REFLECTIONS AT THE FINISH LINE: THE ACTIVITIES, ROLES, AND RELATIONSHIPS OF SUCCESSFUL FIRST-GENERATION COLLEGE STUDENTS

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ABSTRACT

Cynthia Paula Demetriou: Reflections at the Finish Line: The Activities, Roles, and Relationships of Successful First-Generation College Students
(Under the direction of Judith Meece)

Nearly ninety percent of first-generation college students (FGCS) in the United States fail to graduate within six years of enrollment in postsecondary education (Saenz, Hurtado, Barrera, Wolf, & Yeung, 2007). Empirical investigation into the lived experiences of FGCS is necessary to enhance appreciation of undergraduate student retention and to inform practices designed to encourage crossing the finish line to degree completion. The study examines undergraduate retention using qualitative data collected through student interviews with successful FGCS at a large, public research university in the southern United States. Guided by a theoretical lens, informed significantly by bioecological systems theory, the activities, roles, and relationships of successful FGCS are described. Relations among activities, roles, relationships, and positive college outcomes (successful transition, retention, and graduation) are explored.

This study contributes to what is known about FGCS experiences. This contribution is important for the development of programs and supports to encourage four-year degree attainment for FGCS. The study also responds to an omission in the literature on FGCS experiences. Although literature has examined the struggles of first-generation and low-income students, studies have not examined the experiences of successful students. For the purposes

of this study, a *successful student* is a student who has been retained and is within one semester of four-year undergraduate degree completion. This study describes the experiences of successful students utilizing the voices of students themselves. It describes what persistence looks like and feels like through the eyes of students from historically under resourced and underperforming groups. Finally, this study responds to the need for a new paradigm for appreciating undergraduate retention. As such, this study utilizes a developmental perspective to study the experiences of successful students.

Study findings include four thematic areas describing the undergraduate experience of successful first generation college students; a) mentoring, b) developing academic competencies, c) engagement and exploration, and d) developing goals and autonomy. Recommendations support the development and implementation of proactive retention and degree-completion strategies from a strengths-based perspective.

Dedicated to my mother for inspiring me, to my students for teaching me,

to my advisor for guiding me, and to my family for supporting me.

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CHAPTER 1

INTRODUCTION

In a single generation, we've fallen from 1st place to 12th place in college graduation rates for young adults.

—President Barack Obama

As the country continues to languish in economic recession, the association between education and economic growth is a constant refrain in national dialogues. President Barack Obama has maintained that the future of American prosperity relies on a better-educated workforce and has put forth a national call to increase college graduation rates. Through the American Graduation Initiative, the President unveiled an agenda and a vision for the United States to retake the world lead in college graduation rates by 2020. The United States currently ranks behind 11 countries in the share of young workers with college degrees (White House, 2009).

Meeting the goals of the American Graduation Initiative will necessitate that higher education institutions implement proactive retention and degree-completion strategies (Kotamraju & Blackman, 2011). Considering projected demographic shifts in areas of population

growth, ethnicity, immigration, and distribution of wealth as well as projections of K–12 enrollment and of higher education enrollment, the success of first-generation college students (FGCS) and low-income students will be critical to meeting future workforce demands (Lopez, 2006). Research on students, especially those from underrepresented populations, who attain a four-year undergraduate degree, is needed.

Bowen, Chingos, and McPherson's (2009) book *Crossing the Finish Line: Completing College at America's Public Universities* is perhaps the most detailed exploration of college completion at public universities in the United States. It conceptualizes undergraduate graduation and retention as a crisis requiring critical and significant attention. The authors follow students at public universities from entrance to the finish line of graduation, all the while describing a picture of dismally low national undergraduate retention and graduation rates. Assessing the influence of multiple factors on degree attainment, findings indicate that FGCS, ethnic minority students, and students from low-income families have significantly lower graduation rates and take longer to complete a degree. The authors urge universities to invest in and nurture the talents of all of the students on their campuses. Furthermore, public universities are called on to hold themselves accountable for undergraduate retention and graduation rates and to investigate the experiences of those who do and do not cross the finish line.

