

THE INFLUENCE OF PRECOLLEGE EXPERIENCES ON COMMUNITY COLLEGE
STUDENT CIVIC-RELATED CAPACITIES

By

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Abstract of Dissertation Presented to the Graduate School
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By

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This study sought to determine if individual demographics and characteristics, high school experiences, precollege civic engagement experiences, and precollege interactions with diverse peers influence entering community college students' civic-related capacities. This study relied on the Multidimensional Developmental Model of Civic-Related Capacities (Ponjuan & Crosby, 2009), which provides a preliminary model to better understand college students' development process of the civic engagement learning outcome across cognitive, interpersonal, and intrapersonal developmental domains.

This researcher examined community college student civic engagement from a sample of students at community colleges across the United States. The data for the study were drawn from the 2004 administration of The Freshman Survey from the Cooperative Institutional Research Program. The sample included 5,644 first-year student records from 26 participating institutions.

The study included t-test comparisons and analysis of variance (ANOVA) to compare between-group differences for civic-related capacities of students. Separate sequential

(hierarchical) multiple regression analyses were used to explore the effects of the combination of multiple independent variables that best explain students' civic-related capacities.

The results of this study indicate a relationship between precollege civic participation and interactions with diverse peers and community college students' civic goals and responsibilities, a finding consistent with previous research on university students. The results suggest that participating in precollege civic activities is related to how students shape their civic values, civic identity, and community orientation. In addition, gender, ethnicity, age, family income, and political orientation played a role in students' civic-related capacities. Furthermore, there was no evidence to support that high school experiences, based upon type of high school attended, average grade in high school, curricular experiences, and high school graduation requirement of community service, influenced community college students' civic-related capacities.

The results of this study can support community college faculty and administrators' efforts to prepare their students as actively engaged and effective citizens. The findings suggest that students may benefit from meaningful civic activities and diverse interactions. It is recommended that college faculty and student affairs staffs collaborate with high schools and local and regional organizations to provide students with opportunities to enhance civic-related capacities on and off campus.

CHAPTER 1 INTRODUCTION

Introduction

College students' interest in politics has decreased dramatically since the 1960s (Dresner & Blatner, 2006; Ehrlich, 2000; Institute of Politics [IOP], 2000; Sax, 2004). Ehrlich described the downturn trends: civic participation decreased by an average of 10% from 1973 to 1984, and by 24% from 1984 to 1994. During the same time period, among those who attended college, participation in public meetings fell from 34% to 18% (Ehrlich, para. 6). "In the face of this boom in higher education, it is all the more disturbing that civic participation is actually declining – not expanding – in America, and that political participation is falling off precipitously" (Ehrlich, para. 6). Fortunately, the voting turnout of youth in the 2004 presidential election and 2006 mid-term election began to reverse the trend, but it is uncertain whether this is a short-term spike (Jacoby, 2006; Kiesa et al., 2007). In a more recent publication examining voter participation, the IOP (2008) found that 88% of respondents indicated plans to vote in the 2008 presidential election. In analyzing voting records from the 2008 election, the evidence confirms the continued concern that college youth are not voting at the rate expected. Despite a large college youth voter turnout in 2008, the voter turnout gap between college educated and non-college educated groups is one of the smallest in over 30 years. In other words, the non-college youth voting rate was also high in 2008 (Kirby & Kawashima-Ginsberg, 2009), thus shrinking the turnout gap between the two populations.

Although the voting rate by college students and recent college graduates may be experiencing a recent increase after a long decline, there is evidence that college student volunteerism has steadily increased without demonstrating significant declines. In the 1990s, four-year college and university students were turning to volunteerism and service learning as a

more effective avenue of producing social change than that afforded by the voting process (IOP, 2000; Keiser, 2000; Longo, 2004). However, two-year college students participated in volunteerism to a lesser extent than four-year college and university students (Lopez & Brown, 2006). Colby, Beaumont, Ehrlich, and Corngold (2007) contend that postsecondary institutions are not doing enough to produce an informed, effective citizenry, particularly related to political knowledge, values, and behaviors. Furthermore, only 37% of recent first year college students indicated that keeping up to date with political affairs was essential or very important, compared to 57% of entering first year students in the late 1960's (Pryor et al., 2009).

Identifying the possible reasons for the decline in civic engagement of the U.S. population is discussed in terms of the dramatic and complex changes in society over the last century. Individuals and social institutions, and the relationship between the two, have been rapidly altered by technological advances, economic opportunities and crises, and political structures and values (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1992). Putnam (2000) discusses the impact of additional social changes at the individual level, such as impact of the mass media; the dominance of television; commuting; suburban sprawl; employment and financial pressures; and generational changes. A culture of social connectedness has given way to individualism and isolation (Bellah et al., 1992; Putnam, 2000).

In spite of the recent increase in political participation of college-aged youth, the concern about the overall decline in political participation and civic engagement has spurred the development of many projects funded by national organizations and federal grants, such as the American Association of State Colleges and Universities American Democracy Project; the Carnegie Foundation for the Advancement of Teaching; the American Association of Colleges and Universities [AACU]; the Center for Information and Research on Civic Learning and

Engagement [CIRCLE]; Participating in Democracy Project; and Campus Compact. The efforts of these organizations, and a review of the research literature, establish the importance and timeliness of civic engagement research within the higher education community.

Higher education has long been considered an appropriate societal mechanism for educating individuals for an active civic role in society (Bellah, 1992; Colby et al., 2007; Ehrlich, 2000; Morse, Dudley, & Armstrong, 2005; Pascarella, Ethington, & Smart, 1988; Pascarella, Smart, & Braxton, 1986; Smart & McLaughlin, 1985). Although each institution of higher education is unique in its mission, goals, and values, community colleges play a central role in preparing students for effective civic engagement. For example, community colleges offer diversity awareness training, citizenship classes, and leadership development programs. Furthermore, two-thirds of responding community colleges coordinate community service events, and almost half of the institutions offer service learning to their students (Phinney, Schoen, & Hause, 2002). Despite the explicit mission of community colleges as “America’s democracy colleges” (Franco, 2002, p. 119), there is little research on community college student civic-related capacities. The focus of this study will illuminate the civic-related capacities of an often understudied yet large and diverse segment of the college student population: students enrolled at community colleges.

Purpose of Study

In an effort to understand the effects of college and substantiate society’s expectations of college outcomes, researchers and practitioners are studying effective ways to document and promote the impact of college participation on civic-related capacities. The purpose of this dissertation research is to examine civic-related capacities of community college students. This study assists community colleges that work with large and diverse college student population, in their institutional efforts to prepare their students to become active civic participants. In order to

effectively measure and promote change in college student civic-related capacities, it is essential to understand civic-related capacities of first-year or entering college students. Therefore, I will examine the relationship between precollege experiences and civic-related capacities of entering community college students. Specifically, this study attempts to determine if precollege civic engagement experiences and precollege interactions with diverse peers influence entering community college student civic-related capacities. I will conduct a study of community college students at institutions across the country, using data from an established annual national college student survey.

Research Questions

The primary aim of this study is to investigate the development of civic-related capacities of community college students (see Figure 2-1, p. 46). Therefore, the guiding research question for this study is: What individual characteristics and precollege experiences are related to community college students' civic-related capacities? In conducting the research, the following sub-research questions will be answered:

- a) What is the relationship between student demographics, particularly gender, ethnicity, and age, and community college students' civic-related capacities?
- b) What is the relationship between individual characteristics, particularly first-generation college student status, family income, and student's political orientation, and community college students' civic-related capacities?
- c) What is the relationship between high school experiences, including curricular experiences, and community college students' civic-related capacities?
- d) What is the relationship between precollege civic engagement experiences, including interactions with diverse peers, and community college students' civic-related capacities?

In examining the higher education literature, there is evidence that college student civic engagement is influenced by precollege experiences, particularly values, dispositions, and behaviors (Pascarella, Ethington, & Smart, 1988). Studies highlight the importance of precollege

beliefs on socio-political viewpoints (Chang, 2000), social awareness (Greene & Kamimura, 2003), expectations to be involved in diversity initiatives (Milem & Umbach, 2003), and expectations of civic engagement during college (McKee-Culpepper, 2007). Although some researchers have considered precollege experiences to control for their relationship to “within college” or postcollege values, Greene and Kamimura suggest that the study of precollege experiences can “identify pre-college activities/programs that contribute to social awareness development prior to entering college” (p. 17). In addition, the literature reflects that interactions with diverse peers can impact values, beliefs, and abilities associated with civic engagement (Gurin, P., Dey, Hurtado, & Gurin, G., 2002; Gurin, Nagda, & Lopez, 2004; Hurtado, 2005; Hurtado, Engberg, Ponjuan, & Landreman, 2002; Johnson & Lollar, 2002; Rowan-Kenyon, Soldner, & Inkelas, 2008). In order to better understand civic engagement in the community college setting, it is important to study the influence of precollege experiences of community college students.

Rationale

The research literature highlights the long decline and recent resurgence of college student civic engagement (IOP, 2000, 2008; Jacoby & Associates, 2009; Kiesa et al., 2007; Lopez & Brown, 2006); however, there is paucity in the literature regarding civic engagement of community college students (Lopez & Brown, 2006; Prentice, 2007). For example, the national norms report of The Freshman Survey of the Cooperative Institutional Research Program (CIRP) (Pryor et al., 2008) from the Higher Education Research Institute reports the attitudes, beliefs, and experiences of students attending baccalaureate degree-granting institutions and does not currently include community college student data. Furthermore, in a recent study by the Institute of Politics (IOP) (2008), two-year college students were calculated as part of the “noncollege” student population (Jacoby & Associates, 2009). Nevertheless, it is important to understand if

there is a difference between the civic engagement of four-year college students and two-year (community) college students.

It is critical to appreciate the importance of studying the community college student population. Two-year college enrollments have doubled their share of the total college enrollment in the United States since 1963 (Provasnik & Planty, 2008, Table SA-4, p. 33). Community college students differ from four-year college and university students in regards to age, gender, ethnicity, employment and attendance status, parenthood status, level of parental education, income level, immigrant status, and remedial education enrollment (Provasnik & Planty, 2008).

Even though the community college student population may more accurately reflect our larger society, the extant research literature provides little treatment of civic engagement of community college students. Researchers have primarily examined the learning outcome of civic engagement with four-year college and university students. In addition, part-time students are often excluded from national studies (Adelman, 2006), yet 59% of the community college population is enrolled part-time (AACCC, n.d.). Upon closer review of the social science research literature, community college student samples are found in approximately 10% of the civic engagement articles (Ponjuan & Crosby¹). However, community colleges enroll a substantial proportion of U.S. undergraduates (Provasnik & Planty, 2008). The higher education literature should better reflect the diversity of institutions and students in order to align with increased

¹ Ponjuan, L. & Crosby, L. (2009, June). *College student civic engagement? Deconstructing the concepts of civic engagement in the higher education research literature*. Paper presented at the meeting of the Association of Institutional Research, Atlanta, GA.

calls for evidence of the value and impact of higher education (U.S. Department of Education, 2006).

Scope of Study

This study will examine community college student civic engagement from a sample of students at community colleges across the United States. I will use data from The Freshman Survey (TFS), Cooperative Institutional Research Program (CIRP) of the Higher Education Research Institute (HERI) at the University of California, Los Angeles. This survey instrument is used annually to collect data on entering college students' individual characteristics, precollege experiences, college choice, major and career aspirations, and student values and beliefs. The participants include degree-seeking students at two-year and four-year colleges and universities. However, this study is limited to associate degree-seeking two-year college students enrolled at public and private two-year colleges. Studies of community college civic engagement using the established national CIRP survey have not been found in the research literature; therefore, this study can provide initial data from which to discuss community college student civic engagement. This could lead to future research designed to obtain nationally representative samples of community college students and four-year college and university students to examine similarities and differences in civic engagement between these two undergraduate populations.

Despite the difference between individual characteristics of two-year and four-year college students, it is beyond the scope of this study to compare civic engagement of these two populations. In addition, this study does not study the impact of the college experience on civic engagement of community college students. Instead, this study focuses on the relationship of precollege experiences to entering community college student civic-related capacities.

Contributions to the Research Literature

This study utilizes a nationally-recognized survey on a multi-institutional sample to provide initial insights to how community colleges can prepare diverse, non-traditional college students to more effectively engage as active citizens. This study examines how precollege experiences and civic-related capacities vary within the entering first-year community college student population.

The primary focus of this research is to examine college students at community colleges. This study is important to researchers and practitioners because it fills a gap in the literature about an important, large, and diverse part of the higher education population. As demonstrated earlier, community college students have not been sufficiently studied regarding civic engagement experiences, attitudes, values, and self-efficacy. In addition, college student research is often conducted on first-time, full-time students. This study will contribute to the college student civic engagement research, especially that of community college student civic engagement (Blackhurst & Foster, 2003; Drane, 2001; Eklund-Leen & Young, 1997; Haines, 2002; Henderson, 2007; Hurtado et al., 2002; Johnson & Lollar, 2002; Pascarella, Ethington, & Smart, 1988; Pascarella, Smart, & Braxton, 1986; Persell & Wenglinisky, 2004; Prentice, 2007; Sax, 2004; Vogelesgang, 2001).

This study will also add to previous research on the relationship between interactions with diverse peers and student values, beliefs, and abilities associated with civic engagement (Gurin, P., et al., 2002; Gurin et al., 2004; Hurtado, 2005; Hurtado et al., 2002; Johnson & Lollar, 2002; Rowan-Kenyon et al., 2008). This study seeks to understand the relationship between precollege experiences and beliefs with entering community college students' civic-related capacities. Community college administrators and researchers will gain an understanding of the self-reported beliefs, attitudes, and self-efficacy of a large sample of degree-seeking students. This

will help administrators understand civic engagement from the perspective of students.

Knowledge of student attitudes and intended civic behavior can help administrators develop civic-related programming. Such knowledge can lead researchers and practitioners to determine the curricular and cocurricular impact on students' civic engagement, and spur further studies related to specific curricular designs, pedagogical approaches, learning activities and methods, and teaching goals that can influence civic engagement outcomes in the community college setting.

Organization of this Study

This chapter discussed the concept of civic engagement and the long-standing expectation of education to produce civically engaged citizens. Additionally, this chapter highlighted the dearth of research on community college student civic engagement in spite of the large proportion of students enrolled in community colleges. The research questions that guide this study have been presented. In the second chapter I describe the nature of the community college student population and provide a literature review of civic engagement and precollege influences on civic engagement. Additionally, I conclude chapter two with a discussion of the civic-related capacities theoretical framework. The third chapter describes the methodology utilized in this study of community college student civic engagement and discusses the study limitations. In the fourth chapter, I present the results and analyses of community college student survey data. In chapter five, I provide a discussion of the study's findings. Finally, in chapter six I discuss recommendations for future research and for higher education administration.

Summary of Chapter 1

Civically engaged citizens are considered one of the societal benefits of publicly sponsored higher education. However, college students and graduates are not politically and civically involved to the extent expected by stakeholders. Researchers are studying effective ways to

promote college student civic engagement; however, there is a paucity of research on community college student civic engagement. The next chapter will provide a review of the extant research literature on precollege experiences as they relate to college student civic engagement.

CHAPTER 2 LITERATURE REVIEW

Introduction

Civic engagement outcomes, such as dispositions and values, knowledge, skills, intentions, and behaviors, are examined through high school and precollege experiences. The purpose of this study is to examine entering community college student civic engagement; therefore, the literature review will explore the relationship between entering college student civic engagement outcomes and precollege experiences. Due to the lack of research literature on community college student civic engagement, the literature review will also include the relationship of precollege experiences on civic engagement of four-year college and university students. The literature review will highlight that student involvement inside and outside the classroom in high school contributes to the development of the values, attitudes, and actions associated with civic engagement in four-year colleges and universities. However, additional research is needed to determine what aspects of the precollege experience are associated with community college student civic engagement outcomes.

To facilitate discussion, this chapter is divided into seven sections. The first section serves as an introduction to terminology, population, and concepts utilized in the civic related research literature. This section provides a brief definition of terms and a summary of the nature of the community college student population. The second section provides a history of the research topic, to better understand how civic engagement has been studied in the research literature. The third section includes a review of the extant literature on community college student civic engagement. In the fourth section, the literature review highlights themes in high school and precollege experiences that influence college student civic engagement. The fifth section provides a brief review of the extant literature on college student political orientation in

relationship to civic engagement. The sixth section includes a review of the multiple definitions of civic engagement found in the research literature, and the last section provides a discussion of the theoretical framework guiding this study.

Definition of Terms

Researchers have defined civic engagement as knowledge, attitudes, values, skills, and behaviors necessary for effective participation in society.

Civic engagement means working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values, and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes (Ehrlich, 2000, p. vi).

Further discussion of the complexity and variety of definitions of this term will be discussed later in this chapter. Other related key terms include:

- **Civic values** are an awareness of the importance of civic engagement, value of involvement in the community, and belief in promoting a better community or society.
- **Civic self-efficacy** is the belief or confidence in the ability and likelihood to effectively make a difference in the community (Nishishiba, Nelson, & Shinn, 2005).
- **Community self-efficacy** is the belief in the ability of the community to work together to make effective changes (Nishishiba et al., 2005).
- **Community service**, defined as volunteering, or unpaid work, in the local, state, national, or international community, is not directly associated with academic curriculum or stated academic learning outcomes (Pritchard, 2002, as cited in Henderson, 2007; Rhoads, 1998). Community service is arranged, sponsored, and/or required by institutions, such as schools (Pritchard, 2002, as cited in Henderson, 2007).
- **Community college**, as defined by the Carnegie classification nomenclature, refers to two-year and community colleges as associate's colleges. Associate's colleges "include institutions where all degrees are at the associate's level, or where bachelor's degrees account for less than 10 percent of all undergraduate degrees. Excludes institutions eligible for classification as Tribal Colleges or Special Focus Institutions" (Carnegie Foundation for the Advancement of Teaching, 2009, para. 8). The U.S. Department of Education Integrated Postsecondary Education Data System (IPEDS, n.d., Glossary table) and Cohen and Brawer (2003) limit their definition of community colleges to institutions that offer the associate's degree as the highest degree offered. It might be noted for this research study that the Higher Education Research Institute (HERI) uses the term "two-

year college” to be more inclusive of associate degree-granting institutions that may not have the word “community” in the institution’s name. In this study, I will use the term “community college” to refer to two-year colleges and “associate’s colleges” to reflect the Carnegie definition, unless directly citing a source that may use a different term.

- **First-generation college student** refers to “a student whose parents’ highest level of education is a high school diploma or less. In cases where parents have different levels of education, the maximum education level of either parent determines how the student is categorized” (Nunez & Cuccaro-Alamin, 1998, p. 7).
- **Precollege** is generally defined as the time between completing high school and entering college. In the HERI survey used in this study, some questions specifically ask students about their high school experiences, and other questions ask about the experiences that occurred during the year prior to college. For some community college students, more than a year might have passed since completing high school and entering college.
- **Service learning** is defined as “service as part of an academic course” (Vogelgesang & Astin, 2000, p. 25).

While some consistencies exist across most of the selected studies, some caution is warranted when comparing articles that discuss the notion of civic engagement in higher education. Nonetheless, these terms are useful to facilitate the discussion of the related research literature. As mentioned previously, there is a lack of research literature on community college student civic engagement. However, prior to a discussion of the community college student civic engagement literature, it is important to understand the community college student population that is the focus of this study.

The Nature of the Community College Student

It is critical to recognize the importance of studying the community college student population. Enrollment in community colleges has increased at a rapid pace, with a 667% increase from 1963 to 2006. Community college enrollments have doubled their share of the total U.S. college enrollment since 1963 (Provasnik & Planty, 2008, Table SA-4, p. 33). Community college students constitute a diverse and growing student population within higher education.

Community college students differ from four-year college and university students in several ways, including demographics, enrollment behaviors, and graduation patterns. Differences between the two student populations include age (Provasnik & Planty, 2008); gender (Provasnik & Planty, 2008); ethnicity (Provasnik & Planty, 2008); parenthood status (Horn & Nevill, 2006); level of parental education (Provasnik & Planty, 2008); income level (Provasnik & Planty, 2008); immigrant status (Erisman & Looney, 2007); employment and attendance status (Horn & Nevill, 2006); and remedial education enrollment (Adelman, 2006).

Compared to four-year colleges and universities, community colleges enroll a higher percentage of students who are older, female, African American or Hispanic, and have immigrant status. The median age of community college students (24 years) is three years higher than the median age of students attending four-year colleges and universities (21 years). Slightly more than one-third of community college students are at least 30 years of age. Females comprise about 55% of all college students, yet in community colleges, the female student population reaches almost 60%. Fifteen percent of the community college student population is African American, and 14% is Hispanic, while only 10% of the four-year public college and university population is African American, and 9% is Hispanic (Provasnik & Planty, 2008).

Community colleges and private for-profit institutions tend to enroll more immigrant students than public four-year and private non-profit institutions.

Immigrants were 14 percent more likely than the general undergraduate population to be enrolled in public two-year institutions and private for-profit institutions—55 percent of all immigrant undergraduates and 59 percent of legal permanent residents were enrolled in these types of institutions. (Erisman & Looney, 2007, p. 25)

Community college students are also more likely to have caregiving responsibilities, be the first in the family to attend college, and live below the poverty level. Among independent students who attend public community colleges, 25% are single parents, and almost 33% are

married with children, compared to independent students attending public four-year colleges and universities, where almost 17% are single parents and 25% are married with children (Horn & Nevill, 2006). In 2003-2004, almost 41% of community college students were first-generation college students, compared to 27.6% of four-year college and university students (Provasnik & Planty, 2008). Slightly more than 25% of community college students are in families “at or below 125 percent of the 2002 poverty threshold” (Provasnik & Planty, p. 26) compared to 20% of four-year college and university students.

The community college student population is not only diverse demographically; this student population is also more likely to attend college part-time, work full-time, and need remedial coursework. Of those students who attend college full-time, continuously enrolled, excluding summer term, 24.1% are community college students, and 65.3% are four-year college and university students. In a 1992 longitudinal study of high school seniors who attended community college, 64.5% of the community college students enrolled in at least one remedial course; however, only 33.1% of students who attended a four-year college or university enrolled in a remedial course (Adelman, 2006).

Community colleges consistently enroll a substantial proportion of all undergraduates in the United States, and many community college students do not transfer to a bachelor’s degree program at a four-year college or university (Berkner, He, & Cataldi, 2002). Only 25% of the public community college student population transfers to a four-year college or university. Of those students who transfer, 36% earn a bachelor’s degree within six years of the first enrollment at the community college (Berkner et al., p. 14). The majority of the community college student population may take alternative educational pathways, suggesting that community college

students enroll in terminal associates degrees to immediately enter the workforce or retrain for another career.

Regardless of the transfer pathway and baccalaureate attainment of community college students, the demographics of the community college student population more accurately reflect our larger society; however, the extant research literature provides little treatment of civic engagement of this population. The higher education research literature should better reflect the diversity of postsecondary institutional types and students in order to align with increased calls for evidence of the value and impact of higher education (U.S. Department of Education, 2006). Community college students are residents of the local community, participating in the workforce, and thus could immediately apply civic-related capacities that are developed or enhanced in the community college setting. Community colleges serve an important role in promoting civic and economic development of the local community and its residents. Despite the value placed on civic engagement, the literature lacks a clear vision of the civic engagement learning outcome, offers scant research on student development models of civic-related capacities, and provides insufficient empirical evidence based on a growing community college student population.

History of Research Topic

“Never before has citizenship meant so much to the people of this Nation as it does in the critical days that lie ahead” (National Education Association [NEA], 1946). More than 60 years later, these words are poignantly relevant, as the United States recently held a historic presidential election and is in the midst of war and economic crises. President Harry Truman wrote these timeless sentiments in a welcome letter to the president of the NEA on the occasion of the first National Conference on Citizenship, sponsored by the NEA in 1946. Leaders from all levels of education, government, labor, civic organizations, and the religious community convened to define citizenship qualities and discuss the necessity of promoting citizenship in the

post-World War II era. The civic engagement values and behaviors advocated today strongly resemble those qualities espoused at the 1946 conference.

Since then, the U.S. and the world have undergone tremendous political, social, and economic change, yet the need for an informed and active citizenry has never waned; in fact, it may be needed now more than ever, in our increasingly complex global community (Hurtado et al., 2002). Unfortunately, concerns have grown about the failure of educational institutions (i.e., K-12 and postsecondary) to produce an involved citizenry:

If there is a crisis in the United States today, it is less that test scores have declined than it is that we have failed to provide the education for citizenship that is still the most significant responsibility of the nation's schools and colleges. (Newman, 1985, p. 31)

Newman argues that civic learning should be *the* primary goal of higher education.

