented a theoretical foundation, existing research, and justification for current research related to community service and citizenship. The next chapter will present the research methods utilized in this research study.
CHAPTER 3

METHODOLOGY

This chapter identifies the research design guiding this study, including descriptions of the specific hypotheses tested, research context and design, sampling strategy, instrumentation and measures, data collection, and data analysis procedures.

Research Questions and Hypotheses

The purpose of this study was to examine the relationship between involvement in curricular and cocurricular community service and self-perceived citizenship among undergraduate students at the University of Maryland. Arising from the literature reviewed in Chapter 2, this study identified the following null hypotheses to address the four research questions proposed:

(1) Do any differences exist in students’ self-perceived citizenship based upon whether they participated in any community service during college?

*Hypothesis 1:* There is no difference in students’ self-perceived citizenship based upon whether they did or did not participate in any community service during college.

(2) Do different methods of community involvement significantly predict students’ self-perceived citizenship?

*Hypothesis 2:* The four methods of community service involvement analyzed in this study (i.e., community service as part of a class, with a student organization, as part of a Federal Work-Study experience, and on one’s own) do not significantly contribute to explaining students’ self-perceived citizenship, and no one method contributes more to explaining students’ self-perceived citizenship than the others.
(3) To what extent do students’ community involvement and self-perceived citizenship prior to college explain the variance in their community service involvement during college?

*Hypothesis 3:* Students’ community involvement prior to college, having a community service requirement for high school graduation, or self-perceived citizenship prior to college do not significantly contribute to explaining students’ extent of community service involvement during college.

(4) Do any differences based upon gender or race exist in students’ community service involvement and self-perceived citizenship?

*Hypothesis 4a:* There is no difference in method of community service involvement based on students’ gender.

*Hypothesis 4b:* There is no difference in method of community service involvement based on students’ race.

*Hypothesis 4c:* There is no difference in self-perceived citizenship based on students’ gender.

*Hypothesis 4d:* There is no difference in self-perceived citizenship based on students’ race.

**The Multi-Institutional Study of Leadership**

The Multi-Institutional Study of Leadership (MSL) is one of the first studies designed to advance knowledge of leadership development among college students through a national study of undergraduate students (Komives & Dugan, 2005). Directed by a research team consisting of an associate professor, student affairs professionals, and graduate students at the University of Maryland, the MSL seeks to contribute to the
knowledge in the field of student leadership programs and provide suggestions for future programmatic developments to better meet the needs of students (Komives & Dugan). The social change model of leadership development (Higher Education Research Institute, 1996) served as the theoretical context and A.W. Astin’s (1991) inputs-environments-outcomes (I-E-O) college impact model served as the conceptual context for the MSL. Fifty-four institutions participated in the MSL, representing a diverse range of institutional types (e.g., size, Carnegie classification, geographic location, specialty focus, etc.). In addition to serving as the home site for the MSL, the University of Maryland was one of the participating institutions and served as the primary data source in this study.

The results of the MSL yielded a national normative data set of student responses on the Socially Responsible Leadership Scale – Revised 2 (SRLS-Rev2). The MSL national data will be available for institutions to use as a comparison of institutional results obtained on the SRLS – Rev2 to a national data set. Additionally, the MSL addressed research questions related to outcomes associated with student leadership development across a variety of independent variables (e.g., institutional type, demographic variables, college environments).

This study logically stemmed from the MSL because of the close connections between the research question in this study and the data being collected through the MSL. Furthermore, the MSL data was available for use in this study due to the researcher’s role on the MSL research team and location at the University of Maryland. More specifically, this study utilized the data collected only from students at the University of Maryland.
Research Design

This study was developed using an ex post facto research design, using secondary data collected as part of the Multi-Institutional Study of Leadership (MSL). By using this design, relationships between the dependent variable of citizenship and the independent variables of the four methods of community service involvement were addressed using data collected from a random sample of the entire undergraduate student population at the University of Maryland (abbreviated herein as Maryland). Prediction analyses were employed to identify the relationships between these four methods of community service involvement and the variance explained in students’ self-perceived citizenship after controlling for specific demographic and pre-college experiences through modified pre-test measures.

The data used in this study was collected from undergraduate students at the University of Maryland during the spring 2006 semester through an online survey. The Multi-Institutional Study of Leadership Student Survey (MSL-SS) instrument utilized in this study was developed by the research team based at the University of Maryland. Human subjects approval for the MSL was obtained from the University of Maryland’s Institutional Review Board in October 2005. A copy of the email invitation and informed consent letter for the MSL at Maryland can be found in Appendices A and B, respectively. A copy of the entire MSL-SS instrument can be found in Appendix C.

Sampling Strategy

Participants in this study were undergraduate students at the University of Maryland. Maryland is a large, four-year, public research university with a total undergraduate enrollment of 25,442 students in Fall 2005 (Office of Institutional
Research Programs, 2005). Of the undergraduate student population, 57.8% of the student body identifies as Caucasian/White, 12.5% as African American/Black, 13.7% as Asian/Asian American, 5.7% as Hispanic/Latino, and 0.4% as American Indian, with 2.2% Foreign students and 8.8% unknown. Additionally, 49.1% of the undergraduate student population is female and 50.9% is male.

A simple random sample of 3,410 undergraduate students was obtained to provide a diverse sample of the undergraduate student population, rather than selecting students specifically involved in community service programs, leadership programs, or other cocurricular student programs. Considering Maryland’s undergraduate population size and the anticipated return rate, this sample size will yield a sample with a confidence level of 95% and a ±3 margin of error (Komives & Dugan, 2005). This random sample of undergraduate students was obtained from the University of Maryland’s Office of the Registrar. This sample was representative of the undergraduate population by race, gender, and socioeconomic status, including full-time and part-time undergraduate students across all majors and academic class levels. Additional demographic characteristics of the participants will be presented in Chapter 4.

Given that the return rate for Web-based surveys ranges from 25 - 35% (Crawford, Couper, & Lamias, 2001), it was anticipated that this large sample would yield a respondent sample of approximately 1,000 students. This intended respondent sample size of 1,000 students was calculated based on a 5% sampling error and was designed to include a diverse representation of demographic groups within the undergraduate student population (Komives & Dugan, 2005). It was the researchers’ intention that participants be representative of the undergraduate student population at
Maryland by race, gender, socioeconomic status, and class standing, among other demographic variables. With this number of participants in a representative sample, additional analyses based on gender, race, and other sub-groups were possible.

Students were recruited to participate in this study through an e-mail that directed participants to a secure Web site to complete the survey. Up to three reminder emails were sent to students over a three-week period requesting that they complete the survey. Upon completion of the survey, participants entered a raffle to win a variety of local and national incentives. Students from the University of Maryland who completed this survey were eligible to receive incentives such as gift certificates to campus vendors and local restaurants. In addition, all students from the 54 participating institutions who completed the survey were eligible to receive one of seven national incentives.

Sample

Upon the conclusion of data collection, the total number of responses, the overall response rate, and specific demographic information for the obtained participant sample were calculated. Of the 3,410 students included in the random sample, 1,205 participant responses were usable in this study. The number of usable responses is slightly larger than the anticipated 1,000 responses previously identified. The details of the obtained sample are presented in Chapter 4, including participant demographics of race, gender, age, and class standing will be presented in the next chapter.

Instrument and Measures

The student survey instrument used within the Multi-Institutional Study of Leadership (MSL), herein referred to as the MSL-SS, was largely based on the Socially Responsible Leadership Scale (SRLS) developed by Tyree (1998). Though Tyree
developed eight scales corresponding to the values of the social change model within the SRLS, this study specifically used one of these eight scales, the citizenship scale.

*Socially Responsible Leadership Scale (SRLS) as a Measure of Citizenship*

In her dissertation, Tyree (1998) developed the SRLS as a means of operationalizing the values within the social change model of leadership development (Higher Education Research Institute, 1996). Tyree examined the eight constructs of the social change model and generated 291 items that could measure students’ self-perceptions of each of these constructs. The development of the SRLS included three different data collection methods (Tyree). First, a small group of 21 students and experts participated in a rater exercise through which each of the 291 items were placed into the scale of the applicable construct of the social change model. Second, 71 students completed two administrations of the 202-item SRLS instrument that resulted from the rater exercise (Tyree). After reliability and validity analyses were conducted, 98 items were deleted from the instrument, thus creating the final version of the SRLS with 103 items. Lastly, 342 students out of a random sample of 675 undergraduate students participated in the final study with the 103-item SRLS (Tyree).

Tyree (1998) tested internal consistency for each of the eight scales of consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change. With regards to the citizenship scale, Tyree calculated a Cronbach alpha of .87 for each of the two phases of the pilot test of the 202-item SRLS. This measure of reliability increased to .91 during the final test of the condensed 103-item instrument. Among the 71 students who participated in both phases of the pilot test, Tyree conducted a test-retest reliability analysis and found strong
correlation coefficients of .87 and .86, respectively, within the citizenship scale, indicating the strength of the SRLS in producing similar results through multiple administrations. To determine the construct validity of the SRLS, Tyree conducted a factor analysis, specifically in the form of a principal components analysis. Statistically significant correlations ($p \leq .05$) were found for each of the 14 items of the citizenship scale when correlated with the measure of the citizenship construct. The internal consistency reliabilities for all eight scales can be found in Appendix D.

The original SRLS was condensed from Tyree’s (1998) version with 103 items down to 83 items across the eight scales (Appel-Silbaugh, 2005). In comparing the Cronbach alphas and alpha levels for individual items obtained in two studies that utilized the SRLS (Dugan, 2006a; Dugan, 2006b; Tyree), Appel-Silbaugh removed 21 items from Tyree’s original instrument to create the 83-item SRLS-Revised (SRLS-R). Appel-Silbaugh found that the internal consistency was stronger for the commitment, collaboration, controversy with civility, and change scales with these items removed. Although the internal consistency for the other four scales decreased slightly, the Cronbach alpha levels remained strong. For example, Tyree obtained a Cronbach alpha of .92 and Dugan obtained a Cronbach alpha of .90 for the 14-item citizenship scale, while Appel-Silbaugh’s revision to the SRLS obtained a Cronbach alpha of .89 for the revised 12-item citizenship scale.

In addition to the 83 items of SRLS-R, the original MSL-SS instrument contained many other items to assess participants’ pre-college perceptions and experiences, college experiences, and outcomes associated with socially responsible leadership, leadership identity development, and appreciation of diversity among others. Furthermore, some of
the additional questions on the MSL-SS beyond the SRLS Rev-2 came from previously existing surveys for which reliability and validity had already been established. Examples include the National Study of Living-Learning Programs (NSLLP), the Cooperative Institutional Research Program (CIRP) Freshman Survey, and the Center for Information and Research on Civic Learning and Engagement (CIRCLE) (Center for Information and Research on Civic Learning and Engagement, 2005; Higher Education Research Institute, 2005; National Study of Living Learning Programs, 2005; National Survey of Student Engagement, 2005). A copy of the full MSL-SS can be found in Appendix C.

Since the MSL-SS instrument included all 68 items of the Socially Responsible Leadership Scale – Revised 2 (SRLS-Rev 2), responses related to the other seven scales of consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, and change remained in the data set but were not used in this study. To determine the reliability of this administration of the SRLS-Rev 2, internal consistency of the citizenship scale was determined by testing for the Cronbach alpha value of the citizenship scale. Though internal consistency decreased for the citizenship scale in this administration of the SRLS-Rev 2 through the MSL among Maryland students, the Cronbach alpha value of .77 obtained for the citizenship scale still indicated strong internal consistency among the eight items of the scale. Pallant (2005) noted that a Cronbach alpha coefficient of greater than .70 indicates strong internal consistency. Responses to the eight items within the citizenship scale were then combined to create participants’ citizenship score. The citizenship score was determined by calculating the mean of participants’ scores on the eight-item citizenship scale.
Inputs-Environments-Outcomes College Impact Model

This instrument was developed along the conceptual framework of A. W. Astin’s (1991) inputs-environments-outcomes (I-E-O) college impact model. A. W. Astin identified these three types of variables as crucial components in educational assessment. Input variables represent what students bring into their college experience, such as personal characteristics (e.g., race, gender, sexual orientation, religious beliefs, political beliefs, etc.) and experiences prior to college that may impact both their involvement and development during college. Environment variables relate to students’ involvement and experiences during college. Outcome variables represent the student development that occurs during college and often serve as dependent variables. Pre-college inputs can influence college environments and outcomes directly and be controlled for in examining the impact of environments on outcomes (A. W. Astin; Komives & Dugan, 2005).

This study aimed to look at community service involvement as one aspect of the college environment and students’ self-perceptions of citizenship as one outcome of leadership. In following the conceptual framework of A. W. Astin’s (1991) I-E-O model, this study looked at pre-college input variables related to students’ involvement in service and perceptions of citizenship prior to college, as well as the existence of a community service requirement for high school graduation. The MSL and this study both represent a modified use of the I-E-O model because of the retrospective nature of the questions related to pre-college input variables. In a true I-E-O model, students would have completed a separate pre-test measure upon entering college to assess their perceptions at that time rather than asking them to think back to that time.
Pilot Tests

An initial pilot test of the full MSL-SS instrument was conducted in October 2005 with a group of 14 undergraduate Maryland students completing a paper version of the instrument. The participants in the initial pilot test were obtained through a convenience sample and were students accessible to members of the MSL research team. Responses from participants in the initial pilot test were used to determine the face validity of the instrument, as well as other factors such as completion time, clarity of the MSL-SS items, interest in participating, and fatigue. The mean completion time was 30 minutes, and almost every participant felt that the instrument was too long and repetitive. Participants indicated that most of the questions were worded clearly, but a few minor wording changes were made to clarify some questions. Additionally, a draft of the MSL-SS was sent to all participating institutions. A few other minor word changes and clarifications were made to the MSL-SS instrument based on feedback from institutional contacts. Of direct relevance to this study, the category of involvement in service as part of a work-study experience was added to the community service involvement question.

A second pilot test with undergraduate students from Maryland was conducted in December 2005 with the Web-based version of the MSL-SS (S. R. Komives, personal communication, January 11, 2006). The sample utilized in this second pilot test was a random sample of 3,411 undergraduate students at Maryland. A random sample double the intended sample size for the MSL \( n = 6,821 \) was obtained from the University of Maryland’s Office of the Registrar. Half of this sample, or 3,411 students, were randomly selected from this larger sample to serve as the pilot sample. The first email invitation to participate was sent out on the study day between the last day of classes and the start of
final examinations for the fall semester, with the first reminder email sent three days later and a final reminder sent another two days later. Of the 782 students who participated in the pilot study, 88% completed the entire instrument. This 23% response rate was not of concern to the researchers, as the pilot test was intended to assess at what points students ceased responding to questions and how the MSL-SS could be further reduced.

Results of this second pilot test led to a further reduction of some scales. It also yielded data related to significant differences in responses based on subject lines of invitation to participate emails (S. R. Komives, personal communication, January 11, 2006). Considering the 12% drop off rate of this pilot test, the researchers examined potential reductions to the 83-item SRLS-R portion of the MSL-SS. Using data obtained by Dugan (2006a; 2006b) that used the original 104-item SRLS developed by Tyree (1998), the Cronbach alpha values were recalculated and changes in scale reliabilities were determined for the potential elimination of other items (DeCoster, 2000). It was determined that 37 items could be eliminated from the original SRLS without significantly reducing the internal consistency of the scale and two items that were removed for the SRLS-R were added back in, thus resulting in a 68-item SRLS-Revised 2 (SRLS-Rev 2) instrument (S. R. Komives, personal communication, January 11, 2006). The internal consistencies obtained using the 68 items in the SRLS-Rev 2 appear in Appendix D.

Relevance for this Study

The MSL-SS instrument was appropriate for this study because of its measurement of the variables of interest in this study, its previously established reliability and validity, and its administration across a random sample of the entire undergraduate
student population at Maryland. Very few instruments exist that measure components of leadership development. Thus, the MSL-SS used as part of the national study was appropriate and directly relevant for this study.

Variables

The next few sections present the variables examined in this study. Student characteristics, experiences, and perceptions prior to college were addressed through input variables of race, gender, high school community service requirement, community service involvement prior to college, and perceptions of citizenship prior to college. The college environment was addressed through students’ experiences in four methods of community service involvement. Outcomes of community service involvement were addressed through students’ involvement prior to college. Leadership outcomes were measured through students’ community service involvement and self-perceived citizenship.

Demographic Variables

This study included the demographic input variables of gender and race. As a means of addressing student motivation to participate in community service prior to college, the existence of a community service requirement for high school graduation was also addressed. Coding for the demographic variables can found in Table 3.1.

Gender. Participants were asked to indicate their gender in Question 28 by checking the appropriate box. Response choices included: Male, Female, and Transgender. No respondents reported their gender as Transgender and thus this option is not included within the data analysis for this study.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Question</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Q 28</td>
<td>1=Female</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=Male</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3=Transgender</td>
</tr>
<tr>
<td>Race (Mark all that apply.)</td>
<td>Q 31</td>
<td>1=White/Caucasian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=African American/Black</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3=American Indian/Alaska Native</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4=Asian American/Asian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5=Native Hawaiian/Pacific Islander</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6=Mexican American/Chicano</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7=Puerto Rican</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8=Cuban American</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9=Other Latino</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10=Multiracial or multiethnic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11=Race/ethnicity not included</td>
</tr>
<tr>
<td>High School Community Service Requirement</td>
<td>Q 26</td>
<td>1=Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=No</td>
</tr>
<tr>
<td>Community Service Involvement During College</td>
<td>Q 6</td>
<td>1=Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=No (Skip to Q 7)</td>
</tr>
<tr>
<td>Community Service Involvement During College</td>
<td></td>
<td>1=None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2=1-5 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3=6-10 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4=11-15 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5=16-20 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6=21-25 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7=26-30 hours</td>
</tr>
</tbody>
</table>

\(^a\) No participants indicated their gender as transgender. Thus, the gender variable only contained the categories of 1 = Female and 2 = Male in the data analyses utilizing gender.

\(^b\) Responses for the race variable were recoded into 1 = Caucasian/White, 2 = African American/Black, 3 = Asian Pacific American, 4 = American Indian/Alaskan Native, 5 = Latino/Hispanic, 6 = Multiracial/Multiethnic, and 7 = Other/Race not reported. With a very small number of American Indian/Alaskan Native responses, these three responses were recoded into the 7 = Other race category.