To meet college graduation goals, it is essential for higher education policy makers, researchers, and practitioners to appreciate the needs and experiences of FGCS. They are a growing population on college and university campuses in the United States (Ward, Siegel, &

Davenport, 2012). FGCS, in particular, those from low-income families, are at a distinct disadvantage when it comes to degree completion (Adelman, 2006; Schultz, 2004). Empirical investigation into the lived experiences[1] of FGCS is necessary to enhance our appreciation of undergraduate student retention and to inform practices designed to encourage crossing the finish line to degree completion.

Background of the Problem

Nearly 90% of FGCS enrolled in colleges and universities in the United States fail to graduate within 6 years of enrollment (Saenz, Hurtado, Barrera, Wolf, & Yeung, 2007). As the numbers of FGCS attending colleges and universities in the United States increase, there is an urgent need for research on the retention of these students. With the costs of higher education rising each year and sources of federal funding for students in need decreasing, it is critical to determine how to keep students on path to degree completion. To make informed decisions, the knowledge base on the experiences of FGCS must be enhanced. There is a gap in the literature on undergraduate retention concerning the lived experiences of FGCS. Lived experiences include human involvements, choices, and options and how those features of daily

[1] The term lived experience, in the qualitative research tradition, refers to the everyday experiences of human beings in educational settings (Van Manen, 1990). Investigating lived experiences involves exploring and describing the ways in which individuals experience their environment including the options individuals encounter, the choices they make, and ways in which individuals make meaning of their environment. While research on lived experiences appreciates the integrity and unique occurrence of each individual life, it also contends that individual experiences can illuminate broader social themes, needs, and concerns (Boylorn, 2008).

life influence one's perceptions and behaviors. Research on lived experiences is important to appreciating phenomena such as college student retention as it acknowledges "the integrity of an individual life and how separate life experiences can resemble and respond to larger public and social themes" (Boylorn, 2008, p. 409).

The Higher Education Research Institute defines a FGCS as any student from a family in which both parents have no education beyond high school (Pryor, Hurtado, Saenz, Lindholm, Korn, & Mahoney, 2006). It has been estimated that approximately one in six first-year college students in the United States is a FGCS (Pryor et al., 2006). FGCS in the United States are more likely than non-FGCS to come from a low-income family (Hurtado, 2007; Thayer, 2000). The term *low income* or *student from a low-income family* is used to refer to an individual whose family's taxable income for the preceding year did not exceed 150% of the poverty level as determined by guidelines published by the U.S. Department of Health and Human Services (2013; see also U.S. Department of Education, 2013). For a family of four, low income is considered $35,325 or less. Students identified as FGCS in the United States are more likely than individuals not identified as first-generation to be students of color and nontraditionally aged (Choy, 2001; Hurtado, 2007). Students who are both first-generation students and from a low-income family are among the least likely of all undergraduate students to complete a four-year college degree (Thayer, 2000).

FGCS are twice as likely as non-first-generation students to depart from an institution of higher education before the start of the second year (Choy, 2001). FGCS experience several barriers to college completion, including insufficient academic preparation, limited college

knowledge, cultural conflict, limited familial support, and financial constraints (Adelman, 1999; Choy, 2001; Collier & Morgan, 2008; Horn & Nuñez, 2000; Thayer, 2000; Vargas, 2004). These barriers to four-year degree completion build cumulatively. They begin forming well before a student applies to college and continue after matriculation.

Research on First-Generation College Students: Status, Limitations, and Opportunities for Enhancement

The demographic characteristics of students who fail to persist in college graduation have been identified and well documented (Bowen et al., 2009). There is consensus in the literature that FGCS, ethnic minority students, and students from low-income families have significantly lower graduation rates and take longer to complete a college degree (Bowen et al., 2009; Choy, 2001; Hurtado, 2007; Pryor et al., 2006; Saenz et al., 2007). Significant disparities exist in bachelor degree attainment between students from low-income families and students from high-income families (Adelman, 2006; Byun, Meece, & Irvin, 2012; Walpole, 2003). Being a FGCS and from a low-income family presents many significant complications; nonetheless, every year, students from these circumstances persist and cross the finish line to degree completion. Much can be learned from the experiences of these individuals.