Because preparation of individuals for participation in a democratic society has been considered a primary goal of higher education (Bellah et al., 1992; Colby et al., 2007; Ehrlich, 2000; Morse et al., 2005; Newman, 1985; Pascarella et al., 1986, 1988; Smart & McLaughlin, 1985), it is timely to document evidence of the long held belief that college promotes civic engagement (Pascarella et al., 1988). The examination of civic engagement has focused on student values and behaviors shaped by a variety of influences and college experiences. Many of the relevant reports, opinion papers, and conference proceedings related to citizenship in the 1970s centered on political socialization of students, morals, ethics, and social responsibility, with a focus on community-based education and urban reform. Curricular efforts to foster liberally educated citizens were predominant in the 1980s and 1990s, particularly in political science, geography, environmental education, teacher education, and the humanities. The role of college professors, particularly those in the political sciences, to educate future citizens to understand and participate in a democratic society, was a recurring research theme.

Simultaneously, research was conducted on college student political beliefs and behaviors.

Community service and service learning research appeared in the mid-1980s. In the early twenty-first century, research on civic and social responsibility has gained national attention.

As mentioned previously, in the 1980s and 1990s, researchers documented a decline in civic participation, particularly voting behavior, of the college-educated population—the very group that society expects to be more engaged. Terenzini (1994) eloquently expressed the concern of low civic participation levels and the role of higher education to counteract this problem.

If we are to remain a civilized and civil society, if we are to avoid complete emersion in self-interest and tolerance for only those who share our values and interests, if we are to avoid a future America divided along racial and economic lines, then we must take steps to ensure that our educational programs promote a sense of civic and community responsibility and participation. (Terenzini, p. 21)

This concern has not diminished in the twenty-first century. Beaumont, Colby, Ehrlich, and Torney-Purta (2006) and others (AAC&U, 2009; Caputo, 2005; Ehrlich, 2000; Miles & Wilson, 2004; Morse et al., 2005; Schneider, 2006; Vaz, 2005; Wabash National Study of Liberal Arts Education, 2008) affirm that civic engagement, stemming from the goals and aims of higher education, is an important educational outcome. Yet challenges of achieving these goals still remain. Clearly there are many that place a value on civic engagement outcomes, yet the civic engagement construct is unclear. Differences exist in how civic engagement is defined, understood, and used in the higher education literature (Einfeld & Collins, 2008; Kirlin, 2005; Rowan-Kenyon et al., 2008). This lack of clarity presents a challenge to the higher education community's efforts to foster and assess college student civic engagement.

The remainder of the literature review will document that civic engagement has been assessed before, during, and after college. However, the concept of civic engagement and its associated skills are difficult to assess across the extant higher education research literature. It

becomes increasingly difficult to focus our collective efforts to achieve the goals and aims of society. It is even more challenging to promote civic engagement of community college students when little is known about community college student civic engagement.

Community College Student Civic Engagement

Few studies have focused on civic engagement of community college students. In Pascarella and Terenzini's (2005) seminal work in analyzing thousands of studies on college students, including research on civic values and attitudes, the civic values of *community* college students are not discussed. However, several recent studies of community college students focus on the relationship between community service or service learning and civic engagement (Haines, 2002; Henderson, 2007; Hughes, 2002; Prentice, 2007).

As demonstrated previously, community colleges tend to have missions related to civic engagement of the institution and its students. Almost half of community colleges offer service learning opportunities for students (Phinney, Schoen, & Hause, 2002). Therefore, it is not surprising that most of the community college student civic engagement research is conducted on the impact of service learning on civic engagement attitudes, values, and behaviors (Haines, 2002; Henderson, 2007; Hodge, Lewis, Kramer, & Hughes, 2001; Hughes, 2002; Prentice, 2007).

Several researchers have reported mixed results on the relationship between service learning and civic values for community college students. Haines (2002) compared the civic attitudes of community college students enrolled in an English course with a service learning component, with the civic attitudes of students who were enrolled in an English course without a service learning component. The author found no differences between students' attitudes about the importance of civic engagement. In fact, students who enrolled in the course section that did not include service learning reported higher levels of pre-course community service and voting

behaviors (Haines). Henderson (2007) suggests that if Haines' civic attitudes survey was administered in a pre- and post-survey format, the study may have yielded additional information about the impact of the service learning experience on civic attitudes of community college students.

Both Hughes (2002) and Henderson (2007) confirmed that the levels of community college student social awareness and desire to "make a difference" increased as a result of service learning experiences. In Henderson's (2007) examination of the relationship between participation in service learning and development of civic responsibility at a single institution, the author found that students who enrolled in courses with service learning components were more likely to have prior service learning experience. Students who completed the course with the service learning component reported higher levels of civic consciousness than those students who completed the course without the service learning component (Henderson, 2007).

Prentice (2007) examined the impact of service learning using Westheimer and Kahne's (2004) citizenship types that range from personally responsible citizen, participatory citizen, to justice-oriented citizen. Students who enrolled in two or more service learning courses had significantly higher levels of participatory and justice-oriented citizenship beliefs than students who did not enroll in such courses. However, Prentice found that the types of citizenship demonstrated were not correlated with service learning experiences, as expected. In other words, increasing the number of service learning courses that a student had completed did not relate to a similar increase in the depth or complexity of citizenship behaviors or attitudes. These results may also be affected by student demographics, other pre-course experiences, and the beliefs and instructional strategies of the faculty. Even with the mixed results, these studies confirm the value of service learning in the development of community college student civic engagement.

Unlike other studies in which civic engagement values and behaviors are measured, Hodge et al. (2001) limited their study to volunteerism and service learning as a tool to increase retention and satisfaction, not to promote civic engagement. However, this study generally maintains the value of civic engagement as a desired educational outcome of community college programs, as supported by the 21st Century Learning Outcomes Project (Miles & Wilson, 2004). Sixteen community colleges defined, developed, implemented, and assessed crucial outcomes of workforce education and transfer preparation programs for success in a knowledge-based economy. The participating colleges identified community skills, similar to civic engagement and citizenship, as one of the eight overarching learning outcomes necessary for success in a knowledge-based economy.

In another study, Persell and Wenglinsky (2004) examined the impact of institutional type on civic engagement. Persell and Wenglinsky examined civic engagement outcomes by comparing two specific institutional types, for-profit vocational schools and public community colleges. Persell and Wenglinsky hypothesize that students at for-profit vocational schools exhibit less civic engagement than vocational graduates of public community colleges. This longitudinal study focused on civic engagement of community college students, although it specifically examined vocational students, not the associate degree student population. They found that graduates of proprietary vocational institutions are less likely to exhibit civic engagement behaviors, such as voting habits, political campaigning, volunteerism, and community action. The authors' contention that disadvantaged students may tend to enroll in institutional types that are less supportive of civic engagement demands further study.

In a comprehensive longitudinal study of entering first year students in the 1960s, Alexander Astin (1978) found a "between-colleges" effect on students' likelihood to participate

in student government during college, based upon institutional type. Community college students were less likely to participate in student government than students at small four-year colleges, a result consistent with the author's finding that students who live off-campus are less likely to get involved in student government.

Regardless of Alexander Astin's (1978) conclusion of the impact of institutional type on one form of civic behavior, Pascarella et al. (1986) did not find any significant relationship between the type of institution in which students initially enrolled and civic values reported nine years after entering college. Although this study was inclusive of community college student data, the research design did not include precollege experiences as a factor. The authors did, however, conclude that educational attainment is positively related to postcollege civic values, and much of this difference was attributable to entering college student civic values. In a subsequent study of college student civic values, Pascarella et al. (1988) included precollege social accomplishments and precollege civic values as part of the analyses, but excluded community college students from the data analysis.

Although the previous studies emphasize the importance of examining entering college civic values and the impact of service learning during college, they highlight a gap in the research literature on the impact of precollege experiences on entering community college student civic engagement. Most of the research is conducted on the four-year college and university student population. Studies of community college student civic engagement are predominately conducted on the impact of service learning or community service during college. This research limits understanding of civic-related capacities to a narrow group of civic engagement activities. These studies confirm the association of service learning with civic engagement, although students' self-selection of service learning courses may affect the results.

The previous studies of civic engagement fail to include precollege experiences of community college students.

The Influence of High School and Precollege Experiences on Civic Engagement

High school and precollege experiences can act as socialization agents and influence a student's worldview and belief system (Chang, 2000; Greene & Kamimura, 2003; Hurtado et al., 2002; Milem & Umbach, 2003) and civic knowledge, values, intentions, and behaviors (McKee-Culpepper, 2007). Earlier studies have attempted to uncover precollege beliefs and experiences, to assess how much growth in civic engagement students experience after entering college (A. W. Astin & Sax, 1998; Cress, Astin, H., Zimmerman-Oster, & Burkhardt, 2001; Greene & Kamimura, 2003; Gurin et al., 2002; Herrmann, 2005; Johnson & Lollar, 2002; Milem & Umbach, 2003; Pascarella et al., 1986, 1988; Rhee & Dey, 1996; Rowan-Kenyon et al., 2008; Vogelgesang, 2001). These studies highlight the importance of precollege beliefs on socio-political viewpoints (Chang, 2000), social awareness (Greene & Kamimura, 2003), expectations to be involved in diversity initiatives (Milem & Umbach, 2003), and expectations of civic engagement during college (McKee-Culpepper, 2007). Greene and Kamimura suggest that the study of precollege experiences can "identify pre-college activities/programs that contribute to social awareness development prior to entering college" (p. 17).

Pascarella et al. (1986) found that precollege civic values were strongly related to change in civic values between college entry and several years after college. However, this relationship could be attributed to student self-selection. That is, students who tend to enroll in and complete at least a bachelor's degree may already possess higher levels of civic engagement values than those who do not enroll in a postsecondary institution or complete a bachelor's degree.

In a unique study of precollege confidence levels of university residence hall students, Rowan-Kenyon et al. (2008) found that students' precollege level of confidence in their

cognitive skills, as measured by students' confidence in their abilities to master college-level coursework, openness to new ideas, and abilities to analyze and apply course content, was negatively related to college students' sense of civic engagement. However, students' precollege levels of confidence in their psychosocial skills, as measured by confidence in their ability to contribute to their community, develop personal values, and work with others, and the level of importance students placed on cocurricular and community service activities, were positively related to college students' sense of civic engagement. These findings may suggest the level of confidence can bolster or undermine belief in the importance of getting involved and making positive change in the community.

To understand entering college student civic engagement, it is important to assess precollege values, beliefs, and experiences. The next section includes a review of the research literature of high school curricular experiences; high school cocurricular experiences, such as leadership activities and community service; precollege civic engagement activities; and precollege interactions with peer groups.

High School Curricular Experiences

This study seeks to understand the relationship of high school curricular experiences and community college student civic engagement. Those high school experiences include high school curricular experiences, such as enrollment in history or American government coursework and service learning experiences. “[M]iddle and high schools have historically taken responsibility for civic education, primarily by teaching students about American history and government” (Colby et al., 2007), yet there is evidence that schools are not adequately preparing students with civic knowledge (California Campaign for the Civic Mission of Schools, 2005; Lutkus, Weiss, Campbell, Mazzeo, & Lazer, 1999). Recent studies (California Campaign for the Civic Mission of Schools, 2005; Niemi & Junn, 1998; Zukin, Keeter, Andolina, Jenkins, &

Carpini, 2006), however, have indicated that the breadth of course content, the pedagogical approaches, and the opportunity to examine issues from multiple perspectives have a more significant impact on students' civic engagement outcomes than enrollment in a government course (Colby et al., 2007). This study will include an examination of the relationship between enrollment in history/government courses as a high school curricular experience and entering community college student civic engagement.

In addition to history and government courses, diversity-related courses have been examined for their impact on civic engagement learning outcomes. Hurtado et al. (2002) found that few students had many opportunities to enroll in diversity courses during high school, such as ethnic studies and women's studies courses. Yet the authors found that these curricular experiences were positively related to the ability to take multiple perspectives, view conflict as part of democracy, and believe in the importance of social action engagement. However, Hurtado et al. conclude that "the effect of high school multicultural education appears to be indirect . . . [I]t is not simply taking such courses, but the nature of the interaction in these courses that accounts for some of the most desirable civic outcomes" (p. 183). This conclusion echoes the findings of previous studies that examined high school civic education courses. This may suggest that the content of the course is not as influential on civic engagement as the manner in which the course is taught and the interactions in the classroom. Unlike Hurtado et al., Johnson and Lollar (2002) found that student enrollment in ethnic studies courses in high school did not have a significant effect on students' value in promoting racial understanding. These studies highlight conflicting results that question the influences of curricular content on different aspects of civic engagement values, beliefs, and attitudes. In contrast, these studies do

suggest that student interaction within the classroom is important; therefore an examination of precollege cocurricular interactions and activities is warranted.

High School Cocurricular Experiences

In furthering refining knowledge of the impact of high school experiences, Hurtado et al. (2002) examined the influence of precollege cocurricular experiences on entering college students' civic engagement outcomes. The authors found that few students had many opportunities to participate in diversity programs during high school. Yet high school cocurricular engagement activities, such as involvement in student clubs, organized sports, community service, and diversity programs, were positively related to the ability to take multiple perspectives, view conflict as part of democracy, and believe in the importance of social action engagement. In addition, Johnson and Lollar (2002) found that students' attendance at high school diversity programming activities is positively associated with a desire to promote racial understanding. In fact, the authors found that attendance at diversity-related events in either high school or college is associated with students' belief in the importance of promoting racial understanding.

Student participation in cocurricular activities influences civic engagement. To better understand this relationship, types of cocurricular activities, such as leadership experiences, have been examined. It is useful to investigate whether the positive effects of precollege cocurricular activities may be enhanced by assuming leadership roles.

To understand the impact of high school experiences on civic engagement values, beliefs, and behaviors, Pascarella et al. (1988) examined high school "social accomplishments," such as serving as president of a high school student organization and participating in a school play (p. 418). The authors found that high school social accomplishments or leadership roles had a significant conditional effect on college students' civic values, based on gender and race.

However, the impact of high school leadership roles was mediated by social leadership experiences in college. High school leadership roles may be beneficial in enhancing students' opportunities to interact with other students, including students of different racial, ethnic, and cultural backgrounds, and students who have different values, beliefs, and perspectives. Therefore, it is important to consider whether diverse precollege civic engagement and precollege interactions influence college student civic engagement.

Precollege Civic Engagement Experiences

Much of the research on precollege experiences focuses on cocurricular involvement of a general, non-civic nature, such as participation in sports and plays. However, students also participate in civic-related experiences during high school, such as student elections, volunteer efforts, and more. In a study of the impact of precollege experiences on expected civic engagement, McKee-Culpepper (2007) discussed a precollege “formal civic experience” construct—participation in student clubs, community service as part of a class, volunteering, voting in student elections, and participating in demonstrations. The author found that formal precollege civic experiences were significantly associated with students' expected civic engagement in college. Expected civic engagement is students' intentions to participate in student government, clubs, volunteer activities, and student demonstrations in college. However, there was insufficient evidence to conclude that informal experiences, such as discussing politics or religion, and socializing with diverse peers, were associated with expected civic engagement in college. One aspect of precollege civic experiences present in the literature is community service. Precollege community service is another experience that appears to have mixed effects on college student civic engagement.

As demonstrated earlier, participation in volunteer work is associated with students' social activism commitment, sense of civic engagement (A. W. Astin, 1993; A. W. Astin & Sax,

1998; A. W. Astin, Vogelgesang, Ikeda, & Yee, 2000), and other civic engagement outcomes (Hurtado et al., 2002; Oesterle, Johnson, & Mortimer, 2004). Alexander Astin, Sax, and Avalos (1999) found that volunteering in high school was strongly associated with the amount of community service performed in the first several years *after* leaving college. Other studies of precollege community service (A. W. Astin, 1996; A. W. Astin, et al., 2006; Sax, 2004) found that “while three-fourths of entering college freshmen were volunteers during high school, only about half of the new freshmen end up participating during college” (A. W. Astin, 1996, p. 16). The decline in community service during college could be associated with the establishment of a community service requirement in some high schools. Requiring community service may not have a significant positive effect, compared to encouraging optional community service (Marks & Jones, 2004; Niemi, Hepburn, & Chapman, 2000). In a study of community college and four-year college students, Marks and Jones found that students who were more likely to drop community service in college included those students who attended high schools that required community service. Furthermore, the students who dropped community service activities after enrolling in college had stronger values toward the importance of helping others and correcting social inequities, but chose not to participate in community service.

Regardless of the mixed effects of requiring community service, participating in community service in high school remains a major predictor of performing community service during the college years (A. W. Astin & Sax, 1998; Vogelgesang & Astin, 2000). Volunteering has a positive influence on civic engagement outcomes, although the college experience or other factors may serve as mediating effects. These studies highlight the importance of understanding the precollege experiences and values of entering college students in order to effectively promote civic engagement during and after college.

Precollege Interactions with Diverse Peers

In a study of college students from ten universities, Hurtado et al. (2002) examined precollege influences on civic engagement outcomes of entering students. Precollege influence factors included precollege environment – racial composition of high school, neighborhood, and friends, and precollege interactions with peers. As demonstrated previously, Hurtado et al. found that few college students had many opportunities to interact with diverse peers prior to entering college. Yet the authors found that both precollege interactions with diverse peers and precollege interactions with peers from similar racial and ethnic groups were related to the belief that conflict enhances democracy. Furthermore, interaction with diverse peers was found to be an important influence on students' belief in the importance of social action engagement and the ability to see multiple perspectives. The authors conclude that “the more students interact with peers both within and outside of their own racial/ethnic group the more likely their own views will be challenged, thereby broadening their understanding of a democratic society” (p. 182).

Johnson and Lollar (2002) found that the number of high school friends of different racial and ethnic backgrounds did not have a significant effect on college students' belief in the importance of promoting racial understanding. However, Milem and Umbach (2003) found that precollege exposure to diversity, measured by racial composition of high school, neighborhood and peers, was a positive predictor of entering college students' plans to participate in diversity-related activities. The effect was conditional, based on ethnicity, and was not a strong predictor for any ethnicity.

Precollege experiences, especially interactions with diverse peers, have a positive influence on civic engagement outcomes and intentions to participate in diversity-related activities. However, these experiences do not have a similar positive influence on students' belief in the importance of promoting racial understanding. Hurtado et al.'s (2002) study highlights the

importance of precollege interactions with diverse peers on civic engagement values, beliefs, and dispositions during college. Despite the large and diverse community college population, no empirical studies have been published at this time on the relationship between interaction with diverse peers and entering community college student civic engagement. Expanding studies on the influence of interactions with diverse peers would provide community colleges with meaningful information to shape the community college experience and promote civic engagement of community college students.

Summary

The research reflects that civic engagement during college is influenced by precollege experiences, particularly values, dispositions, and behaviors (Greene & Kamimura, 2003; Hurtado et al., 2002; Pascarella et al., 1986; Rhee & Dey, 1996). In addition, precollege values and dispositions, diverse interactions, and cocurricular activities are positively related to aspects of civic engagement in new college students. These studies establish the influence of precollege dispositions on civic engagement outcomes and support the need for research like Hurtado et al. in examining how precollege values and dispositions influence college student civic engagement outcomes within college. In addition, precollege interactions with diverse peers and peers of similar racial and ethnic groups positively affect entering college student civic engagement. The power of the peer group highlights the importance of the value of interactions with a diverse student body in relationship to civic engagement outcomes.

Thus far, the literature review has discussed the history of the research topic, civic engagement of community college students, and the influence of high school and precollege experiences on college student civic engagement. The next section will include a discussion of political orientation and college student civic engagement.

Political Orientation and Civic Engagement

There is a lack of research literature in higher education on the relationship between college students' political orientation and civic engagement. However, female college students indicated a more liberal political orientation, compared to their male peers (A. W. Astin, 1993; Sax & Harper, 2007). In addition, African American students were also more likely to report a liberal political orientation. After accounting for entering college student political orientation, Alexander Astin found that during college, women and African Americans tend to become more liberal and men tend to become more conservative. According to Astin, becoming more liberal is associated with social activism, civic participation, and diversity-related activities. These activities include participation in demonstrations, discussion of racial or ethnic issues with other students, and attendance at diversity workshops. Students' political orientation is also influenced by students' peers and faculty (A. W. Astin, 1993). Further research in this area would highlight the influence of precollege political orientation, precollege experiences, and students' civic values and intent to become involved in civic life.

Multiple Definitions of Civic Engagement

Researchers have used various conceptual definitions to discuss civic engagement. Civic engagement, civic responsibility, civic competency, civic agency, civic participation, democratic outcomes, and citizenship are some of the terms employed interchangeably. Not only do researchers use different terminology, they do not operationally define civic engagement with the same attitudes and behaviors. Some research studies consider only two civic engagement behaviors, community service and voting, as the primary indicators of civic engagement.

Other researchers have expanded the concept of civic engagement to include dispositions toward the greater good; increased understanding of the broader community; involvement in social, cultural, and political life; altruistic actions; ability to interact with a diverse community;

and attempts to shape public policy (Caputo, 2005). Civic engagement has also been defined as “active participation in public issues in an informed and constructive manner, with a focus on the common good” (Gottlieb & Robinson, 2003, as cited in Dresner & Blatner, 2005, p. 213).

Some authors distinguish civic participation from political participation where civic participation is considered neutral (Campbell, 2004, as cited in Theiss-Morse & Hibbing, 2005; Westheimer & Kahne, 2004). Westheimer and Kahne propose a continuum between a more benign or altruistic civic participation and a type of political participation that serves to advocate for or challenge the status quo. The authors propose three types of citizenship, ranging from individual duty, civic participation, to justice-oriented community change. Banks (2008) proposes four levels of citizenship: legal citizenship, minimal citizenship, active citizenship, and transformative citizenship. These citizenship levels reflect “increasingly deeper citizenship,” (p. 136) similar to Westheimer and Kahne. Other studies of college student civic engagement portray this continuum of values, beliefs, and attitudes, in an effort to reflect more complex goals of civic engagement (Huddy & Khatib, 2007; Prentice, 2007).

This section has described the challenge of defining civic engagement despite its importance as a student learning outcome. Differences exist in how civic engagement is defined, understood, and used in the higher education literature (Einfeld & Collins, 2008; Kirlin, 2005; Rowan-Kenyon et al., 2008). The concept of civic engagement and its associated skills are difficult to assess across the extant higher education research literature. Furthermore, the disparity and inconsistent nature of defining civic engagement can pose challenges to higher education institutions that attempt to promote and assess civic engagement outcomes of college students. In this context, it becomes increasingly difficult to focus collective efforts to achieve those goals and aims of society.

Theoretical Framework

As demonstrated previously, concern about the decline in political participation and civic engagement as a whole has spurred the development of many projects funded by national organizations and federal grants to address this issue. In an effort to better understand the effects of college and substantiate society's expectations of college outcomes, researchers, practitioners, and policymakers are studying effective ways to document and promote the impact of college on civic engagement outcomes.

This study will provide initial insights in how community colleges can prepare diverse, non-traditional college students, who comprise a large proportion of the United States college student population, to more effectively engage as active citizens. This study relies on the Multidimensional Developmental Model of Civic-Related Capacities proposed by Ponjuan and Crosby¹ to describe civic engagement in community college students across three domains: cognitive, intrapersonal, and interpersonal. This developmental model is adapted from the Developmental Model of Intercultural Maturity proposed by King and Baxter Magolda (2005).

The Multidimensional Developmental Model of Civic-Related Capacities provides a conceptual model of examining civic engagement in two ways: a trajectory of the complexity or depth of civic engagement and by developmental dimensions. The notion of a trajectory or continuum within civic engagement can be found in recent studies in civic engagement literature (Einfeld & Collins, 2008; Huddy & Khatib, 2007; Prentice, 2007; Westheimer & Kahne, 2004). Researchers have increasingly focused on deeper, more complex goals of civic engagement. In particular, community service and political involvement are viewed on a continuum from surface involvement (volunteering for a non-profit agency, charity work, voting, and campaigning) to

¹ Ponjuan, L., & Crosby, L. (2010). *Preparing students as engaged citizens: A developmental model of civic engagement*. Unpublished manuscript.

justice-oriented involvement (making substantive change in the community and advocating for disenfranchised groups), based upon Westheimer and Kahne's model (Einfeld & Collins, 2008; Prentice, 2007). Huddy and Khatib (2007) apply a similar continuum to types of patriotism. They examine whether an individual student is a loyal, obedient patriot or a critical patriot who will speak out about national issues and policies in order to improve the nation.