\(^c\) Responses for the four methods of community service involvement were recoded into 0 = None, 1 = 1-5 hours, 2 = 6-10 hours, 3 = 11-20 hours, and 4 = 21-30 hours.
Race. Question 31 on the MSL-SS asked participants to “Please indicate your racial or ethnic background.” This question provided participants with the opportunity to mark all races or ethnicities that applied by checking the corresponding boxes. Eleven response choices were presented: White/Caucasian, African American/Black, American Indian/Alaska Native, Asian American/Asian, Native Hawaiian/Pacific Islander, Mexican American/Chicano, Puerto Rican, Cuban American, Other Latino American, Multiracial or Multiethnic, and race/ethnicity not included above.

For use in this research study, these 11 categories were condensed into seven smaller racial and ethnic categories comparable to those reported by the University of Maryland. More specifically, responses of Asian American/Asian and Native Hawaiian/Pacific Islander were condensed into one “Asian Pacific American” category. Also, the four Latino/Hispanic ethnicities, Mexican American/Chicano, Puerto Rican, Cuban American, Other Latino American, were condensed into one “Latino/Hispanic” category. For statistical analysis purposes, participants who indicated more than one race or ethnicity were recoded into the Multiracial/Multiethnic category. Due to a very small number of students who identified at American Indian/Alaskan Native ($n = 3$), these students were recoded into the “Other, Race/ethnicity not reported” category.

High school community service requirement. Participants were asked to indicate if their high school required community service for graduation by checking Yes or No.

Community Involvement and Perceptions of Citizenship Prior to College

Based upon the literature presented in Chapter 2, certain experiences prior to college can affect students’ community service involvement during college. Five questions regarding students’ experiences prior to college were included in this research
study, four related to community involvement and one related to self-perceptions of citizenship. Table 3.2 includes the response choice coding for these questions related to perceptions and experiences prior to college.

Participants’ community involvement prior to college was assessed through four forms of community involvement. The MSL-SS asked participants, “Looking back to before you started college, how often did you engage in …” The four forms of community involvement completing the previous statement that were examined in this study included: (1) performing volunteering work; (2) participating in community organizations (e.g., church youth group, scouts); (3) taking leadership positions in community organizations; and (4) participating in activism in any form. Response choices for this question appear in a 4-point Likert scale ranging from (1) Never to (4) Very Often. Responses to this question will be used to control for prior community involvement and to analyze differences in involvement between high school and college.

Participants’ perceptions of citizenship prior to college were addressed through a modified pre-college input question using the most reliable item from each of the eight constructs measured through the SRLS-R. The modified prior to college citizenship question states “Looking back to before you started college, please indicate your agreement with the following items by choosing the number that most closely represented your opinion about that statement AT THAT TIME.” The citizenship item is represented by the statement, “I value the opportunities that allow me to contribute to my community.” Participants responded to this question using a 5-point Likert-scale ranging from (1) strongly disagree to (5) strongly agree. This question served as a modified pre-test measure due to its request for participants to think back to their experiences prior to
Table 3.2

*Community Involvement and Perceptions of Citizenship Prior to College Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Question</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing Volunteer Work Prior to College</td>
<td>Q 9a</td>
<td>1=Never 2=Sometimes 3=Often 4=Very Often</td>
</tr>
<tr>
<td>Participating in Community Organizations Prior to College</td>
<td>Q 9e</td>
<td>1=Never 2=Sometimes 3=Often 4=Very Often</td>
</tr>
<tr>
<td>Taking Leadership Positions in Community Organizations Prior to College</td>
<td>Q 9f</td>
<td>1=Never 2=Sometimes 3=Often 4=Very Often</td>
</tr>
<tr>
<td>Participating in Activism in any Form Prior to College</td>
<td>Q 9g</td>
<td>1=Never 2=Sometimes 3=Often 4=Very Often</td>
</tr>
<tr>
<td>Modified Pre-Test Measure of Citizenship Perception Prior to College</td>
<td>Q 10h</td>
<td>1=Strongly Disagree 2=Disagree 3=Neural 4=Agree 5=Strongly Agree</td>
</tr>
</tbody>
</table>
college rather than existing in the form of a true pre-test measure. In true I-E-O methodology, participants would have completed a pre-test instrument upon entering college and then completed the MSL-SS after they were in college (Astin, 1991). The coding for this modified pre-test measure can be found in Table 3.2.

Community Service Involvement During College

The first question on the MSL-SS that corresponded to the environment of community service involvement asked participants to indicate if they participated in any community service during college. This question stated, “In an average academic term, do you engage in any community service?” Response choices included (1) yes and (2) no. If participants indicated that they engaged in community service in an average academic term by selecting yes to this question, the second question asked participants the number of hours they engage in each of the four types of community service. This question was worded as follows: “In an average academic term, approximately how many hours do you engage in community service?” This question stem was followed by four methods of community service involvement: (1) As part of a class, (2) With a student organization, (3) As part of a work study experience, and (4) On your own. Previous research supports the breakdown of community service involvement into these four methods (Eyler & Giles Jr., 1999; Vogelgesang & Astin, 2000; Vogt, 2005). Participants who answered “no” to this first question were not included in the specific analysis regarding different methods of community service involvement. Since this question asked participants to report their involvement in particular activities, measures of reliability and validity were not assessed for this question.
Response choices for the community service involvement question presented ranges of hours of participation. Participants were asked to indicate one response for each of the four methods of community service involvement. Response choices were as follows: (1) None, (2) 1-5 hours, (3) 6-10 hours, (4) 11-15 hours, (5) 16-20 hours, (6) 21-25 hours, and (7) 26-30 hours. This specific range of hours was comparable to the response choices of similar questions on the CIRP instrument and on the Maryland CSL survey (Higher Education Research Institute, 2005; Vogt, 2005). Rather than requiring participants to identify their participation in a sometimes-frequently type scale, this hour-based scale allowed participants to indicate the number of hours they engage in community service in an average academic term. Given that community service involvement can fluctuate during college, asking this question as “in an average academic term” further allowed participants to indicate their typical involvement. Coding for these four variables can be found in Table 3.1.

Citizenship

Citizenship serves as one of the eight scales within the SRLS (Tyree, 1998) and was used in this study as a measure of leadership development. Table 3.3 presents the eight items from the SRLS-Rev 2 that construct the citizenship scale (S. R. Komives, personal communication, January 11, 2006). These items stemmed from perceptions associated with experiences examined through previous research in Chapter 2, such as involvement in one’s community, civic responsibility, and individual efforts to create larger societal change. The terminology used in these items was also closely aligned with the terminology utilized by the Coalition for Civic Engagement and Leadership at the University of Maryland (Coalition for Civic Engagement and Leadership, 2005), further
Table 3.3

Self-Perceived Citizenship Items and Scale

<table>
<thead>
<tr>
<th>Citizenship Items</th>
<th>Cronbach α = .87</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. Please indicate your agreement or disagreement with the following items by choosing the number that most closely represents your opinion about the statement.</td>
<td></td>
</tr>
<tr>
<td>1 = Strongly disagree</td>
<td></td>
</tr>
<tr>
<td>2 = Disagree</td>
<td></td>
</tr>
<tr>
<td>3 = Neutral</td>
<td></td>
</tr>
<tr>
<td>4 = Agree</td>
<td></td>
</tr>
<tr>
<td>5 = Strongly agree</td>
<td></td>
</tr>
<tr>
<td>33. I believe I have responsibilities to my community.</td>
<td></td>
</tr>
<tr>
<td>38. I give time to making a difference for someone else.</td>
<td></td>
</tr>
<tr>
<td>40. I work with others to make my communities better places.</td>
<td></td>
</tr>
<tr>
<td>44. I have the power to make a difference in my community.</td>
<td></td>
</tr>
<tr>
<td>46. I am willing to act for the rights of others.</td>
<td></td>
</tr>
<tr>
<td>47. I participate in activities that contribute to the common good.</td>
<td></td>
</tr>
<tr>
<td>55. I believe I have a civic responsibility to the greater public.</td>
<td></td>
</tr>
<tr>
<td>66. I value opportunities that allow me to contribute to my community.</td>
<td></td>
</tr>
</tbody>
</table>

Note: This scale was modified from its original version (Tyree, 1998) to result in a shorter, more reliable version in the SRLS-Revised. The citizenship scale was cut from 14 original items to the 12 items in the SRLS-Revised (Appel-Silbaugh, 2005). Following a pilot test of the MSL-SS, this scale was further condensed to eight items in the SRLS-Rev 2 with a Cronbach alpha value of .87 (S. R. Komives, personal communication, January 11, 2006).
strengthening the connections between this research study and implications for the broader Maryland community. Given these connections between previous research and this particular scale, the citizenship scale was most closely aligned with the purpose of this research study.

Response options for the SRLS-Rev 2 were in a 5-point Likert scale format with response choices ranging from (1) strongly disagree to (5) strongly agree. Only those responses that correspond to the eight items of the citizenship scale will be utilized in this study. Participants’ citizenship score was determined by obtaining the mean of the score for responses to each of the eight items comprising the citizenship scale. Thus, the citizenship score used in the following data analysis procedures ranges from 1 to 5. This provided values in a similar metric scale to the community service involvement question, which ranges from 0 to 8.

Table 3.3 also presents the reliability for the citizenship scale found within the SRLS-Rev 2. In the MSL pilot test that led to the creation of the SRLS-Rev 2, a Cronbach alpha of .87 was calculated for the revised 8-item citizenship scale (S. R. Komives, personal communication, January 11, 2006). In studies that utilized the original SRLS, Cronbach alpha values of .92 for the 14-item citizenship scale were consistently found (Dugan, 2006a; Dugan, 2006b; Meixner, 2000; Tyree, 1998). During the first revision of the SRLS (SRLS-R), a Cronbach alpha of .89 was found for the revised 12-item citizenship scale (Appel-Silbaugh, 2005). Though the internal consistency for the citizenship scale decreased in the SRLS-Rev 2, a Cronbach alpha value of .87 still indicates strong internal consistency (McMillan & Schumacher, 2001). Additional reliabilities for all eight scales of the SRLS found in four other studies and two pilot tests
of the revised instruments are presented in Appendix D (Appel-Silbaugh, 2005; Dugan, 2006a; Dugan, 2006b; Meixner, 2000; Tyree, 1998). Reliability for the citizenship scale within this specific research study was obtained through the calculation of a Cronbach alpha of .77 as part of the data analysis.

Data Collection Procedure

The data used in this study was collected as part of the Multi-Institutional Study of Leadership (MSL) during the first half of the Spring 2006 semester. The data was collected from undergraduate students at the University of Maryland between February 17, 2006 and March 20, 2006, and became available for use in April 2006. Email addresses were obtained for the 3,410 Maryland undergraduate students randomly selected by the Office of the Registrar. Students received an email inviting them to participate in this research study; a copy of the email invitation is provided in Appendix A. Each student was randomly assigned a unique identification number; students used this number to access the online survey. When students clicked on the URL link in the invitation email, they were directed to the informed consent form to which they needed to electronically provide their consent to participate in this study. A copy of the Informed Consent Form is provided in Appendix B. Students who had not participated in the study received up to three reminder emails over the first two weeks of data collection.

Data Analysis

Data Preparation

Of the 3,410 undergraduate students in the random sample for the MSL, 1,407 Maryland students participated in the MSL for a return rate of 41.3%, above the average return rate for Web-based surveys of 25%-35%. In preparing the data set for use in this
study, a number of participants were deleted from the data set. Responses received from graduate students and students who indicated “Other” as their academic class standing were deleted from the data set. As a result, only participants who identified as traditional undergraduate students (i.e., freshman, sophomores, juniors, and seniors) were included in the data analysis. Furthermore, only those participants who completed the entire MSL-SS were included in this study, counteracting any experimental mortality threats to internal validity. Participants who only completed part of the instrument or did not respond to all of the MSL-SS questions used in this study were deleted from the data set.

The preparation of the MSL data set for use in this study concluded with a check for outliers within the responses. Outliers are extreme cases within the data set that may have a significant effect on the validity of the data and the results of data analysis (Krathwohl, 1998; Pallant, 2005). Additional participants were deleted from the data set after checking for outliers and determining that their responses were far above or far below most other responses. Due to the large number of participants, these few extreme responses were deleted from the data set. Therefore, of the 1,407 total responses received from the random sample, 1,205 responses were usable in this study.

Individual variables were recoded in preparation for the linear multiple regression analyses. The three categorical independent variables that were entered into the two regression analyses were gender, race/ethnicity, and high school community service requirement. Gender and high school community service requirement were recoded into single dummy variables. The six categories of the race/ethnicity variable were recoded into five dummy variables with Other/Race not reported serving as the referent category.
Due to a limited number of participants who indicated community service involvement in some of the seven hour ranges on the MSL-SS, the responses to the amount of involvement in the four methods of community service involvement were recoded into the following scale: (0) None, (1) 1-5 hours, (2) 6-10 hours, (3) 11-20 hours, and (4) 21-30 hours. To determine the overall extent of community service involvement for the purpose of testing hypothesis three in this study, a sum of all scores was obtained for participants’ involvement in all four methods of community service. Using the recoded hour range with no involvement represented by a zero, the hour ranges selected for each of the four methods of community service involvement were added together. For example, if a participant indicated involvement in community service as part of a class for 1-5 hours (1), with a student organization for 6-10 hours (2), as part of a work study experience for no hours (0), and on one’s own for 1-5 hours (1), the extent of community service involvement would be represented by the ordinal number 4. This sum score value representing extent of community service involvement was entered into the second hierarchical linear regression analysis as the dependent variable. The analysis associated with this mean score is elaborated upon in the next section.

Statistical Analyses

Descriptive statistics in the form of frequencies were computed for participants’ (a) gender, (b) race, (c) high school community service requirement, (d) performing volunteer work prior to college, (e) participating in community organizations prior to college, (f) taking leadership positions in community organizations prior to college, (g) participating in activism in any form prior to college, (h) self-perceived citizenship perceptions prior to college, (i) involvement in community service (i.e, Yes or No), and
(j) involvement in each of the four methods of community service involvement (i.e., range of hours if answered Yes to previous question). Additionally, mean scores and standard deviations were computed for the variables of (a) performing volunteer work prior to college, (b) participating in community organizations prior to college, (c) taking leadership positions in community organizations prior to college, (d) participating in activism in any form prior to college, (e) self-perceived citizenship prior to college, (f) involvement in each of the four methods of community service involvement (i.e., as part of a class, with a student organization, as part of a work-study experience, and on one’s own), and (g) self-perceived citizenship during college. The results of these descriptive analyses are reported in the next chapter.

Differences in Community Service Involvement

Hypothesis 1 stated that there is no difference in participants’ self-perceived citizenship based upon whether they did or did not participate in any community service during college. This hypothesis was examined through an independent samples \( t \) - test where participants’ response to the question about whether they participated in any community service during college served as the independent variable and participants’ self-perceived citizenship score served as the dependent variable.

Participation in Four Different Methods of Community Service Involvement

Hypothesis 2 stated that the four methods of community service involvement analyzed in this study do not significantly contribute to explaining students’ self-perceived citizenship, and that no one method contributes more to explaining students’ self-perceived citizenship than the others. This hypothesis was examined through a hierarchical multiple regression analysis with one stepwise regression block. This
regression analysis was selected for Hypothesis 2 because it sought to determine the variance explained in the dependent variable of citizenship scores that is contributed by each of the independent variables represented by the four methods of community service involvement after controlling for a series of other variables (Jaeger, 1993; Licht, 1995; Pallant, 2005).

Multiple regression analysis is used to determine the variance in measures of the dependent variable explained by multiple independent variables (Jaeger, 1993). In hierarchical multiple regression analysis, the researcher indicates the order in which variables are entered into the regression equation. Hierarchical regression analysis serves as a type of statistical analysis in which variables are entered as individual sets and their subsequent contribution to explaining the variance in the dependent variable is determined (Licht, 1995; Pallant, 2005). Consistent with A. W. Astin’s (1991) inputs-environments-outcomes model previously presented, hierarchical multiple regression provides the opportunity to enter the designated input variables into the analysis before examining the independent environment variables of interest.

Prior to conducting the multiple regression analysis, the results of a correlation analysis were examined to determine the level of multicollinearity among the four independent variables of methods of community service involvement. Table 3.4 presents a correlation matrix of the four methods of community service involvement. The four methods were correlated with one another, but the correlations were not very strong and ranged from .01 to .19. The strongest correlation was between community service as part of a class and community service as part of a work-study experience ($r = .19, p = .000$). The weakest correlation was between community service with a student organization and
Table 3.4

*Correlation Matrix of the Four Methods of Community Service Involvement*

<table>
<thead>
<tr>
<th>Service as Part of a Class</th>
<th>Service With a Student Organization</th>
<th>Service as Part of a Work-Study Experience</th>
<th>Service on One’s Own</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service as Part of a Class</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service With a Student Organization</td>
<td>.18 **</td>
<td>.01</td>
<td>1.00</td>
</tr>
<tr>
<td>Service as Part of a Work-Study Experience</td>
<td>.19 **</td>
<td>.17 **</td>
<td>1.00</td>
</tr>
<tr>
<td>Service on One’s Own</td>
<td>.03</td>
<td>-.05</td>
<td>.17 **</td>
</tr>
</tbody>
</table>

** p < .01
community service as part of a work-study experience ($r = .01, p = .88$). Upon obtaining variance inflation factors (VIF) ranging from 1.03 to 9.87, citizenship scores from the SRLS-Rev 2 were entered as the dependent variable into the multiple regression analysis.

This specific hierarchical multiple regression analysis contained a total of six blocks, including a series of five blocks to control for input variables. The first two blocks contained demographic input variables, followed by input variables related to participants’ experiences and perceptions prior to college. The final block containing the four variables associated with the college environment through community service involvement followed these five blocks of input variables. The order of the hierarchical regression blocks also reflected the order of blocks employed in prior research that used Astin’s (1991) I-E-O model to examine community service and leadership development (Astin & Sax, 1998; Cress et al., 2001; Kezar & Moriarty, 2000; Vogelgesang & Astin, 2000). The first block contained participants’ gender. The second block contained participants’ race. The third block contained four variables related to community involvement prior to college: performing volunteer work, participating in community organizations, taking leadership positions in community organizations, and participating in activism in any form. The fourth block consisted of participants’ responses to the question regarding their high school having a community service requirement for graduation. The fifth block examined self-perceived citizenship prior to college through responses to the modified citizenship pre-test question. Thus, the amount of variance explained in self-perceived citizenship during college through each of these five blocks was calculated before determining the variance explained by the four methods of community service involvement.
Stepwise multiple regression analysis serves as another type of multiple regression analysis in which each independent variable is entered into the regression equation on the basis of the strength of its relationship to the dependent variable and other independent variables (Licht, 1995). The sixth block entered into this hierarchical multiple regression analysis consisted of the four methods of community service involvement and each of these methods was entered into the regression equation in a stepwise manner. SPSS, the statistical analysis software, determined the order in which the four independent variables were entered into the regression equation based upon the strength of their relationship with the dependent variable (Pallant, 2005). Furthermore, only those methods that are found to explain a significant amount of the variance were entered into separate blocks that emerged from the stepwise block.