Currently there is a gap in the literature on FGCS experiences. Although many studies have described the demographic characteristics of students who fail to persist, very few studies have described the experiences of successful FGCS. A thorough literature review of journals in education found that articles that have described the lived experiences of FGCS are few and far between, with fewer than 40 appearing in peer-reviewed journals. Morales (2012) and Easley,

Bianco, and Leech (2012) are standouts among this small group. Morales (2012) explored the role of the liberal arts curriculum in the undergraduate education of FGCS, whereas Easley and colleagues (2012) provided a description of student motivations to attend and persist in college. These rich, compelling studies call for further empirical exploration. They provide fertile ground from which to grow the base of literature on successful FGCS experiences.

Research on Undergraduate Retention: Status, Limitations, and Opportunities for Enhancement

Undergraduate graduation and retention is one of the most widely studied areas of higher education (Berger & Lyon, 2005; Bowen et al., 2009; Swail, 2004; Tinto, 2007). For the last 100 years, the national undergraduate graduation rate has hovered around 50%, meaning that only half of the high school graduates entering institutions of higher education in the United States graduate (Swail, 2004). Although *graduation* and *retention* are seemingly common terms in education, it is helpful to define these terms and others within the context of research on undergraduate retention. *Graduation* refers to degree completion, whereas the term *retention* refers to an institution of higher education's ability to retain a student from admission until graduation (Berger & Lyon, 2005). Advances in higher education access have resulted in enrollment growth among FGCS; however, FGCS remain less likely to be retained than non-FGCS (Choy, 2001). *Persistence* is the student behavior of staying enrolled in college from matriculation to degree completion (Seidman, 2005). When a student does not persist, it is called *nonpersistence* or attrition*. Attrition* is when a student fails to complete a semester or enroll in consecutive semesters (Bean, 1986). This behavior has also been called *dropout* (Tinto,

1975). Attrition and dropout are negative college outcomes. Conversely, positive college outcomes include successful transition, retention, and graduation. The retention literature and literature on the undergraduate experience have frequently used the term *student success* (Adelman, 1999; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006; Swail, 2004; Tinto, 2000) when discussing these outcomes. Undergraduate student success can be broadly defined as student persistence and degree completion (Swail, 2004). Historically, undergraduate student success has been measured by retention and graduation rates (Adelman, 1999; Swail, 2004; Tinto, 2004).

The primary theoretical tradition in the study of undergraduate retention has been sociological. This tradition has not focused on student success; rather, it has focused on attrition. The main theorists in this tradition utilize person–environment fit models to predict student nonpersistence (Bean, 1986; Spady, 1970; Tinto, 1975, 1993). They attempt to explain the negative outcomes of dropout or attrition and, as such, can be classified as deficit oriented. Developed in the 1970s and 1980s, these person–environment fit models are still the dominant tools guiding research on retention today. The models assess whether student entry characteristics (e.g., high school grade point average and rank) align with institutional characteristics (e.g., academic rigor and course offerings) then subsequently explain how poor fit between characteristics results in low academic and social integration. Limited empirical support has emerged over the three decades since these models were introduced (Braxton, Sullivan, & Johnson, 1997; Kuh & Love, 2000), indicating that the potential of person–environment fit models to guide research on undergraduate retention is greatly limited. It has

been proposed that these models are fundamentally flawed (Brunsden, Davies, Shevlin, & Bracken, 2000) and culturally insensitive (Guiffrida, 2006; Hurtado & Carter, 1997). The models fail to appreciate the changing nature of the student and the environment over the course of the student's interaction with the institution (Guiffrida, 2006). These issues result in three primary limitations of current research on undergraduate retention: (a) The dominant models of retention are flawed and necessitate a new paradigm, (b) developmental perspectives are largely absent from the literature and are needed to have a deeper understanding of retention, and (c) the research focuses heavily on attrition and not on success.