Most civic engagement studies include cognitive, intrapersonal, interpersonal, and/or behavioral aspects of civic engagement, although the research is not always categorized by these dimensions. There is, however, utility in understanding the learning outcome of civic engagement in such a holistic, developmental, and comprehensive manner (Colby et al., 2003; Ponjuan & Crosby²). Civic engagement is inclusive of knowledge, values, self-efficacy, skills, and behaviors. Typically, researchers examine political knowledge, perspective-taking, social and cultural awareness (cognitive); values, beliefs, and attitudes (affective or intrapersonal); and interactions (interpersonal). Self-reported behavioral measures of civic engagement, especially civic skills, are also more visible in the literature (Gurin et al., 2004; Kirlin, 2005; Lott, 2008; Moely, Mercer, Ilustre, Miron, & McFarland, 2002; Rowan-Kenyon et al., 2008). The ability to take perspectives of those with differing views is an example of a cognitive civic skill, based on diverse interactions and environment, that has become an integral part of civic engagement affective, cognitive, and behavioral studies (Gurin, et al., 2002, 2004; Hurtado, 2005; Hurtado et al., 2002; Johnson & Lollar, 2002; Kirlin, 2005; Moely, Mercer, et al., 2002; Simons & Cleary, 2006). Effective, engaged citizenship implies that individuals can obtain and understand information; possess personal values and beliefs characterized by a community orientation;

² Ponjuan, L. & Crosby, L. (2009, June). *College student civic engagement? Deconstructing the concepts of civic engagement in the higher education research literature*. Paper presented at the meeting of the Association of Institutional Research, Atlanta, GA.

possess a willingness to get involved and a belief that one's actions can make a difference; possess skills and knowledge to effectively promote a better community; and demonstrate civic engagement actions. Individuals may be at varying levels of each of these civic-related capacities. For example, individuals can possess civic values and attitudes but lack leadership or communication skills to effectively engage in a community issue.

Until recently, the literature did not provide a developmental model of college student civic engagement to describe how students develop along the dimensions of this critical learning outcome. However, the Multidimensional Developmental Model of Civic-Related Capacities, proposed by Ponjuan and Crosby³, provides a preliminary model to better understand college students' development process of the civic engagement learning outcome across the three developmental domains: cognitive, interpersonal, and intrapersonal. Figure 2-1 displays the developmental model, and Table 2-1 presents the three dimensional developmental trajectory.

It is important to note that the Three Dimensional Developmental Trajectory of Civic-related Capacities is currently undergoing validation through other research projects. As mentioned previously, this model is adapted from the Developmental Model of Intercultural Maturity proposed by King and Baxter Magolda (2005). Furthermore, Ponjuan and Crosby⁴ use different terminology than King and Baxter Magolda to label the three levels within each developmental domain. Instead of using initial, intermediate, and mature levels of civic-related capacities, the authors describe early, transitional, and advanced levels of the cognitive, intrapersonal, and interpersonal domains of civic-related capacities.

³ Ponjuan, L., & Crosby, L. (2010). *Preparing students as engaged citizens: A developmental model of civic engagement*. Unpublished manuscript.

⁴ Ponjuan, L. & Crosby, L. (2009, June). *College student civic engagement? Deconstructing the concepts of civic engagement in the higher education research literature*. Paper presented at the meeting of the Association of Institutional Research, Atlanta, GA.

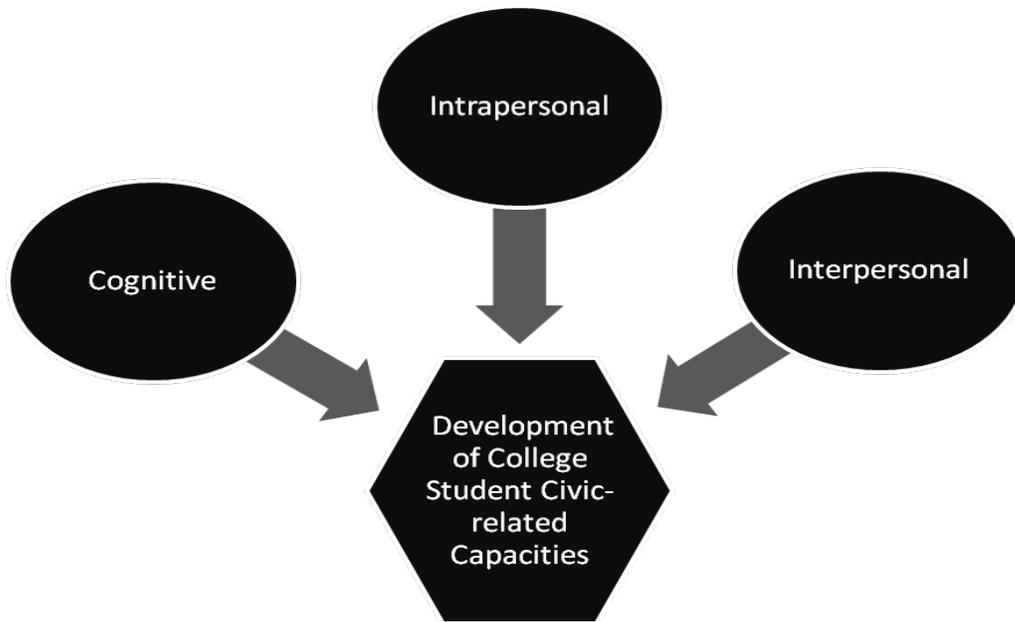


Figure 2-1. Multidimensional Developmental Model of Civic-Related Capacities (Ponjuan & Crosby⁵).

Cognitive Domain of Civic-Related Capacities

The cognitive domain “focuses on how one constructs one’s view and creates a meaning-making system based on how one understands knowledge and how it is gained” (King & Baxter Magolda, 2005, p. 574). Cognitive aspects of civic engagement include cultural awareness, understanding political and civic systems, critical thinking skills, and the ability to take multiple perspectives. In the Three Dimensional Developmental Trajectory of Civic-related Capacities (Ponjuan & Crosby⁶), the early level of cognitive development of civic-related capacities is characteristic of dualistic thinking and lack of awareness of diverse perspectives. The transitional level of cognitive development of civic-related capacities describes individuals who are beginning to understand civic issues and diverse perspectives that can inform one’s

⁵ Ponjuan, L., & Crosby, L. (2010). *Preparing students as engaged citizens: A developmental model of civic engagement*. Unpublished manuscript.

⁶ Ponjuan, L. & Crosby, L. (2009, June). *College student civic engagement? Deconstructing the concepts of civic engagement in the higher education research literature*. Paper presented at the meeting of the Association of Institutional Research, Atlanta, GA.

understanding of civic issues. The advanced level, the desired level of civic-related capacities, is exhibited by a complex grasp of civic issues and diverse views (Ponjuan & Crosby).

Table 2-1. Three Dimensional Developmental Trajectory of Civic-Related Capacities (Ponjuan & Crosby⁷, adapted model from King & Baxter Magolda, 2005)

Develop-mental Domain	Early Civic-Related Capacities	Transitional Civic-Related Capacities	Advanced Civic-Related Capacities
Cognitive	Unequivocal thinking about civic issues and an unawareness of multiple perspectives (Beaumont et al., 2006; Bernstein, A., 2005; Blackhurst & Foster, 2003; Johnson & Lollar, 2002)	Evolving understanding of civic issues and an emerging awareness of multiple perspectives (Einfeld & Collins, 2008; Hunter & Brisbin, 2000)	A cogent understanding of civic issues and multiple perspectives (Anderson et al., 2003; Bernstein, J. L., 2008; Bogard et al., 2008; Giles & Eyler, 1994; Gurin et al., 2002)
Intra-personal	Limited understanding of own civic beliefs, values, and agency (Malaney & Berger, 2005; Myers-Lipton, 1998; Parker-Gwin & Mabry, 1998)	Discernment of their own civic beliefs, values, and agency (Einfeld & Collins, 2008; Eklund-Leen et al., 1997; Giles & Eyler, 1994; Spiezio et al., 2005)	A formed civic identity and ability to articulate civic beliefs, values, and agency (Anderson et al., 2003; Angeliq et al., 2002; Bogard et al., 2008; Einfeld & Collins, 2008; Malaney & Berger, 2005)
Inter-personal	Minimal exposure to and interactions with diverse others. Lack of or hesitant engagement in civic affairs (Persell & Wenglinsky, 2004; Singer, King, Green, & Barr, 2002)	Openness to interaction with diverse others and infrequent and casual engagement in civic affairs (Blackhurst & Foster, 2003; Klofstad, 2007; Lott, 2008)	Meaningful interactions with diverse others and active participation in civic affairs (Bernstein, J. L., 2008; Hurtado et al., 2002; Singer et al., 2002; Spiezio, Baker, & Boland, 2005)

Cognitive civic-related capacities “reflect a student’s capacity to make sense of the world, recognize multiple perspectives, and apply critical thinking and problem solving skills to community, national or global issues” (Ponjuan & Crosby⁷, p. 14). The ability to take multiple perspectives and think critically contributes to the capacity to make meaning of civic issues (Anderson, Levis-Fitzgerald, & Rhoads, 2003; Einfeld & Collins, 2008; Parker-Gwin, & Mabry, 1998). Furthermore, a sense of civic identity and belief in civic agency may be supported by

⁷ Ponjuan, L., & Crosby, L. (2010). *Preparing students as engaged citizens: A developmental model of civic engagement*. Unpublished manuscript.

one's level of understanding and awareness of civic affairs. The ability to understand local, state, and federal policies and processes is a vital component of cognitive capacity-building (Beaumont et. al, 2006; Bernstein, J. L., 2008; Bernstein, J. L. & Meizlish, 2003; Bogard, Sheinheit, & Clarke, 2008; Carr, 2007). An individual with advanced civic-related capacities can be described as "a civically competent citizen [who] can make sense of the vast amounts of political information out there" (Bernstein, J. L., 2008, pp. 5-6). Such capacity can enable an individual to get involved and make beneficial improvements to the community; however, it must coincide with an ability to find and assess the reliability, credibility, and relevancy of information. Such "civic literacy" (Bogard et al., 2008) enhances effective participation in order to influence the political/civic arena or government institutions.

Intrapersonal Domain of Civic-Related Capacities

The intrapersonal domain describes an individual's development of identity, including values and beliefs that may be influenced by individual characteristics, such as ethnicity, and socioeconomic status (Chickering, 1969; Chickering & Reisser, 1993). This domain "focuses on how one understands one's own beliefs, values, and sense of self, and uses these to guide choices and behaviors" (King & Baxter Magolda, 2005, p. 574). In the civic-related capacities model, the early level of intrapersonal development of civic-related capacities is marked by a lack of awareness and understanding of one's own civic beliefs and values. Individuals at this level do not believe that they can make a difference and thus do not exhibit a willingness to take action. The transitional level of the intrapersonal domain is characterized by an emerging formation and acknowledgement of civic values and beliefs, with some efficacy in the ability to make a difference in the community. In the advanced level, the desired level of the civic-related capacities outcome, individuals possess a sense of civic responsibility, in which beliefs, values,

and agency foster an integrated civic identity. Individuals at this level would likely exhibit congruence between values, intentions, and actions (Ponjuan & Crosby⁸).

Intrapersonal civic-related capacities include “a formed civic identity and ability to articulate civic beliefs, values, and agency” (Ponjuan & Crosby⁹). Civic values, commitments, responsibilities, and efficacy contribute to a formed civic identity. Vital to civic agency and social self-efficacy are individuals’ beliefs that they are knowledgeable and competent to make a difference (Angelique, Reischl, & Davidson, 2002; Beaumont et al., 2006; Bernstein, J. L., 2008; Hunter & Brisbin, 2000; Lott, 2008; Malaney & Berger, 2005; McKinney & Chattopadhyay, 2007; Spiezio et al., 2005). Most of these studies are focused on political knowledge capabilities (Angelique et al., 2002; Bernstein, J. L., 2008; McKinney & Chattopadhyay, 2007). Referred to as internal political efficacy in the literature, this type of efficacy is defined as “individual’s self-perceptions that they are capable of understanding politics and competent enough to participate in political acts such as voting” (Angelique et al., 2002, p. 824). The extant research literature pays scant attention to the broader concept of civic self-efficacy in relationship to individuals’ self-perceptions about their knowledge level and competence to get involved in the community and solve community problems.

Individuals believe that community problems are their problems (Peters & Stearns, 2003). In order for individuals to act upon their sense of civic responsibility, civic agency and efficacy become important (Colby et al., 2003). Civic values, commitments, responsibilities, and agency contribute to a civic identity. Ponjuan and Crosby⁹ describe the advanced level of the intrapersonal domain of civic-related capacities as the development of a formed civic identity.

⁸ Ponjuan, L. & Crosby, L. (2009, June). *College student civic engagement? Deconstructing the concepts of civic engagement in the higher education research literature*. Paper presented at the meeting of the Association of Institutional Research, Atlanta, GA.

⁹ Ibid.

Civic identity “brings with it a sense of agency and social responsibility for sustaining one’s community. Those who do not develop a civic identity while young are at risk for being non-voters and non-joiners of community organizations as adults” (Bogard et al., 2008, pp. 541-542). This reinforces the connection between cognitive, intrapersonal, and interpersonal domains of civic-related capacities.

Interpersonal Domain of Civic-Related Capacities

The interpersonal domain includes the ability to become autonomous yet interdependent by establishing an internal locus of control, solving problems, nurturing one’s own autonomy, and respecting the autonomy of others, while immersed in a social context (Chickering, 1969; Chickering & Reisser, 1993). The interpersonal domain “focuses on how one views oneself in relationship to and with other people (their views, values, behaviors, etc.) and makes choices in social situations” (King & Baxter Magolda, 2005, p. 574). Interpersonal aspects of civic engagement include expressing one’s political voice, getting involved in political and civic groups, and working with others to improve one’s community. In the civic-related capacities model, the early level of interpersonal development describes an individual with little experience interacting with individuals who are different, in terms of values, ideas, culture, ethnicity, and other characteristics. This individual may also feel uncomfortable getting involved in the civic life of the community. The transitional level is characterized by haphazard, irregular, or superficial involvement in the civic life of the community. The individual, however, is willing to interact with diverse others. In the advanced level, the desired level of the civic-related capacities outcome, an individual develops significant relationships with individuals who are

different from self, and participates in a regular and meaningful way in civic life (Ponjuan & Crosby¹⁰).

The interpersonal dimension of civic-related capacities “entails participation in activities that seek to enhance the overall quality of society and its diverse constituents, not simply one’s own life, ... from basic political participation and charitable donations to membership in community organizations to the active pursuit of social justice” (Singer et al., 2002, pp. 536-537). The advanced level of interpersonal civic-related capacities highlights a distinction from casual and or impersonal actions, such as voting and signing petitions (Beaumont et al., 2006; Bernstein, J. L. & Meizlish, 2003; Blackhurst & Foster, 2003; Bogard et al., 2008; Hunter & Brisbin, 2000; Marullo, 1998; Nishishiba et al., 2005; Persell & Wenglinsky, 2004), to participating in public meetings (Ball, 2005; Beaumont et al., 2006; González, 2008; Hunter & Brisbin, 2000; Jensen & Hunt, 2007; Klofstad, 2007; Nishishiba et al., 2005; Persell & Wenglinsky, 2004; Zuniga, Williams, & Berger, 2005), and participating in demonstrations, boycotts, and marches (Angelique et al., 2002; Beaumont et al., 2006; Myers-Lipton, 1998; Nishishiba et al., 2005; Townsend, 1973). Apolitical participation in community service and volunteer activities form another avenue for individuals to demonstrate meaningful interactions in civic affairs (A. W. Astin & Sax, 1998; Ball, 2005; Blackhurst & Foster, 2003; Einfeld & Collins, 2008; González, 2008; Nishishiba et al., 2005; Persell & Wenglinsky, 2004; Rowan-Kenyon et al., 2008; Sax, 2004; Zuniga et al., 2005).

Summary of Chapter 2

This chapter provided an introduction to the community college student population, and the terminology and concepts utilized in the civic-related research literature. To better

¹⁰ Ibid.

understand how civic engagement has been studied in the research literature, a review of the history of civic engagement and community college student civic engagement was presented. The literature review highlighted themes in precollege curricular and cocurricular experiences that influence college student civic engagement. In addition, this chapter presented the theoretical framework of a multi-dimensional model of civic-related capacities that guides this study.

This study examines entering college student civic-related capacities in cognitive, intrapersonal, and interpersonal domains. The Multidimensional Developmental Model of Civic-Related Capacities, proposed by Ponjuan and Crosby¹¹, provides a preliminary model to better understand college students' development process of the civic engagement learning outcome across the three domains.

It is important to assess the influence of curricular and cocurricular experiences on college student civic engagement outcomes, since increased civic engagement is viewed as one of the primary societal benefits of higher education. Higher education institutions, including community colleges, are being called upon to promote the development of civic engagement of their college students. To demonstrate this value-added outcome of the college experience, it is necessary to understand the cognitive, intrapersonal, and interpersonal dimensions of civic-related capacities of entering community college students.

Precollege values and dispositions, diverse interactions, and cocurricular activities are related to college students' civic engagement values and dispositions. The relationship between the nature and frequency of precollege experiences and civic engagement outcomes merits further research to better understand entering college student civic engagement attitudes, skills,

¹¹ Ponjuan, L., & Crosby, L. (2010). *Preparing students as engaged citizens: A developmental model of civic engagement*. Unpublished manuscript.

and behaviors. Furthermore, the review of the literature has highlighted that not enough is known about civic-related capacities of community college students. Additional research will assist community colleges in designing curricular and cocurricular programs that effectively foster civic engagement outcomes of the entering community college student population.

The next chapter describes the methodology utilized in this study of community college student civic engagement. The chapter will present the data source and sample, research design, measures, and analytic method of this study of the influence of precollege experiences on civic-related capacities of entering community college students.

CHAPTER 3 METHODOLOGY

Introduction

The purpose of this chapter is to explain the methodology employed in this study of precollege experience effects on community college student civic-related capacities. This chapter includes a discussion of the following sections: (a) data source and sample; (b) bivariate descriptives of the sample; (c) research design; (d) instrumentation; (e) measures (i.e., dependent variables and independent variables); (f) analytic methods; and (g) study limitations. To conduct this study, I obtained student response data from an annual national survey instrument, which is described in this chapter. I will provide a description of the student sample and discuss the dependent and independent variables, including the factor scales developed from the survey items. I will also present the analytic methods selected and conclude this chapter with an explanation of the limitations of this study.

This study relies on the Multidimensional Developmental Model of Civic-Related Capacities proposed by Ponjuan and Crosby¹ to describe civic-related capacities in community college students across three domains: cognitive, intrapersonal, and interpersonal. This developmental model is adapted from the Developmental Model of Intercultural Maturity proposed by King and Baxter Magolda (2005).

The primary aim of this study is to investigate the civic-related capacities of community college students. Therefore, the guiding research question for this study is: What individual characteristics and precollege experiences are related to community college students' civic-related capacities? In conducting the research, the following hypotheses will be tested:

¹ Ponjuan, L., & Crosby, L. (2010). *Preparing students as engaged citizens: A developmental model of civic engagement*. Unpublished manuscript.

- a) There are no significant differences in civic-related capacities (cognitive, intrapersonal, or interpersonal), based on individual demographics (gender, ethnicity, and age).
- b) There are no significant differences in civic-related capacities (cognitive, intrapersonal, or interpersonal), based on individual characteristics (first-generation college student status, family income, and student's political orientation).
- c) There are no significant differences in civic-related capacities (cognitive, intrapersonal, or interpersonal), based on high school experiences (type of high school attended, average grade in high school, curricular experiences, and high school graduation requirement of community service).
- d) There are no significant differences in civic-related capacities (cognitive, intrapersonal, or interpersonal), based on precollege experiences (civic engagement and interactions with diverse peers).

Data Source

The Cooperative Institutional Research Program (CIRP) Higher Education Research Institute (HERI) seeks institutions each year to administer The Freshman Survey to entering college students. The Freshman Survey is administered during freshman orientation prior to the fall term or early in the fall term. This study uses data from administration of The Freshman Survey 2004 with a particular subset—community colleges. This study uses the 2004 survey administration year because it includes a diverse group of community colleges across the nation and provides a robust number of relevant survey items. The 2004 survey was administered by 26 two-year colleges: 16 public two-year colleges and 10 private two-year colleges. This particular HERI student dataset contained 7,745 freshman student records from the 26 participating institutions.

The HERI dataset of 7,745 freshman student records was examined for missing data. I conditioned the data based on the key dependent and independent variables to arrive at the final student sample. After this data conditioning, the sample is 5,644 freshman student records from the 26 participating institutions. Seventy-six percent of the sample is enrolled at public two-year colleges, and 24% of the sample is enrolled at private two-year colleges. Since this study

attempts to conduct a large-scale study of 26 participating two-year colleges, not a nationally representative study for generalizing about all two-year college students in the United States, the data will not be stratified and weighted, as HERI typically does for aggregate national norms reporting.

Data Sample

The survey was administered as a census survey to each first year student at participating institutions during orientation or early in the fall term of 2004. The sample consists of students from the 2004 freshman class at 26 two-year colleges who completed the Student Information Form of The Freshman Survey 2004. When the survey was administered in 2004 by the institutions participating in the Higher Education Research Institute (HERI) program, participants were informed that their participation was strictly voluntary, and that participants could skip any question. Each institution is required to provide participants with HERI's survey information sheet that explains the purpose and use of the survey data, the confidentiality guidelines, and the potential benefits and anticipated risks of survey participation. This study includes secondary data analysis on the freshmen data collected by HERI in 2004.

The descriptive statistics of independent variables will include the frequency of students by gender, age, ethnicity, geographic diversity, family income, first-generation college student status, students' political orientation, and high school experiences, such as type of high school attended and civic course taking patterns. Mean and standard deviation will include frequency of precollege civic engagement.

Students' Gender and Age Diversity

The sample population has a higher percentage of males and more traditional-age students than the U.S. community college student population, according to a 2008 National Center for Education Statistics report (Provasnik & Planty, 2008). The sample has 2,499 males (44.3%)

and 3,142 females (55.7%), compared to approximately 40% male and 60% female community college student population in the United States (Provasnik & Planty, 2008). The mean and median age of the respondents was 19 years old, which is 5 years less than the median age of the U.S. community college student population (Provasnik & Planty, 2008). Furthermore, only 7.2% (557) of the respondents were 30 years of age or older, compared to slightly more than one-third of community college students in the United States. I recoded the age range responses to reduce the ten response options to two response options, for dummy coding the variables for data analysis. A variety of distinctions are made in the literature to define adult or non-traditional students; however, in this study, the recoding was based on 150% of the length of time to complete a bachelor's degree, or six years, beyond age 18. Ninety-one percent of the sample is of traditional college age (24 years or younger), and 9% of the sample is of non-traditional age (25 years or older) (see Table 3-1).

Table 3-1. Students' age groups by traditional college-age categories (n = 5607)

Age	Frequency	Percent
24 years of age or younger (traditional age)	5105	91.0
25 years of age or older (non-traditional age)	502	9.0

Note. n reflects the number of students who completed this question.

Students' Ethnic Diversity

The sample includes more African-American, Hispanic, and American Indian/Alaskan Native students than typically found in the U.S. community college population, based on two recent National Center for Education Statistics reports (Horn & Nevill, 2006; Provasnik & Planty, 2008). The 2004 Freshman Survey participants were instructed to mark all ethnic backgrounds that applied. However, for the purposes of this study, the ethnicity responses have been recoded in a dichotomous variable. Ethnicity responses other than White/Caucasian have been recoded as students of color (see Table 3-2).

Table 3-2. Ethnicity (n = 5644)

Ethnicity	Frequency	Percent
White/Caucasian	3495	61.9
Students of Color	2149	38.1

Note. n reflects the number of students who completed this question.

Geographic Diversity

Although geographic diversity is not part of this study’s analysis, the information demonstrates that the respondents were from diverse locations. Almost 10% of the respondents are non-native English speakers. One and one-half percent of the sample indicated that they were not U.S. citizens, and 2.9% were permanent residents. Almost 76% of the sample indicated that the college is 50 miles or less from the student’s permanent home. Forty-one percent of the respondents are enrolled at institutions in the East, 7.2% in the Midwest, 29.3% in the South, and 22.3% in the West. The geographic representation of the home states of the participants is diverse. Students were from 47 states; Montana, North Dakota, and South Dakota were the only states not represented. Students from 13 states represented 91.2% of the sample. The following list is in order of highest to lowest frequency of the top 13 states, according to home states of the student respondents: New York, California, Virginia, Oklahoma, Louisiana, New Jersey, Pennsylvania, Illinois, Alabama, Tennessee, Arizona, Florida, and Minnesota.

Family Income

Almost 23% of the sample reported a total family income of less than \$20,000 per year, categorized as low-income in this study. Approximately 44% of the sample reported a total family income between \$20,000 - \$59,999 per year. Almost 33% of the sample reported that their family income was \$60,000 or more per year. The median income is the \$40,000 - \$49,999 range (see Table 3-3). Almost 48% percent of the respondents indicated that there is some chance or a very good chance that they will work full-time while attending college, and 81% will

get some type of job to help pay for college expenses. Approximately 10% of the sample reported that they are attending college part-time.

Table 3-3. Family income (n = 5644)

Family income	Frequency	Percent
Low (Less than \$20,000)	1287	22.8
Middle (\$20,000 - \$59,999)	2497	44.2
Upper middle (\$60,000 - \$99,999)	1209	21.4
High (\$100,000 or more)	651	11.5

Note. n reflects the number of students who completed this question.