Community Involvement During College

Hypothesis 3 stated that students’ community involvement prior to college, having a community service requirement for high school graduation, and self-perceived citizenship prior to college do not significantly contribute to explaining students’ extent of community service involvement during college. Students’ community involvement prior to college was examined through the question that asked students to think about four aspects of community involvement prior to college: performing volunteer work, participating in community organizations, taking leadership positions in community organizations, and participating in activism in any form. The extent of community service involvement during college was measured through the sum score of participants’ involvement in each of the four methods of community service involvement. Results of a
correlation analysis within this second regression will be presented to determine the level of multicollinearity among these three independent variables.

A second hierarchical multiple regression analysis was implemented to test this hypothesis because it sought to examine whether any of the three prior to college variables predicted extent of community service involvement during college (Licht, 1995; Pallant, 2005). The extent of community service involvement was entered as the dependent variable. Participants’ gender and race were entered into the first two blocks, respectively, to determine their significance in predicting extent of community service involvement during college. The third block contained the four variables representing community involvement prior to college. The fourth block contained the variable that examined the existence of a high school community service requirement for graduation. The fifth block examined self-perceived citizenship prior to college through responses to the modified citizenship pre-test question.

Differences in Gender and Race

Hypotheses 4a and 4b stated that there is no difference in method of community service involvement based on students’ gender and race, respectively. Each of these two hypotheses was examined through a multivariate analysis of variance (MANOVA), with the four methods of community service involvement serving as the multiple dependent variables (Pallant, 2005). Prior to conducting the MANOVA analysis, the correlations among the four dependents variables previously presented in Table 3.4 were reviewed. Although the four variables are correlated with one another, all of the correlations are rather low and range from .01 to .19 (Pallant). These low correlations indicate the assumption of multicollinearity was not violated. It was still determined that a more
conservative MANOVA test would be used to reduce the possibilities of Type I error. Only those participants who indicated that they were involved in community service during college were included in this analysis. The four methods of community service involvement served as the dependent variables, and gender served as the independent variable in the first MANOVA. The second MANOVA consisted of the four methods of community service involvement as the dependent variables and race as the independent variable.

Hypotheses 4c and 4d stated that there is no difference in self-perceived citizenship based on students’ gender and race, respectively. Each of these two hypotheses were examined through a one-way analysis of variance (ANOVA) with self-perceived citizenship serving at the single dependent variable (Pallant, 2005). For comparison purposes with Hypotheses 4a and 4b, participants who did not indicate any involvement in community service during college were not included in this part of the data analysis. Participants’ self-perceived citizenship score served as the dependent variable, and gender served at the independent variable in the first ANOVA. The second ANOVA contained self-perceived citizenship as the dependent variable and race as the independent variable.

Summary

This chapter has identified the methods used in this quantitative study of students’ perceived levels of citizenship based upon involvement in four types of community service. The next chapter will present and explain the results attained from utilizing these methods.
CHAPTER 4

RESULTS

The purpose of this study was to examine the relationship between involvement in curricular and cocurricular community service and self-perceived citizenship among undergraduate students at the University of Maryland. This chapter begins with a description of the participants in this study, followed by a presentation the results of the data analysis procedures outlined in the previous chapter. Results will be presented in accordance with the hypotheses stemming from the four research questions.

Descriptive Statistics

This section begins with a description of the participants in this study through demographic characteristics. Overall frequencies for the variables used in this study will also be presented. In addition, this section concludes with the presentation of means and standard deviations for the continuous variables used.

Description of Participants

While a total of 1,407 students from the University of Maryland participated in the MSL, 1,205 of those responses were usable for the purpose of this study. The obtained sample was comprised of 686 women, or 56.9%, and 519 men, or 43.1%. No students identified as transgender on the instrument. Table 4.1 compares the demographic characteristics of the Maryland students who participated in the MSL with the characteristics of the total Maryland random sample and the overall Maryland undergraduate student population. In comparison with the overall undergraduate Maryland student population and the MSL random sample, women participants appear to be overrepresented in this study.
<table>
<thead>
<tr>
<th></th>
<th>Maryland MSL Participants</th>
<th>Maryland MSL Random Sample</th>
<th>Maryland Undergraduate Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N = 1,205)</td>
<td>(N = 3,410)</td>
<td>(N = 25,442)</td>
</tr>
<tr>
<td><strong>n</strong></td>
<td><strong>Percent</strong></td>
<td><strong>n</strong></td>
<td><strong>Percent</strong></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>686</td>
<td>56.9%</td>
<td>1690</td>
</tr>
<tr>
<td>Male</td>
<td>519</td>
<td>43.1%</td>
<td>1720</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American/Black</td>
<td>108</td>
<td>9.0%</td>
<td>439</td>
</tr>
<tr>
<td>American Indian</td>
<td>3</td>
<td>0.2%</td>
<td>10</td>
</tr>
<tr>
<td>Asian Pacific American</td>
<td>167</td>
<td>13.9%</td>
<td>477</td>
</tr>
<tr>
<td>Caucasian/White</td>
<td>744</td>
<td>61.7%</td>
<td>1,972</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>45</td>
<td>3.7%</td>
<td>212</td>
</tr>
<tr>
<td>Multi-racial/Multi-ethnic</td>
<td>107</td>
<td>8.9%</td>
<td>N/A</td>
</tr>
<tr>
<td>Foreign/International</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Other/Race not reported</td>
<td>34</td>
<td>2.8%</td>
<td>300</td>
</tr>
<tr>
<td><strong>Academic Class Standing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First year/Freshman</td>
<td>205</td>
<td>17.0%</td>
<td>732</td>
</tr>
<tr>
<td>Sophomore</td>
<td>285</td>
<td>23.6%</td>
<td>851</td>
</tr>
<tr>
<td>Junior</td>
<td>355</td>
<td>29.4%</td>
<td>863</td>
</tr>
<tr>
<td>Senior</td>
<td>360</td>
<td>29.9%</td>
<td>920</td>
</tr>
</tbody>
</table>

Note: N/A indicates that data was not available for these categories from these data sources. Maryland’s Office of Institutional Research and Planning (OIRP) does not report statistics for multiracial/multiethnic students. The samples used in the MSL did not report the number of Foreign/International students within the race/ethnicity category. The three responses from American Indian students were recoded into the Other/Race not reported category to create a stronger sample size for the data analysis.
Additionally, 108 participants identified as African American/Black (9.0%), 167 participants identified as Asian Pacific American (13.9%), 744 participants identified as Caucasian/White (61.7%), 45 participants identified as Latino/Hispanic (3.7%), 107 participants identified as Multiracial/Multiethnic or they indicated more than one race/ethnicity (8.9%), and 34 participants indicated another race or did not report their race/ethnicity (2.8%). Since only three participants indicated their race as American Indian/Alaskan Native, their responses were recoded into the Other/Race not reported category to provide enough responses in each category for the data analyses.

The obtained sample contained 205 freshmen (17.0%), 285 sophomores (23.6%), 355 juniors (29.4%), and 360 seniors (29.9%). The random sample of 3,410 students drawn for the MSL at Maryland contained 44 (1.3%) post-bachelors students, however any student not identifying as a traditional undergraduate student was deleted from the data set utilized in this study.

Community Involvement and Perceptions of Citizenship Prior to College

Community involvement prior to college was assessed through participants’ retrospection on their volunteer work, participation in community organizations, leadership in community organizations, and participation in activism prior to college. These questions that began with, “Looking back to before you started college, how often did you engage in …” and concluded with the four items just mentioned contained response choices that ranged from (1) never to (4) very often. Table 4.2 presents the frequencies and means for the community involvement prior to college variables. A modified citizenship pre-test measure requested participants to think back to before they started college and served as the measure of perceptions of citizenship prior to college.
Table 4.2

*Analysis of Community Involvement Prior to College (N = 1,205)*

<table>
<thead>
<tr>
<th>Prior to College Variable</th>
<th>Never (0)</th>
<th>Sometimes (1)</th>
<th>Often (2)</th>
<th>Very Often (3)</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing Volunteer Work</td>
<td>104 (8.6%)</td>
<td>600 (49.8%)</td>
<td>318 (26.4%)</td>
<td>183 (15.2%)</td>
<td>2.48 (0.85)</td>
</tr>
<tr>
<td>Participation in Community Organizations</td>
<td>351 (29.1%)</td>
<td>414 (34.4%)</td>
<td>231 (19.2%)</td>
<td>209 (17.3%)</td>
<td>2.25 (1.06)</td>
</tr>
<tr>
<td>Leadership in Community Organizations</td>
<td>607 (50.4%)</td>
<td>352 (29.2%)</td>
<td>147 (12.2%)</td>
<td>98 (8.1%)</td>
<td>1.78 (0.95)</td>
</tr>
<tr>
<td>Participation in Activism</td>
<td>770 (63.9%)</td>
<td>335 (27.8%)</td>
<td>67 (5.6%)</td>
<td>32 (2.7%)</td>
<td>1.47 (0.72)</td>
</tr>
</tbody>
</table>
Volunteer Work

Of the 1,205 participants, 91.4% \((n = 1,101)\) indicated at least some volunteer work prior to college. More specifically, 104 students (8.6%) responded that they never performed volunteer work before starting college, 600 students (49.8%) responded that they sometimes performed volunteer work, 318 students (26.4%) responded that they performed volunteer work often, and 183 students (15.2%) responded that they performed volunteer work very often. Hence, the mean score for volunteer work prior to college was 2.48 with a standard deviation of 0.85. When asked whether their high school had a community service requirement for graduation, 72.9% of participants \((n = 879)\) indicated that their high school did require community service for graduation.

Participation in Community Organizations

In response to the question regarding engagement through participation in community organizations prior to college, 351 students (29.1%) responded that they never participated in community organizations before starting college, 414 students (34.4%) responded that they sometimes participated in community organizations, 231 students (19.2%) responded that they participated in community organizations often, and 209 students (17.3%) responded that they participated in community organizations very often. The mean score for participation in community organizations prior to college was 2.25 with a standard deviation of 1.06.

Leadership in Community Organizations

More than half of the participants indicated no involvement through leadership in community organizations prior to college while 20.3% reported taking leadership positions in community organizations often or very often. Upon calculating the
frequencies for each response choice, it was determined that 607 students (50.4%) responded that they *never* took leadership positions in community organizations before starting college, 352 students (29.2%) responded that they *sometimes* took leadership positions in community organizations, 147 students (12.2%) responded that they took leadership positions in community organizations *often*, and 98 students (8.1%) responded that they took leadership positions in community organizations *very often*. One student did not respond to this question. The mean score for leadership in community organizations prior to college was 1.78 with a standard deviation of 0.95, illustrating that fewer students took leadership positions through community organizations than those who participated in community organizations.

*Participation in Activism*

Very few students (36.1%) indicated participation in any form of activism before beginning college. In response to the question regarding engagement through participation in activism in any form prior to college, 770 students (63.9%) responded that they *never* participated in any form of activism before starting college, 335 students (27.8%) responded that they *sometimes* participated in activism, 67 students (5.6%) responded that they participated in activism *often*, and 32 students (2.7%) responded that they participated in activism *very often*. One student did not respond to this question. The mean score for participation in activism in any form prior to college was 1.47 with a standard deviation of 0.72.

*Modified Citizenship Pre-Test*

This measure served as a modified citizenship pre-test because it entailed reporting perceptions from a past time, before participants started college. The modified
citizenship pre-test score was determined from responses to the question that asked participants to think back to a time before college and indicate their agreement to the statement “I value the opportunities that allow me to contribute to my community.” Of the 1,205 participants in this study, 15 students (1.2%) responded they strongly disagreed with this statement, 84 students (7.0%) responded that they disagreed, 354 students (29.4%) responded that they were neutral, 565 students (46.9%) responded that they agreed, and 187 (15.5%) responded that they strongly agreed. The mean score for the modified citizenship pre-test was 3.68 with a standard deviation of 0.86.

Community Service Involvement During College

Forty-six percent of participants \((n = 550)\) reported that they engaged in community service during an average academic term in college. Frequencies were determined for the number of hours that students were involved in each of the four methods of community service involvement. Community service with a student organization was determined to be the method with the most participation with 71.5\(\%(n = 393)\) of the 550 students involved in this method of community service during college. Community service on one’s own was the method with the second highest number of involved students; 63.5\(\%(n = 349)\) of the 550 students involved in community service during college indicated involvement in community service on their own. Fewer students were involved with community service as part of a class where only 32.2\(\%(n = 177)\) of students involved in this method of community service. The lowest participation existed in community service as part of a Federal Work-Study experience in which only 9.5\(\%(n = 52)\) of students involved in community service participated in this method of community service involvement during an average academic term.
Table 4.3 presents the frequencies for the extent of involvement within each of the four methods, as measured by hours of involvement during an average academic term. Levels of involvement within each method are positively skewed with most participants indicating involvement of 1-5 hours or 6-10 hours. Of the 550 students who participated in any community service during college, 43.6% \((n = 240)\) indicated participation in only one method, 38.7% \((n = 213)\) indicated participation in two methods, 15.1% \((n = 83)\) indicated participation in three methods, and 2.5% \((n = 14)\) indicated participation in all four methods of community service involvement. Participants who indicated involvement in all four methods were highly involved in one method for 11-20 hours or 21-30 hours and minimally involved in the other three methods for 1-5 hours or 6-10 hours. The primary method of involvement varied per participant with no single method appearing significantly more frequent than others.

**Citizenship**

Within this particular administration of the Socially Responsible Leadership Scale Revised 2 (SRLS – Rev 2) as part of the MSL at Maryland, a Cronbach alpha value of .77 was calculated for the citizenship scale. Though this is a lower value than the Cronbach alpha found by Komives and Dugan (2005) for the citizenship scale in the pilot test of the MSL Student Survey (MSL-SS), an alpha of .77 still indicates strong internal consistency that these items were all measuring citizenship and thus that the citizenship scale was reliable (Pallant, 2005). Participants’ citizenship score was calculated as the mean score for their responses to the eight items comprising the citizenship scale. The mean score for the citizenship scale across all 1,205 participants was 3.81 \((SD = 0.47)\), slightly higher than the mean score of 3.68 reported on the modified pre-test for self-perceived
Table 4.3
Extent of Participation in Each Method of Community Service Involvement (N = 550)

<table>
<thead>
<tr>
<th>Hours Involved During an Academic Term</th>
<th>Coding</th>
<th>Service as part of a class n (% of method)</th>
<th>Service with a student organization n (% of method)</th>
<th>Service as part of a work-study experience n (% of method)</th>
<th>Service on one's own n (% of method)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Involvement</td>
<td>0</td>
<td>373 (67.8%)</td>
<td>157 (28.5%)</td>
<td>498 (90.5%)</td>
<td>201 (36.5%)</td>
</tr>
<tr>
<td>1-5 Hours</td>
<td>1</td>
<td>128 (23.3%)</td>
<td>177 (32.2%)</td>
<td>26 (4.7%)</td>
<td>204 (37.1%)</td>
</tr>
<tr>
<td>6-10 Hours</td>
<td>2</td>
<td>28 (5.1%)</td>
<td>115 (20.9%)</td>
<td>9 (1.6%)</td>
<td>54 (9.8%)</td>
</tr>
<tr>
<td>11-20 Hours</td>
<td>3</td>
<td>13 (2.4%)</td>
<td>64 (11.6%)</td>
<td>6 (1.1%)</td>
<td>53 (9.6%)</td>
</tr>
<tr>
<td>21-30 Hours</td>
<td>4</td>
<td>8 (1.5%)</td>
<td>37 (6.7%)</td>
<td>11 (2.0%)</td>
<td>38 (6.9%)</td>
</tr>
<tr>
<td>Mean Hours (SD)</td>
<td></td>
<td>0.46 (0.82)</td>
<td>1.36 (1.20)</td>
<td>0.19 (0.70)</td>
<td>1.13 (1.21)</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td>0.47 (0.83)</td>
<td>1.96 (1.00)</td>
<td>0.23 (0.76)</td>
<td>1.12 (1.17)</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td>0.45 (0.80)</td>
<td>1.81 (0.98)</td>
<td>0.14 (0.60)</td>
<td>1.16 (1.23)</td>
</tr>
<tr>
<td>White / Caucasian</td>
<td></td>
<td>0.48 (0.83)</td>
<td>1.32 (1.14)</td>
<td>0.16 (0.69)</td>
<td>1.03 (1.18)</td>
</tr>
<tr>
<td>African American /Black</td>
<td></td>
<td>0.29 (0.68)</td>
<td>1.42 (1.29)</td>
<td>0.17 (0.48)</td>
<td>1.31 (1.27)</td>
</tr>
<tr>
<td>Asian Pacific American</td>
<td></td>
<td>0.54 (0.94)</td>
<td>1.43 (1.32)</td>
<td>0.22 (0.68)</td>
<td>1.25 (1.32)</td>
</tr>
<tr>
<td>Latino / Hispanic</td>
<td></td>
<td>0.47 (0.77)</td>
<td>1.05 (1.08)</td>
<td>0.53 (1.24)</td>
<td>1.37 (1.01)</td>
</tr>
<tr>
<td>Multiracial / Multiethnic</td>
<td></td>
<td>0.40 (0.73)</td>
<td>1.50 (1.39)</td>
<td>0.30 (0.93)</td>
<td>1.34 (1.26)</td>
</tr>
<tr>
<td>Other / Race not reported</td>
<td></td>
<td>0.36 (0.63)</td>
<td>1.57 (1.16)</td>
<td>0.07 (0.27)</td>
<td>1.36 (1.01)</td>
</tr>
</tbody>
</table>
citizenship prior to college. The mean citizenship score for 458 participants was 4.0 or higher indicating that 38% of participants reported agree or strongly agree on average to the eight items of the citizenship scale. Most participants \((n = 727)\) reported mean citizenship scores coinciding with the neutral range of the scale from 3.0 to 3.9.

Testing of Hypotheses

Following the descriptive statistics presented in the previous section, this section will present the results of the data analyses employed to test the four sets of hypotheses that stemmed from the four research questions in this study.

**Hypothesis 1: Differences in Self-Perceived Citizenship**

The first hypothesis, stated in the null form, asserts that there is no difference in students’ self-perceived citizenship based whether they did or did not participate in any community service during college. This hypothesis set out to determine if students involved in community service differed from students not involved in community service on their respective self-perceived citizenship scores. The results of the independent samples t-test conducted to test this hypothesis are presented in Table 4.4.