The need for a new paradigm. Replacing the person–environment fit paradigm with a developmental perspective could enhance the current state of research on undergraduate retention and graduation. To fully appreciate the college student experience, including retention, a developmental approach is necessary. Traditionally aged college students are students between 18 and 24 years of age. This is, arguably, the time of late adolescence (Zarrett & Eccles, 2006). Development does not conclude at the end of adolescence or any other age or life stage; rather, people continue to develop throughout the college years and beyond. A developmental perspective would appreciate the dynamic, changing nature of both college students and the college context. Contemporary developmental perspectives define *development* as a gradually occurring and lifelong process that transpires through reciprocal and mutually beneficial interactions between the individual and the environment (Elder, 1985; Elder & Shanahan, 2006; Hamilton, Hamilton, & Pittman, 2004; Lerner, 2001). Development is the "natural unfolding of the potential inherent in the human organism in relation to the

challenges and supports of the physical and social environment" (Hamilton et al., 2004, p. 3). To develop intellectually, emotionally, and socially, an individual must interact with persons, objects, and symbols in his or her environment in a progressively more complex manner (Bronfenbrenner & Morris, 1998). Appreciating the activities, roles, and relationships of successful students can help us understand how students meet their potential in the college environment. Activities, roles, and relationships are key experiences in the environment of the developing person (Bronfenbrenner & Morris, 1998). These experiences are influenced by the characteristics of the individual and of the environment.

Developmental perspectives. Bioecological systems theory has significantly influenced contemporary developmental perspectives. It presents a holistic approach to understanding human development (Bronfenbrenner, 2005). This ecological model describes developing individuals experiencing events and activities within specific contexts. It proposes that personal experiences cannot be disconnected from the settings in which they occur. According to the theory, individuals shape, and are shaped by, their social contexts. Bronfenbrenner described developing individuals as agents both in their environment and on their environment.

Both the individual and his or her immediate environment are also influenced by larger social, political, and historical systems (Bronfenbrenner & Morris, 1998; Elder, 1985). All of the systems in the model are considered dynamic and interactive (Bronfenbrenner, 1979, 2005). Each system is both part of a larger system and a container of smaller systems. Change or conflict in any one system is likely to ripple throughout other systems or layers.

To study an individual's development, it is thus necessary to look not just at the characteristics of the individual and the characteristics of the environment but also at the ways in which the individual and the environment interact across time. This approach to understanding development has not been widely utilized in research on undergraduate retention. Applying a contemporary developmental perspective to the study of undergraduate retention would require that researchers examine the interactions between the individual and the college environment. Such a perspective has the potential to enrich the knowledge base on student development, undergraduate retention, and the college student experience. As described in the next chapter, the current investigation adopts a systems approach to understanding retention of FGCS.

Lack of research on success in retention literature. The current state of research on undergraduate retention could be further enhanced by focusing not just on attrition but also on the positive college outcomes of successful retention and degree completion. Historically, higher education research has addressed pathology with a focus on ameliorating students' problems (Shushok & Hulme, 2006). To this end, much research exists on why students fail to persist as opposed to why they succeed. Researchers have argued for a paradigm shift away from the pathological study of college learning and persistence (Walker, Gleaves, & Grey, 2006). Studying what is right with students may illuminate new aspects of successful student experiences that can in turn be applied to supporting all students (Pajares, 2009; Shushok & Hulme, 2006). There is much we can gain from studying optimal academic functioning; it is important to appreciate not just the least successful students but also flourishing students who

are fulfilled, accomplished, and learning (Pajares, 2009; Schreiner, Hulme, Hetzel, & Lopez, 2009). Students will not flourish if we simply cure pathology and eliminate behavioral and emotional problems; rather, flourishing requires building and capitalizing on human strengths and capacities (Fredrickson & Losada, 2005). Thus, research is needed to describe the experiences, strengths, and capacities of successful students is necessary. If we want to achieve excellence and bolster degree attainment, then we should study excellence. If we want to increase retention and student success, we need to more fully appreciate not just weaknesses but also the unique strengths of students.