First-Generation College Student Status

More than half of the sample includes students whose fathers did not attend postsecondary school or college, and almost half reported that their mothers did not attend postsecondary school or college. The sample includes 2,088 first-generation college students (37%), compared to 40.8% of the U.S. community college student population (Provasnik & Planty, 2008) (see Table 3-4). This percentage was calculated by including only those students with families where neither parent attended any postsecondary school or college. For purposes of dummy coding the variables for analysis, those who had at least one parent who attended postsecondary school or college were considered to be of “not first-generation college student status.” For those in which neither parent attended postsecondary school or college, the students were considered to be of “first-generation college student status.”

Table 3-4. First-generation college student status (n = 5644)

First-generation college student status	Frequency	Percent
Not first-generation college student	3556	63.0
First-generation college student	2088	37.0

Note. n reflects the number of students who completed this question.

Political Orientation

Almost 51% of the sample indicated that their political orientation was “middle-of-the-road.” The rest of the sample characterized themselves in the following manner: Far right 3.3%, Conservative 22.4%, Liberal 19.6%, and Far left 4.0%. For purposes of dummy coding the

variables for analysis, Far right and Conservative were combined, to equal 26% of the sample who responded to this question. Far Left and Liberal were combined, to equal 23.6% of the sample who responded to this question (see Table 3-5).

Table 3-5. Political orientation (n = 5444)

Political orientation	Frequency	Percent
Far right/Conservative	1447	25.6
Middle of road	2863	50.7
Far left/liberal	1134	23.6

Note. n reflects the number of students who completed this question.

High School Experiences

A large majority (87.6%) of the student sample attended public high school. Approximately 6% attended private religious/parochial high schools, and less than 2% each of the sample attended any one of the following types of high school: public charter, public magnet, private independent, and home school. For purposes of dummy coding the variables for analysis, those who attended public school, public charter schools, and public magnet schools were combined to become public, which is 90.3% (5095) of the sample. Those who attended private religious/parochial, private independent, or home school were combined to become private school/home school, which is almost 10% (549) of the sample (see Table 3-6).

Table 3-6. Type of high school attended (n = 5644)

Type of high school attended	Frequency	Percent
Public	5095	90.3
Private school/Home school	549	9.7

Note. n reflects the number of students who completed this question.

Fifty-five percent (3082) of the sample reported a B grade average in high school. Almost 20% reported an A grade average, and one quarter reported a C or D grade average in high school. Almost one-third of the student sample indicated that they had previously taken college credit courses at the same or another postsecondary institution.

This study also includes students' civics course taking patterns. Ninety-eight percent of the respondents indicated that they studied history/American government in high school. Less than 2% indicated that they did not study history/American government in high school (see Table 3-7.). Almost one quarter of the students indicated that their high school required students to conduct community service prior to graduation.

Table 3-7. High school curricular experience (Civics course taking patterns) (n = 5644)

Type of high school attended	Frequency	Percent
No civics course taking	66	1.2
Civics course taking	5578	98.0

Note. n reflects the number of students who completed this question.

As mentioned previously, the survey was administered to freshman students in the summer or early fall of 2004. Almost 68% of the respondents indicated that they had graduated from high school the same year. Almost 4% indicated that they earned a GED instead of a standard high school diploma, and 2% reported that they had not graduated from high school at the time that they completed the survey (see Table 3-8).

Table 3-8. Year of high school graduation (n = 5597)

Year of graduation	Frequency	Percent
2004	3776	67.5
2003	550	9.8
2002	233	4.2
2001 or earlier	728	13.0
GED	197	3.5
Didn't graduate	113	2.0

Note. n reflects the number of students who completed this question.

Precollege Experiences

Students in this sample were less likely to work on a local, state, or national political campaign than other civic engagement activities. Students reported higher frequencies of discussing politics and performing volunteer work than other civic engagement activities (see Table 3-9). In addition, almost two-thirds of the sample reported that they frequently socialized with someone of another racial or ethnic group during the past year. As shown in the table, a

mean score of 1.5 on the scale would indicate that students participated in specific types of precollege experiences on average more than not at all but less than occasionally. It is important to note that the HERI survey questions made a distinction between experiences during high school, including the last year of high school, and experiences during the previous year. Previous year refers to the year prior to completing the survey. As demonstrated in the previous table (see Table 3-8), the year prior to completing the survey may not have been the last year of high school, since some community college students do not enter college immediately after completing high school.

Table 3-9. Frequency of precollege civic engagement

Students' activity	N	Mean	Standard deviation
Participated in organized demonstrations	5569	1.54	.657
Performed volunteer work	5579	1.79	.681
Discussed politics	5571	1.80	.690
Voted in student election	5543	1.58	.688
Did community service as part of class	5580	1.46	.658
Worked on a local, state, or national political campaign	5572	1.08	.308

Scale: 1 = not at all; 2 = occasionally; 3 = frequently

Bivariate Descriptive Statistics

The following section provides a description of gender and ethnicity of the sample by three additional key independent variables: non-traditional age status, first-generation college student status, and student's political orientation. In this sample, women are more likely to come from a home in which neither parent attended postsecondary school or college, and are more likely to be older when they enter college themselves. As mentioned previously, the sample is predominately of traditional age, unlike the U.S. community college population. However, community college women (11.7%) are more likely to be non-traditional age compared to men (5.6%) in this sample (see Table 3-10.). Furthermore, community college women (40.4%) are more likely to be first-generation college students compared to men (32.8%) in this sample (see

Table 3-11). There is, however, similarity across genders: roughly 25% of men and women consider themselves Far right/Conservative, 50% reported that they are “middle-of-the-road,” and 25% indicated that they are Far left/Liberal (see Table 3-12).

Table 3-10. Frequency of students’ gender by traditional age status (n = 5604)

Gender	Traditional age		Non-traditional age	
	Count	Percent	Count	Percent
Males	2345	94.4	138	5.6
Females	2757	88.3	364	11.7

Note. n reflects the number of students who completed this question.

Table 3-11. Frequency of students’ gender by first-generation college student status (n = 4648)

Gender	Not first-generation college student		First-generation college student	
	Count	Percent	Count	Percent
Males	1679	67.2	820	32.8
Females	1135	59.6	1014	40.4

Note. n reflects the number of students who completed this question.

Table 3-12. Frequency of students’ gender by political orientation (n = 5558)

Gender	Far right/Conservative		Middle of road		Far left/Liberal	
	Count	Percent	Count	Percent	Count	Percent
Males	648	25.9	1246	49.9	605	24.2
Females	797	25.4	1617	51.5	645	23.2

Note. n reflects the number of students who completed this question.

In this sample, like female students, students of color are more likely to come from a home in which neither parent attended postsecondary school or college, and are more likely to be older than Caucasian students when they enter college. Students of color (11.1%) are more likely to be non-traditional age compared to Caucasian students (7.6%) in this sample (see Table 3-13). Furthermore, students of color (47.2%) are more likely to be first-generation college students compared to Caucasian students (30.7%) in this sample (see Table 3-14). Caucasian students (28%) are more likely to indicate that they have a Far right/Conservative political orientation, compared to 21% of students of color (see Table 3-15). Students of color (30%) are more likely to indicate a Far left/Liberal political orientation, compared to 20% of Caucasian students.

Table 3-13. Frequency of students' ethnicity by traditional age status (n = 5607)

Ethnicity	Traditional age		Non-traditional age	
	Count	Percent	Count	Percent
Caucasian students	3206	92.4	264	7.6
Students of color	1899	88.9	238	11.1

Note. n reflects the number of students who completed this question.

Table 3-14. Frequency of students' ethnicity by first-generation college student status (n = 5644)

Ethnicity	Not first-generation college student		First-generation college student	
	Count	Percent	Count	Percent
Caucasian students	2421	69.3	1074	30.7
Students of color	1135	52.8	1014	47.2

Note. n reflects the number of students who completed this question.

Table 3-15. Frequency of students' ethnicity by political orientation (n = 5644)

Ethnicity	Far right/Conservative		Middle of road		Far left/Liberal	
	Count	Percent	Count	Percent	Count	Percent
Caucasian students	991	28.4	1815	51.9	689	19.7
Students of color	456	21.2	1048	48.8	645	30.0

Note. n reflects the number of students who completed this question.

Research Design

This study seeks to examine the relationship between students' individual demographics, individual characteristics, high school experiences, and precollege engagement and entering college student civic engagement. Figure 3-1 shows the relationship between high school and precollege influences on entering college student civic engagement outcomes. This theoretical model displays the influence of precollege experiences on the attitudes, values, efficacy, and intentions associated with civic-related capacities. This theoretical model is adapted from the conceptual framework for students' precollege preparation for a diverse democracy employed by Hurtado et al. (2002). In their study, the authors consider the influence of background characteristics, precollege environment, precollege engagement, and precollege interaction on freshmen university students' abilities to see multiple perspectives, belief that conflict enhances democracy, and the importance of social action engagement (p. 168).

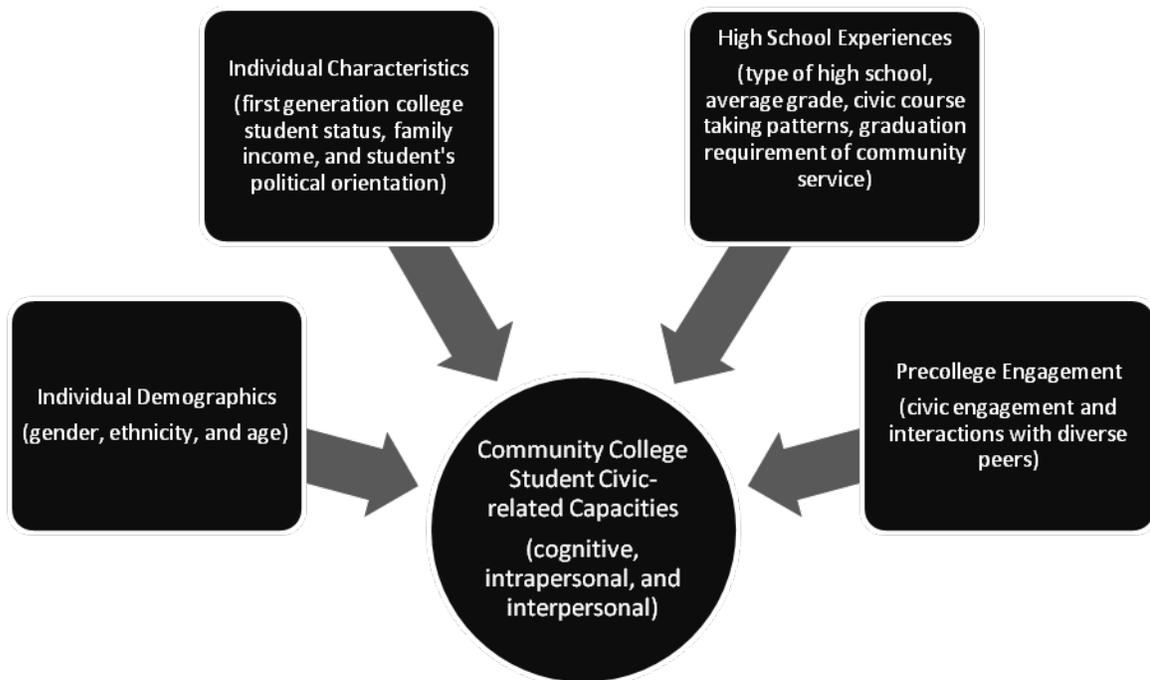


Figure 3-1. Theoretical Model of Influences on Community College Student Civic-Related Capacities

Instrumentation

The Freshman Survey of the Cooperative Institutional Research Program (CIRP) was first administered in 1966 and has been modified and administered annually for over 40 years to participating institutions. The CIRP survey “is the largest American study of higher education” (HERI, 2009, para. 1). The Freshman Survey 2004 was administered as a census survey to each freshman student at participating institutions during orientation or early in the fall term of 2004. The survey takes approximately 25 minutes to complete. Each participating institution determined the survey administration format: online or paper and pencil. The survey includes questions about ethnicity, family income, high school experiences, college choice, college payment, values, beliefs, intended major and career, and other information. A complete copy of The Freshman Survey 2004 is provided in the Appendix.

Item Development and Validity

The Freshman Survey is a widely used instrument for institutional research, comparative research of institutional types and student populations. Most notably, The Freshman Survey data has been used in the seminal work by Alexander Astin (1978, 1993) regarding the impact of college on student outcomes. Although HERI has not published its own factor analysis and constructs of variables developed from the survey items, many researchers (A. W. Astin & Sax, 1998; Ball, 2005; Cress et al., 2001; Engberg & Mayhew, 2007; Giles & Eyler, 1994; Gurin et al., 2002; Herrmann, 2005; Kim, 2001; McKee-Culpepper, 2007; Pascarella et al., 1986, 1988; Sax, 2004; Vogelgesang, 2001; Vogelgesang & Astin, 2005) have utilized The Freshman Survey in studies of college student civic values, beliefs, attitudes, and intentions.

Reliance upon self-reported data from a cross-sectional administration of a student survey can pose concerns (A. W. Astin & Lee, 2003; Kuh, 2001). However, this study does not attempt to assess how college impacts students' civic-related capacities or measure any change over time. Furthermore, Kuh (2001) concluded that

self-reports are likely to be valid under five general conditions . . . They are: (1) when the information requested is known to the respondents; (2) the questions are phrased clearly and unambiguously; (3) the questions refer to recent activities; (4) the respondents think the questions merit a serious and thoughtful response; and (5) answering the questions does not threaten, embarrass, or violate the privacy of the respondent or encourage the respondent to respond in socially desirable ways. (pp. 3-4)

Hurtado et al. (2002) stress that self-reported data is often the best available data when studying college student experiences. The Freshman Survey item development and administration procedures satisfy these conditions.

Reliability

As mentioned previously, The Freshman Survey has been administered for over 40 years. The Higher Education Research Institute indicates that

the vast majority of CIRP Freshman Survey questions exhibit a great deal of stability over time . . . Changes that are observed do not represent wild or random fluctuations, but can be linked to temporal trends or to real and meaningful exogenous shocks (the events of September 11th, for example). (HERI, n.d.c)

Measures

The following section discusses the dependent and independent variables used in this study. The variables are based on the research question and hypotheses of the study. The scales described in this study are limited to existing data in lieu of specifically designed survey items. The best survey items in the existing instrument serve as a proxy for these complex constructs of cognitive, intrapersonal, and interpersonal civic-related capacities. Initial scale development was based on extant research using HERI CIRP survey items and the validity and appropriateness for the developmental dimensions of civic-related capacities.

Factor analysis is defined as “reducing [a large number of] variables to a few factors by combining variables that are moderately or highly correlated with each other. Each set of variables that is combined forms a **factor**” (Gall, Gall, & Borg, 2007, pp. 368-369). Crocker and Algina (2006) further explain that “a common factor is a latent or unobservable variable” (p. 305). Therefore, factor analysis is used in this study as a dimension reduction method to identify latent factors or scales among the survey items, and determine whether students who responded to one item were likely to respond in a similar manner to other items.

These scales were developed by conducting Principal Axis Factoring in SPSS 17.0. This method of factor analysis was selected for its more conservative approach in identifying potential factors. A varimax orthogonal rotated solution was implemented, excluding missing cases listwise, to yield factors that are uncorrelated with each other. Coefficients smaller than 0.35 were suppressed. To test the internal scale reliability, Cronbach’s alpha was employed, with a minimum threshold of alpha reliability of 0.68. Based on this minimum reliability desired, some

items were removed from scales and not used in the final reliability analysis of the factor scales. The factors used as dependent variables in this study are explained in detail in the following section.

Dependent Variables

The dependent variables include cognitive, intrapersonal, and interpersonal dimensions of civic-related capacities. The civic values construct from CIRP surveys has been the basis of many studies on college student civic values (A. W. Astin & Sax, 1998; Ball, 2005; Cress et al., 2001; Engberg & Mayhew, 2007; Giles & Eyler, 1994; Gurin et al., 2002; Herrmann, 2005; Kim, 2001; McKee-Culpepper, 2007; Pascarella et al., 1986, 1988; Sax, 2004; Vogelgesang, 2001; Vogelgesang & Astin, 2005). Civic values examined in the higher education and social science literature focus on open-mindedness, altruism, and the importance of community orientation and social action engagement. Studies of civic values that rely on CIRP data often include the importance of becoming involved in programs to clean up the environment, helping others who are in difficulty, participating in a community action program, becoming a community leader, influencing social values, and influencing the political structure.

The civic values construct is not identical in each study, depending on the year of survey administration, survey items are modified, added, or deleted. The construct has typically been referred to as civic values, humanitarian/civic values, civic virtues, commitment to social activism, citizenship engagement, or sense of civic responsibility. The civic values construct used by Pascarella et al. (1986, 1988) included the importance of becoming involved in programs to clean up the environment, helping others who are in difficulty, participating in a community action program, becoming a community leader, influencing social values, and influencing the political structure (1988, p. 418). In a more recent use of the CIRP survey to examine civic responsibility of college student leaders, Cress et al. (2001) modified the construct by adding

“promoting racial understanding,” and excluding “becoming a community leader.” This study will include all of these items, with the addition of a new item, “working to find a cure to a health problem.”

In preliminary analysis, all of the civic value items together have a Cronbach’s alpha reliability of 0.879, although I will make distinctions between the survey items to better reflect the subtle differences in Ponjuan and Crosby’s² model of civic-related dimensions. Therefore, I have parsed out the constructs to create three distinct dependent variables, although they are related. The alpha reliability results of each new civic-related capacities scale justify the separation of these survey items into three separate scales that support the theoretical framework of this study. Therefore, the related survey items have been assigned to three related constructs: cognitive, intrapersonal, or interpersonal domains of civic-related capacities.

The cognitive dimension includes survey items related to the intent to become informed and to obtain civic-related knowledge. I created the Cognitive Civic-related Values Capacity Scale to reflect the literature that describes the cognitive domain of civic engagement (Ball, 2005; Bernstein, J. L., 2007; Bogard et al., 2008; Carr, 2007; Johnson & Lollar, 2002; Moely, McFarland, Miron, Mercer, & Ilustre, 2002; Parker-Gwin & Mabry, 1998; Sax, 2004; Schamber & Mahoney, 2008; Simons & Cleary, 2006; Zukin et al, 2006). The civic-related capacities scale included survey items that asked students to indicate the level of importance of keeping up to date with political affairs, developing meaningful philosophies of life, and improving their understanding of other countries and cultures. The Cognitive Civic Capacities Scale had a Cronbach’s alpha reliability of 0.71 (see Table 3-16).

² Ponjuan, L. & Crosby, L. (2009, June). *College student civic engagement? Deconstructing the concepts of civic engagement in the higher education research literature*. Paper presented at the meeting of the Association of Institutional Research, Atlanta, GA.

Table 3-16. Factor scale & survey items of cognitive civic-related values capacity scale

Cognitive civic-related value items	Factor loadings	alpha
<i>Indicate the importance to you personally of:</i>		.71
Understanding of other countries/cultures	.732	
Keeping up with political affairs	.658	
Developing meaningful philosophy of life	.615	

In the intrapersonal domain of this study, a scale was developed from the civic values/goals survey items. The intrapersonal dimension includes survey items related to participants' civic values of altruism and concern for others. The Intrapersonal Civic-related Values Capacity Scale reflects the literature of individual identity development, including values and beliefs; and civic agency and self-efficacy (Angelique et al., 2002; Beaumont et al., 2006; Bernstein, J. L., 2008; Bogard et al., 2008; Chickering, 1969; Chickering & Reisser, 1993; Colby et al., 2003; Hunter & Brisbin, 2000; King & Baxter Magolda, 2005; Lott, 2008; Malaney & Berger, 2005; McKinney & Chattopadhyay, 2007; Peters & Stearns, 2003; Spiezio et al., 2005). More specifically, this scale includes the importance of helping others who are in difficulty, becoming a community leader, becoming involved in programs to clean up the environment, and working to find a cure to a health problem. Cronbach's alpha reliability is 0.68 (see Table 3-17).

Table 3-17. Factor loadings of intrapersonal civic-related values capacity scale

Intrapersonal civic-related values items	Factor loadings	alpha
<i>Indicate the importance to you personally of:</i>		.68
Becoming involved in environmental clean-up	.630	
Working to find cure for health problem	.608	
Becoming a community leader	.608	
Helping others in difficulty	.507	

The interpersonal dimension includes survey items related to participants' civic participation goals for community orientation and social action engagement. The Interpersonal Civic-related Values Capacity Scale reflects the student development literature of autonomy and interdependence (Chickering, 1969; Chickering & Reisser, 1993; King & Baxter Magolda, 2005) and the literature of political expression, community involvement, political activities, and social

action engagement (Angelique et al., 2002; A. W. Astin & Sax, 1998; Ball, 2005; Beaumont et al., 2006; Bernstein, J. L. & Meizlish, 2003; Blackhurst & Foster, 2003; Bogard et al., 2008; Einfeld & Collins, 2008; Gonzalez, 2008; Hunter & Brisbin, 2000; Jensen & Hunt, 2007; Klofstad, 2007; Marullo, 1998; Myers-Lipton; 1998; Nishishiba et al., 2005; Persell & Wenglinsky, 2004; Rowan-Kenyon et al., 2008; Sax, 2004; Singer et al., 2002; Townsend, 1973; Zuniga et al., 2005). In the interpersonal domain of this study, civic-related capacities will be measured by an Interpersonal Civic-related Values Capacity Scale, which includes the importance of participating in a community action program, influencing social values, influencing the political structure, and helping to promote racial understanding. Cronbach's alpha is 0.77 (see Table 3-18).

Table 3-18. Factor loadings of interpersonal civic-related values capacity scale

Interpersonal civic-related values capacity items	Factor loadings	alpha
<i>Indicate the importance to you personally of:</i>		.77
Influencing social values	.692	
Influencing the political structure	.674	
Taking part in community action program	.669	
Promoting racial understanding	.641	

For each survey item forming the dependent variables, participants were asked to indicate the personal importance of each item, from not important to essential. Students in this sample were less likely to place importance on interpersonal civic-related capacities. Students reported that all three civic-related capacities were somewhat important (see Table 3-19).

Table 3-19. Mean of dependent variables

Dependent variables	N	Mean	Standard deviation
Cognitive civic-related capacities	5337	2.13	.734
Intrapersonal civic-related capacities	5349	2.12	.633
Interpersonal civic-related capacities	5350	1.98	.665

Scale: 1 = not important; 2 = somewhat important; 3 = very important; 4 = essential

Independent Variables

The four groups of independent variables were based on chronological occurrences of these variables in the lifetime of the students. The independent variable groups include individual demographics (gender, ethnicity, and age); individual characteristics (first-generation college student status, family income, and student's political orientation); high school experiences (type of high school attended, average grade in high school, high school curricular experiences [civic course taking], and graduation requirement of community service); and precollege experiences (civic engagement and interactions with diverse peers). The following table summarizes the independent variables used in this study (see Table 3-20).

Individual demographics chronologically occur first since they are pre-existing variables that are individually unique to each student. Individual demographics of interest in this study include gender (A. W. Astin, 1993; A. W. Astin & Kent, 1983; Rhee & Dey, 1996), ethnicity (Chang, 2003; Milem & Umbach, 2003; Rhee & Dey, 1996), and age (Pascarella et al., 1986).

Individual characteristics are individually unique but may change over time due to individual life experiences. Individual characteristics of interest include first-generation college student status (Pike & Kuh, 2005; Terenzini, Springer, Yaeger, Pascarella, Nora, 1996); family income (Pascarella et al., 1986; Rhee & Dey, 1996), and student's political orientation (A. W. Astin, 1993; Sax & Harper, 2007).

High school experiences typically occur during the middle teen years of a student's life. High school experiences measure several conditions that describe the student's educational experiences in high school. The high school environment variable used in this study is measured by a single item: the type of secondary school attended. High school experiences variables also include average grade in high school, high school curricular experiences, measured by whether

students enrolled in civics courses (history and American government) in high school and whether students attended a high school that required community service for graduation.