Students who indicated community service involvement during college reported a mean score of 3.96 \((SD = 0.44)\) on the citizenship scale of the SRLS whereas students who did not indicate any community service involvement during college reported a mean score of 3.68 \((SD = 0.45)\). Upon examining the results of Levine’s Test for equality of variances, the Sig. value of .45 indicated that the variation of scores for students who did and students who did not indicate any community service involvement during college was the same and thus equal variances could be assumed. With a \(t\) statistic \((df = 1203)\) of 10.851 and \(p = .000\), students who are involved in some form of community service
Table 4.4
*Differences in Self-Perceived Citizenship Based Upon Community Service Involvement (N = 1,205)*

<table>
<thead>
<tr>
<th>Community Service Involvement During College</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>t-statistic (df)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>550</td>
<td>3.96</td>
<td>0.44</td>
<td>10.85 (1203)</td>
<td>.000***</td>
</tr>
<tr>
<td>No</td>
<td>655</td>
<td>3.68</td>
<td>0.45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*** p < .001

Partial Eta squared ($\eta^2$) = .09

Note: Self-perceived citizenship scores may range from 1.00 to 5.00.
during college report significantly higher scores on the citizenship scale than students who are not involved in community service ($p < .001$).

Consequently, the decision was made to reject the null hypothesis corresponding to the first research question, concluding that there is a significant difference in students’ self-perceived citizenship based upon the indication of participation in any community service involvement during college. In determining the effect size for this independent samples t-test, a partial Eta squared ($\eta^2$) value of .09 was calculated. According to Cohen (1988), this represents a moderate to large effect size (as cited in Pallant, 2005). In other words, approximately 9% of the variance in self-perceived citizenship scores was explained by students’ involvement in any form of community service.

**Hypothesis 2: Predictors of Self-Perceived Citizenship**

Hypothesis 2 stated that the four methods of community service involvement analyzed in this study (i.e., community service as part of a class, with a student organization, as part of a Federal Work-Study experience, and on one’s own) do not significantly contribute to explaining students’ self-perceived citizenship, and no one method contributes more to explaining students’ self-perceived citizenship than the others. The hierarchical multiple regression analysis conducted to test this hypothesis controlled for the following pre-college input variables: gender, race, community involvement prior to college, high school community service requirement, and scores on the modified citizenship pre-test.

As discussed in Chapter 3, the categorical independent variables used (i.e., gender, race, and high school community service requirement) were recoded into proper dummy variable formatting appropriate for linear multiple regression prior to conducting
the multiple regression analysis. This resulted in a total of 13 variables entered into the regression. Multicollinearity was assessed through determining the correlations among these variables; none of the correlations calculated exceeded the threshold of .70 that would cause a concern of multicollinearity (Licht, 1995). Moreover, in running the linear hierarchical multiple regression analysis, variance inflation factors (VIF) were obtained for each variable block. The VIF values ranged from 1.03 for the variable of high school community service requirement to 9.87 for the race variable of White / Caucasian. Pallant (2005) indicated that VIF values above 10 indicate multicollinearity. With all VIF values obtained in this analysis falling below 10, it can be presumed that a multicollinearity problem is not suspected.

Each of the pre-college input variables were entered into separate blocks within the regression analysis. The four methods of community service involvement were entered into the final block in a stepwise method, such that only those methods of community service involvement that significantly contributed to explaining the variance in students’ self-perceived citizenship scores were entered into the regression analysis by the SPSS software. Only two methods of community service involvement, community service with a student organization and community service as part of a Federal Work-Study experience, were significant enough beyond the variance explained by the pre-college variables to enter into this regression analysis.

The results of this hierarchical linear regression analysis can be found in Table 4.5. The results obtained from this analysis implied that the overall model was significant \( F (14, 533) = 8.33, p = .000 \) in explaining 18% of the total variance, with the two significant methods of community service involvement explaining 3.6% of the variance.
Table 4.5
Results of Hierarchical Multiple Regression Analysis for Predictors of Self-Perceived Citizenship (N = 550)

<table>
<thead>
<tr>
<th>Hierarchical Multiple Regression Blocks</th>
<th>$R^2$</th>
<th>$R^2$ Change</th>
<th>$F$ Change</th>
<th>$B$</th>
<th>$B$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1: Gender</td>
<td>.000</td>
<td>.000</td>
<td>0.001</td>
<td>.073</td>
<td>.037</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 2: Race</td>
<td>.011</td>
<td>.011</td>
<td>1.17</td>
<td>-.112</td>
<td>-.123</td>
</tr>
<tr>
<td>White/Caucasian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American/Black</td>
<td>-.155</td>
<td>-.098</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Pacific American</td>
<td>-.188</td>
<td>-.150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>-.061</td>
<td>-.025</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiracial/Multiethnic</td>
<td>-.103</td>
<td>-.067</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Referent Category:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other/Race not reported)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 3: Community involvement</td>
<td>.107</td>
<td>.097</td>
<td>14.51 ***</td>
<td>.007</td>
<td>.014</td>
</tr>
<tr>
<td>prior to college</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performing volunteer work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating in community</td>
<td>-.013</td>
<td>-.032</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking leadership positions in</td>
<td>.025</td>
<td>.058</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>community organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participating in activism in any form</td>
<td>.131</td>
<td>.233 ***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 4: High school service</td>
<td>.109</td>
<td>.001</td>
<td>0.81</td>
<td>-.034</td>
<td>-.033</td>
</tr>
<tr>
<td>requirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, high school requirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 5: Modified citizenship</td>
<td>.143</td>
<td>.035</td>
<td>21.82 ***</td>
<td>.109</td>
<td>.199 ***</td>
</tr>
<tr>
<td>pre-test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stepwise Blocks: Service method</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 6: With a student</td>
<td>.173</td>
<td>.029</td>
<td>18.98 ***</td>
<td>.049</td>
<td>.173 ***</td>
</tr>
<tr>
<td>organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 7: As part of a work-study</td>
<td>.180</td>
<td>.007</td>
<td>4.32 *</td>
<td>.038</td>
<td>.083 *</td>
</tr>
<tr>
<td>experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p < .05$  *** $p < .001$  

$F$ (14, 533) = 8.33, $p = .000$
in students’ self-perceived citizenship scores. Gender, as the first block entered into the
regression analysis, was not found to explain a significant amount of the variance in self-
perceived citizenship ($F = 0.001, p = .971$).

Two of the prior to college variables contributed to explaining a significant
amount of the variance explained in self-perceived citizenship. Community involvement
prior to college provided the greatest amount of variance explained in self-perceived
citizenship during college (9.7% of the variance, $p = .000$) Participation in activism in
any form served as the single significant variable within this block, making the strongest
unique contribution in explaining self-perceived citizenship ($\beta = .233, p = .000$) after
controlling for the other variables. Scores on the modified citizenship pre-test also
significantly contributed to the variance explained in self-perceived citizenship during
college ($\beta = .199, R^2 \Delta = .035, p = .000$), indicating the 3.5% of the variance in self-
perceived citizenship was explained by the modified pre-test measure for self-perceived
citizenship.

For the final block of the hierarchical regression, the four methods of community
service involvement were entered into the regression by SPSS in a stepwise fashion, with
each variable entering the regression in decreasing strength of the variance explained by
each method. Community service as part of a class and community service on one’s own
did not make a significant contribution to the variance explained in self-perceived
citizenship beyond the variance already explained for by the variables in the previous five
blocks. Community service with a student organization explained 2.9% of the variance in
self-perceived citizenship ($\beta = .173, R^2 \Delta = .029, p = .000$) while community service as
part of a Federal Work-Study experience contributed to explaining 0.7% of the variance
in self-perceived citizenship ($\beta = .019$, $R^2 \Delta = .007$, $p = .038$). Accordingly, the decision was made to reject the null hypothesis corresponding to the second research question, concluding that two of the four methods of community service involvement significantly contributed to explaining self-perceived citizenship among participants in this study.

**Hypothesis 3: Community Service Involvement During College**

Hypothesis 3 stated that students’ community involvement prior to college, having a community service requirement for high school graduation, or self-perceived citizenship prior to college do not significantly contribute to explaining students’ extent of community service involvement during college. A second hierarchical multiple regression analysis was conducted with students’ total community service involvement serving as the dependent variable. As with the first regression, the variable inflation factors (VIF) maintained a range from 1.03 to 9.89 and indicated that multicollinearity was not a problem.

Results from this second hierarchical multiple regression analysis also indicate that the overall model was significant ($F (12, 535) = 4.19, p = .000$) in explaining 8.6% of the total variance in students’ extent of community service involvement during college. The results from this analysis can be found in Table 4.6. Both performing volunteer work prior to college and self-perceived citizenship prior to college, as measured through the modified citizenship pre-test, individually explained significant amounts of the variance in extent of community service involvement during college. Specifically, 6.1% of the variance in extent of community service involvement was explained by the four community involvement prior to college variables and 1.1% of the variance was explained by self-perceived citizenship prior to college. Within the
Table 4.6
Results of Hierarchical Multiple Regression Analysis for Predictors of Overall Community Service Involvement (N = 550)

<table>
<thead>
<tr>
<th>Blocks</th>
<th>$R^2$</th>
<th>$R^2$ Change</th>
<th>$F$ Change</th>
<th>$B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1: Gender</td>
<td>.003</td>
<td>.003</td>
<td>1.59</td>
<td>.062</td>
<td>.014</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block 2: Race</td>
<td>.013</td>
<td>.010</td>
<td>1.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td></td>
<td></td>
<td></td>
<td>-.507</td>
<td>-.116</td>
</tr>
<tr>
<td>African American/Black</td>
<td></td>
<td></td>
<td></td>
<td>-.299</td>
<td>-.039</td>
</tr>
<tr>
<td>Asian Pacific American</td>
<td></td>
<td></td>
<td></td>
<td>-.020</td>
<td>-.003</td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td></td>
<td></td>
<td></td>
<td>-.139</td>
<td>-.012</td>
</tr>
<tr>
<td>Multiracial/Multiethnic (Referent Category: Other/Race not reported)</td>
<td></td>
<td></td>
<td></td>
<td>.107</td>
<td>.014</td>
</tr>
<tr>
<td>Block 3: Community involvement prior to college</td>
<td>.074</td>
<td>.061</td>
<td>8.84 ***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volunteer work</td>
<td></td>
<td></td>
<td></td>
<td>.467</td>
<td>.190 ***</td>
</tr>
<tr>
<td>Participation in community organizations</td>
<td></td>
<td></td>
<td></td>
<td>-.051</td>
<td>-.026</td>
</tr>
<tr>
<td>Leadership in community organizations</td>
<td></td>
<td></td>
<td></td>
<td>.105</td>
<td>.050</td>
</tr>
<tr>
<td>Participation in activism in any form</td>
<td></td>
<td></td>
<td></td>
<td>.060</td>
<td>.022</td>
</tr>
<tr>
<td>Block 4: High school service requirement</td>
<td>.075</td>
<td>.001</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, high school requirement</td>
<td></td>
<td></td>
<td></td>
<td>-.168</td>
<td>-.035</td>
</tr>
<tr>
<td>Block 5: Modified citizenship pre-test</td>
<td>.086</td>
<td>.011</td>
<td>6.34 ***</td>
<td>.308</td>
<td>.116 ***</td>
</tr>
</tbody>
</table>

* $p < .05$  *** $p < .001$  $F (12, 535) = 4.19, p = .000$
community involvement prior to college block, performing volunteer work prior to college was the strongest predictor of community service involvement during college. Having a community service as a requirement for high school graduation did not explain a significant amount of the variance in students’ extent of community service involvement during college. Thus, the decision was made to reject the null hypothesis because community involvement prior to college, specifically through performing volunteer work, and self-perceived citizenship prior to college did significantly contribute to explaining the variance in students’ extent of community service involvement during college.

*Hypothesis 4: Differences Based Upon Gender and Race*

Hypotheses 4a and 4b stated that there is no difference in method of community service involvement based on students’ gender and race, respectively. These two hypotheses aimed toward examining whether students of different genders and different races participate in different methods of community service involvement. While the hierarchical multiple regression analysis conducted to test Hypothesis 3 found neither gender or race to explain a significant amount of the variance in method of community service involvement, Hypotheses 4a and 4b were examined through an additional and more direct analysis that consisted of two multivariate analyses of variance (MANOVA).

The first MANOVA examined whether there were any differences in method of community service involvement based on students’ gender. The findings indicate a failure to reject the null hypothesis because no significant differences for females and males in their participation in the four methods of community service involvement were found (Wilk’s $\Lambda = .990, p = .244$). Table 4.7 presents the results of this MANOVA.
Table 4.7

**MANOVA Results: Differences in Community Service Involvement by Gender (N = 550)**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Service as part of a class</th>
<th>Service with a student organization</th>
<th>Service as part of a work-study experience</th>
<th>Service on one’s own</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Female</td>
<td>0.47 (0.83)</td>
<td>1.43 (1.22)</td>
<td>0.23 (0.76)</td>
<td>1.12 (1.17)</td>
</tr>
<tr>
<td>(n = 336)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>0.45 (0.80)</td>
<td>1.24 (1.17)</td>
<td>0.14 (0.60)</td>
<td>1.16 (1.27)</td>
</tr>
<tr>
<td>(n = 214)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.46 (0.82)</td>
<td>1.36 (1.20)</td>
<td>0.19 (0.70)</td>
<td>1.13 (1.21)</td>
</tr>
<tr>
<td>(n = 550)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Statistic (1, 548)</td>
<td>0.06</td>
<td>3.24</td>
<td>1.96</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>.813</td>
<td>.072</td>
<td>.162</td>
</tr>
</tbody>
</table>

Wilk’s Λ = .990, p = .244

Partial eta squared (effect size) = ranged from .000 to .006

Note: Scores for each method ranged from 0 = None to 4 = 21-30 Hours.
The second multivariate analysis of variance (MANOVA) examined differences in method of community service involvement based on students’ race. As previously mentioned, six different races/ethnicities were examined as the categories of the independent variable: Caucasian/White, African American/Black, Asian Pacific American, Latino/Hispanic, Multiracial/Multiethnic, and Other/Race not reported. Due to the small number of American Indian/Alaskan Natives in this sample ($n = 3$), these students were included in the Other/Race not reported category. The four methods of community service involvement served as the dependent variable in this MANOVA.

There was no significant difference found in student involvement in the four different methods of community service based on students’ race as determined through the second MANOVA (Wilk’s $\Lambda = .964, p = .446$). Thus, the research failed to reject the null hypothesis 4b. The results of this MANOVA, including the $F$ statistic values for each of the four methods of community service involvement, can be found in Table 4.8.

Hypotheses 4c and 4d stated that there is no difference in self-perceived citizenship based on students’ gender and race. These two hypotheses were tested through two different one-way analyses of variance (ANOVA). These two hypotheses were also tested as part of the first hierarchical regression analysis in which gender and race were entered into the first two blocks, respectively. However, the two ANOVA analyses discussed below present a more direct method of examining differences in self-perceived citizenship based on gender and race.

The first ANOVA sought to examine differences in self-perceived citizenship based upon students’ gender. There was no significant difference in self-perceived citizenship scores for females and males found in the second ANOVA where
Table 4.8

**MANOVA Results: Differences in Community Service Involvement by Race**

<table>
<thead>
<tr>
<th>Race / Ethnicity</th>
<th>Service as part of a class (Mean (SD))</th>
<th>Service with a student organization (Mean (SD))</th>
<th>Service as part of a work-study experience (Mean (SD))</th>
<th>Service on one’s own (Mean (SD))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian / White (n = 339)</td>
<td>0.48 (0.83)</td>
<td>1.32 (1.14)</td>
<td>0.16 (0.68)</td>
<td>1.03 (1.18)</td>
</tr>
<tr>
<td>African American / Black (n = 48)</td>
<td>0.29 (0.68)</td>
<td>1.42 (1.29)</td>
<td>0.17 (0.48)</td>
<td>1.31 (1.27)</td>
</tr>
<tr>
<td>Asian Pacific American (n = 80)</td>
<td>0.54 (0.94)</td>
<td>1.43 (1.32)</td>
<td>0.23 (0.68)</td>
<td>1.25 (1.32)</td>
</tr>
<tr>
<td>Latino / Hispanic (n = 19)</td>
<td>0.47 (0.77)</td>
<td>1.05 (1.08)</td>
<td>0.53 (1.12)</td>
<td>1.37 (1.01)</td>
</tr>
<tr>
<td>Multiracial / Multiethnic (n = 50)</td>
<td>0.40 (0.73)</td>
<td>1.50 (1.39)</td>
<td>0.30 (0.93)</td>
<td>1.34 (1.26)</td>
</tr>
<tr>
<td>Other / Race not reported (n = 14)</td>
<td>0.36 (0.63)</td>
<td>1.57 (1.16)</td>
<td>0.07 (0.27)</td>
<td>1.36 (1.01)</td>
</tr>
<tr>
<td><strong>Total (n = 550)</strong></td>
<td><strong>0.46 (0.82)</strong></td>
<td><strong>1.36 (1.20)</strong></td>
<td><strong>0.19 (0.70)</strong></td>
<td><strong>1.13 (1.21)</strong></td>
</tr>
</tbody>
</table>

\[ \text{F Statistic (5, 544)} = 0.71, p = 0.621 \]
\[ \text{Wilk’s } \Lambda = 0.964, p = 0.49 \]

Partial eta squared (effect size) ranged from .006 to .013

Note: Scores for each method ranged from 0 = None to 4 = 21-30 Hours.
F (1, 548) = 0.02, p = .895. Table 4.9 presents the results of the second ANOVA related to students’ gender. Hence, the findings indicate a failure to reject the null hypothesis 4c.

The second ANOVA sought to examine differences in self-perceived citizenship based upon students’ race. The six different races/ethnicities previously mentioned served as the categories within the independent variable of race. No significant difference in self-perceived citizenship based upon race was found in this ANOVA, F (5, 544) = 1.19, p = .314. Specific results for this ANOVA are presented in Table 4.10. The research failed to reject the null hypothesis 4d.

Post Hoc Analysis

Following the above results that no significant differences in community service involvement or self-perceived citizenship based upon participants’ gender or race were found, a series of two post hoc analyses were conducted to examine differences based on gender and race in more depth. Since the previous analyses examined gender and race as related to differences across the four methods of community service involvement, the post hoc analyses aimed to explore differences based on any involvement within each method. This section identifies the data analysis procedures implemented and the results of these analyses.

First, a Chi-square test for independence analysis was conducted to ascertain whether any differences existed in involvement in each of the four methods of community service based on participants’ gender or race. Each of the four variables corresponding to the four methods of community service involvement were recoded such that a participant who indicated no hours of involvement in a particular method was
Table 4.9  
ANOVA Results: Differences in Self-Perceived Citizenship by Gender (N = 550)

<table>
<thead>
<tr>
<th>Gender</th>
<th>M</th>
<th>SD</th>
<th>F (df)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>3.96</td>
<td>0.41</td>
<td>0.02 (1, 548)</td>
<td>.895</td>
</tr>
<tr>
<td>(n = 336)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.96</td>
<td>0.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 214)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3.96</td>
<td>0.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(n = 550)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Partial eta squared (effect size) = .000

Note: Self-perceived citizenship scores ranged from 1 to 5.
Table 4.10
ANOVA Results: Differences in Self-Perceived Citizenship by Race (N=550)

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>M</th>
<th>SD</th>
<th>F (df)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian / White (n = 339)</td>
<td>3.97</td>
<td>0.42</td>
<td>1.19 (5, 544)</td>
<td>.314</td>
</tr>
<tr>
<td>African American / Black (n = 48)</td>
<td>3.93</td>
<td>0.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Pacific American (n = 80)</td>
<td>3.89</td>
<td>0.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latino / Hispanic (n = 19)</td>
<td>4.02</td>
<td>0.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiracial / Multiethnic (n = 50)</td>
<td>4.00</td>
<td>0.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other / Race not reported (n = 14)</td>
<td>4.13</td>
<td>0.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (n = 550)</td>
<td>3.96</td>
<td>0.44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Partial eta squared (effect size) = .011

Note: Self-perceived citizenship scores ranged from 1 to 5.
recoded into a “No Involvement” category while all participants who indicated any of the range of hours of involvement were recoded into an “Involvement” category.

A total of eight Chi-square analyses were conducted, four that examined the relationship between gender and each of the four methods of community service involvement and four that examined the relationship between race and each of the four methods of community service involvement. Tables 4.11 and 4.12 presents the results of these eight Chi-square analyses. There was no significant difference between males and females across whether or not they participated in community service as part of a class ($\chi^2 = 0.01$, $df = 1, p = .95$), community service with a student organization ($\chi^2 = 1.10$, $df = 1, p = .30$), community service as part of a work-study experience ($\chi^2 = 2.00$, $df = 1, p = .16$), or community service on one’s own ($\chi^2 = 0.61$, $df = 1, p = .44$). There also was no significant difference based on participants’ race across whether or not they participated in community service as part of a class ($\chi^2 = 2.37$, $df = 5, p = .80$), community service with a student organization ($\chi^2 = 1.88$, $df = 5, p = .87$), or community service on one’s own ($\chi^2 = 10.17$, $df = 5, p = .07$).

The only significant result emerged through the relationship between race and community service as part of a work study experience ($\chi^2 = 11.84$, $df = 5, p = .04$), illustrating that a slight difference in involvement did exist based upon students’ race within this particular method. Most students involved in community service as part of a work-study experience identified as White (44.2%), followed by Asian Pacific American students (21.2%), African American or Black students (11.5%), Multiracial/Multiethnic students (11.5%), Latino students (9.6%), and Other/Race not reported (7.1%).
Table 4.11

*Post Hoc Chi-Square Analysis Results: Differences in Involvement Based on Participants' Gender (N = 550)*

<table>
<thead>
<tr>
<th>Gender and Service as Part of a Class</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Involvement ($n = 373$)</td>
<td>Any Involvement ($n = 177$)</td>
<td>0.01</td>
<td>1</td>
</tr>
<tr>
<td>Female ($n = 336$)</td>
<td>$n = 227$</td>
<td>$n = 109$</td>
<td>67.6% of gender</td>
</tr>
<tr>
<td>Male ($n = 214$)</td>
<td>$n = 146$</td>
<td>$n = 68$</td>
<td>68.2% of gender</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender and Service With a Student Organization</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Involvement ($n = 157$)</td>
<td>Any Involvement ($n = 393$)</td>
<td>1.10</td>
<td>1</td>
</tr>
<tr>
<td>Female ($n = 336$)</td>
<td>$n = 90$</td>
<td>$n = 246$</td>
<td>26.8% of gender</td>
</tr>
<tr>
<td>Male ($n = 214$)</td>
<td>$n = 67$</td>
<td>$n = 147$</td>
<td>31.3% of gender</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender and Service as Part of a Work-Study Experience</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Involvement ($n = 498$)</td>
<td>Any Involvement ($n = 52$)</td>
<td>2.00</td>
<td>1</td>
</tr>
<tr>
<td>Female ($n = 336$)</td>
<td>$n = 299$</td>
<td>$n = 37$</td>
<td>89.0% of gender</td>
</tr>
<tr>
<td>Male ($n = 214$)</td>
<td>$n = 199$</td>
<td>$n = 15$</td>
<td>93.0% of gender</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender and Service on One’s Own</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Involvement ($n = 201$)</td>
<td>Any Involvement ($n = 349$)</td>
<td>0.61</td>
<td>1</td>
</tr>
<tr>
<td>Female ($n = 336$)</td>
<td>$n = 118$</td>
<td>$n = 218$</td>
<td>35.1% of gender</td>
</tr>
<tr>
<td>Male ($n = 214$)</td>
<td>$n = 83$</td>
<td>$n = 131$</td>
<td>38.8% of gender</td>
</tr>
</tbody>
</table>
### Table 4.12

**Post Hoc Analysis Results: Differences in Involvement Based on Participants’ Race**

#### Race and Service as Part of a Class \((N = 550)\)

<table>
<thead>
<tr>
<th>Race and Service</th>
<th>No Involvement ((n = 373))</th>
<th>Any Involvement ((n = 177))</th>
<th>(\chi^2)</th>
<th>df</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian / White ((n = 339))</td>
<td>67.0% within race</td>
<td>33.0% within race</td>
<td>2.37</td>
<td>5</td>
<td>.797</td>
</tr>
<tr>
<td>African American / Black ((n = 48))</td>
<td>77.1% within race</td>
<td>22.9% within race</td>
<td>6.2% of method</td>
<td>.012</td>
<td></td>
</tr>
<tr>
<td>Asian Pacific American ((n = 80))</td>
<td>66.3% within race</td>
<td>33.8% within race</td>
<td>15.3% of method</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Latino / Hispanic ((n = 19))</td>
<td>63.2% within race</td>
<td>36.8% within race</td>
<td>4.0% of method</td>
<td>.048</td>
<td></td>
</tr>
<tr>
<td>Multiracial / Multiethnic ((n = 50))</td>
<td>68.0% within race</td>
<td>32.0% within race</td>
<td>9.0% of method</td>
<td>.003</td>
<td></td>
</tr>
<tr>
<td>Other / Race not reported ((n = 14))</td>
<td>71.4% within race</td>
<td>28.6% within race</td>
<td>2.3% of method</td>
<td>.131</td>
<td></td>
</tr>
</tbody>
</table>

#### Race and Service With a Student Organization \((N = 550)\)

<table>
<thead>
<tr>
<th>Race and Service</th>
<th>No Involvement ((n = 157))</th>
<th>Any Involvement ((n = 393))</th>
<th>(\chi^2)</th>
<th>df</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian / White ((n = 339))</td>
<td>27.7% within race</td>
<td>72.3% within race</td>
<td>1.88</td>
<td>5</td>
<td>.865</td>
</tr>
<tr>
<td>African American / Black ((n = 48))</td>
<td>29.2% within race</td>
<td>70.8% within race</td>
<td>8.7% of method</td>
<td>.003</td>
<td></td>
</tr>
<tr>
<td>Asian Pacific American ((n = 80))</td>
<td>27.5% within race</td>
<td>72.5% within race</td>
<td>14.8% of method</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Latino / Hispanic ((n = 19))</td>
<td>36.8% within race</td>
<td>63.2% within race</td>
<td>3.1% of method</td>
<td>.079</td>
<td></td>
</tr>
<tr>
<td>Multiracial / Multiethnic ((n = 50))</td>
<td>34.0% within race</td>
<td>66.0% within race</td>
<td>8.4% of method</td>
<td>.004</td>
<td></td>
</tr>
<tr>
<td>Other / Race not reported ((n = 14))</td>
<td>21.4% within race</td>
<td>78.6% within race</td>
<td>2.8% of method</td>
<td>.126</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.12 cont.

*Post Hoc Analysis Results: Differences in Involvement Based on Participants’ Race*

### Race and Service as Part of a Work-Study Experience (N = 550)

<table>
<thead>
<tr>
<th>Race and Service</th>
<th>No Involvement (n = 498)</th>
<th>Any Involvement (n = 52)</th>
<th>χ²</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian / White (n = 339)</td>
<td>n = 316</td>
<td>n = 23</td>
<td>11.84</td>
<td>5</td>
<td>.037</td>
</tr>
<tr>
<td>African American / Black (n = 48)</td>
<td>n = 42</td>
<td>n = 6</td>
<td>8.4% of method</td>
<td>11.5% of method</td>
<td></td>
</tr>
<tr>
<td>Asian Pacific American (n = 80)</td>
<td>n = 69</td>
<td>n = 11</td>
<td>13.9% of method</td>
<td>21.2% of method</td>
<td></td>
</tr>
<tr>
<td>Latino / Hispanic (n = 19)</td>
<td>n = 14</td>
<td>n = 5</td>
<td>2.8% of method</td>
<td>9.6% of method</td>
<td></td>
</tr>
<tr>
<td>Multiracial / Multietnic (n = 50)</td>
<td>n = 44</td>
<td>n = 6</td>
<td>8.8% of method</td>
<td>11.5% of method</td>
<td></td>
</tr>
<tr>
<td>Other / Race not reported (n = 14)</td>
<td>n = 13</td>
<td>n = 1</td>
<td>2.6% of method</td>
<td>1.9% of method</td>
<td></td>
</tr>
</tbody>
</table>

### Race and Service on One’s Own (N = 550)

<table>
<thead>
<tr>
<th>Race and Service</th>
<th>No Involvement (n = 201)</th>
<th>Any Involvement (n = 349)</th>
<th>χ²</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian / White (n = 339)</td>
<td>n = 139</td>
<td>n = 200</td>
<td>10.17</td>
<td>5</td>
<td>.071</td>
</tr>
<tr>
<td>African American / Black (n = 48)</td>
<td>n = 16</td>
<td>n = 32</td>
<td>33.3% within race</td>
<td>66.7% within race</td>
<td></td>
</tr>
<tr>
<td>Asian Pacific American (n = 80)</td>
<td>n = 26</td>
<td>n = 54</td>
<td>32.5% within race</td>
<td>67.5% within race</td>
<td></td>
</tr>
<tr>
<td>Latino / Hispanic (n = 19)</td>
<td>n = 3</td>
<td>n = 16</td>
<td>15.8% within race</td>
<td>84.2% within race</td>
<td></td>
</tr>
<tr>
<td>Multiracial / Multietnic (n = 50)</td>
<td>n = 14</td>
<td>n = 36</td>
<td>28.0% within race</td>
<td>72.0% within race</td>
<td></td>
</tr>
<tr>
<td>Other / Race not reported (n = 14)</td>
<td>n = 3</td>
<td>n = 11</td>
<td>21.4% within race</td>
<td>78.6% within race</td>
<td></td>
</tr>
</tbody>
</table>
However, among all students who participated in any community service during college, 6.8% of White students participated in community service as part of a work-study experience whereas 13.8% of Asian Pacific American students, 12.5% of African American/Black students, 26.3% of Latino students, 12.0% of Multiracial/Multiethnic students, and 7.1% of American Indian/Other/Race not reported students participated in community service as part of a work-study experience. Through this additional examination of Hypothesis 4b, it was found that a difference in involvement existed even though a difference in extent of involvement was not found previously.

A second post hoc analysis was conducted using a series of eight two-way analyses of variance (ANOVA) to ascertain whether any differences in self-perceived citizenship existed among those students who participated in each method of community service involvement based on their gender or race. Only those participants who indicated involvement in a particular method of community service were included within the two analyses, one with gender as the second independent variable and the other with race as the second independent variable, for that specific independent variable of method of community service involvement. For example, participants who indicated any involvement in community service as part of a class were included as one independent variable in a two-way ANOVA with gender as the second independent variable. Participants’ scores on the citizenship scale were entered as the dependent variable in each analysis.

Of the eight intended two-way ANOVAs, only one analysis could be conducted with the data used in this study. The four analyses that would have examined differences in self-perceived citizenship based on the extent of participation in each of the four
methods of community service involvement and participants’ race could be performed due to small sample sizes in multiple cells. For example, 11 African American / Black students indicated involvement in community service as part of a class. Ten of those students participated for 1-5 hours in an academic term, one participated for 21-30 hours, and no African American / Black students participated for 6-10 hours or 11-20 hours. These extremely small cell sizes of $n = 1$ or $n = 0$ in multiple cells for all four methods prevent a two-way ANOVA from being robust enough to be conducted.

In addition to the analyses based on participants’ race, two of the four analyses examining the impact of extent of involvement and gender on self-perceived citizenship scores also failed to yield a sufficient number of cases in each cell because much fewer men were involved in community service as part of a class and community service as part of a work-study experience than women. The two two-way ANOVAs that yielded enough cases in each cell were the analyses examining the impact of gender and extent of involvement in community service with a student organization ($n = 393$) and community service on one’s own ($n = 349$) on self-perceived citizenship. Table 4.13 presents the results of the two ANOVAs that were run as part of this post hoc analysis. The analysis examining the impact of gender and extent of involvement in community service with a student organization produced a statistically significant main effect for extent of community service involvement was found ($F(3, 385) = 6.50, p = .000$). The subsequent Tukey HSD test determined that participants involved for 1-5 hours ($M = 3.92, SD = 0.41$) differed significantly from participants involved for 21-30 hours ($M = 4.21, SD = 0.49$) in their self-perceived citizenship scores ($p = .018$). The second two-way ANOVA did not produce significant results indicating that no difference in self-perceived
Table 4.13

Two-Way ANOVA Results: Impact of Gender and Community Service Involvement on Self-Perceived Citizenship

<table>
<thead>
<tr>
<th>Service With a Student Organization</th>
<th>1-5 Hours</th>
<th>6-10 Hours</th>
<th>11-20 Hours</th>
<th>21-30 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female (n = 246)</strong></td>
<td>$M = 3.94$</td>
<td>$M = 3.96$</td>
<td>$M = 3.98$</td>
<td>$M = 4.16$</td>
</tr>
<tr>
<td></td>
<td>$SD = 0.41$</td>
<td>$SD = 0.39$</td>
<td>$SD = 0.39$</td>
<td>$SD = 0.40$</td>
</tr>
<tr>
<td></td>
<td>$n = 104$</td>
<td>$n = 45$</td>
<td>$n = 45$</td>
<td>$n = 24$</td>
</tr>
<tr>
<td><strong>Male (n = 147)</strong></td>
<td>$M = 3.91$</td>
<td>$M = 4.02$</td>
<td>$M = 4.20$</td>
<td>$M = 4.16$</td>
</tr>
<tr>
<td></td>
<td>$SD = 0.42$</td>
<td>$SD = 0.42$</td>
<td>$SD = 0.47$</td>
<td>$SD = 0.40$</td>
</tr>
<tr>
<td></td>
<td>$n = 73$</td>
<td>$n = 42$</td>
<td>$n = 19$</td>
<td>$n = 24$</td>
</tr>
<tr>
<td><strong>Total (N = 393)</strong></td>
<td>$M = 3.92$</td>
<td>$M = 3.98$</td>
<td>$M = 4.04$</td>
<td>$M = 4.21$</td>
</tr>
<tr>
<td></td>
<td>$SD = 0.41$</td>
<td>$SD = 0.40$</td>
<td>$SD = 0.42$</td>
<td>$SD = 0.45$</td>
</tr>
<tr>
<td></td>
<td>$n = 177$</td>
<td>$n = 115$</td>
<td>$n = 64$</td>
<td>$n = 37$</td>
</tr>
</tbody>
</table>

$F (3, 385) = 6.50, p = .000$

<table>
<thead>
<tr>
<th>Service on One’s Own</th>
<th>1-5 Hours</th>
<th>6-10 Hours</th>
<th>11-20 Hours</th>
<th>21-30 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female (n = 218)</strong></td>
<td>$M = 3.92$</td>
<td>$M = 4.09$</td>
<td>$M = 4.07$</td>
<td>$M = 4.01$</td>
</tr>
<tr>
<td></td>
<td>$SD = 0.40$</td>
<td>$SD = 0.42$</td>
<td>$SD = 0.46$</td>
<td>$SD = 0.48$</td>
</tr>
<tr>
<td></td>
<td>$n = 133$</td>
<td>$n = 35$</td>
<td>$n = 28$</td>
<td>$n = 22$</td>
</tr>
<tr>
<td><strong>Male (n = 131)</strong></td>
<td>$M = 3.95$</td>
<td>$M = 3.97$</td>
<td>$M = 4.12$</td>
<td>$M = 4.13$</td>
</tr>
<tr>
<td></td>
<td>$SD = 0.49$</td>
<td>$SD = 0.37$</td>
<td>$SD = 0.42$</td>
<td>$SD = 0.74$</td>
</tr>
<tr>
<td></td>
<td>$n = 71$</td>
<td>$n = 19$</td>
<td>$n = 25$</td>
<td>$n = 16$</td>
</tr>
<tr>
<td><strong>Total (N = 349)</strong></td>
<td>$M = 3.93$</td>
<td>$M = 4.05$</td>
<td>$M = 4.09$</td>
<td>$M = 4.06$</td>
</tr>
<tr>
<td></td>
<td>$SD = 0.45$</td>
<td>$SD = 0.40$</td>
<td>$SD = 0.44$</td>
<td>$SD = 0.59$</td>
</tr>
<tr>
<td></td>
<td>$n = 204$</td>
<td>$n = 54$</td>
<td>$n = 53$</td>
<td>$n = 38$</td>
</tr>
</tbody>
</table>

$F (3, 341) = 2.26, p = .081$
citizenship was found based on whether students were involved in community service on their own and based on their gender.