Table 3-20. Summary of independent variables and indices

Items	Variable Type	Scale
Student's gender	Dichotomous dummy	Recoded: 0 = (Male, reference group), 1 = Female
Student's ethnicity	Dichotomous dummy	Recoded: White/Caucasian (reference group), Students of color (includes Black/African American, American Indian/Alaskan Native, Asian American/Asian, Native Hawaiian/Pacific Islander, Latino (Mexican American/Chicano, Puerto Rican, Other Latino), and Multiracial)
Student's age	Dichotomous dummy	Recoded: 0 = Traditional (24 years of age or younger, reference group); 1 = Non-traditional (25 and older)
Student's first-generation college student status	Dichotomous dummy	0 = (Not First-generation, reference group); 1 = First-generation (Neither parent attended postsecondary)
Student's family income	Categorical dummy	Recoded: Low = \$19,999 or less; Middle = \$20,000 - \$59,999; Upper Middle = \$60,000 - \$99,999; High = (\$100,000 or more, reference group)
Student's political orientation	Categorical dummy	Recoded: 0 = (Far right/Conservative, reference group), 1 = Middle-of-the-road, 2 = Far left/Liberal
Type of high school attended	Dichotomous dummy	Recoded 0 = (Private/Home School , reference group); 1 = Public School
Average grade in high school	Categorical dummy	Recoded: 1 = C/D Average (D to C+); 2 = B Average = B- to B+, 3 = A Average (A- to A+, reference group)
High school curricular experience (Civics course taking pattern)	Dichotomous dummy	Recoded: 0 = No Civic Course Taking (reference group); 1 = Civic Course Taking (½ to 4 or more years)
High school graduation requirement of community service	Dichotomous dummy	Recoded: 0 = (No, reference group); 1 = Yes
Precollege civic engagement experiences (Frequency)	Continuous	1 = Not at all, 2 = Occasionally, 3 = Frequently
Precollege interactions with diverse peers	Dichotomous dummy	Recoded: 0 = (Not at all/Occasionally, reference group), 1 = Frequently

Note. Dummy refers to the “special metric variable used to represent a single category of a nonmetric variable” (Hair, Black, Babin, & Anderson, 2010, p. 35).

Precollege engagement can occur during high school or after completion of high school, and prior to enrolling in college. Precollege experiences include precollege civic engagement and precollege interactions with diverse peers. Students' participation in civic activities is measured by their involvement in organized demonstrations; volunteer work; student elections; political discussions; work on local, state, or national political campaigns; and performance of community service as part of a class. As shown in the previous table, precollege interactions with diverse peers are measured by a single survey item: frequency of socializing with someone of another racial/ethnic group in the previous year. As mentioned previously, the year prior to completing the survey may not have been the last year of high school, since some community college students do not enter college immediately after completing high school.

Most of the independent variables have been transformed into dummy variables for use in multiple regression analysis. Dummy variables "act as replacement variables for the nonmetric variable. *A dummy variable is a dichotomous variable that represents one category of a nonmetric independent variable.*" The number of dummy variables used to represent the categories is one less than the total number of categories of the variable. "[T]he category that is omitted, [is] known as the **reference category** or **comparison group**" (Hair et al., 2010, pp. 86-87).

Analytic Method

I will use a quantitative approach to answer the research questions and hypotheses about community college student civic-related capacities. I will conduct the analyses in two phases, preliminary and advanced data analyses. The preliminary data analysis will include t-test comparisons and ANOVA between key independent variables and the dependent variables, and multiple regression analyses to determine which combination of independent variables best explain each dependent variable (Gall et al., 2007).

T-tests will be conducted to determine if the means of groups of scores on each dependent variable differ to a statistically significant degree. Groups include gender, age, first-generation college student status, type of high school attended, high school graduation requirement of community service, and precollege interactions with diverse peers.

One-way ANOVA will be conducted to determine whether between-group differences on each dependent variable differ to a statistically significant degree: race/ethnicity, family income, political orientation, average grade in high school, and high school curricular experiences (civics course taking patterns). A multiple comparisons test, using orthogonal contrasts with Scheffe's post hoc analysis, will be conducted to determine which pairs of group means are statistically different.

The advanced data analysis includes multiple regression analyses to explore the effects of the combination of multiple independent variables which explain the student's civic-related capacity across each of the dependent variables: cognitive, intrapersonal, and interpersonal. I used sequential or hierarchical regression with block entry. Sequential regression is used for explanatory purposes, and is subject to the order the variables are entered into the equation. Sequential (hierarchical) regression provides an estimate of the total effects, rather than direct effects, of individual or groups of variables, based on the order that the individual or groups of variables are entered into the equation (Keith, 2006). This methodological approach allows researchers to group related independent variables using a theoretical rationale. This approach also allows a closer examination of the relative impact of each regression block on the overall variance explained. That is, I can examine the relative changes in the overall variance explained with each newly entered regression block of variables. The following formula will be used in this multiple regression model in this study:

$$\hat{y}_i = \beta_0 + \beta_1 X + \beta_2 + \beta_3 + \beta_4 + \beta_5 + \dots + \beta_n + e$$

Where \hat{y}_i is the predicted score on y and β_0 is the intercept, reflecting the reference group's dependent variable score. For example, β_0 is the score of cognitive civic-related capacity for the students in the reference group, if the reference group variables are equal to zero. $\beta_1 X$ is the continuous independent variable in the study, frequency of precollege civic engagement activities; β_2 is female; β_3 is students of color; β_4 is non-traditional age; β_5 is first-generation college student, and so on; and e represents the error. To illustrate, β_2 would estimate the difference in the cognitive civic-related capacity dependent variable between females and males (Schroeder, Sjoquist, & Stephan, 1986). Results will be discussed in terms of β , the standardized regression coefficient's beta weight. The "standardized coefficients measure the change in the dependent variable (measured in standard deviations) that results from a one-standard-deviation change in the independent variables" (Schroeder et al., p. 32).

Regression Models

The independent variables were entered in the following blocks: individual demographics, individual characteristics, high school experiences, and precollege engagement. Individual demographics were entered first, since they are pre-existing variables that are unique to each student. Individual demographics include gender, ethnicity, and age.

The next conceptual block of independent variables is individual characteristics, including first-generation college student status, family income, and student's political orientation. Each of these characteristics are individually unique but may change over time, due to individual life experiences. For example, the CIRP Freshman Survey asked students about their parents' highest level of education attained, which has the potential to change throughout a student's life. A student's first-generation college student status is determined when a student enters college.

Furthermore, participants were asked to respond to a question regarding family income for the previous year, not the family income at birth. Moreover, a student has the potential to identify and change political orientation throughout life.

High school experiences are entered in the third block in the model. This block includes the type of high school attended, the student's self-reported average grade in high school, curricular experience (civic course-taking pattern), and high school graduation requirement of community service.

The fourth and final block measures precollege engagement, specifically precollege civic participation and interaction with diverse peers. Precollege engagement can occur during high school or at any time prior to enrolling in college. For some community college students, the precollege time frame may be a period of months or years, as community college students may not start college immediately after completing high school.

Regression Diagnostics

Regression diagnostics were used to identify problems with the regression models used in this study. For example, *F* tests reveal the efficacy of each regression model and how much of the variance of each dependent variable is explained. In this study, each model resulted in statistically significant *F* values.

Other regression diagnostics were used to identify problems with the dependent and independent variables used in the models. Residuals were used for assessing the normal distribution of the errors in prediction of the dependent variables. The dependent variable cannot be predicted or explained accurately given the independent variable, if the dependent variable is not normally distributed. Histograms of standardized residuals of each dependent variable were examined to determine if the residuals are normally distributed. The histograms approximate a

normal curve. Furthermore, *p-p* plots were analyzed to assess whether the residuals and expected values of the residuals are normally distributed (Keith, 2006).

Collinearity statistics were examined to detect any potential impact of multicollinearity. Multicollinearity signals that independent variables are too highly correlated with each other (Hair et al., 2010; Keith, 2006). If the tolerance, “a measure of the degree to which each variable is independent of (does not overlap with) the other independent variables,” (Keith, p. 201) has a small value, and the variance inflation factor (VIF) has a large value, then multicollinearity may be present. The VIF level of the independent variables in all three models is well below the VIF threshold of 10. In addition, the Durbin-Watson values for each model were 1.9 or 2.0, indicating no autocorrelation of the independent variables (Doane & Seward, 2007).

Study Limitations

Limitations of this study include the collection of self-reported beliefs, values, and goals. This study is based on indirect measures of student learning, rather than more direct measures of evidence of student learning. Respondents may not accurately report their beliefs, values, or experiences for a variety of reasons. As mentioned previously, reliance upon self-reported data from a cross-sectional administration of a student survey can pose concerns. However, self-reported data analysis can be enhanced by use of factor analysis (Greene & Kamimura, 2003). Furthermore, this study does not attempt to assess how college impacts students’ civic-related capacities or measure any change over time. The purpose of this study is to understand community college student civic-related capacities at one point in time—entry to the first semester of college.

Other limitations include the lack of ability to generalize the results to other community colleges and their students. Only 26 two-year colleges participated in The Freshman Survey in 2004. This is not a nationally representative sample of the students enrolled in all two-year

institutions in the United States. Therefore, the study results cannot be generalized to the broader population of two-year college students across the nation. This is an exploratory study in which the participating institutions and students were not selected as a random sample (Chang, 2003).

The CIRP survey instrument may have been designed for several other purposes; therefore, secondary data analysis can be challenging to operationalize definitions and measures of civic-related capacities (Pascarella et al., 1986, 1988). The developmental domains of cognitive, intrapersonal, and interpersonal civic-related capacities are limited to those survey items that were accessible for this study. In addition, other independent (confounding) variables may affect the outcome of civic-related capacities that are not measured by The Freshman Survey.

Summary of Chapter 3

This chapter has provided an overview of the methodology that will be employed in this study. This study seeks to understand the relationship between precollege experiences on the cognitive, intrapersonal, and interpersonal civic-related capacities of the first-year community college student population. Although this study will not provide results that can be generalized to the broader community college student population, it provides an important analysis through a large scale study to test the Ponjuan and Crosby³ civic-related capacities model. The next chapter will discuss the results of the research questions that have been examined.

³ Ibid.

CHAPTER 4 RESULTS

Introduction

This chapter provides a presentation of the results of the statistical analysis of the data. The initial analysis includes results of the t-tests and analysis of variance (ANOVA) for the three dependent variables: cognitive civic-related capacities, intrapersonal civic-related capacities, and interpersonal civic-related capacities. Next, the chapter concludes with the results of the multivariate regression analysis for each of the three dependent variables.

Independent Sample t-Tests

I conducted t-tests to determine if the mean difference between particular group characteristics (e.g., gender) is statistically significant for each dependent variable. I conducted group comparisons for students' gender, ethnicity, age, first-generation college student status, and level of precollege interactions with diverse peers. For each t-test, assumptions of independence, normal distribution, and equal variances were made; however, the Levene's Test of Equality of Variance yielded a significant p value ($p \leq .05$) for some of the group comparisons. Therefore, I interpreted results of some of the t-tests based on the assumption that these groups do not have equal variances. I divided the following section into three tables that present the results of the independent sample t-tests by each dependent variable.

Cognitive Civic-Related Capacities

I found significant mean differences for cognitive civic-related capacities based on ethnicity and students' interactions with diverse peers (see Table 4-1). In this sample of community college students, Caucasian students reported their cognitive civic-related capacities as less important compared to their students of color peers ($p \leq .001$).

Table 4-1. Analysis of mean cognitive civic-related capacities

	Comparisons	Levene's test of equal variance		<i>df</i>	<i>t</i>	Mean difference	Std. Error Difference	<i>p</i>
		F	<i>Sig</i>					
1	Males vs. females	1.930	.165	5311	-.782	-.0158	0.0203	.434
2	Caucasian students vs. students of color	5.129	.024	4012.050	-10.840	-.2252	0.0208	.000***
3	Traditional age vs. non-traditional age	7.388	.007	560.331	.086	.0032	0.0374	.932
4	Non-first generation college students vs. first-generation college students	1.868	.172	5313	.747	.0156	0.0208	.455
5	Non/occasional engagers with diverse peers vs. frequent engagers with diverse peers	35.675	.000	4684.335	-10.915	-.2186	0.0200	.000***

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Statistically significant mean differences existed in community college students' cognitive civic-related capacities based on students' frequency of engagement with diverse peers ($p \leq .001$). More specifically, students who had occasional or no interaction with diverse peers reported their cognitive civic-related capacities as less important than students who frequently interact with diverse peers. No significant mean differences were found for cognitive civic-related capacities between groups according to gender, age, or first-generation college student status.

Intrapersonal Civic-Related Capacities

In the intrapersonal civic-related capacities analyses, I found statistically significant mean differences for students' gender, ethnicity, first-generation college student status, and interactions with diverse peers (see Table 4-2). A significant mean difference for the intrapersonal civic-related capacities was found between male and female community college

students ($p \leq .001$). In this sample of community college students, males reported their intrapersonal civic-related capacities as less important compared to their female peers.

In addition, a significant mean difference for intrapersonal civic-related capacities existed between Caucasians and students of color ($p \leq .001$). Results of the t-test of the community college students in this study revealed that Caucasian students placed less importance on intrapersonal civic-related capacities than students of color.

Table 4-2. Analysis of mean intrapersonal civic-related capacities

	Comparisons	Levene's test of equal variance		<i>df</i>	<i>t</i>	Mean difference	Std. Error Difference	<i>p</i>
		F	<i>Sig</i>					
1	Males vs. females	2.955	.086	5311	-7.542	-.1308	0.0174	.000***
2	Caucasian students vs. students of color	46.693	.000	3750.976	-15.138	-.2734	0.0181	.000***
3	Traditional age vs. non-traditional age	.008	.931	5280	-.808	-.0245	0.0303	.419
4	Non-first generation college students vs. first-generation college students	21.545	.000	3790.644	-5.402	-.0990	0.0183	.000***
5	Non/occasional engagers with diverse peers vs. frequent engagers with diverse peers	18.030	.000	4638.377	-8.996	-.1563	0.0174	.000***

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Furthermore, a significant mean difference of intrapersonal civic-related capacities existed between non-first generation college students and first-generation college students ($p \leq .001$). In this sample of community college students, non-first generation college students reported intrapersonal civic-related capacities as less important than first-generation college students. In addition, a significant mean difference existed in community college students' intrapersonal civic-related capacities based on students' frequency of interaction with diverse peers ($p \leq .001$).

More specifically, community college students who indicated that they have no or only occasional interaction with diverse peers reported intrapersonal civic-related capacities as less important than students who frequently interact with diverse peers. Additionally, I found no significant mean differences in the intrapersonal civic-related capacities between traditional age students and non-traditional age students.

Interpersonal Civic-Related Capacities

In the interpersonal civic-related capacities t-tests, significant mean differences were found for gender, ethnicity, age, first-generation college student status, and interactions with diverse peers (see Table 4-3).

Table 4-3. Analysis of mean interpersonal civic-related capacities

	Comparisons	Levene's test of equal variance		<i>df</i>	<i>t</i>	Mean difference	Std. Error Difference	<i>p</i>
		F	<i>Sig</i>					
1	Males vs. females	10.457	.001	4855.193	-3.612	-.0666	0.0184	.000***
2	Caucasian students vs. students of color	15.326	.000	3835.346	-14.402	-.2720	0.0189	.000***
3	Traditional age vs. non-traditional age	5.274	.022	564.664	2.499	.0829	0.0332	.013*
4	Non-first generation college students vs. first-generation college students	8.225	.004	3866.468	-2.718	-.0521	0.0192	.007**
5	Non/occasional engagers with diverse peers vs. frequent engagers with diverse peers	17.610	.000	4690.563	-10.899	-.1972	0.0181	.000***

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

I found a significant mean difference of interpersonal civic-related capacities between traditional-age students and non-traditional age students ($p \leq .05$). Traditional-age students reported interpersonal civic-related capacities as more important than non-traditional age

students. Furthermore, results of the conducted t-test of the community college students in this study revealed that those who are non-first generation college students placed less importance on interpersonal civic-related capacities than first-generation college students ($p \leq .01$).

Finally, significant mean differences existed in community college students' interpersonal civic-related capacities based on frequency of interaction with diverse peers ($p \leq .001$). More specifically, community college students who indicated that they have no or only occasional interaction with diverse peers reported interpersonal civic-related capacities as less important than those students who frequently interact with diverse peers.

Summary of the t-Test Analyses

Each of the independent variables (gender, ethnicity, age, first-generation college student status, and precollege interactions with diverse peers) yielded significant differences between-group means for at least one of the civic-related capacities. Significant mean differences existed for interpersonal civic-related capacities for all selected independent variables. Students of color and students who frequently interact with diverse peers reported cognitive, intrapersonal, and interpersonal civic-related capacities as more important compared to Caucasian students and students who have no or only occasional interaction with diverse peers, respectively. Females also placed more importance on each of the civic-related capacities; however, the difference between females and males was only statistically significant for intrapersonal and interpersonal civic-related capacities. Similarly, first-generation college students reported intrapersonal and interpersonal civic-related capacities as more important than non-first generation college students. The following section will explore how students with divergent political orientations differ across the three dependent variables.

Analysis of Variance (ANOVA)

I conducted a one-way analysis of variance (ANOVA) to determine if between-group differences existed for political orientation groups (e.g., Far left/Liberal, Middle-of-the-road, and Far right/Conservative) across each dependent variable. For each ANOVA, assumptions of independence, normal distribution, and equal variances were made; however, the Levene’s Test of Equality of Variance yielded a significant p value ($p \leq .05$). Therefore, I interpreted results of some of the t-tests based on the assumption that these groups do not have equal variances. I conducted a multiple comparisons test, using orthogonal contrasts with Scheffe’s post hoc analysis, to determine which pairs of group means were statistically different. In the following section, I discuss three separate ANOVA models, one for each dependent variable.

Cognitive Civic-Related Capacities

Based on the ANOVA results, there are significant differences between the political orientation groups in cognitive civic-related capacities ($p < .001$) (see Table 4-4). For cognitive civic-related capacities, significant differences existed between all of the political orientation groups (see Table 4-5). In particular, results from this ANOVA indicate that middle-of-the-road students reported cognitive civic-related capacities as less important than Far right/Conservative students ($p < .001$) and far left/liberal students ($p < .001$). In addition, the Far right/Conservative student groups reported their cognitive civic-related capacities as significantly less important than students in the Far left/Liberal student group.

Table 4-4. Cognitive civic-related capacities one-way ANOVA by political orientation

Dependent variable		Sum of squares	<i>df</i>	Mean square	F	<i>p</i>
Cognitive civic-related capacities	Between Groups	66.586	2	33.293	63.513	.000***
	Within Groups	2784.524	5312	.524		
	Total	2851.110	5314			

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Table 4-5. Scheffe's post-hoc tests of mean differences for cognitive civic-related capacities by political orientation

(I) Political orientation (group mean)	(J) Political orientation	Mean difference (I - J)	Std. error
Far right/Conservative (2.192)	Middle-of-Road	0.1672***	0.0241
	Far left/Liberal	-0.0967**	0.0284
Middle-of-Road (2.024)	Far right/ Conservative	-0.1672***	0.0241
	Far left/Liberal	-0.2640***	0.0248
Far left/Liberal (02.288)	Far right/ Conservative	0.0967**	0.0284
	Middle-of-Road	0.2640***	0.0248

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Intrapersonal Civic-related Capacities

Next, I conducted an ANOVA for intrapersonal civic-related capacities. For intrapersonal civic-related capacities, the one-way ANOVA results were significant between political orientation groups ($p < .001$) (see Table 4-6).

Table 4-6. Intrapersonal civic-related capacities one-way ANOVA by political orientation

Dependent variable		Sum of squares	df	Mean square	F	p
Intrapersonal civic-related capacities	Between Groups	13.384	2	6.692	16.930	.000***
	Within Groups	2099.627	5312	.395		
	Total	2113.011	5314			

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Far right/Conservative students reported a significantly different level of importance of intrapersonal civic-related capacities than Far left/Liberal students ($p < .05$), and middle-of-the-road students ($p < .05$); however, the largest difference was between students with a Middle-of-the-road political orientation and students with a Far left/Liberal political orientation ($p < .001$) (see Table 4-7). Results from this ANOVA indicate that Middle-of-the-road students reported intrapersonal civic-related capacities as less important than Far left/Liberal students.

Table 4-7. Scheffe's post-hoc tests of mean differences for intrapersonal civic-related capacities by political orientation

(I) Political orientation (group mean)	(J) Political orientation	Mean difference (I - J)	Std. error
Far right/Conservative (2.134)	Middle-of-Road	0.0575*	0.0209
	Far left/Liberal	-0.0662*	0.0247
Middle-of-Road (2.077)	Far right/Conservative	-0.0575*	0.0209
	Far left/Liberal	-0.1236***	0.0215
Far left/Liberal (2.200)	Far right/Conservative	0.0662*	0.0247
	Middle-of-Road	0.1236***	0.0215

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Interpersonal Civic-Related Capacities

Finally, I conducted an ANOVA for interpersonal civic-related capacities. Based on the ANOVA results, there are significant differences between political orientation groups in interpersonal civic-related capacities ($p < .001$) (see Table 4-8).

Table 4-8. Interpersonal civic-related capacities one-way ANOVA by political orientation

Dependent variable		Sum of squares	df	Mean square	F	p
Interpersonal civic-related capacities	Between Groups	30.262	2	15.131	34.929	.000***
	Within Groups	2301.132	5312	.433		
	Total	2331.394	5314			

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

The results were similar to the post hoc test results of political orientation groups in the levels of cognitive civic-related capacities (see Table 4-9). The level of interpersonal civic-related capacities of the far left/liberal students was significantly different than the Far right/Conservative students ($p < .01$) and Middle-of-the-road students ($p < .001$). In particular, Middle-of-the-road students reported interpersonal civic-related capacities as less important than Far right/Conservative students ($p < .001$) and Far left/Liberal students ($p < .001$).

Table 4-9. Scheffe's post-hoc tests of mean differences for interpersonal civic-related capacities by political orientation

(I) Political orientation (group mean)	(J) Political orientation	Mean difference (I - J)	Std. error
Far right/Conservative (2.006)	Middle-of-Road	0.0917***	0.0219
	Far left/Liberal	-0.0931**	0.0258
Middle-of-Road (1.914)	Far right/Conservative	-0.0917***	0.0219
	Far left/Liberal	-0.1848***	0.0225
Far left/Liberal (2.099)	Far right/Conservative	0.0931**	0.0258
	Middle-of-Road	0.1848***	0.0225

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

In summary, there was a significant relationship between students' political orientation and the three dependent variables: cognitive, intrapersonal, and interpersonal civic-related capacities. The following section will discuss the results of the multiple regression analysis.

Multiple Regression Analysis

I conducted sequential or hierarchical multiple regression analyses to explore the effects of the combination of multiple independent variables across each of the dependent variables: cognitive, intrapersonal, and interpersonal. As described earlier, the independent variables were entered in the following blocks: individual demographics, individual characteristics, high school experiences, and precollege engagement. In the following section, I discuss three separate multiple regression models, one for each dependent variable.

Cognitive Civic-Related Capacities Regression Results

The cognitive civic-related capacities outcome variable measured the importance students placed on becoming informed and obtaining civic-related knowledge. The regression model used in this study explained 13% of the total variance in the cognitive civic-related capacities scale ($df = 16, 5167; F = 47.818; p < .001$), and three of the four block entries yielded a significant change in the model ($p < .001$) (see Table 4-10). I will discuss the relative effect size

of each block based on the introduction of each block of variables, which controls for all the variables in the model.

Table 4-10. Standardized beta coefficients for blocked entry regression on cognitive civic-related capacities ($n = 5,184$)

Variable name	Block 1	Block 2	Block 3	Block 4
<i>Individual demographics</i>				
Female (male)	.019	.027	.024	.019
Students of color (Caucasian)	.147***	.149***	.153***	.145***
Non-traditional age student (traditional age)	-.017	-.011	-.011	.027*
<i>Individual characteristics</i>				
First-generation college student (non-first-generation college student)		.023	-.021	.001
Low-income (high-income)		-.071***	-.071***	-.038
Middle-income (high-income)		-.083***	-.085***	-.055*
Upper middle-income (high-income)		-.070***	-.072***	-.057**
Middle-of-road political orientation (Far right/Conservative)		-.123***	-.119***	-.080***
Far left/liberal political orientation (Far right/Conservative)		.031	.034*	.048*
<i>High school experiences</i>				
Public high school (private/home school)			-.015	-.024
B average grade (A average grade)			-.028	-.006
C/D average grade (A average grade)			-.025	.009
Civic course taking (no civics course taking)			-.005	-.008
Community service graduation requirement (no requirement)			-.005	-.024
<i>Precollege engagement</i>				
Civic participation				.273***
Frequent interaction with diverse peers (no/occasional interaction)				.073***
R^2	.022	.046	.047	.129
Change in R^2	.022***	.024***	.001	.082***
F	38.81***	28.00***	18.31***	47.82***

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

Controlling for all of the co-variates, certain individual demographics, individual characteristics, and precollege engagement variables resulted in statistically significant increases in the explained variance of cognitive civic-related capacities in community college students. In the individual demographic block of variables of the model, only students' ethnicity yielded a significant difference on the addition of individual demographic variables. Students of color reported a higher level of importance of becoming informed and obtaining civic-related knowledge ($p < .001$). Furthermore, students' ethnicity remained significant across all four block entries in the model. In the earlier blocks, non-traditional age community college students reported cognitive civic-related capacities as less important compared to traditional-age community college students, until the final block was entered in the model, precollege engagement. In the final block of the model, non-traditional age community college students reported that becoming informed and obtaining civic-related knowledge was more important compared to traditional-age students ($p < .05$). The change in direction and significance could be attributed to a suppressor effect. The suppressor effect can indicate that the relationship between the two variables is masked until additional independent variables are added to the model to account for some multicollinearity (Hair et al., 2010). Finally, although female community college students reported a higher level of cognitive civic-related capacities compared to their male peers, students' gender was not significant for the overall model.