**Summary of Results**

This chapter has reported the results of the statistical analyses conducted in an effort to address the four research questions that guided this study. The first null hypothesis was rejected because significant differences in self-perceived citizenship between students who participated in community service and students who did not participate in community service during college were found. The second null hypothesis was also rejected because community service involvement was determined to explain a significant amount of the variance in self-perceived citizenship, and community service with a student organization and community service as part of a Federal Work-Study experience explained a significant amount of the variance. The third null hypothesis was also rejected because two of the prior to college variables, community involvement prior to college and self-perceived citizenship prior to college, explained a significant amount of the variance in students’ extent of community service involvement during college. None of the series of four hypotheses that emerged through the fourth research question were rejected because no differences in community service involvement or self-perceived citizenship were found based on participants’ gender or race. Post hoc analyses did identify a difference in involvement in community service as part of a work-study based on participants’ race, and slight differences in self-perceived citizenship based on gender when examined within the context of one of the methods of community service involvement.
CHAPTER 5

DISCUSSION

The primary intention of this quantitative research study was to investigate the relationships between community service involvement during college and self-perceived citizenship among undergraduate students. As delineated in previous chapters, the following four research questions guided this study:

(1) Do any differences exist in students’ self-perceived citizenship based upon whether they participated in any community service during college?

(2) Do different methods of community service involvement significantly predict students’ self-perceived citizenship?

(3) To what extent do students’ community involvement and self-perceived citizenship prior to college explain the variance in their extent of community service involvement during college?

(4) Do any differences based upon gender or race exist in students’ community service involvement and self-perceived citizenship?

This chapter provides a discussion of the findings presented in the previous chapter. Implications for the results of this study for practice are included. Some key limitations to this study will also be presented. This chapter concludes with implications for future research and an overall summary of this study.

Summary of Findings

Of the 3,410 University of Maryland undergraduate students included in the random sample for the Multi-Institutional Study of Leadership (MSL), 1,205 responses were used in this study. After the analysis for the first research question was conducted
with the full obtained sample of 1,205 participants, the remaining three research questions were examined using the 550 participants who indicated their participation in any form of community service during a typical academic term.

This study found that a significant difference did exist in students’ self-perceived citizenship based on community service involvement during college, with students involved in some form of community service during an average academic term in college reporting significantly higher scores than students who were not involved in any community service during an average academic term in college. After controlling for gender and race, participating in activism prior to college and participants’ scores on the modified citizenship pre-test significantly predicted self-perceived citizenship during college for those students involved in community service during college. Additionally, cocurricular community service involvement with a student organization and community service involvement as part of a work-study experience were also significant predictors of participants’ self-perceived citizenship. The other two forms of community service involvement, as part of a class and on one’s own, were not significant beyond the variance in citizenship scores already accounted for in the regression analysis.

Performing volunteer work prior to college and self-perceived citizenship prior to college significantly predicted students’ extent of community service involvement during college. There were no significant differences in students’ community service involvement nor their self-perceived citizenship based upon their race or gender.
Discussion of Results

This section presents a discussion of the results found in this study through elaboration of the results as presented in the previous chapter and incorporating relevant research to explain these results further.

_Differences in Self-Perceived Citizenship_

Significant differences in self-perceived citizenship based upon students’ involvement in any community service during college were found ($t = 10.85, p = .000$). Students involved in community service reported significantly higher citizenship scores ($M = 3.96, SD = 0.44$) than students not involved in community service ($M = 3.68, SD = 0.45$). Measured on a Likert scale from 1=strongly disagree to 5=strongly agree, both of these means are above the median of 3 and suggest that more participants involved in community service agreed or strongly agreed with the eight items comprising the citizenship scale than participants not involved in community service. Similarly, Dugan (2006b) found that participation in community service produced higher scores on the citizenship scale ($t = -9.26, p < .05$). Dugan also found that community service participation had the strongest influence on the citizenship dimension of the social change model (Higher Education Research Institute, 1996) and the SRLS (Tyree, 1998).

The current study provides additional support for the relationship between community service involvement and self-perceived citizenship among undergraduate students. It can be inferred that community service experiences foster citizenship development. Though this study did not directly examine the components of community service experiences, speculations can be made regarding the finding that students involved in community service report higher citizenship scores. Participating in
community service can lead to an increased understanding of social issues and commitments to helping communities and creating positive social change. These relate to the values included within the citizenship value of the social change model (Higher Education Research Institute, 1996). In addition, this represents an example of the developmental models presented in Chapter 2 where community service involvement can serve as one mechanism for fostering citizenship development (Delve et al., 1990; Morton, 1995; Musil, 2003; Westheimer & Kahne, 2002).

Predictors of Self-Perceived Citizenship

Based on the results of the hierarchical regression analysis, two of the three forms of cocurricular community service were found to significantly account for 3.6% of the variance in self-perceived citizenship. Specifically, community service with a student organization and community service as part of a work-study experience were found to explain a significant amount of the variance. Curricular community service as part of a class and cocurricular community service on one’s own were not found to be significant predictors of citizenship in this study. These results provide support for different methods of community service involvement, beyond the sole significant method of religiously based community service obtained by Berger and Milem (2002). The element of individual choice represents one difference between the curricular and cocurricular methods of community services examined. While some aspect of individual choice is present with selecting courses with service-learning components, some students may view the direct service component as fulfilling a course requirement.

It is possible that self-selecting to participate in student organizations or selecting a Federal Work-Study position in a community service-based position, such as with
America Reads*America Counts, contributes to explaining self-perceived citizenship more than community service that is a component of an academic course. Limited research has examined the effect of involvement in different methods of community service on student development, especially for involvement in required and self-selected community service (Berger & Milem, 2002; Fitch, 1991; Payne, 2000; Vogelgesang & Astin, 2000). This strengthens the support for conducting this study and suggesting future research. Moreover, students involved in a Federal Work-Study position with America Reads*America Counts at Maryland scored higher in comparison with students involved in academic service-learning and community service with a student organization on measures of diversity, leadership, and civic engagement (Vogt, 2005). Though citizenship was not a measure in Vogt’s analysis, the trend of student responses to the leadership and civic engagement scales may explain the significance found in the present study for community service through Federal Work-Study as contributing to participants’ self-perceived citizenship.

The entire hierarchical regression model including the input and environment variables explained 18% of the total variance in self-perceived citizenship scores. This is quite a small amount of variance that was explained by the variables included within this study, with over 80% of the variance being explained by variables not examined within the context of this study. Some demographic variables not examined within this study that may have an impact on community service involvement and self-perceived citizenship include socioeconomic status and national citizenship status, among others. Also, other aspects of the college environment likely contribute to citizenship development, such as specific types of student organizations in which students are
involved, involvement in leadership programs, academic class standing, program of study, and other forms of student involvement. Lastly, it is important to examine other outcomes (e.g., cognitive development, leadership identity development, psychosocial development, and other dimensions of identity development) and their relationship to the outcome of self-perceived citizenship. Thus, while community service involvement does explain a significant amount of the variance in self-perceived citizenship, other elements of Astin’s (1991) inputs, environments, and outcomes explain more of the variance.

Eyler, Giles, Jr., and Braxton (1997) identified citizenship as an outcome of involvement in academic service-learning, or community service in an academic course, through their study of 1,500 students from 20 different institutions enrolled in service-learning courses. However, the results of the present study differ from these findings. Due to the random sample used in the MSL study and the primary focus of that study being on student leadership development, academic service-learning was not assessed through any means other than the one question about extent of community service involvement. Although Eyler et al. did not base their study on the values of the social change model (Higher Education Research Institute, 1996), they did examine citizenship through values similar to the social change model such as through personal values, citizenship values, a commitment to making a difference, and an understanding of social issues and social change. Eyler et al. also directly examined connections with faculty through service-learning experiences and students’ commitment to having an impact on public policy. An examination of items on the MSL instrument related to long-term activism and change may have produced more clarity regarding the community service as part of a class experiences. While the result in the current study differs from the findings
in Eyler et al.’s study, it is possible that the differences in the two populations and measures negate a direct comparison between these two studies.

Additionally, the components of individual courses and the nature of community service within those courses may also account for the different results found. Faculty incorporate community service into their courses in different ways, from one community service experience to ongoing service-learning experiences. The identified purpose of a course and the inclusion of community service or citizenship development within the course’s learning objectives may have an influence on the ways in which students define their course-based community service. Though community service as part of a class was not found to explain a significant amount of the variance in self-perceived citizenship in this study, these experiences may contribute to citizenship development through interactions with other college experiences not examined in this study.

Furthermore, the group membership and collaborative structure within community service that may occur through student organizations and community service-based Federal Work-Study positions may also contribute to students’ self-perceived citizenship. Participating in student organizations fosters development through the nature of the group’s collaboration. Many community service-based Federal Work Study programs have a required number of hours for students to complete that may exceed the number of hours students are involved in community service through a student organization. Specifically, strong connections develop among students participating in Federal Work-Study placements with programs such as America Reads*America Counts. With the financial compensation involved in Federal Work-Study positions, students may spend more time engaged with their community and may develop greater connections
with their peer and community groups and greater self-perceived citizenship than students involved in community service as part of a class or on their own. Community service on one’s own as presented in the MSL-SS could be interpreted in a variety of ways and could have a strong group membership influence or may not.

In controlling for certain input variables, as delineated by A. W. Astin’s (1991) inputs-environments-outcomes (I-E-O) college impact model, participating in activism was the only variable related to community involvement prior to college that explained a significant amount of the variance in self-perceived citizenship. As Sax (2000) found, students were influenced by their peers’ participation in activism, and the influence of peer networks may lead more students to participate in different forms of activism prior to college. Rhoads (2005) noted that students are increasingly more active in advocating for campus or societal change. Also, activism is taking a greater focus on concepts of identity and multiculturalism (Rhoads, 1997b). While neither of Rhoads’ studies examined activism prior to college, the shift in focus of activism may contribute to students’ increased involvement in activism and subsequent impact on self-perceived citizenship. Thus, students’ self-perceived citizenship at the time of the MSL was partly explained by their participation in activism prior to college.

In addition, students’ retrospection to their perception of citizenship prior to college also explained a significant amount of the variance in the measurement of self-perceived citizenship during college through the SRLS-Rev 2 (Komives & Dugan, 2006). This implies that while involvement in community service was found to contribute to higher scores on the citizenship scale as discussed in the previous section, students may
enter college with a certain level of citizenship that is enhanced or maintained through their involvement or non-involvement in community service during college.

Community Service Involvement During College

Decrease in Community Service Involvement

Community service involvement among participants decreased between their volunteer work prior to college and their community service involvement during college, as indicated by their retrospection to their involvement prior to college. Of the 1,205 student participants included in this study, 91.4% ($n = 1,102$) indicated that they had performed volunteer work prior to college. Interestingly, the percentage of participants who reported any community service involvement during college decreased to 45.7% ($n = 550$). Furthermore, 73% of participants ($n = 880$) reported that their high school had a community service requirement for graduation. These percentages reflect the decrease in community service involvement from high school to college as presented in Chapter 2 through the findings from studies conducted by Eyler and Giles, Jr. (1999), Marks and Jones (2004), and Vogelgesang and A. W. Astin (2005).

Due to the quantitative nature of this study, specific reasons for this decrease in community service involvement between high school and college were not addressed directly. However, some suggestions can be posed. Students may be more involved in community service prior to college as a means of gaining a diverse array of experiences for friendship development and to enhance their college applications. Upon entering college, students may simply cut back on their cocurricular involvement. In addition, students develop across many dimensions (e.g., cognitive and identity development) during college, all of which can have an effect on their involvement.
Beyond this concept of simple decreases in overall involvement from high school to college, students become more selective in their forms of cocurricular involvement during college. Komives, Owen, Longerbeam, Mainella, and Osteen (2005) found through their work on creating a model of leadership identity development that students’ motivations for involvement shift during college. Students begin to seek out experiences that are meaningful to them and increase their investment in specific forms of involvement. For some students this may consist of becoming more involved in community service experiences, but for other students this may consist of becoming more involved in athletics, culturally-based organizations, or a variety of other forms of involvement.

Methods of Involvement

The hierarchical regression analysis conducted to test Hypothesis 3 found 8.6% of the variance in extent of community service involvement to be explained by the demographic variables and community involvement prior to college. As discussed earlier, this is a very low amount of variance explained by the variables examined within this study, and clearly many other factors contribute to students’ extent of community service involvement during college. Contrary to the overall decrease in the number of students involved in community service from high school to college, performing volunteer work prior to college was the only variable that explained a significant amount of the variance in students’ extent of community service involvement during college. This result supports the results found by A. W. Astin and Vogelgesang (2000), Cress et al. (2001), and Eyler and Giles, Jr. (1999) that community service during high school is positively related to students seeking community service experiences during college. Prior research found
women and students from higher socioeconomic backgrounds to be more likely to continue their volunteer work from high school to college (Marks & Jones, 2004). Demographic variables examining the relationship between community service prior to and during college were not examined in the current study. It seems as though participation in volunteer work during high school predicted community service involvement during college more so than students with no prior experience beginning their community service involvement during college.

For the 550 students who indicated that they participated in any community service in an average academic term during college, the greatest number of students indicated involvement in community service with a student organization (n = 393), followed by community service on one’s own (n = 349), community service as part of a class (n = 177), and the fewest number of students involved in community service as part of a work study experience (n = 52). It is interesting that the two methods found to be significant predictors of citizenship were the ones that had the greatest number and least number of participants.

Some potential reasons for this stark difference in number of participants may relate to processes through which students select to participate in these two methods of community service. Many student organizations at Maryland provide opportunities for students to engage in some community service. On the other hand, students participating in community service as part of a Federal Work-Study experience must meet certain financial requirements to qualify for financial, apply for a work-study placement in a community service-based position, be selected for such a position, and participate in
extensive training. This could be one possible reason for the low number of students who indicated community service involvement as part of a work-study experience.

**Differences Based Upon Gender and Race**

Much of the literature presented in Chapter 2 found conflicting results regarding the significance of gender and race on citizenship development or community service involvement, if these two variables were examined. Some studies found significant differences based on gender or race (Dugan, 2006b; Eyler et al., 1997) while others did not find significant differences (Cress et al., 2001; Eyler et al., 1997; Morrison, 2001). The results of this study support the latter in that no differences in self-perceived citizenship or community service involvement were found based on gender or race in testing the series of the fourth hypotheses. This does not imply that no differences exist across the entire population, just that no significant differences existed within the participant sample used in this study. Since all participants were undergraduate students at the same university, these results are not adequately generalizable across all undergraduate students at different institutions.

Moreover, the post hoc analysis did not find any significant relationships between participation in each of the four methods of community service involvement and participants’ gender or race, with one exception. The post hoc analysis did find a significant relationship between community service as part of a work-study experience and participants’ race. Students involved in this method of community service differed significantly based upon their race or ethnicity from students not involved in this method. The difference can be seen between the percentages of students involved as compared within this method and within the race/ethnicity categories across all four methods. For
instance, Latino students comprise one of the smallest groups within community service-based work-study experiences, but over one quarter of all Latino students are involved in community service as part of a work-study experience. It is possible that a relationship exists between race and financial need that prescribes Federal Work-Study opportunities for students, explaining the significant connections among these two characteristics.

Although no differences in self-perceived citizenship or community service involvement based on participants’ gender were found in the current study, more women ($n = 336$, or 61.1% of participants involved in community service) indicated involvement in community service than men ($n = 214$, or 38.9% of participants involved in community service). This finding supports Eyler and Giles, Jr.’s (1999) finding in their study of service-learning participants that about twice as many women were involved in service-learning programs than men.

**Post Hoc Analysis**

Two of the intended eight two-way ANOVA post hoc analyses were conducted, and one yielded significant results. Students involved in community service with a student organization for 21-30 hours in an academic term reported significantly higher self-perceived citizenship scores than students involved for 1-5 hours. This result indicates that more hours of involvement in this particular method community service have a greater impact on self-perceived citizenship. Though more women were involved in community service across all four hour ranges, women involved for 1-5 hours reported higher self-perceived citizenship scores than men but men reported higher scores for 6-10 hours, 11-20 hours, and 21-30 hours.
The Chi-square post hoc analysis found significant differences in whether students were involved in community service as part of a work-study experience based upon their race. However, the source of this significant impact was not obtained through a deeper examination of the extent of involvement in these methods. These results provide a deeper examination of differences in self-perceived citizenship based on gender and race, finding significant results for only a few instances. Interestingly, the two methods of community service involvement for which significant results were found in the post hoc analyses were the two methods found to explain a significant amount of the variance in self-perceived citizenship scores through the first hierarchical regression analysis.

Implications for Practice

The results of this study can contribute to the work of student affairs educators at higher education institutions in a number of ways. As one of only a few studies that intentionally link community service involvement with citizenship development, the results of this study contribute to expanding research related to these areas and inform potential practices.

First, this study provides support for the relationship between community service involvement and the social change model of leadership development (Higher Education Research Institute, 1996). For campuses that use the social change model as a theoretical framework for leadership programs, this study provides support for the integration of community service programming with leadership programming. The result that students involved with community service reported significantly higher self-perceived citizenship scores than students not involved in community service during an average academic term.
illustrates citizenship as one outcome of community service involvement. Offices and departments that have a pre-existing learning outcome of citizenship or leadership through service could incorporate this result into their assessment plan. Other offices and departments could use the result that community service involvement contributes to self-perceived citizenship in the development of learning outcomes and objectives.

For campuses that do not use the social change model, this study illustrates a link between community service involvement and citizenship that provides support for the social change model of leadership development. Citizenship, representing one aspect of leadership, could be incorporated into identified learning outcomes and program objectives. In considering specific offices that link community service and leadership programs, this study supports the incorporation of the social change model as a framework for connecting community service and leadership in practice.

Furthermore, community service coordinators, student organization advisors, and community service-based Federal Work-Study coordinators, in particular, could incorporate the findings of this study into practice. Community service with a student organization and community service as part of a work-study experience were the two methods of community service involvement found to explain a significant amount of the variance in self-perceived citizenship. This provides support for student organizations and community service-based Federal Work-Study positions as influential mechanisms for citizenship development. Professionals working with these two types of programs could include citizenship development as a dimension of leadership development within identified learning outcomes, training programs, and in general practice. Student organizations, in particular, could intentionally develop community service programs to
enhance the group development process and leadership development of individuals and the group as a whole.

This does not discredit the impact of the other two methods of community service examined in this study, however. From the data used in the current study, it can be inferred that community service connected with an academic course and community service conducted independently of campus-sponsored programs did not have an impact on students’ citizenship development. On the MSL-SS these two items could be interpreted in a variety of ways because criteria for each method of community service involvement were not developed within the instrument. It is possible that participants’ involvement in curricular community service or individually-designed community service lacked the structure of the two methods found to be significant predictors, and that the structure may have also contributed to participants’ self-perceived citizenship. Citizenship outcomes could be explicitly identified within learning outcomes for academic courses, and courses could be designed to foster student development within these outcomes. Furthermore, community service as part of a class may foster cognitive development more than citizenship or leadership development (Vogelgesang & A. W. Astin, 2000).