In the first block, first-generation college students reported cognitive civic-related capacities as less important compared to community college non-first generation college students ($p < .05$), until the remainder of the individual characteristics block of variables was introduced to the model. The direction of the relationship between first-generation college student status and cognitive civic-related capacities changed after each block of variables was added to the

model, although there was no significant difference. Similar to the independent variable of students of non-traditional age, this change in direction could be attributed to a suppressor effect, but due to lack of significance in the difference, it may not warrant additional research. In the individual characteristics block of variables of the model, there were significant differences in family income in at least two blocks across the model. Community college students of middle and upper-middle family income placed less importance on becoming informed and obtaining civic-related knowledge compared to community college students of high family income. The statistical significance of these differences compared to students of high family income decreased by the fourth block; however, the difference remained significant for students of middle ($p < .05$) and upper-middle family income ($p < .01$). Community college students who expressed a Middle-of-the-road political orientation reported cognitive civic-related capacities as less important compared to Far right/Conservative students ($p < .001$). In contrast, Far left/Liberal students ($p < .05$) reported cognitive civic-related capacities as more important in the final block of the model compared to Far right/Conservative students. Furthermore, Middle-of-the-road political orientation remained significant across all four block entries in the model. However, Far left/Liberal political orientation lost significance on the addition of the individual characteristics block of variables to the model, but regained significance in the third and fourth blocks.

In the high school experiences variable block of the model, high school experiences did not provide significant explanation of cognitive civic-related capacities across the model. Taking civics courses and attending a high school with a graduation requirement of community service are not strong explanatory variables for cognitive civic-related capacities of community college students.

Precollege engagement, defined as precollege civic participation and interactions with diverse peers, accounted for 8% of the variance in the model. Precollege engagement had a significant effect on the importance community college students placed on becoming informed and obtaining civic-related knowledge across the model ($p < .001$). As the frequency of engagement in precollege civic activities increases, the level of cognitive civic-related capacities increases. Furthermore, those who reported frequent interaction with diverse peers reported that becoming informed and obtaining civic-related knowledge was more important compared to students who reported occasional or no interactions with diverse peers.

Intrapersonal Civic-Related Capacities Regression Results

The intrapersonal civic-related capacities outcome variable measured the importance students placed on civic values of altruism and concern for others. The regression model used in this study explained 13% of the total variance in the intrapersonal civic-related capacities scale ($df = 16, 5155; F = 46.950; p < .001$), and three of the four block entries yielded a significant change in the model ($p < .001$) (see Table 4-11). Similar to the first model, controlling for all of the co-variates, certain individual demographics, individual characteristics, and precollege engagement variables resulted in statistically significant increases in the explained variance of intrapersonal civic-related capacities.

Unlike the previous model, females reported intrapersonal civic-related capacities as more important compared to community college males ($p < .001$). Community college students of color also placed more importance on civic values of altruism and concern for others compared to Caucasian students ($p < .001$). Furthermore, students' gender and ethnicity remained significant across all four block entries in the model. Similar to the previous model, the changes in the non-traditional age variable could be attributed to a suppressor effect, but due to lack of significance, the difference may not warrant additional research.

Table 4-11. Standardized beta coefficients for blocked entry regression on intrapersonal civic-related capacities ($n = 5,172$)

Variable name	Block 1	Block 2	Block 3	Block 4
<i>Individual demographics</i>				
Female (male)	.091 ^{***}	.087 ^{***}	.085 ^{***}	.082 ^{***}
Students of color (Caucasian)	.205 ^{***}	.182 ^{***}	.184 ^{***}	.181 ^{***}
Non-traditional age student (traditional-age)	-.015	-.022	-.021	.012
<i>Individual characteristics</i>				
First-generation college student (non-first-generation college student)		.036 [*]	.037 ^{**}	.056 ^{***}
Low-income (high-income)		.020	.019	.048 [*]
Middle-income (high-income)		-.024	-.027	-.001
Upper middle-income (high-income)		-.045 [*]	-.047 [*]	-.034
Middle-of-road political orientation (Far right/Conservative)		-.053 ^{**}	-.051 ^{**}	-.016
Far left/liberal political orientation (Far right/Conservative)		.025	.026	.040 [*]
<i>High school experiences</i>				
Public high school (private/home school)			.006	-.002
B average grade (A average grade)			-.030	-.008
C/D average grade (A average grade)			-.024	.009
Civic course taking (no civics course taking)			-.013	-.017
Community service graduation requirement (no requirement)			.004	-.013
<i>Precollege engagement</i>				
Civic participation				.254 ^{***}
Frequent interaction with diverse peers (no/occasional interaction)				.042 ^{**}
R^2	.051	.061	.061	.127
Change in R^2	.051 ^{***}	.009 ^{***}	.001	.066 ^{***}
F	93.05 ^{***}	36.99 ^{***}	24.07 ^{***}	46.95 ^{***}

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

In the individual characteristics block of variables of the model, first-generation college students indicated intrapersonal civic-related capacities as more important compared to non-first generation college students throughout the model, and this difference is most significant after

controlling for precollege engagement ($p < .001$). In addition, first generation college student status remained significant across all four block entries in the model. Community college students of low family income placed more importance on intrapersonal civic-related capacities, on controlling for individual demographics. However, this significant difference disappears on adding individual characteristics and high school experiences, but becomes significant in the final block of the model. Students of upper-middle family income reported civic values of altruism and concern for others as less important compared to students of high family income, yet this difference disappeared after controlling for precollege engagement. Community college students who expressed a middle-of-the-road political orientation also placed less importance on intrapersonal civic-related capacities compared to Far right/Conservative community college students ($p < .01$), yet this difference disappeared after controlling for precollege engagement. Far left/Conservative students reported intrapersonal civic-related capacities as more important until the addition of the individual characteristics block of variables and high school experiences block of variables, and subsequently became significant after controlling for students' precollege engagement.

As in the previous model, high school experiences did not provide significant explanation of intrapersonal civic-related capacities in any block in the model. In the high school experiences block of variables in the model, there were positive, although not significant, differences in community college students' intrapersonal civic-related capacities. This difference was based on attendance at a high school that required community service for graduation compared to attendance at a high school without such a requirement. Once precollege engagement was added to the model, the difference was negative yet continued to lack statistical significance. Despite a lack of significance of the between-group mean

differences, the beta coefficients of the public high school variable and the community service graduation variable changed direction on adding the precollege engagement block of variables to the model, and C/D average grade changed direction twice in the model.

Precollege engagement had a significant influence on the importance community college students place on civic values of altruism and concern for others in all blocks of the model. As the frequency of engagement in precollege civic activities increases, the importance level of intrapersonal civic-related capacities increases ($p < .001$). Furthermore, those who reported frequent interaction with diverse peers placed more importance on civic values of altruism and concern for others compared to students who indicated occasional or no interactions with diverse peers ($p < .01$).

Interpersonal Civic-Related Capacities Regression Results

Interpersonal civic-related capacities are measured by community college students' civic participation goals for community orientation and social action engagement. The regression model used in this study explained 15% of the total variance in the interpersonal civic-related capacities scale ($df = 16, 5132; F = 54.674; p < .001$), and three of the four block entries yielded a significant change in the model ($p < .001$) (see Table 4-12). This model provided the best explanatory strength of the three models in this study. As in the previous two models, controlling for all of the co-variates, certain individual demographics, individual characteristics, and precollege engagement variables resulted in statistically significant increases in the explained variance of interpersonal civic-related capacities. Furthermore, 9% of the variance was explained on addition of precollege engagement block of variables to the model. As in the previous two models, precollege engagement is significantly related to community college students' interpersonal civic-related capacities.

Table 4-12. Standardized beta coefficients for blocked entry regression on interpersonal civic-related capacities ($n = 5,149$)

Variable name	Block 1	Block 2	Block 3	Block 4
<i>Individual demographics</i>				
Female (male)	.055 ^{***}	.057 ^{***}	.057 ^{***}	.053 ^{***}
Students of color (Caucasian)	.191 ^{***}	.179 ^{***}	.181 ^{***}	.176 ^{***}
Non-traditional age student (traditional-age)	-.051 ^{***}	-.052 ^{***}	-.048 ^{***}	-.009
<i>Individual characteristics</i>				
First-generation college student (non-first-generation college student)		.017	.017	.040 ^{**}
Low-income (high-income)		-.027	-.026	.009
Middle-income (high-income)		-.059 ^{**}	-.059 [*]	-.026
Upper-middle-income (high-income)		-.057 ^{**}	-.057 ^{**}	-.040 [*]
Middle-of-road political orientation (Far right/Conservative)		-.082 ^{***}	-.082 ^{***}	-.040 [*]
Far left/liberal political orientation (Far right/Conservative)		.030	.029	.045 ^{**}
<i>High school experiences</i>				
Public high school (private/home school)			.004	-.006
B average grade (A average grade)			-.010	.016
C/D average grade (A average grade)			-.012	.026
Civic course taking (no civics course taking)			.001	-.004
Community service graduation requirement (no requirement)			.025	.005
<i>Precollege engagement</i>				
Civic participation				.297 ^{***}
Frequent interaction with diverse peers (no/occasional interaction)				.058 ^{***}
R^2	.041	.053	.054	.146
Change in R^2	.041 ^{***}	.012 ^{***}	.001	.091 ^{***}
F	73.34 ^{***}	32.25 ^{***}	20.99 ^{***}	54.67 ^{***}

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

In analyzing the individual demographics block of variables in the model, community college females reported interpersonal civic-related capacities as more important compared to community college males ($p < .001$). Community college students of color placed more

importance on community orientation and social action engagement compared to Caucasian students ($p < .001$). As in the previous model, both students' gender and ethnicity remained significant across all four block entries in the model. Non-traditional age community college students reported intrapersonal civic-related capacities as more important compared to traditional-age community college students, and this difference remained significant until the addition of the precollege engagement block of variables.

In the individual characteristics block of variables in the model, first-generation college students placed more importance on interpersonal civic-related capacities compared to non-first generation college students, after controlling for precollege engagement variables ($p < .01$). Although there was no significant difference in interpersonal civic-related capacities between low family income and high family income throughout the model, there may be a suppressor effect. The direction of the relationship changes on adding the individual characteristics block of variables to the model, and changes directions a second time after adding the precollege engagement block of variables. Community college students of middle-income reported interpersonal civic-related capacities as less important compared to community college students of high-income, on controlling for the individual demographics and individual characteristics blocks of variables; however, this significant difference disappeared on adding precollege engagement experiences. Community college students of upper middle-income placed less importance on community orientation and social action engagement compared to community college students of high family income.

Community college students who expressed a middle-of-the-road political orientation also placed less importance on interpersonal civic-related capacities compared to Far right/Conservative community college students ($p < .01$), yet this significant difference weakened after

controlling for precollege engagement. Similar to the intrapersonal civic-related capacities model, Far left/Liberal students' higher levels of interpersonal civic-related capacities disappeared on adding individual characteristics and high school experiences, and subsequently became significant after controlling for precollege engagement. As in the cognitive civic-related capacities model, Middle-of-the-road political orientation remained significant across all four block entries in the model.

As in both of the previous models, the high school experiences block of variables did not provide significant explanation of interpersonal civic-related capacities. Although there was a positive significant difference in students' interpersonal civic-related capacities, based on attendance at a high school that required community service for graduation compared to attendance at a high school without such a requirement, this difference disappeared after controlling for individual characteristics.

Once again, precollege engagement had a significant effect on students' level of interpersonal civic-related capacities in all blocks of the model and explained the largest amount of variance in the model. As the frequency of engagement in precollege civic activities increased, the level of interpersonal civic-related capacities increased ($p < .001$). Furthermore, those who reported frequent interaction with diverse peers placed more importance on community orientation and social action engagement compared to students who indicated occasional or no interactions with diverse peers ($p < .001$).

Summary of Chapter 4

This chapter has presented the preliminary analysis of the data, including results of the conducted t-tests and analysis of variance (ANOVA) for the three dependent variables. This chapter also included the results of the three multiple regression models. Interpretation of the results confirm that community college students of color compared to Caucasian community

college students, placed more importance on cognitive, intrapersonal, and interpersonal civic-related capacities. Additionally, female community college students reported intrapersonal and interpersonal civic-related capacities as more important compared to male community college students. Community college students of Middle-of-the-road political orientation also reported each of the dependent variables as less important compared to students of Far right/Conservative and Far left/Liberal political orientations.

After controlling for individual demographics, individual characteristics, high school experiences, and precollege engagement in the conducted multiple regression models, first-generation college student status had a significant influence on intrapersonal and interpersonal civic-related capacities. Moreover, in the last block of the model, political orientation also had a significant influence on community college students' cognitive and interpersonal civic-related capacities. High school experiences did not explain the variance of the dependent variables in the three models. However, precollege engagement was a strong explanatory block of variables in each of the models. Frequency of participation in civic activities was positively associated with cognitive, intrapersonal, and interpersonal civic-related capacities. Furthermore, those who frequently interact with diverse peers reported that all three civic-related capacities were more important compared to community college students who never or occasionally interact with diverse peers. The next chapter will extend the discussion of the results in the context of the extant research literature.

CHAPTER 5 DISCUSSION

Introduction

Higher education has long been considered an appropriate societal mechanism for educating individuals for an active civic role in society (Bellah, 1992; Colby et al., 2007; Ehrlich, 2000; Morse et al., 2005; Pascarella et al., 1988; Pascarella et al., 1986; Smart & McLaughlin, 1985). Community colleges can play a central role in preparing students for effective civic engagement. Despite the explicit mission of community colleges as “America’s democracy colleges” (Franco, 2002, p. 119), there is little research focused on the development of community college student civic-related capacities. To that end, this study has enhanced understanding of the civic-related capacities of an often understudied yet large and diverse segment of the college student population: students enrolled at community colleges.

Over the last 45 years, two-year college enrollments have doubled their share of the total college enrollment in the United States (Provasnik & Planty, 2008, Table SA-4, p. 33). In addition, this student population differs from four-year college and university students in many ways, including age, gender, ethnicity, employment and attendance status, parental status, level of parental education, and income level (Provasnik & Planty, 2008).

Although the community college population is understudied in the area of civic engagement, the civic engagement topic has received a great deal of attention. As mentioned previously, the concern about the overall decline in political participation and civic engagement in the nation has spurred the development of many projects funded by national organizations and federal grants in the hopes of promoting civic engagement for the next generation of college students. This research study on civic engagement of community college students contributes a new perspective to this important national discussion.

Summary of Study Contributions

This empirical study provides initial insights into how community colleges can prepare diverse, non-traditional college students to more effectively engage as active citizens. I examined how precollege experiences and civic-related capacities vary within the entering first-year community college student population. Furthermore, this study contributes to the extant literature by analyzing civic engagement through three interrelated constructs: cognitive, intrapersonal, and interpersonal dimensions of civic engagement. This study also adds to previous research on the relationship between interactions with diverse peers and student values, beliefs, and abilities associated with civic engagement. This research connects precollege experiences and beliefs with entering community college students' civic-related capacities.

Summary of Research Findings

This empirical study sought to examine the relationship between precollege experiences and civic-related capacities of entering community college students. Specifically, this study examined if individual demographics, individual characteristics, high school experiences, and precollege civic engagement influence entering community college student civic-related capacities. The guiding research question of this study is: What individual characteristics and precollege experiences are related to community college students' civic-related capacities? The discussion of the research question and the sub-research questions are presented in the following three main sections. In the first section, I will discuss the results by the three dependent variables, cognitive, intrapersonal, and interpersonal civic-related capacities. In the next section, I will discuss the results by themes across the models for each of the independent variable blocks. Finally, I will provide a brief discussion of the overarching themes that intersect across all three models.

Cognitive Civic-Related Capacities

The cognitive civic-related capacities dependent variable measures the importance students place on becoming informed and obtaining civic-related knowledge. Cognitive aspects of civic engagement include cultural awareness, understanding political and civic systems, critical thinking skills, and the ability to take multiple perspectives. This construct is similar to earlier research that examined the cognitive capacity of student development. This domain “focuses on how one constructs one’s view and creates a meaning-making system based on how one understands knowledge and how it is gained” (King & Baxter Magolda, 2005, p. 574).

Students’ ethnicities appear to play an important role in the cognitive dimension of civic-related capacities. Statistically controlling for first-generation college student status, family income, political orientation, high school experiences, and precollege engagement, students of color reported cognitive civic-related capacities as more important compared to Caucasian students. This supports earlier research that found students who have interactions with peers from different racial ethnic groups are more likely to agree that conflict enhances our democracy (Hurtado, et al., 2002). This similar finding may suggest that community college students of color (e.g. African American, Latino, etc.) compared to their peers may be more likely to have had precollege interactions with students from different races and ethnicities that resulted in cognitive dissonance and growth.

Unlike previous studies, students’ gender was not significantly related to cognitive civic-related capacities. Sax and Harper (2006) found that gender was associated with keeping up-to-date with political affairs, one aspect of cognitive civic-related capacities. In the same study, they also found male university students reported that political engagement was more important compared to their female peers. Even though I found no gender differences, this may suggest that community college students are different from four-year students, due to their first-

generation college student status. In this sample, approximately 40% of community college students were first-generation college students. Perhaps these students (both males and females) who were first generation college student status are less likely to have civic-related conversations with parents and have an adequate level of reading and reference materials in the home. There is empirical evidence (Niemi & Junn, 1998) that suggests adults with low levels of education are less informed about civic-related issues. Furthermore, those who have earned a high school degree or less are not as likely to vote as individuals who hold at least a baccalaureate degree (The Institute for Higher Education Policy [IHEP], 1998) or to get involved in community and civic issues (Pascarella & Terenzini, 2005).

I found that non-traditional age community college students place more importance on becoming informed and obtaining civic-related knowledge compared to traditional-age students. Perhaps compared to traditional-age community college students, non-traditional age students had different experiences in precollege engagement activities that influenced their commitment to becoming informed and obtaining civic-related knowledge. Non-traditional age students, by mere definition, have been of voting age during one or more presidential elections, and have had an opportunity to vote in such highly publicized national elections. Thus, non-traditional students may perceive civic-related information as more relevant to their daily lives as citizens, and may realize a need to remain up-to-date with political information. Several researchers have confirmed that the ability to understand local, state, and federal policies and processes is a vital component of cognitive capacity-building (Beaumont et al., 2006; Bernstein, J. L., 2008; Bernstein, J. L. & Meizlish, 2003; Bogard et al., 2008; Carr, 2007). The results of this study suggest that non-traditional students may also be more advanced in their cognitive developmental level, due to their life experiences and demands (Colby et al., 2003).

A community college student's family income also appears to play a role in community college students' cognitive civic-related capacities. In measuring the ability to see multiple perspectives, another aspect of the cognitive dimension, Hurtado et al. (2002) found that income did not have a significant impact on the abilities of university students to see multiple perspectives. Contrary to Hurtado's results, I found that community college students from middle and upper-middle family incomes reported becoming informed and obtaining civic-related knowledge as less important compared to community college students from high family incomes. Wealthier students may have access to more resources, such as books and reference materials, and have participated in international travel opportunities that enhanced their appreciation for understanding other countries and cultures (Zukin et al., 2006). Additionally, perhaps these students who are from high-income families are more likely to have civic-related conversations with parents who are college educated and more aware of civic issues.

Unlike previous studies (Niemi & Junn, 1998; Sax, 2004; Zukin et al., 2006), where low-income students have less access to civic information and less opportunity for political discussions with parents, in this study students from low-income families did not report significantly different levels of the importance of keeping up-to-date with political affairs and other civic-related information compared to their peers from high-income families. This suggests that perhaps low-income students may have similar precollege engagement experiences or be equally involved in precollege civic activities and interactions with diverse peers as students from high-income families. These findings suggest that additional research is needed to explore the nature and types of precollege experiences in which students from low-income families may participate.

The block of variables that explained the majority of the variance in the model for cognitive civic-related capacities in this study was precollege engagement. Participating in organized demonstrations, performing volunteer work, conducting community service as a part of a class, voting in student elections, working on political campaigns, and discussing politics, as well as interacting frequently with diverse peers, was related to community college students' cognitive civic-related capacities. The ability to take multiple perspectives and think critically contributes to the capacity to make meaning of civic issues (Anderson et al., 2003; Einfeld & Collins, 2008; Parker-Gwin & Mabry, 1998). Much of the precollege engagement experiences may require students to reflect and utilize metacognitive skills that create cognitive growth and a need to seek more information. Students may question their understanding of the world, encounter conflict, and experience cognitive dissonance. Precollege engagement may assist students in moving to a more relativistic commitment in which personal beliefs and values are recognized among multiple "truths" (Perry, 1970). These findings support Hurtado's (2002) research on precollege engagement of university students. Both precollege engagement activities and interactions with diverse peers was significantly related to changes in university students' abilities to see multiple perspectives and believe that conflict enhances democracy. Furthermore, "those most knowledgeable are most likely to participate in politics" (Dudley & Gitelson, 2002, p. 178). Basic civic and political information is needed for an individual to decide if and how to get involved in civic activities (Dudley & Gitelson). Moreover, political and civic understanding is related to voting behavior (Zukin et al., 2006): "By talking about politics, families teach their children that it is important to pay attention to the world around them—and to take the next step of doing something" (p. 147). Therefore, this suggests that students who have more

opportunities to participate in engagement activities may place more importance on keeping up-to-date with political affairs and obtaining civic-related information.

Intrapersonal Civic-Related Capacities

The intrapersonal dimension includes survey items related to participants' civic values of altruism and concern for others. The intrapersonal domain describes an individual's development of identity, including values and beliefs that may be influenced by individual characteristics, such as ethnicity and socioeconomic status (Chickering, 1969; Chickering & Reisser, 1993). This domain "focuses on how one understands one's own beliefs, values, and sense of self, and uses these to guide choices and behaviors" (King & Baxter Magolda, 2005, p. 574).

In my study, I found that several individual demographics and characteristics have a significant relationship to community college students' intrapersonal civic-related capacities. For example, researchers have found that female college students are more likely to have prior volunteer or community service experience (A. W. Astin & Sax, 1998; Sax & Harper, 2006); and the primary reason that students indicated for volunteering is the desire to help others (A. W. Astin & Sax). In a similar fashion, the results suggest that female community college students may place more importance on helping others. These altruistic goals could have been the catalyst for female college students' initial volunteer efforts, and may have reinforced subsequent volunteering as a result of introspection and reflection on rewarding volunteer experiences.

It may seem counterintuitive that the results of this study revealed high school experiences, particularly community service graduation requirement, are not associated with altruism and concern for others. As mentioned previously, those who volunteer are more likely to do so because of a desire to help others; however, researchers (Marks & Jones, 2004; Stukas, Snyder,

& Clary, 1999) have found that requiring community service either in high school or during college had a negative effect on future volunteer efforts. In other words, students who did not have prior voluntary community service experience but were subject to a community service requirement are less likely to volunteer again in the future. Zukin et al. (2006) found that mandatory service had no effect on students' future civic engagement. Perhaps these differences can be attributed to intrinsic versus extrinsic motivation. Students who have a strong sense of civic values and civic identities, complemented by altruistic goals, may be unaffected by a community service requirement. That is, these students may possess altruistic goals and embrace their own civic identities, regardless of whether their high schools require community service. And those who do not naturally have such altruistic values may be discouraged to engage in future participation as a result of the mandatory civic participation graduation requirement. The type and nature of the community service can also have an impact on students' civic-related capacities (Niemi et al., 2000; Prentice, 2007; Stukas et al., 1999; Vogelgesang & Astin, 2000). Zukin et al. (2006) argue that the instructional approaches to community service are integral to its impact; students who are encouraged to reflect on and discuss their service activities in class are more likely to continue to participate.

As in cognitive civic-related capacities, precollege engagement provided the most influence on differences in intrapersonal civic-related capacities among students. Those who are most involved may be most likely to think differently about their own civic identities. Participating in organized demonstrations, performing volunteer work, conducting community service as a part of a class, voting in student elections, working on political campaigns, and discussing politics, as well as interacting frequently with diverse peers, had a significant relationship to altruistic goals and reflections about civic values and beliefs. Perhaps

participating in precollege civic activities assists students in shaping their civic values and civic identities (A. W. Astin & Sax, 1998; Colby et al., 2003). Students who participate in meaningful actions and interactions may be engaged in reflection and cognitive development, which prompts intrapersonal development of civic values and deepening of a desire to help others in difficulty and sustain one's community. This suggests that students who have higher frequencies of precollege engagement may place more importance on altruism and concern for helping individuals and the community. Bogard et al. (2008) stress the importance of this capacity: "Those who do not develop a civic identity while young are at risk for being non-voters and non-joiners of community organizations as adults" (pp. 541-542). This reinforces the connection between cognitive, intrapersonal, and interpersonal domains of civic-related capacities.

Interpersonal Civic-Related Capacities

The interpersonal dimension includes survey items related to participants' civic participation goals for community orientation and social action engagement. The interpersonal domain includes the ability to become autonomous yet interdependent by establishing an internal locus of control, solving problems, nurturing one's own autonomy, and respecting the autonomy of others, while immersed in a social context (Chickering, 1969; Chickering & Reisser, 1993). The interpersonal domain "focuses on how one views oneself in relationship to and with other people (their views, values, behaviors, etc.) and makes choices in social situations" (King & Baxter Magolda, 2005, p. 574).

In my study, I found students' gender, ethnicity, first-generation college student status, family income, political orientation, precollege civic participation, and interaction with diverse peers were significantly related to community college students' interpersonal civic-related capacities. Community college men and Caucasian students expressed less importance of promoting racial understanding, one aspect of interpersonal civic-related capacities. This

confirms previous studies of university students (Johnson & Lollar, 2002; Vogelgesang, 2001). Vogelgesang posits that the African Americans' strong commitment to promote racial understanding may be because they "have the most to gain from improvements in race relations (or decreases in racism) in this country" (p. 17). Vogelgesang also found that women enter college with a stronger commitment to activism, which is a composite of several intrapersonal and interpersonal civic-related capacities. This might suggest that women and students of color recognize important benefits to shaping social values, influencing the political structure, and promoting racial understanding. These findings may also suggest that women and students of color perceive that underrepresented groups have not had sufficient opportunities to influence societal rules, norms, and values that govern an increasingly diverse democracy.

Students with Far right/Conservative and Far left/Liberal political orientations place more importance on interpersonal civic-related capacities compared to their peers with a Middle-of-the-road political orientation. Those who have stronger political views in either direction may be more invested in political and civic life and believe they have more opportunity for influencing social values or public policy by supporting political party platforms. Perhaps the findings of this study suggest the interrelationship between cognitive, intrapersonal, and interpersonal civic-related capacities (Colby et al., 2003). Colby et al. argue that civic development encompasses growth in several civic capacities, including civic knowledge and cognitive skills, civic values and identity, and the competence and motivation to get involved.

From a generational perspective, Zukin et al. (2006) provide evidence that college students today are more disengaged from traditional political life, yet more involved in less traditional ways. This finding is echoed in the discussion of community service as the chosen method for college students to make a difference in their communities (Long, 2002; Longo & Meyer, 2004).

This contention is based predominantly on traditional-age university students, suggesting that additional research is needed to understand the relationship between political orientation, age, and the nature and type of different interpersonal civic-related capacities.

Similar to the cognitive and intrapersonal civic-related capacity models, precollege engagement provides the most influence on differences in interpersonal civic-related capacities among students in this study. This study supports previous research that suggests precollege engagement and interactions are more strongly associated with social action engagement than individual demographics or individual characteristics of students (Hurtado et al., 2002; Malaney & Berger, 2005). This relationship supports the idea that those who are more involved are more likely to be invested in social action engagement. The nature of precollege engagement may enhance students' civic knowledge and skills, which then contributes to students' propensity for future civic engagement (Kirlin, 2000, as cited in Colby et al., 2003).

Precollege interactions with diverse peers positively affected aspects of interpersonal civic-related capacities of university students (A. W. Astin, 1993; Gurin et al., 2002; Hurtado et al., 2002; Johnson & Lollar, 2002; Malaney & Berger, 2005). For example, when examining gains in civic-related capacities of students during college, interactions with diverse peers during college produced a large change in interpersonal civic-related capacities of university students (Gurin et al.; Johnson & Lollar). Diverse interactions during college may provide opportunities that enhance students' commitment to promote racial understanding, which deepens support of social action engagement. This suggests that interacting with those who are different may broaden students' understanding of a diverse society, promote belief in the importance of creating social awareness, and develop support for race-based initiatives and other democratic outcomes (Gurin et al.; Hurtado, 2005; Hurtado et al., 2002). Furthermore, these findings

suggest that community college students and four-year college students both benefit from interactions with those who are different from themselves. As will be discussed in the next section, precollege interactions with diverse peers and precollege civic participation, both forms of precollege engagement, are positively related to all three models.

Themes Across the Models

There were several significant patterns across the three models. Students' ethnicity, political orientation, precollege civic engagement, and interactions with diverse peers were associated with all three conceptual models: cognitive, intrapersonal, and interpersonal civic-related capacities. In addition, students' gender was associated with two of the three conceptual models: intrapersonal and interpersonal civic-related capacities. The following section describes each of these patterns in the context of the block entries of variables as they pertain to each research question.

Influence of individual demographics

What is the relationship between student demographics, particularly gender, ethnicity, age, and community college students' civic-related capacities? There were significant differences between students' gender, ethnicity, and age for one or more of the civic-related capacities. Female community college students expressed greater importance for each of the civic-related capacities; however, the difference between females and males was only statistically significant for intrapersonal and interpersonal civic-related capacities. Community college females were more likely than community college males to place more importance on civic values of altruism and concern for others, and goals for community orientation and social action engagement. This result is consistent with studies of gender differences of entering four-year college students (Malaney & Berger, 2005; Sax & Harper, 2007; Vogelgesang, 2001). In these studies, the authors found that female college students expressed greater importance on social activism and

promoting racial understanding, aspects of interpersonal civic-related capacities. This suggests that community college women may have similar interpersonal civic-related capacities as four-year college women. These results may suggest, as a result of their increased likelihood to volunteer, that entering college women have had more opportunity to hone their political voice, get involved in political and civic groups, and work with others to improve their communities.

Community college students of color reported higher levels across all three civic-related capacities compared to their Caucasian community college student peers. In other words, community college students of color reported higher levels of the importance of becoming informed and obtaining civic-related knowledge; of altruism and concern for others; and community orientation and social action engagement. These results are consistent with studies of four-year college students conducted in the 1980s and 1990s (A. W. Astin, 1993; Vogelgesang, 2001). Vogelgesang found that African American and Latino college students, compared to Caucasian college students, placed more importance on promoting racial understanding and community activism at the time they enter college. This suggests that students of color may have life experiences that foster interpersonal civic-related capacities. They also express a stronger inclination for helping individuals and the community at large and participating in social change.

In examining the relationship between age and civic-related capacities, there is an inconsistency in the role of age across all three dependent variables. I found that non-traditional age community college students reported becoming informed and obtaining civic-related knowledge as more important, after controlling for precollege engagement. Perhaps non-traditional age community college students may find more value in obtaining and using civic-related information. Non-traditional age community college students may perceive civic-related

information as more relevant to their daily lives as citizens of the local community. Since much of the research on civic engagement has been conducted on traditional age four-year college students, the relationship between age and civic-related capacities warrants further investigation.

Based on the results, the null hypothesis is rejected. This study indicates that there are significant differences in civic-related capacities (cognitive, intrapersonal, or interpersonal), based on individual demographics (gender, ethnicity, and age). Furthermore, there were significant differences based on students' gender for intrapersonal and interpersonal civic-related capacities, based on students' ethnicity for all three dependent variables, and based on age for cognitive civic-related capacities.

Influence of individual characteristics

What is the relationship between individual characteristics, particularly first-generation college student status, family income, and student's political orientation, and community college students' civic-related capacities? I found that first-generation college students reported intrapersonal and interpersonal civic-related capacities as more important compared to non-first generation college students, and these differences are most significant after controlling for precollege engagement. Perhaps first-generation college students have unique experiences in precollege engagement activities that influence their level of altruism and concern for others, and commitment to social action engagement. Being the first in the family to attend college can be a challenging decision that may require significant thought regarding the expected benefits of the college experience, with little guidance and involvement from parents (Horn & Nunez, 2002). Furthermore, first-generation college students may be more invested in influencing social and political structures and improving their community, as a way to elevate their own family conditions and those of others. Therefore, perhaps first-generation college students perceive the importance of and necessity to help self, family, and community, and this is reflected in their

precollege engagement activities. Additional research is needed to understand first-generation college students' precollege experiences and civic-related capacities.

In this study, community college students from low-income families placed more importance on altruism and concern for others compared to high-income community college students. Perhaps this difference is due to personal experiences of low-income students, in which they have the opportunity to understand the impact of helping those in need. This suggests that these students may have a keen and realistic understanding of the negative effects of low income, which spurs their sense of altruism for others in positions of hardship and a more developed sense of individual civic values and beliefs.

Political orientation had a significant effect on each conceptual model. Significant differences were found between political orientation groups in cognitive, intrapersonal, and interpersonal civic-related capacities. Community college students who expressed a Middle-of-the-road political orientation placed less importance on cognitive civic-related capacities compared to Far right/Conservative students and Far left/Liberal students. Sax (2004) found that students who expressed a Middle-of-the-road political orientation were less likely to talk about politics than those who express a political orientation to the left or right. Perhaps identification with a political party on the right or left of center is related to students' interest in keeping up-to-date with political events and issues. In other words, students who expressed a political orientation at either end of the spectrum may be more likely to find it important to keep up-to-date with political affairs. As mentioned previously, those who have stronger political views may be more invested in political and civic life, and have a stronger need to stay informed. A far left/liberal political orientation is also associated with supporting social action engagement, civic participation, and diversity-related activities (A. W. Astin, 1993). Perhaps students with a far

left/liberal orientation have encountered unique civic participation experiences that fostered their commitment to influencing social values, influencing the political structure, and promoting racial understanding.

Based on the results, the null hypothesis is rejected. This study indicates that there are significant differences in civic-related capacities (cognitive, intrapersonal, or interpersonal), based on individual characteristics (first-generation college student status, family income, and student's political orientation). In particular, there were significant differences based on family income and students' political orientation for all three models, and based on first-generation college student status for intrapersonal and interpersonal civic-related capacities.

Influence of high school experiences

What is the relationship between high school experiences, including curricular experiences, and community college students' civic-related capacities? Research has focused on civic-related capacities based on types of experiences in high school, such as the racial composition of high school and enrollment in diversity courses, rather than the type of high school (Hurtado, 2002; Milem & Umbach, 2003). I found that type of high school attended had no significant effect on community college students' civic-related capacities. This confirms Hurtado's (2002) findings, in which public high school students expressed more commitment to democratic outcomes, yet the influence of high school type was not significant. Furthermore, Niemi and Junn (1998) found that structural characteristics of high schools, such as adequacy of resources and opportunities to obtain civic knowledge and develop civic-related capacities, did not appear to influence students' demonstration of civic and political knowledge. High school type may be less important than the actual social and educational experiences that occur in high school learning settings.

I found that enrollment in civics courses in high school had no significant effect on community college students' civic-related capacities. This is similar to Hurtado et al.'s (2002) examination of diversity-related courses in which the authors suggest that the interaction within the classroom may have more meaningful influence on civic engagement learning outcomes. The breadth of course content, the pedagogical approaches, and the opportunity to examine issues from multiple perspectives have a more significant influence on students' civic engagement outcomes (California Campaign for the Civic Mission of Schools, 2005; Colby et al., 2007; Niemi & Junn, 1998; Zukin et al., 2006). These studies of the impact of enrollment in civics courses and diversity-related courses suggest that enrollment in and perhaps even the content of the course may not be as influential on civic engagement as the manner in which the course is taught and the student interactions in the classroom.

This study confirms previous research on the mixed effects of the high school graduation requirement for community service (Marks & Jones, 2004; Niemi et al., 2000). Researchers have found a negative effect of such a requirement on students' future intentions to volunteer, if the student did not already have *voluntary* volunteering experience (Marks & Jones, 2004). In this study, required community service appears to have no significant influence on community college students' civic-related capacities. When only controlling for students' gender, ethnicity, and age, the community service requirement was a positive significant factor, yet this disappeared after accounting for individual characteristics. These results confirm previous research that revealed no significant differences in civic engagement of students who attend high schools with a community service graduation requirement compared to students who attend high schools without such a requirement (Zukin et al., 2006). This also suggests that one's political orientation, as well as socioeconomic and family educational background, may mediate the effect

of requiring community service as a high school graduation requirement on students' value of community orientation and social action engagement.

Niemi, Hepburn, and Chapman (2000) found that students who participate in community service in high school expressed more commitment to paying attention to and discussing politics and other civic-related information, an aspect of cognitive civic-related capacities. However, there appears to be a difference in the effects of required high school community service compared to community service encouraged by the high school. Extrinsic motivation in the form of a community service requirement for high school graduation may not promote enduring civic values and actions, unless the individual students were already volunteering prior to the requirement. Just as the nature and types of experiences in high school curricular experiences may have more impact than simply enrolling in the courses, perhaps it is the nature and type of community service, and the academic connection or guided reflection of the service experiences, that can have an impact on students' civic values and actions (Niemi et al., 2000; Prentice, 2007; Vogelgesang & Astin, 2000). Further research is needed to examine the type of community service that is required in high schools to better understand the influence on community college students' civic-related capacities.

Based on the results, the null hypothesis cannot be rejected. The study indicates that there are no significant differences in civic-related capacities (cognitive, intrapersonal, or interpersonal), based on high school experiences (type of high school attended, average grade in high school, curricular experiences, and high school graduation requirement of community service).

Influence of precollege experiences

What is the relationship between precollege civic engagement experiences, including interactions with diverse peers, and community college students' civic-related capacities?

Precollege engagement explains the largest amount of variance in the cognitive, intrapersonal, and interpersonal civic-related capacities models. Precollege civic participation, as measured by participation in organized demonstrations, performing volunteer work, voting in student elections, working on political campaigns, discussing politics, and conducting community service as a part of a class, have a significant influence on all three civic-related capacities. Individual demographics, individual characteristics, and high school experiences explain fewer differences in community college students' civic-related capacities.

In this study, precollege engagement was a composite of several precollege civic activities. I did not analyze the unique influence of each precollege civic activity. However, in the extant research, specific types of precollege civic engagement have been associated with aspects of civic-related capacities. For example, Hurtado et al. (2002) found that certain precollege engagement activities, such as participation in student clubs, participating in race/ethnicity discussions, participating in volunteer work, and studying with different racial/ethnic groups, were positively associated with one or more democratic outcomes. Perhaps different types of precollege civic engagement activities have different influences on community college students as compared to university students. To that end, there is a need to examine the influence of different types of precollege civic activities on community college students' civic-related capacities in future studies.

This study confirms previous findings that participation in volunteer work is associated with students' social activism commitment and sense of civic engagement (A. W. Astin, 1993; A. W. Astin & Sax, 1998; A. W. Astin, et al., 2000), and other civic engagement outcomes (Hurtado et al., 2002; Oesterle et al., 2004). Students who have prior civic participation experience, such as student elections, demonstrations, and volunteer efforts, expressed more

commitment civic engagement during college (McKee-Culpepper, 2007). This suggests that community college students' initial volunteer efforts may have produced positive and rewarding benefits, which reinforces their personal commitment to social action engagement.

Community college students' precollege interactions with diverse peers are associated with civic-related capacities. This confirms previous research on first-year university students (Hurtado et al., 2002; Milem & Umbach, 2003) and contradicts findings by Johnson & Lollar (2002) and McKee-Culpepper (2002). Interactions with diverse peers were an important influence on students' beliefs in the importance of social action engagement and the ability to see multiple perspectives (Hurtado et al.) and entering college students' plans to participate in diversity-related activities (Milem & Umbach). Both university students and community college students appeared to benefit from interactions with diverse peers. Those with frequent interaction with diverse peers placed more importance on becoming informed and obtaining civic-related knowledge, having altruistic values, and supporting social action engagement. Precollege cocurricular experiences, especially interactions with diverse peers, had a positive influence on civic engagement outcomes and intentions to participate in diversity-related activities. This supports Nishishiba et al.'s (2005) contention that students with higher levels of diversity awareness were also more likely to "embrace diverse perspectives, exhibit empathy, and evaluate alternative options" (p. 276). However, these experiences did not have a similar positive influence on students' intent to become civically engaged while in college (McKee-Culpepper, 2002). Expanding studies on the impact of precollege interactions with diverse peers would provide community colleges with meaningful information to shape the community college experience and promote civic engagement of community college students.

Based on the results, the null hypothesis is rejected. There are significant differences in civic-related capacities (cognitive, intrapersonal, or interpersonal), based on precollege civic engagement experiences and interactions with diverse peers. Precollege engagement is significantly related to each of the three civic-related capacities of entering community college students.

Overall Findings

The Multidimensional Developmental Model of Civic-Related Capacities, proposed by Ponjuan and Crosby¹, provides a preliminary model to better understand college students' development process of the civic engagement learning outcomes across the three developmental domains of civic-related capacities. The results of this study support the use of this theoretical framework for examining civic-related capacities. For example, the results suggest that precollege experiences assist students in developing across all three developmental dimensions. Students who enter college with precollege civic experiences and interactions with diverse peers may be more prepared and interested in enhancing and utilizing their civic-related capacities. Further, students may be at different developmental levels of cognitive, intrapersonal, and interpersonal civic-related capacities at any given time. Colby et al. (2003) described the interconnection between knowledge (cognitive), political and civic identity and values (intrapersonal), with motivation to take action (interpersonal). The authors posit that

moral and civic education is no doubt most effective when it addresses as many facets of development as possible; they cannot and should not be dealt with separately. Any one program or experience is likely to affect many of these dimensions, and changes in one dimension can contribute to changes in others. (p. 100)

¹ Ponjuan, L., & Crosby, L. (2010). *Preparing students as engaged citizens: A developmental model of civic engagement*. Unpublished manuscript.

Psychosocial theorists have acknowledged the interconnection between cognitive, intrapersonal, and interpersonal domains of development (Chickering & Reisser, 1993; Erikson, 1959, 1968). Each theorist contends that individuals develop identity throughout life, and developmental growth is influenced by life events, environment, and readiness to advance through developmental challenges. This suggests that individuals who develop cognitive and intrapersonal civic-related capacities may possess civic self-efficacy, be more motivated to get involved, and thus place more importance on interpersonal civic-related capacities.

Summary of Chapter 5

This chapter provided a discussion of the results of this study. Specifically, this discussion explored the relationship between individual demographics, individual characteristics, high school experiences, and precollege civic engagement on entering community college student civic-related capacities. The results were described for each dependent variable and by themes across the models. The next chapter provides a discussion of future research directions and policy recommendations.

CHAPTER 6
FUTURE RESEARCH AND HIGHER EDUCATION ADMINISTRATION
RECOMMENDATIONS

Introduction

This study has provided insight into the self-reported civic-related capacities of a large sample of community college students. In an effort to understand the effects of college and substantiate society's expectations of college outcomes, researchers and practitioners are studying effective ways to document and promote the impact of college attendance on civic-related capacities. This study assists community colleges that work with large and diverse college student populations in their institutional efforts to prepare their students to actively participate in their local community as engaged citizens. This chapter includes recommendations for future research and recommendations for community colleges and their faculty.

Future Research

To effectively measure and promote development of college student civic-related capacities, it is essential to understand civic-related capacities of entering community college students. Knowledge of this diverse group allows administrators and faculty to develop and offer relevant civic-related programming. Such knowledge can lead researchers and practitioners to examine specific curricular and cocurricular experiences that can influence civic-related capacities in the community college setting.

This large-scale study was not a representative sample of the national community college student population. Therefore, to draw conclusions and make recommendations about the community college population as a whole, future research could include a nationally representative sample. As demonstrated, there is scant literature regarding civic engagement of community college students (Lopez & Brown, 2006; Prentice, 2007), and this prevents researchers from gaining a comprehensive understanding of the civic-related capacities of the

community college population in the United States. If a large, random sample was drawn from community colleges across the nation, national norms of community college civic engagement could be described, similar to the annual HERI national norms report of four-year college students, using the HERI CIRP survey.

Which types of precollege civic engagement influence community college students' civic-related capacities was a primary research question guiding this study. As mentioned previously, this study examined precollege engagement as a composite of several precollege civic activities. However, in the extant research literature, specific types of precollege civic engagement have been associated with aspects of civic-related capacities of four-year college students (A. W. Astin, 1993; A. W. Astin & Sax, 1998; A. W. Astin et al., 2000; Hurtado et al., 2002; McKee-Culpepper, 2007; Oesterle et al., 2004). For example, Hurtado et al. found that certain precollege engagement activities, such as participation in student clubs, opportunities for race/ethnicity discussions between students, volunteer work, and studying with diverse peers, were positively associated with one or more democratic outcomes. To that end, there is a need to examine the influence of other precollege civic activities (e.g., civic-related community groups) in future studies of the community college student population.

Other questions also guide future research. For example, what additional beliefs, attitudes, and behaviors can provide a thorough understanding of the developmental dimensions of community college student civic engagement? How can researchers comprehensively study the civic knowledge, values, efficacy, identity, and skills associated with civic-related capacities? Researchers can delve further into theories of human development, such as moral development and identity development, to provide a framework for future studies of civic-related capacities

(Colby et al., 2003). As expressed by Colby et al., elements of civic-related capacities may be independent, yet interrelated:

Moral and civic education is no doubt most effective when it addresses as many facets of development as possible. . . . Any one program or experience is likely to affect many of these dimensions, and changes in one dimension can contribute to changes in others. (p. 100)

The model proposed by Ponjuan and Crosby¹ offers new opportunities to expand and explore the dimensions of civic-related capacities. Therefore, additional research in the context of cognitive, intrapersonal, and interpersonal developmental dimensions could provide a more holistic understanding of the development of civic-related capacities.

It is also important to understand how community college students develop civic-related capacities along a developmental trajectory. Previous studies provide insight into examining civic-related capacities along a trajectory or continuum (Einfeld & Collins, 2008; Huddy & Khatib, 2007; Prentice, 2007; Westheimer & Kahne, 2004). In these recent studies, researchers increasingly focused on deeper, more significant goals of civic engagement. In particular, service learning and political involvement are viewed on a continuum from surface involvement (volunteering for a nonprofit agency, charity work, voting, and campaigning) to justice-oriented involvement (making substantive change in the community, advocating for disenfranchised groups) (Einfeld, 2008; Prentice, 2007). To extend understanding beyond solely looking at the different dimensions, additional scrutiny is needed to examine the developmental trajectories of the three primary civic-related capacities. In particular, it is important to further examine how community college students may develop civic-related capacities at varying levels compared to students from four-year institutions. For example, community college students could possess

¹ Ponjuan, L., & Crosby, L. (2010). *Preparing students as engaged citizens: A developmental model of civic engagement*. Unpublished manuscript.

civic values and civic self-efficacy, but lack leadership or communication skills to effectively engage in a community issue.

Since this study relied on secondary data, the analysis was limited to the available questions. The best survey items in the existing instrument served as the most approximate proxy for these complex constructs of cognitive, intrapersonal, and interpersonal civic-related capacities. Initial scale development was based on extant research using HERI CIRP survey items and the validity and appropriateness for the developmental dimensions of civic-related capacities. The development of a survey specifically designed to assess the multidimensional civic-related capacities along a developmental trajectory would enhance understanding of civic-related capacities as a developmental framework. Furthermore, an instrument tailored to assess these constructs may also provide evidence of the interrelationship across the three developmental dimensions.

Unfortunately, less is known about how community college students develop in each developmental domain throughout their college careers. Future research can investigate development of civic-related capacities by utilizing longitudinal research design. This study was limited to a cross-sectional study of community college students surveyed upon entry to college. Previous longitudinal studies of community college student civic engagement relied on a short time frame and examined students' changes in civic values and dispositions over the length of one semester in one course (Henderson, 2007; Prentice, 2007). In contrast, earlier studies of four-year college students have attempted to uncover precollege beliefs and experiences, to assess how much growth in civic engagement students experience during and after college (A. W. Astin, 1993; A. W. Astin & Sax, 1998; Cress et al., 2001; Greene & Kamimura, 2003; Gurin et al., 2002; Herrmann, 2005; Johnson & Lollar, 2002; Milem & Umbach, 2003; Pascarella et al.,

1986, 1988; Rhee & Dey, 1996; Rowan-Kenyon et al., 2008; Vogelgesang, 2001). In an attempt to document how the college experience enhances student learning and development, longitudinal studies are needed to understand the development of civic-related capacities on entry to college and periodic assessments during and after college.

Finally, few qualitative research studies on civic engagement outcomes are present in the extant higher education research literature (Einfeld & Collins, 2008; Seider, 2007). Einfeld and Collins conducted qualitative research to understand participants' perceptions of civic engagement and their commitment to civic values and activities. Qualitative research can cultivate an understanding of how participants make sense of their world (Glesne, 2006). To elucidate the Multidimensional Developmental Model of Civic-Related Capacities (Ponjuan & Crosby²), qualitative research of student interviews and writing can help anchor the developmental levels within Ponjuan and Crosby's³ proposed trajectory. Similar to King and Baxter Magolda's (2005) qualitative research on the Developmental Model of Intercultural Maturity, analysis of students' reflections can shape and illustrate the developmental domains of civic-related capacities.