Limitations

The research design of this study presented a number of limitations. This section will elaborate upon the primary limitations to this study and cautionary notes for interpreting, generalizing, and applying the results of this study.
Research Design

This study utilized a modified I-E-O design in that the MSL was not a longitudinal study with the intention of measuring participants’ true perceptions before starting college for comparison with their perceptions during college. Rather, the MSL was a retrospective study that asked participants questions to which they had to take a retrospective approach to their experiences and perceptions before they started college. These questions aimed at measuring participants’ experiences and perceptions prior to college represented the input elements of A. W. Astin’s (1991) I-E-O model, but they relied completely on participants’ individual retrospections. Thus this study utilized a modified I-E-O design. Moreover, only one item on the MSL instrument measured participants’ self-perceived citizenship prior to college. Though this item was the most reliable item on the citizenship scale of the SRLS – Rev 2, additional pre-test items measured as a true pre-test within a longitudinal study would help to correct this limitation.

Instrument

Participant responses in this study should be interpreted with the caveat that the instrument used in the MSL was entirely a self-report measure. Mertens (2005) noted that the honesty of participants in their responses can have a strong effect on the internal validity of the instrument. The question remains as to whether participants were truly honest in all of their responses or the extent to which they understood the question in the same way that it was developed by the research team. Maturation served as another threat to internal validity in that the instrument was rather lengthy and participants may not
have been as energetic as they progressed through all 68 of the SRLS – Rev 2 items and the demographic questions at the end.

By the nature of survey research and quantitative methodology, participants were required to answer questions using a pre-determined set of response choices. It is possible that some participants were challenged by the community service involvement questions’ measurement in number of hours in an average academic term. This question may have required students to calculate the number of hours, or students may have just responded to a range that seemed appropriate for them. In addition, the clause ‘in an average academic term’ may have also been initially unclear to participants. Two prior questions on the MSL instrument asked participants to indicate the number of hours in an average week that they worked on and off campus. Participants may have experienced a response bias upon reading the question used in this study regarding involvement in community service in an average academic term. This question may have been interpreted and responded to in a manner different from the researchers’ intentions.

Sample

The participants in this study were all undergraduate students at the University of Maryland. While the purpose of this study was to examine community service involvement and self-perceived citizenship among students at this one institution, many other environmental factors may have had an influence on the perceptions and involvement of Maryland students. As a large, public, research university, Maryland may espouse different core values or provide students with opportunities very different from other types of institutions that may indirectly affect their self-perceived citizenship. In addition, this study only examined the diverse student population through the
characteristics of gender and race, and did not examine any other demographics of the student population for their potential relationship to community service involvement and self-perceived citizenship. No accommodations were made on behalf of the researchers for participants with disabilities.

Variables

One of the four methods of community service involvement examined within this study was community service as part of a Federal Work-Study experience. This method connects with the existing assessments conducted by the Office of Community Service-Learning (CSL) at Maryland that include students in Federal Work-Study placements as America Reads* America Counts tutors (Vogt, 2005). Significant differences based on participants’ race were found when conducting the post hoc analysis for community service as part of a work-study experience. However, this study did not examine differences in socioeconomic status of students choosing to work in a community service-based Federal Work-Study position, nor did this study examine student motivations for selecting this type of employment or community service experience. It is also possible that students involved in a community service-based Federal Work-Study position reported this involvement in other questions on the MSL instrument targeted towards student employment.

Community service involvement with a student organization was found to be the method of community service that explained the most variance in self-perceived citizenship scores. However, this study did not examine any demographic information regarding the types of organizations that students were involved in, nor with which organizations the students were involved in service. For example, if a student was
involved in five different student organizations, this study did not show how many of these organizations had community service components and what role membership in each organization had in explaining that student’s self-perceived citizenship.

Certain variables that may have had a direct impact on the results were not included within this study. Due to the small number of students who identified as American Indian or Alaskan Native (n = 3), these participants were included within the Other race or ethnicity category. This study did not provide any data related to American Indian students, a major limitation. In recoding the race/ethnicity category, the researcher made the decision to identify any participant who indicated more than one race/ethnicity as multiracial/multiethnic with the exception of participants who indicated more than one race or ethnicity that were recoded into the same category. For example, a participant who indicated that he/she was Cuban American and Mexican American was recoded as Latino/Hispanic. By identifying participants as multiracial/multiethnic who may not self-identify in that way, different results based on race may have been reported than if only one response choice were selected. Furthermore, this study did not examine the relationship of national citizenship status for participants’ self-perceived citizenship as defined through the social change model (Higher Education Research Institute, 1996). Many other variables not included may have also had a direct impact on this study.

The creation of an ordinal sum score to measure extent of community service involvement as used within the regression analysis to test Hypothesis 3 was not a true representation of participants’ overall involvement. Scores indicated by the coding for the ranges of hours on each of the four methods were added together to create the extent of
involvement variable. Thus, this variable did not represent a true interval measuring extent of involvement in a total hour range of involvement.

This study only examined a single aspect of the college environment, community service involvement. Since a total of only 18% of the variance in self-perceived citizenship was explained by the variables included within this study, over 80% of the variance was explained by countless other factors that were not addressed within the scope of this study. Exploration of the relationship between other components of the student environment and students’ self-perceived citizenship would provide additional information regarding the broader student experience. For instance, examining involvement in different types of student organizations, identifying the extent of involvement in specific leadership programs, and determining connections with on-campus and off-campus employment could lead to the development of a greater understanding of how other aspects of the college environment contribute to citizenship development is necessary.

Lastly, this study only examined community service involvement and did not differentiate between volunteerism, community service, and service-learning experiences within the instruments. Students may have defined community service in a different way than it was defined for the purpose of this study and the larger MSL. More specifically, this study did not examine the components of the community service experiences, such as learning outcomes, reflection, or other developmental outcomes of the experience.
Implications for Future Research

The limitations presented in the previous section of this chapter lead into suggestions for future research on citizenship and community service. Many questions for exploration through future research remain.

The first mechanism for future research stems from the larger MSL as this study only examined responses from students at the University of Maryland. Additional analyses of the questions posed in this study in using the full 54-institution data set would provide stronger evidence of the relationship between community service involvement and self-perceived citizenship. The examination of differences by institutional type could also provide valuable support for the instrument in the creation of national normative data set of leadership development. Though not a part of the student survey portion of the MSL, comparison with institutional missions as determined through the MSL Institutional Survey would also identify connections between an institution’s values as espoused in their mission statement, forms of student involvement, and levels of development across the seven C’s of the social change model (Higher Education Research Institute, 1996).

This study also suggests implications for future iterations of the MSL. Though the MSL’s primary focus is on measuring leadership development through the SRLS-Rev 2, a future sub-study could include a deeper exploration of community service involvement and assessment of leadership outcomes. New scales could be created to measure student involvement in community service, and specific elements of the community service experience.
In examining community service involvement, this study found a decrease in the number of students who participated in volunteer work during high school and those who indicated any community service involvement during college. Additional research is needed to examine predictors of this decline in community service involvement. Qualitative methodology could be useful to explore reasons for this decline in participation and gauging student needs to provide more appropriate programming. As previously discussed, the current study found performing volunteer work prior to college to be a significant predictor of continued community service involvement during college. However, the number of students involved in community service decreased between before and during college. Additional research would also help to clarify these relationships between community service prior to and during college.

In order to truly examine citizenship development among undergraduate students, future studies incorporating a true I-E-O model through a longitudinal design would counteract the significant limitation of this study that required participants to think back to previous perceptions and experiences. Measuring perceptions of citizenship at one time and then administering the MSL-SS or similar instrument at a later time will provide future researchers with a more comprehensive analysis of true perceptions of citizenship.

Additional research is also needed to address what fosters citizenship development far beyond minimal community service involvement. The question remains regarding what else students are involved in and what other pre-college experiences and perceptions contribute to citizenship. This study only examined four elements of community involvement prior to college. Further analyses could be conducted to develop a community involvement scale through the addition of more elements and factor
analysis procedures to identify the relationship among these items and possible clustering for subscales. Connections with the various citizenship and community service models presented in Chapter 2 could enhance the effort to develop a comprehensive measure of citizenship development through community service (Delve et al., 1990; Morton, 1995; Musil, 2003; Westheimer & Kahne, 2002).

Coupled with that, more research is also needed to determine what it is about community service that enhances student development, as well as more research on aspects of curricular and cocurricular community service. Much of this could be accomplished through a qualitative or mixed methods research design. Again, connections with the service-learning model developed by Delve et al. (1990) could provide a framework for addressing student development through service. Revisiting the Scale of Service Learning Involvement (SSLI) could provide a developmental measure (Olney & Grande, 1995).

Conclusion

The purpose of this study was to examine the relationship between curricular and cocurricular forms of community service involvement during college and self-perceived citizenship among undergraduate students. Participants reported their involvement in four different methods of community service. Community service as part of a class served as the single curricular method while community service with a student organization, as part of a work study experience, and on one’s own represented three cocurricular methods of community service. This study emerged from the Multi-Institutional Study of Leadership conducted in the spring of 2006, specifically using the responses from undergraduate students at the University of Maryland.
The findings from this study suggest that community service involvement with a student organization and as part of a work-study experience may have an impact on self-perceived citizenship in addition to performing volunteer work and self-perceived citizenship prior to college. However, with only 18% of the variance in self-perceived citizenship explained by the series of prior to college variables and community service involvement during college, additional factors not examined within this study clearly have an impact on self-perceived citizenship. In the initial analyses, no differences were found in method of community service involvement or self-perceived citizenship based upon participants’ gender or race. Subsequent post hoc analyses yielded similar results, finding the only significant relationship between community service as part of a work-study experience and race. Though this study found significant results supporting the relationship between community service involvement and citizenship, further research on this topic is still warranted.
Dear [MERGE STUDENT NAME],

The University of Maryland has been selected to participate in a national study which will focus on student leadership experiences in college. As an institution, we are very interested in developing leadership among our graduates and hope to learn more about our students' experiences through participation in this study.

You have been selected to participate in this national study! Your participation is VERY important and will contribute a great deal to understanding the college student experience at both the University of Maryland and in the broader context of higher education. This is an amazing opportunity for the University of Maryland and we hope you are excited to participate.

Participation is easy and just by completing the survey you will automatically be entered into a raffle for one of over 75 prizes including: 5 iPod Nanos, gift certificates to local restaurants and Barnes & Noble, free bowling and billiards at TerpZone, free movies at the Hoff Theater, free registration for the LeaderShape Institute, and others.

What does it mean to participate?
- Participation will involve completing an online survey/questionnaire about your college involvement and thoughts about leadership.
- The survey should take approximately 20 minutes to complete.
- Your response is completely confidential.
- Participation is totally voluntary and you may withdraw at any time.
- Take note of your unique Study ID: [INSERT STUDY ID#], you will need to enter this ID into the login box on the website.

We encourage you now to click on the link below to indicate your consent to participate in the survey. If you have any questions, please contact Craig Slack, at 301-314-7164, or cslack@umd.edu.

Thank you for your participation!

Sincerely,

Craig Slack
Assistant Director for Leadership, Community Service Learning, and Involvement.

CLICK HERE TO BEGIN
[INSERT SURVEY WEB ADDRESS]
Appendix B

Informed Consent Form

Multi-Institutional Study of Leadership

You have been randomly selected to participate in an important research project being conducted by the University of Maryland and the National Clearinghouse for Leadership Programs. The purpose of this research project is to enhance knowledge regarding college student leadership development as well as the influence of higher education on the development of leadership capacities.

If you choose to participate in this important research study, you will be asked to complete an online survey that should take about 20 minutes. On this survey you will be asked questions pertaining to your pre-college and college experiences and attitudes.

- All information collected in this study will be kept confidential. Reports and presentations on the study will be based on grouped data and will not reveal your identity. Data will be collected by an independent contractor specializing in survey collection.

- There are no known risks associated with your participation in this study.

- Your participation is entirely voluntary, and you are free to withdraw from participation at any time. Failure to participate will not result in the loss of any benefit from your institution.

- The research is not designed to help you personally, but the benefits of participation include contributing to research on an important topic.

If you have any questions about participating in this study, please contact Craig Slack, your campus’ principal investigator, at 301-314-7164 or via email at cslack@umd.edu.

If you have questions about your rights as a research subject or wish to report a research-related injury, please contact the Institutional Board Office, University of Maryland, College Park, MD, 20742, (email) irb@deans.umd.edu; (telephone) 301-405-0678.

Answering “Yes” indicates that:

- you are at least 18 years of age;
- the research has been explained to you;
- your questions have been fully answered; and
- you freely and voluntarily choose to participate in this research project.

___ Yes, I wish to participate in this study and begin the instrument.

___ No, I do not wish to participate in this research study.
MULTI-INSTITUTIONAL STUDY OF LEADERSHIP

This is a paper and pencil version of what will be presented as an on-line web survey. Skip patterns will automatically take the respondent to the appropriate section. Shaded sections/items will be used in split samples and will not be asked of all participants.

COLLEGE INFORMATION

1. Did you begin college at your current institution or elsewhere? (Choose One)
   - Started here
   - Started elsewhere

2. Thinking about this academic term, how would you characterize your enrollment? (Choose One)
   - Full-Time
   - Less than Full-Time

3. What is your current class level? (Choose One)
   - First year/freshman
   - Sophomore
   - Junior
   - Senior
   - Graduate student
   - Other

4. Are you currently working OFF CAMPUS? (Circle one)
   - YES
   - NO
   If NO skip to #5

4a. Approximately how many hours do you work off campus in a typical 7 day week?

4b. In your primary off campus position, how frequently do you:
   (Circle one for each item)
   - Perform repetitive tasks .................................... 1 2 3 4
   - Consider options before making decisions .............. 1 2 3 4
   - Perform structured tasks ................................... 1 2 3 4
   - Have the authority to change the way some things are done ........................................... 1 2 3 4
   - Coordinate the work of others ........................... 1 2 3 4
   - Work with others on a team .............................. 1 2 3 4

5. Are you currently working ON CAMPUS?

   (Circle one)
   - YES
   - NO
   If NO skip to #6

5a. Approximately how many hours do you work on campus in a typical 7 day week?

5b. In your primary position, how frequently do you:
   (Circle one for each item)
   - Perform repetitive tasks .................................... 1 2 3 4
   - Consider options before making decisions .............. 1 2 3 4
   - Perform structured tasks ................................... 1 2 3 4
   - Have the authority to change the way some things are done ........................................... 1 2 3 4
   - Coordinate the work of others ........................... 1 2 3 4
   - Work with others on a team .............................. 1 2 3 4

6. In an average academic term, do you engage in any community service? (Circle one for each category).
   - YES
   - NO
   If NO skip to #7

6a. In an average academic term, approximately how many hours do you engage in community service?
   - As part of a class
     - Note: 1-5 6-10 11-15 16-20 21-25 26-30 more than 30
   - With a student organization
     - Note: 1-5 6-10 11-15 16-20 21-25 26-30 more than 30
   - As part of a work study experience
     - Note: 1-5 6-10 11-15 16-20 21-25 26-30 more than 30
   - On your own
     - Note: 1-5 6-10 11-15 16-20 21-25 26-30 more than 30

7. Check all the following activities you engaged in during your college experience.
   - Studied abroad
   - Experienced a practicum, internship, field experience, co-op experience, or clinical experience
   - Participated in a learning community or some other formal program where groups of students take two or more classes together.
   - Enrolled in a culminating senior experience (capstone course, thesis etc.)
8. Looking back to before you started college, how confident were you that you would be successful at the following: (Circle one response for each.)

1 = Not at all confident  2 = Somewhat confident  3 = Confident  4 = Very confident

Handling the challenge of college-level work ...................................................... 1 2 3 4
Feeling as though you belong on campus ..................................................... 1 2 3 4
Analyzing new ideas and concepts ............................................................... 1 2 3 4
Applying something learned in class to the “real world” ................................ 1 2 3 4
Enjoying the challenge of learning new material ......................................... 1 2 3 4
Appreciating new and different ideas, beliefs .............................................. 1 2 3 4
Leading others ......................................................................................... 1 2 3 4
Organizing a group’s tasks to accomplish a goal ........................................ 1 2 3 4
Taking initiative to improve something ..................................................... 1 2 3 4
Working with a team on a group project ..................................................... 1 2 3 4

9. Looking back to before you started college, how often did you engage in the following activities: (Circle one response for each.)

1 = Never  2 = Sometimes  3 = Often  4 = Very Often

Performing volunteer work ................................................................. 1 2 3 4
Participating in student clubs/groups ...................................................... 1 2 3 4
Participating in varsity sports ................................................................. 1 2 3 4
Taking leadership positions in student clubs, groups or sports ................ 1 2 3 4
Participating in community organizations (e.g., church youth group, scouts) 1 2 3 4
Taking leadership positions in community organizations ......................... 1 2 3 4
Participating in activism in any form (e.g., petitions, rally, protest) ........... 1 2 3 4
Getting to know people from backgrounds different than your own ........ 1 2 3 4
Learning about cultures different from your own .................................... 1 2 3 4
Participating in training or education that developed your leadership skills 1 2 3 4

10. Looking back to before you started college, please indicate your agreement with the following items by choosing the number that most closely represented your opinion about that statement AT THAT TIME: (Circle one response for each.)

1 = Strongly disagree  2 = Disagree  3 = Neutral  4 = Agree  5 = Strongly Agree

Hearing differences in opinions enriched my thinking ................................ 1 2 3 4 5
I had low self esteem .............................................................................. 1 2 3 4 5
I worked well in changing environments ............................................. 1 2 3 4 5
I enjoyed working with others toward common goals .............................. 1 2 3 4 5
I hold myself accountable for responsibilities ......................................... 1 2 3 4 5
I agree to .................................................................................................. 1 2 3 4 5
My behaviors reflected my beliefs ....................................................... 1 2 3 4 5
I value the opportunities that allow me to contribute to my community..... 1 2 3 4 5
I thought of myself as a leader ONLY if I was the head of a group (e.g., chair, president) ................................................................. 1 2 3 4 5

11a. Before you started college, how would you describe the amount of leadership experience you have had (e.g., student clubs, performing groups, service organizations, jobs)? Please circle the appropriate number

No experience  1     2    3    4    5    Extensive experience

11b. Before you started college, how often have others given you positive feedback or encouraged your leadership ability (e.g., teachers, advisors, mentors)? Please circle the appropriate number

Never 1 2 3 4 5 frequently

11c. Before you started college, How would you react to being chosen or appointed the leader of a group? Please circle the appropriate number

Very uncomfortable 1 2 3 4 5 very comfortable

11d. Before you started college, how often have you seen others be effective leaders? Please circle the appropriate number

Never 1 2 3 4 5 frequently

11e. Before you started college, how often did you think of yourself as a leader?