Higher Education Administration Recommendations

In this section, I will briefly discuss the higher education recommendations of this study. This section is grouped into instructor and student affairs professional-level recommendations and institutional-level recommendations. The examination of civic engagement in earlier studies has focused on student values and behaviors shaped by a variety of influences and college experiences. As mentioned previously, curricular efforts to foster liberally educated citizens

² Ibid.

³ Ponjuan, L. & Crosby, L. (2009, June). *College student civic engagement? Deconstructing the concepts of civic engagement in the higher education research literature*. Paper presented at the meeting of the Association of Institutional Research, Atlanta, GA.

were predominant in the late twentieth century, particularly in political science, geography, environmental education, teacher education, and the humanities. Longitudinal studies revealed that college professors influence the college student experience (A. W. Astin, 1993) and serve a vital role in educating future citizens to understand and participate in a democratic society.

The academic experience is greatly influenced by the educational philosophy of faculty and their instructional strategies and pedagogical approaches. “Faculty attitudes toward civic education are important, then, because of educators’ capacity to positively or negatively influence their students’ sense of civic engagement through formal or informal means” (Rowan-Kenyon et al., p. 758). Much of the way that course content and classroom environment is designed is based on the teaching goals of the faculty (Myers, 2008). They construct the curriculum, plan the coursework, and ultimately design a classroom environment of interaction with students and among students. Faculty members also serve as academic advisors, club advisors, and campus leaders in cocurricular events and programs. Their influence on student development may be most powerful in the classroom setting; however, it rests on the type and frequency of faculty-student interaction, regardless of location (Terenzini, 1993).

The college experience, academic, social, and institutional, is also influenced by student affairs professionals (American Association of Higher Education (AAHE), American College Personnel Association (ACPA), & National Association of Student Personnel Administrators (NASPA), 1998; ACPA, 1996, 2004; ACPA & NASPA, 1997). The college community, inclusive of faculty and student affairs professionals, plays a role in fostering a transformative learning experience by breaking down the silos of learning that have typically discouraged students from integrating and synthesizing knowledge, values and skills across courses and departments. The importance of collaboration among faculty and student affairs professionals is

stressed in several key professional publications and a handbook for the profession (AAHE, ACPA, & NASPA, 1998; ACPA, 1996, 2004; ACPA & NASPA, 1997; Nuss, 2003; Schroeder, 2003; Young, 2003). *Learning Reconsidered* (ACPA & NASPA, 2004) identified several student learning outcomes, including civic engagement, as key outcomes that student affairs professionals and faculty should promote in a collaborative, integrated manner. This collaborative approach can promote a more comprehensive and holistic emphasis on the development of cognitive, intrapersonal, and interpersonal dimensions of student learning (ACPA & NASPA, 2004; King & Baxter Magolda, 2005).

Student affairs professionals may be the first college representatives that students encounter after being admitted to the college. As a representative of the institution, student affairs professionals can orient the student to the institutional mission, goals and values, and promote the benefits of student involvement in civic-related activities. In their diverse roles at the institution, student affairs professionals are responsible for designing formal and informal cocurricular experiences that support the development of student learning throughout the college experience, in every institutional venue (AAHE, ACPA, & NASPA, 1998; ACPA, 1996, 2004; ACPA & NASPA, 1997). These staff members design meaningful learning opportunities through student government, clubs and organizations, judicial board, study abroad programs, community service, and much more. Inter-group dialogues can also promote appreciation for diversity. Such dialogues can assist students in achieving competence in their intellectual and social abilities and managing emotions in potentially new, uncomfortable, or uncertain dynamics (Gurin, 2004). The following recommendations are designed for community college instructors and student affairs professionals to consider in an effort to enhance the development of community college students' civic-related capacities.

First, community college professors should examine the curriculum to determine if it aims to foster civic responsibility and civic engagement, in a manner meaningful and relevant to the institution's mission. The public cannot expect colleges to contribute to the development of college students' civic-related capacities, if the core curriculum is not designed to promote civic development in its students. Courses should be designed to ensure that all students have an opportunity to learn and develop civic-related capacities. For example, several studies have found a relationship between enrollment in diversified curriculum, such as women's studies and diversity appreciation courses, and civic engagement outcomes (Gurin et al., 2004; Hurtado, 2001, as cited in Hurtado, Engberg, & Ponjuan⁴; Hurtado, 2005; Hurtado et al.⁵). First-year experience courses can serve as an effective educational tool to acclimate and orient a student to the institution's culture and values, and the institution's goals for student learning and development. In addition, general education curriculum often includes a diversity requirement that aims to broaden students' worldviews, promote intercultural understanding, and foster their ability to see multiple perspectives. Therefore, first-year experience courses and general education core curriculum may provide a common experience and create an effective avenue for community college faculty to foster college students' cognitive, intrapersonal, and interpersonal civic-related capacities.

Second, researchers argue that college instructors should design pedagogical approaches to promote civic engagement outcomes, including service learning, problem-based learning, authentic learning tasks, and other experiential learning strategies (Colby et al., 2003; Dresner & Blatner, 2006; Nishishiba et al; 2005; Pratte & Laposata, 2005; Spiezio et al., 2005). These

⁴ Hurtado, S., Engberg, M. E., & Ponjuan, L. (2003, November). The impact of the college experience on students' learning for a diverse democracy. Paper presented at the meeting of the *Association for the Study of Higher Education*, Portland, OR.

⁵ Ibid.

approaches can be applied in many curricular programs, such as first-year experience, general education, and diversity courses (Vaz, 2005). Colby (2003) expresses the importance of curricular mechanisms to enhance civic engagement outcomes:

Weaving moral and civic issues into the curriculum is schools' best hope of connecting with the hard-to-reach students and making sure that students already on an inspired path will not lose their way. . . . [t]he curriculum is central to educating college students as citizens because so many key dimensions of moral and civic maturity are fundamentally cognitive or intellectual – rooted in understanding, interpretation, and judgment. (pp. 167-168)

Although I found that enrollment in civics courses in high school had no significant effect on entering community college students' civic-related capacities, other researchers (California Campaign for the Civic Mission of Schools, 2005; Colby et al., 2007; Hurtado et al., 2002; Niemi & Junn, 1998; Zukin et al., 2006) have suggested that peer interaction within the classroom may have a more meaningful impact on the dimensions of civic-related capacities than simple course enrollment. The breadth of course content, the pedagogical approaches, and the opportunity to examine issues from multiple perspectives may have a more significant impact on students' civic-related capacities.

Third, community college instructors should partner with student affairs staff to develop meaningful civic engagement opportunities. The results from this study confirm the importance of precollege civic engagement activities in the development of civic-related capacities (Hurtado et al., 2002). In the college environment, student involvement inside and outside of the college classroom is also a significant factor in the development of the values, attitudes, and behaviors associated with civic engagement (Caputo, 2005; Pascarella et al., 1988; Sax, 2004). Informal and formal cocurricular experiences in college, such as community service, political activities, leadership experiences, and formal and informal diversity interactions, support civic engagement

outcomes (Gurin et al., 2002; Gurin et al., 2004; Hurtado, 2005; Hurtado et al.⁶; Johnson & Lollar, 2002; Pascarella et al., 1988). These studies validate the relationship between specific types of activities and civic-related capacities.

Finally, at the instructor and student affairs professional level, community college faculty and staff should develop programs and opportunities for students to interact with diverse peers. Earlier research supports the value of demographic diversity of students as it relates to civic engagement outcomes (Gurin et al., 2002; Hurtado, 2005; Hurtado et al.; 2002, 2003; Rowan-Kenyon et al., 2008). This study confirms that interactions with diverse peers are positively related to the development of civic-related capacities. As demonstrated previously, Hurtado et al. found that few college students had many opportunities to interact with diverse peers prior to entering college, yet students who had the opportunity to participate in diversity programs and enroll in diverse curriculum (p. 170), demonstrated greater democratic outcomes than their peers. Therefore, faculty and student affairs professionals may be able to provide students opportunities to enhance civic-related capacities by designing curricular and cocurricular programs that increase students' interactions with diverse peers.

This study assists community colleges that work with a large and diverse college student population, in their institutional efforts to prepare students to actively participate in their local community as engaged citizens. Institutions should capitalize on the efforts of their faculty and student affairs professionals and develop broader institutional initiatives to cultivate the civic-related capacities of their students. Therefore, the following recommendations are directed at the larger community college organizational level.

⁶ Ibid.

First, community colleges should develop programs to promote student civic engagement. Researchers have found that student leadership experiences may be influential on civic engagement outcomes (Hurtado, 2005; Pascarella, 1988). To that end, community colleges should design student programs and experiences that promote civic engagement values, dispositions, and behaviors at the institution and in the broader community, and foster socially responsible leadership beyond college. Civic engagement should also be viewed as “hands-on” involvement in campus governance, leadership, and student activities (Johnson & Lollar, 2002), rather than the college merely serving as the “training ground” for future civic engagement in another community after college. These experiences may most influence community college student interpersonal civic-related capacities; however, these activities should also be designed to enhance the cognitive and intrapersonal dimensions.

Second, community colleges should develop relationships with local and regional organizations to identify community service opportunities and civic internship sites. Previous studies have demonstrated that the nature and type of the service or internship experience can be vital to the value and impact on civic-related capacities (Niemi et al., 2000; Prentice, 2007; Stukas et al., 1999; Vogelgesang & Astin, 2000). Providing a central campus office for civic engagement resources and placement opportunities can ameliorate faculty concerns about the effort expended by individual faculty in identifying and vetting appropriate service sites for promoting community college student interpersonal civic-related capacities (Colby et al., 2007).

Third, community colleges should develop partnerships with local high schools to encourage precollege experiences that promote college student civic-related capacities. Research provides evidence of the influence of precollege civic experiences on civic-related capacities (Hurtado et al., 2002; Johnson & Lollar, 2002; Pascarella et al., 1988). This study highlights the

significant effect of precollege engagement civic participation and interactions with diverse peers. In an effort to promote civic engagement in the local community, colleges and local school districts should collaborate on programming and pedagogical approaches that foster the development of all three dimensions of civic-related capacities.

Finally, community colleges should examine civic engagement in light of institutional accountability and effectiveness. Is the institution fulfilling its mission as a community college? How is the institution demonstrating achievement of its mission to prepare students to become more effective, engaged citizens? In the current accountability environment, practitioners need to demonstrate the ‘value-added’ impact of the college experience (U. S. Department of Education, 2006)—in this case, the development or growth of civic-related capacities as a result of the college experience. The institution should conduct ongoing assessment of students’ civic-related capacities at the point of college entry and again in the last semester of the associate degree. In this manner, the institution could assess the specific civic-related capacities of its students, design programs to enhance development of civic-related capacities, and repeat the assessment of students prior to graduation. This would allow the institution to demonstrate the civic-related capacities to the broader community, stakeholders, and government.

Higher education institutions are enduring increasing pressure to demonstrate the “value-added” gains of the college experience and verify that the higher education system as a whole is contributing to the public good. Demonstrating institutions’ abilities to produce effective, engaged citizens is valuable to students, families, and society at large. This study highlights the importance of precollege experiences, particularly civic activities and interactions with diverse peers that promote civic-related capacities of community college students. Yet much more information is needed to clarify the types and levels of experiences that influence civic-related

capacities in order to design and assess effective programs. Research on civic-related capacities can be used to inform policy makers, practitioners, and researchers and provide evidence of the value and impact of the college experience on the development of civic-related capacities. With intentional institutional and faculty efforts, partnerships with local school districts, and further research, community colleges can effectively promote and demonstrate the development of civic-related capacities of community college students.

21. How much of your first year's educational expenses (room, board, tuition, and fees) do you expect to cover from each of the sources listed below? (Mark one answer for each possible source)

Family resources (parents, relatives, spouse, etc.)	<input type="radio"/>				
My own resources (savings from work, work-study, other income)	<input type="radio"/>				
Aid which need <u>not</u> be repaid (grants, scholarships, military funding, etc.)	<input type="radio"/>				
Aid which <u>must</u> be repaid (loans, etc.)	<input type="radio"/>				
Other than above	<input type="radio"/>				

22. What is your best estimate of your parents' total income last year? Consider income from all sources before taxes. (Mark one)

<input type="radio"/> Less than \$10,000	<input type="radio"/> \$50,000-59,999
<input type="radio"/> \$10,000-14,999	<input type="radio"/> \$60,000-74,999
<input type="radio"/> \$15,000-19,999	<input type="radio"/> \$75,000-99,999
<input type="radio"/> \$20,000-24,999	<input type="radio"/> \$100,000-149,999
<input type="radio"/> \$25,000-29,999	<input type="radio"/> \$150,000-199,999
<input type="radio"/> \$30,000-39,999	<input type="radio"/> \$200,000-249,999
<input type="radio"/> \$40,000-49,999	<input type="radio"/> \$250,000 or more

23. Current religious preference: (Mark one in each column)

	Yours	Father's	Mother's
Baptist	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Buddhist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Church of Christ	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eastern Orthodox	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Episcopalian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hindu	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Islamic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jewish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LDS (Mormon)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lutheran	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Methodist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presbyterian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quaker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Roman Catholic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seventh Day Adventist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unitarian/Universalist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
United Church of Christ/Congregational	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Christian	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Religion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
None	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. Do you consider yourself a Born-Again Christian?
 Yes No

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

White/Caucasian	<input type="checkbox"/>
African American/Black	<input type="checkbox"/>
American Indian/Alaska Native	<input type="checkbox"/>
Asian American/Asian	<input type="checkbox"/>
Native Hawaiian/Pacific Islander	<input type="checkbox"/>
Mexican American/Chicano	<input type="checkbox"/>
Puerto Rican	<input type="checkbox"/>
Other Latino	<input type="checkbox"/>
Other	<input type="checkbox"/>

26. For the activities below, indicate which ones you did during the past year. If you engaged in an activity frequently, mark (F). If you engaged in an activity one or more times, but not frequently, mark (O) (Occasionally). Mark (N) (Not at all) if you have not performed the activity during the past year. (Mark one for each item)

Attended a religious service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was bored in class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participated in organized demonstrations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tutored another student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Studied with other students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was a guest in a teacher's home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Smoked cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drank beer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drank wine or liquor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt overwhelmed by all I had to do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt depressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performed volunteer work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Played a musical instrument	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asked a teacher for advice after class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed politics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Voted in a student election	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Socialized with someone of another racial/ethnic group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Came late to class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used the Internet for research or homework	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performed community service as part of a class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used a personal computer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed religion/spirituality:			
In class	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
With friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
With family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Worked on a local, state, or national political campaign	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Maintained a healthy diet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stayed up all night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Missed school because of illness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. For each item, please mark Yes or No:

Did your high school require community service for graduation?	Yes	No
	<input checked="" type="radio"/>	<input type="radio"/>
Have you participated in:		
A summer research program?	<input type="radio"/>	<input type="radio"/>
A health science research program sponsored by a university?	<input checked="" type="radio"/>	<input type="radio"/>

28. What is the highest level of formal education obtained by your parents? (Mark one in each column)

	Father	Mother
Grammar school or less	<input type="radio"/>	<input type="radio"/>
Some high school	<input type="radio"/>	<input type="radio"/>
High school graduate	<input type="radio"/>	<input type="radio"/>
Postsecondary school other than college	<input type="radio"/>	<input type="radio"/>
Some college	<input type="radio"/>	<input type="radio"/>
College degree	<input type="radio"/>	<input type="radio"/>
Some graduate school	<input type="radio"/>	<input type="radio"/>
Graduate degree	<input type="radio"/>	<input type="radio"/>

29. In deciding to go to college, how important to you was each of the following reasons? (Mark one answer for each possible reason)

My parents wanted me to go	<input type="radio"/>				
I could not find a job	<input type="radio"/>				
Wanted to get away from home	<input type="radio"/>				
To be able to get a better job	<input type="radio"/>				
To gain a general education and appreciation of ideas	<input type="radio"/>				
There was nothing better to do	<input type="radio"/>				
To make me a more cultured person	<input type="radio"/>				
To be able to make more money	<input type="radio"/>				
To learn more about things that interest me	<input type="radio"/>				
To prepare myself for graduate or professional school	<input type="radio"/>				
To get training for a specific career	<input type="radio"/>				
To find my purpose in life	<input type="radio"/>				

30. How would you characterize your political views? (Mark one)

Farleft
 Liberal
 Middle-of-the-road
 Conservative
 Farright

31. Rate yourself on each of the following traits as compared with the average person your age. We want the most accurate estimate of how you see yourself. (Mark one in each row)

	Highest 10%	Above Average	Average	Below Average	Lowest 10%
Academic ability	<input type="radio"/>				
Artistic ability	<input type="radio"/>				
Compassion	<input type="radio"/>				
Computer skills	<input type="radio"/>				
Cooperativeness	<input type="radio"/>				
Courage	<input type="radio"/>				
Creativity	<input type="radio"/>				
Drive to achieve	<input type="radio"/>				
Emotional health	<input type="radio"/>				
Forgiveness	<input type="radio"/>				
Generosity	<input type="radio"/>				
Kindness	<input type="radio"/>				
Leadership ability	<input type="radio"/>				
Mathematical ability	<input type="radio"/>				
Physical health	<input type="radio"/>				
Public speaking ability	<input type="radio"/>				
Religiousness	<input type="radio"/>				
Self-confidence (intellectual)	<input type="radio"/>				
Self-confidence (social)	<input type="radio"/>				
Self-understanding	<input type="radio"/>				
Spirituality	<input type="radio"/>				
Time management	<input type="radio"/>				
Understanding of others	<input type="radio"/>				
Writing ability	<input type="radio"/>				

32. Mark only three responses, one in each column.

M Your mother's occupation
 F Your father's occupation
 Y Your probable career occupation

NOTE: If your father or mother is deceased, please indicate his or her last occupation.

Accountant or actuary	Y	F	M
Actor or entertainer	Y	F	M
Architect or urban planner	Y	F	M
Artist	Y	F	M
Business (clerical)	Y	F	M
Business executive (management, administrator)	Y	F	M
Business owner or proprietor	Y	F	M
Business salesperson or buyer	Y	F	M
Clergy (minister, priest)	Y	F	M
Clergy (other religious)	Y	F	M
Clinical psychologist	Y	F	M
College administrator/staff	Y	F	M
College teacher	Y	F	M
Computer programmer or analyst	Y	F	M
Conservationist or forester	Y	F	M
Dentist (including orthodontist)	Y	F	M
Dietitian or nutritionist	Y	F	M
Engineer	Y	F	M
Farmer or rancher	Y	F	M
Foreign service worker (including diplomat)	Y	F	M
Homemaker (full-time)	Y	F	M
Interior decorator (including designer)	Y	F	M
Lab technician or hygienist	Y	F	M
Law enforcement officer	Y	F	M
Lawyer (attorney) or judge	Y	F	M
Military service (career)	Y	F	M
Musician (performer, composer)	Y	F	M
Nurse	Y	F	M
Optometrist	Y	F	M
Pharmacist	Y	F	M
Physician	Y	F	M
Policymaker/Government	Y	F	M
School counselor	Y	F	M
School principal or superintendent	Y	F	M
Scientific researcher	Y	F	M
Social, welfare or recreation worker	Y	F	M
Therapist (physical, occupational, speech)	Y	F	M
Teacher or administrator (elementary)	Y	F	M
Teacher or administrator (secondary)	Y	F	M
Veterinarian	Y	F	M
Writer or journalist	Y	F	M
Skilled trades	Y	F	M
Laborer (unskilled)	Y	F	M
Semi-skilled worker	Y	F	M
Unemployed	Y	F	M
Other	Y	F	M
Undecided	Y		

33. Mark one in each row:

	1 Disagree Strongly	2 Disagree Somewhat	3 Agree Somewhat	4 Agree Strongly
There is too much concern in the courts for the rights of criminals	4	3	2	1
Abortion should be legal	4	3	2	1
The death penalty should be abolished	4	3	2	1
Marijuana should be legalized	4	3	2	1
It is important to have laws prohibiting homosexual relationships	4	3	2	1
Racial discrimination is no longer a major problem in America	4	3	2	1
Realistically, an individual can do little to bring about changes in our society	4	3	2	1
Wealthy people should pay a larger share of taxes than they do now	4	3	2	1
Colleges should prohibit racist/sexist speech on campus	4	3	2	1
Same-sex couples should have the right to legal marital status	4	3	2	1
Affirmative action in college admissions should be abolished	4	3	2	1
The activities of married women are best confined to the home and family	4	3	2	1
Federal military spending should be increased	4	3	2	1
Colleges have the right to ban extreme speakers	4	3	2	1
If two people really like each other, it's all right for them to have sex even if they've known each other for only a very short time	4	3	2	1
The federal government should do more to control the sale of handguns	4	3	2	1

34. Below is a list of community service/volunteer activities. Indicate which of these you participated in during high school. (Mark all that apply)

None	<input type="checkbox"/>	Elder care	<input type="checkbox"/>	Community improvement/construction	<input type="checkbox"/>
Tutoring/teaching	<input type="checkbox"/>	Hospital work	<input type="checkbox"/>	Conflict mediation	<input type="checkbox"/>
Counseling/mentoring	<input type="checkbox"/>	Substance abuse education	<input type="checkbox"/>	Service to my religious community	<input type="checkbox"/>
Environmental activities	<input type="checkbox"/>	Other health education	<input type="checkbox"/>	Other community service	<input type="checkbox"/>
Child care	<input type="checkbox"/>	Services to the homeless	<input type="checkbox"/>		

35. During your last year in high school, how much time did you spend during a typical week doing the following activities?

Hours per week:	None	Less than 1 hour	1-2	3-5	6-10	11-15	16-20	Over 20
Studying/homework	<input type="checkbox"/>							
Socializing with friends	<input type="checkbox"/>							
Talking with teachers outside of class	<input type="checkbox"/>							
Exercise or sports	<input type="checkbox"/>							
Partying	<input type="checkbox"/>							
Working (for pay)	<input type="checkbox"/>							
Volunteer work	<input type="checkbox"/>							
Student clubs/groups	<input type="checkbox"/>							
Watching TV	<input type="checkbox"/>							
Household/childcare duties	<input type="checkbox"/>							
Reading for pleasure	<input type="checkbox"/>							
Playing video/computer games	<input type="checkbox"/>							
Prayer/meditation	<input type="checkbox"/>							

36. Do you have any concern about your ability to finance your college education? (Mark one)

None (I am confident that I will have sufficient funds)
 Some (but I probably will have enough funds)
 Major (not sure I will have enough funds to complete college)

37. Below are some reasons that might have influenced your decision to attend this particular college. How important was each reason in your decision to come here? (Mark one answer for each possible reason)

	Very Important	Somewhat Important	Not Important
My relatives wanted me to come here	Y	S	N
My teacher advised me	Y	S	N
This college has a very good academic reputation	Y	S	N
This college has a good reputation for its social activities	Y	S	N
I was offered financial assistance	Y	S	N
The cost of attending this college	Y	S	N
High school counselor advised me	Y	S	N
Private college counselor advised me	Y	S	N
I wanted to live near home	Y	S	N
Not offered aid by first choice	Y	S	N
This college's graduates gain admission to top graduate/professional schools	Y	S	N
This college's graduates get good jobs	Y	S	N
I was attracted by the religious affiliation/orientation of the college	Y	S	N
I wanted to go to a school about the size of this college	Y	S	N
Rankings in national magazines	Y	S	N
Information from a website	Y	S	N
I was admitted through an Early Action or Early Decision program	Y	S	N
A visit to the campus	Y	S	N

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BIOGRAPHICAL SKETCH

Lynne Sponaugle Crosby was born in Lancaster, Pennsylvania. Lynne earned her Bachelor of Arts in politics from Wake Forest University (WFU) in 1989, and her Master of Science in higher education with a major in student affairs, from Florida State University (FSU) in 1993.

Upon graduating from WFU in May 1989, Lynne entered the higher education and student affairs profession by working in residence life and housing at WFU. Upon graduating with her master's degree in May 1993, Lynne worked in residence life and housing at the University of the Pacific in Stockton, California, and Virginia Tech in Blacksburg, Virginia. In these positions, she had the opportunity to work with living-learning communities and residence hall government.

In 1999, Lynne began working in the community college environment. Her career at Florida State College at Jacksonville (f/k/a Florida Community College at Jacksonville [FCCJ]) included administration positions in distance learning, military education, and most recently in liberal arts and sciences, where her responsibilities included transfer articulation, general education assessment, and classroom assessment. She has also completed the certificate program of the national Chair Academy for Leadership and Development, and the FCCJ Online Professor Certificate program, and has been an online adjunct for FCCJ for several years. In her current position as Director of Institutional Accountability, she has the opportunity to lead the College's accreditation and institutional effectiveness efforts.