Never 1 2 3 4 5 frequently
YOUR EXPERIENCE IN COLLEGE

12. How often have you engaged in the following activities during your college experience:
   (Circle one for each item)
   1 = Never  2 = Sometimes  3 = Often  4 = Very Often
   Paid attention to national issues........................ 1 2 3 4
   Paid attention to global issues………………………1 2 3 4
   Was aware of the current issues facing the community surrounding your institution.....1 2 3 4
   Signed a petition or sent an email about a social or political issue ................................ 1 2 3 4
   Bought or did not buy a product or service because of your views about the social or political values of the company that produces or provides it ............................................... 1 2 3 4
   Contacted a public official, newspaper, magazine, radio, or television talk show to express your opinion on a political issue.....1 2 3 4
   Took part in a protest, rally, march, or demonstration.............................................. 1 2 3 4

13. Since starting college, how often have you:
   been an involved member or active participant in college organizations?
     Never  1     2    3    4    5    Much of the time
   held a leadership position in a college organization? (for example, serving as an officer of a club or organization, captain of an athletic team, first chair in a musical group, section editor of the newspaper, chairperson of a committee)
     Never  1     2    3    4    5    Much of the time
   been an involved member or active participant in an off-campus community organizations (e.g. PTA, church group)?
     Never  1     2    3    4    5    Much of the time
   held a leadership position in a community organization? (for example, serving as an officer of a club or organization, leader in a youth group, chairperson of a committee)
     Never  1     2    3    4    5    Much of the time

YOUR STUDENT GROUP INVOLVEMENTS

14. Which of the following kinds of student groups have you been involved with during college?
   (Check all the categories that apply)
   ○ Academic/ Departmental/ Professional (ex: Pre-Law Society, an academic fraternity, Engineering Club)
   ○ Arts/Theater/Music (ex: Theater group, Marching Band)
   ○ Campus-wide programming groups (ex: program board, film series board, a multicultural programming committee)
   ○ Cultural/ International (ex: Black Student Union, German Club)
   ○ Honor Society (ex: Omicron Delta Kappa [ODK], Mortar Board, Phi Beta Kappa)
   ○ Living-learning programs (e.g. language house, leadership floors, ecology halls)
   ○ Leadership (ex: Peer Leadership Program, Emerging Leaders Program)
   ○ Media (ex: Campus Radio, Student Newspaper)
   ○ Military (ex: ROTC)
   ○ New Student Transitions (ex: admissions ambassador, orientation advisor)
   ○ Para professional group (ex: Resident assistants, peer health educators)
   ○ Political/ Advocacy (ex: College Democrats, Students Against Sweatshops)
   ○ Religious (ex: Campus Crusades for Christ, Hillel)
   ○ Service (ex: Circle K, Alpha Phi Omega [APO])
   ○ Culturally based fraternities and sororities (ex: National Pan-Hellenic Council (NPHC) groups, Latino Greek Council groups such as Alpha Phi Alpha Fraternity Inc., Lambda Theta Alpha)
   ○ Social fraternities or sororities (e.g. Panhellenic or Interfraternity Council groups such as Sigma Phi Epsilon or Kappa Kappa Gamma)
   ○ Sports- Intercollegiate or Varsity (ex: NCAA Hockey, Varsity Soccer)
   ○ Sports- Club (ex: Club Volleyball)
14A. Were you involved in your campus-wide student government association? (Circle one) YES NO

If No, skip to item 15.

Thinking about your student government experience, indicate your level of agreement with the following items:
(Circle one response for each.)

1 = Strongly disagree 4 = Agree
2 = Disagree 5 = Strongly agree
3 = Neutral

I found it hard to represent my constituents’ concerns..................................................... 1 2 3 4 5

I successfully initiated change on behalf of my constituents (e.g., policy, institutional, or social)........................................................ 1 2 3 4 5

My motivation for involvement was about gaining influence........................................... 1 2 3 4 5

My motivation for involvement was to receive recognition ..................................................... 1 2 3 4 5

My motivation for involvement was to help others..................................................... 1 2 3 4 5

I have witnessed effective constituency-based efforts for change ........................................... 1 2 3 4 5

If you selected 4 or 5 above, respond:
Those effective models have influenced my own actions........................................... 1 2 3 4 5

I held a constituency-based position prior to this college SGA experience (e.g. high school or other governance group) Yes No
Experience with previous constituency based positions did NOT make me more effective in my college SGA work....... 1 2 3 4 5

15. At any time during your college experience, have you been in a mentoring relationship where another person intentionally assisted your growth or connected you to opportunities for career and personal development? Indicate how many times

Student affairs staff
(e.g., a student organization advisor, career counselor, the Dean of Students, or residence hall coordinator):

.....................................................never once several many

Faculty.....................................................never once several many

Employers .....................................................never once several many

Community members .....................................................never once several many

Other students .....................................................never once several many

16. During interactions with other students outside of class, how often have you done each of the following in an average school year? (Circle one for each.)

1 = Never 3 = Often
2 = Sometimes 4 = Very Often

Talked about different lifestyles/customs..................................................... 1 2 3 4

Held discussions with students whose personal values were very different from your own..................................................... 1 2 3 4

Discussed major social issues such as peace, human rights, and justice........ 1 2 3 4

Held discussions with students whose religious beliefs were very different from your own..................................................... 1 2 3 4

Discussed your views about multiculturalism and diversity ...................... 1 2 3 4

Held discussions with students whose political opinions were very different from your own..................................................... 1 2 3 4

DEVELOPING YOUR LEADERSHIP ABILITIES

17. Since starting college, how many times have you participated in the following types of training or education that developed your leadership skills (ex: courses, Resident Assistant training, organization retreats, job training) (Circle one for each.)

17a- Short-Term Experiences (ex: individual or one-time workshops, retreats, conferences, lectures, or training)

Never once several many

17b-Moderate-Term Experiences (ex: a single course, multiple or ongoing retreats, conferences, institutes, workshops, and/or training)

Never once several many

IF NEVER skip to 17c:

Did your experience involve any courses? YES NO

If no, skip to 17c:

a. How many leadership courses have you completed?

.....................................................never once several many
b. How many other courses have you taken that contributed to your leadership abilities (e.g. ethics course, personal development courses, management courses)? Keep in mind you might have taken such a course but it did not contribute to your leadership.

17c- Long-Term Experiences (ex: multi-semester leadership program, leadership certificate program, leadership minor or major, emerging leaders program, living-learning program),

Never          once     several     many

If NEVER skip to 18

Which of the following Long-Term Activities did you experience? (check all that apply)

- Emerging or New Leaders Program
- Peer Leadership Program
- Leadership Certificate Program
- Multi-Semester Leadership Program
- Senior Leadership Capstone Experience
- Residential Living-learning leadership program
- Leadership Minor
- Leadership Major
- Other

ASSESSING LEADERSHIP DEVELOPMENT

18. Please indicate your agreement or disagreement with the following items by choosing the number that most closely represents your opinion about that statement.

(Circle one response for each.)

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

1 = Strongly disagree  4 = Agree
2 = Disagree          5 = Strongly Agree
3 = Neutral

<table>
<thead>
<tr>
<th>Statement</th>
<th>1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am open to others’ ideas ...</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>Creativity can come from conflict ...</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>I value differences in others ...</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>I am able to articulate my priorities ...</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>Hearing differences in opinions enriches my thinking ...</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>I have a low self esteem ...</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>I struggle when group members have ideas that are different from mine ...</td>
<td>2 3 4 5</td>
</tr>
<tr>
<td>Transition makes me uncomfortable ...</td>
<td>2 3 4 5</td>
</tr>
</tbody>
</table>
My actions are consistent with my values ....................................................... 1 2 3 4 5
I believe I have responsibilities to my community ........................................... 1 2 3 4 5
I could describe my personality ............................................................... 1 2 3 4 5
I have helped to shape the mission of the group ........................................... 1 2 3 4 5
New ways of doing things frustrate me ........................................... 1 2 3 4 5
Common values drive an organization .................................................... 1 2 3 4 5
I give time to making a difference for someone else .................................. 1 2 3 4 5
I work well in changing environments ................................................... 1 2 3 4 5
I work with others to make my communities better places ..................... 1 2 3 4 5
I can describe how I am similar to other people ...................................... 1 2 3 4 5
I enjoy working with others toward common goals .................................. 1 2 3 4 5
I am open to new ideas ............................................................................. 1 2 3 4 5
I have the power to make a difference in my community ....................... 1 2 3 4 5
I look for new ways to do something .......................................................... 1 2 3 4 5
I am willing to act for the rights of others ................................................. 1 2 3 4 5
I participate in activities that contribute to the common good ............... 1 2 3 4 5
Others would describe me as a cooperative group member ..................... 1 2 3 4 5
I am comfortable with conflict ................................................................. 1 2 3 4 5
I can identify the differences between positive and negative change ....... 1 2 3 4 5
I can be counted on to do my part .............................................................. 1 2 3 4 5
Being seen as a person of integrity is important to me ............................ 1 2 3 4 5
I follow through on my promises .............................................................. 1 2 3 4 5
I hold myself accountable for responsibilities I agree to .......................... 1 2 3 4 5
I believe I have a civic responsibility to the greater public ..................... 1 2 3 4 5
Self-reflection is difficult for me ................................................................. 1 2 3 4 5
Collaboration produces better results ....................................................... 1 2 3 4 5
I know the purpose of the groups to which I belong ................................ 1 2 3 4 5
I am comfortable expressing myself ......................................................... 1 2 3 4 5
My contributions are recognized by others in the groups I belong to ........ 1 2 3 4 5
I work well when I know the collective values of a group ....................... 1 2 3 4 5
I share my ideas with others ................................................................. 1 2 3 4 5
My behaviors reflect my beliefs .............................................................. 1 2 3 4 5
I am genuine .............................................................................................. 1 2 3 4 5
I am able to trust the people with whom I work ..................................... 1 2 3 4 5
I value opportunities that allow me to contribute to my community ....... 1 2 3 4 5
I support what the group is trying to accomplish .................................... 1 2 3 4 5
It is easy for me to be truthful ................................................................. 1 2 3 4 5

THINKING MORE ABOUT YOURSELF

19. How would you characterize your political views? (Mark One)
   (Circle one response for each.)
   1 = Far left
   2 = Liberal
   3 = Middle-of-the-road
   4 = Conservative
   5 = Far right

20. In thinking about how you have changed during college, to what extent do you feel you have grown in the following areas? (Circle one response for each.)
   1 = Not grown at all
   2 = Grown somewhat
   3 = Grown
   4 = grown very much

   Ability to put ideas together and to see relationships between ideas ........ 1 2 3 4
   Ability to learn on your own, pursue ideas, and find information you need 1 2 3 4
   Ability to critically analyze ideas and information ............................... 1 2 3 4
   Learning more about things that are new to you .................................. 1 2 3 4

21. Please indicate the extent to which you agree or disagree with the following statements.
   (Circle one response for each.)
   1 = Strongly disagree
   2 = Disagree
   3 = Agree
   4 = Strongly agree

   Since coming to college, I have learned a great deal about other racial/ethnic groups ........................................... 1 2 3 4
I have gained a greater commitment to my racial/ethnic identity since coming to college...  
1 2 3 4

My campus’s commitment to diversity fosters more division among racial/ethnic groups than inter-group understanding .............................................................. 1 2 3 4

Since coming to college, I have become aware of the complexities of inter-group understanding .............................................................. 1 2 3 4

THINKING ABOUT LEADERSHIP

22. How confident are you that you can be successful at the following: (Circle one response for each.)
   1 = Not at all confident 3 = Confident
   2 = Somewhat confident 4 = Very confident

Leading others .............................................................. 1 2 3 4
Organizing a group’s tasks to accomplish a goal  .............................................................. 1 2 3 4
Taking initiative to improve something  .............................................................. 1 2 3 4
Working with a team on a group project...... .............................................................. 1 2 3 4

23. To what degree do you agree with these items? (Circle one response for each.)
   1 = Strongly disagree
   2 = Disagree
   3 = neither agree or disagree
   4 = Agree
   5 = Strongly agree

It is the responsibility of the head of a group to make sure the job gets done.............. 1 2 3 4 5
I spend time mentoring other group members .............................................................. 1 2 3 4 5
I think of myself as a leader ONLY if I am the head of a group (e.g. chair, president) 4 5
Group members share the responsibility for leadership .............................................................. 1 2 3 4 5
I am a person who can work effectively with others to accomplish our shared goals .............................................................. 1 2 3 4 5
I do NOT think of myself as a leader when I am just a member of a group...... 1 2 3 4 5
Leadership is a process all people in the group do together.............................................. 1 2 3 4 5
I feel inter-dependent with others in a group .............................................................. 1 2 3 4 5
I know I can be an effective member of any group I choose to join................................ 1 2 3 4 5
Teamwork skills are important in all organizations .............................................................. 1 2 3 4 5

The head of the group is the leader and members of the group are followers ...... 1 2 3 4

YOUR COLLEGE CLIMATE

24. Select the number that best represents your experience with your overall college climate

Closed, hostile, intolerant, 1 2 3 4 5 6 7
Open, inclusive, friendly

BACKGROUND INFORMATION

25. What were your average grades in High School? (Choose One)
   o A or A+
   o A- or B+
   o B
   o B- or C+
   o C
   o C- or D+
   o D or lower

26. Did your high school require community service for graduation? (Circle One) Yes No

27. What is your age?

28. What is your gender? (Mark all that apply)
   o Female
   o Male
   o Transgender

29. What is your sexual orientation? (Mark all that apply)
   o Heterosexual
   o Bisexual
   o Gay/Lesbian
   o Rather not say

30. Indicate your citizenship and/ or generation status: (Choose One)
   o Your grandparents, parents, and you were born in the U.S.
   o Both of your parents and you were born in the U.S.
   o You were born in the U.S., but at least one of your parents was not
   o You are a foreign born, naturalized citizen
   o You are a foreign born, resident alien/ permanent resident
   o You are on a student visa
31. Please indicate your racial or ethnic background. (Mark all that apply)
   - White/Caucasian
   - African American/Black
   - American Indian/Alaska Native
   - Asian American/Asian
   - Native Hawaiian/Pacific Islander
   - Mexican American/Chicano
   - Puerto Rican
   - Cuban American
   - Other Latino American
   - Multiracial or multiethnic
   - Race/ethnicity not included above

32. Do you have a mental, emotional, or physical condition that now or in the past affects your functioning in daily activities at work, school, or home?  
   - Yes  
   - No
   Please indicate all that apply:
   - Deaf/Hard of Hearing
   - Blind/Visually Impairment
   - Speech/language condition
   - Learning Disability
   - Physical or musculoskeletal (e.g. multiple sclerosis)
   - Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder
   - Psychiatric/Psychological condition (e.g. anxiety disorder, major depression)
   - Neurological condition (e.g. brain injury, stroke)
   - Medical (e.g. diabetes, severe asthma)
   - Other

33. What is your current religious affiliation?  
   (Choose One)
   - None
   - Agnostic
   - Atheist
   - Buddhist
   - Catholic
   - Hindu
   - Islamic
   - Jewish
   - Mormon
   - Quaker
   - Protestant (e.g. Baptist, Methodist, Presbyterian)
   - Other Christian
   - Other
   - Rather not say

34. What is your best estimate of your grades so far in college? [Assume 4.00 = A]  
   (Choose One)
   - 3.50 – 4.00
   - 3.00 – 3.49
   - 2.50 – 2.99
   - 2.00 – 2.49
   - 1.99 or less
   - No college GPA

35. What is the HIGHEST level of formal education obtained by any of your parent(s) or guardian(s)? (Mark all that apply)
   - Don’t know
   - Less than high school diploma or GED
   - High school diploma or GED
   - Some college
   - Associates degree
   - Bachelors degree
   - Masters degree
   - Doctorate or professional degree (e.g., JD, MD, PhD)

36. What is your best estimate of your parent(s) or guardian(s) combined total income from last year? If you are independent from your parents, indicate your income.  
   (Choose one)
   - Less than $12,500
   - $12,500 - $24,999
   - $25,000 – $39,999
   - $40,000 – $54,999
   - $55,000 - $74,999
   - $75,000 - $99,999
   - $100,000 - $149,999
   - $150,000 - $199,999
   - $200,000 and over

37. Which of the following best describes where are you currently living while attending college?  
   (Choose one)
   - Parent/guardian or other relative home
   - Other private home, apartment, or room
   - College/university residence hall
   - Other campus student housing
   - Fraternity or sorority house
   - Other

INDIVIDUAL CAMPUS ITEMS
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
Appendix D

Reliabilities of the Socially Responsible Leadership Scale (SRLS)

*Internal Reliability Analysis of the SRLS*

<table>
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<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Consciousness of Self</td>
<td>0.82</td>
<td>0.74</td>
<td>0.82</td>
<td>0.78</td>
</tr>
<tr>
<td>Congruence</td>
<td>0.82</td>
<td>0.68</td>
<td>0.82</td>
<td>0.79</td>
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<tr>
<td>Commitment</td>
<td>0.85</td>
<td>0.84</td>
<td>0.85</td>
<td>0.83</td>
</tr>
<tr>
<td>Collaboration</td>
<td>0.77</td>
<td>0.85</td>
<td>0.77</td>
<td>0.80</td>
</tr>
<tr>
<td>Common Purpose</td>
<td>0.82</td>
<td>0.76</td>
<td>0.82</td>
<td>0.81</td>
</tr>
<tr>
<td>Controversy with Civility</td>
<td>0.69</td>
<td>0.63</td>
<td>0.69</td>
<td>0.72</td>
</tr>
<tr>
<td>Citizenship</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.89</td>
</tr>
<tr>
<td>Change</td>
<td>0.78</td>
<td>0.79</td>
<td>0.78</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Note: These reliabilities are based on the original 103-item SRLS, with the exception of the SRLS-Revised (2005) based upon the revised 83-item instrument. The data in column 2 are from *Designing an Instrument to Measure Socially Responsible Leadership Using the Social Change Model of Leadership Development* by T. M. Tyree, 1998, University of Maryland, College Park. The data in column 3 are from *Sex Differences in Undergraduates’ Self-Perceptions of Socially Responsible Leadership* (p. 84), by C. L. Meixner, 2000, University of Maryland, College Park. The data in column 4 are from “Involvement in Leadership: A Descriptive Analysis of Socially Responsible Leadership” by J. P. Dugan, 2006b, *Journal of College Student Development*. The data in column 5 are from *Socially Responsible Leadership Scale 2: The Revision of the SRLS*, by C. Appel-Silbaugh, 2005, University of Maryland, College Park.
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