A historical look at undergraduate retention reveals that empirical study of student persistence has grown considerably over the last 50 years (Berger & Lyon, 2005). Researchers are concerned with variables related to student persistence in college as well as with identifying best practices to encourage degree attainment. Nonetheless, there is a void in the existing literature on undergraduate retention concerning the experiences of students who persist to college degree completion. Higher education research currently focuses more on surviving than on thriving (Schreiner et al., 2009). The literature on undergraduate retention can be enhanced by studies describing students who thrive and graduate from college.

Statement of the Problem

The research on FGCS is limited. Additionally, there is a need for a new paradigm to study undergraduate retention. This study addresses this gap in the literature and the need for a new paradigm by empirically investigating the lived experiences of successful FGCS using a developmental lens. The study applied a developmental theoretical framework or lens to the

study of successful FGCS who are retained and on path to degree completion. It responds to the need for a new paradigm to study undergraduate retention and contributes to our knowledge of FGCS experiences.

Purpose of the Study

This study examines undergraduate retention using qualitative data collected through student interviews with successful FGCS at a large, public research university in the southern United States. Guided by a theoretical framework, this investigation seeks to describe the essence of interactions among individuals and their environment. Qualitative research focuses "in-depth on the meaning of a particular aspect of experience, assuming that through dialogue and reflection the quintessential meaning of the experience will be reviewed" (Rossman & Rallis, 1998, p. 72). For this study, data collected through student reflections and dialogue was explored to appreciate the experiences of successful FGCS on their paths to undergraduate degree completion. A theoretical lens, informed significantly by bioecological systems theory (Bronfenbrenner, 1979) was applied to the data. Through this lens, activities, roles, and relationships are described. Connections among activities, roles, and realtionships and the positive college outcomes of successful retention and graduation are explored. Participants include successful students who are FGCS from low-income families.

The primary aim of this study is to contribute to what is known about FGCS experiences. This contribution is important for the development and implementation of proactive retention and degree-completion strategies. A secondary aim of this study is to respond to an omission in the literature on FGCS experiences. Although literature has examined the struggles of first-

generation and low-income students, studies have not examined the experiences of successful students. For the purposes of this study, a *successful student* is a student who has been retained and is within one semester of four-year undergraduate degree completion. This study describes the experiences of successful students utilizing the voices of students themselves. It describes what persistence looks like and feels like through the eyes of students from historically under-resourced and underperforming groups. Finally, a third aim of this study is to respond to the need for a new paradigm for appreciating undergraduate retention. As such, this study utilizes a developmental perspective to study the experiences of successful students.

Significance of the Study

The vast majority of research on undergraduate retention and graduation has focused on failure. Little is known about the experiences of successful students. The success of FGCS is critical to meeting goals for degree-completion rates and, subsequently, national prosperity. Appreciating the experiences of FGCS who are retained and graduate from college enhances our ability to develop and implement proactive retention and degree-completion strategies. Furthermore, applying a developmental theoretical lens to student experiences enriches our understanding of human development during college. In particular, studying successful students deepens our understanding of the experiences of students who are realizing their potential in relation to the challenges and supports of their environments.

Summary

Undergraduate retention and graduation is an issue requiring critical attention from public universities across the nation (Bowen et al., 2009). Degree attainment for FGCS in the

United States is especially important to meeting future workforce demands, goals for national economic prosperity, and global competitiveness (Lopez, 2006). Innovative retention and degree-completion programs are necessary to promote the success of undergraduates and meet national goals for degree attainment (Kotamraju & Blackman, 2011). Empirical research into the lived experiences of FGCS is needed to develop effective programs and supports. Historically, the empirical study of undergraduate retention has been deficit oriented, with a focus on those who fail to persist. There is a gap in the current literature on the FGCS experience, with very few studies describing the individual experiences of students who are fulfilled and thriving in college. This study responds to this gap in knowledge as well as establishes a new paradigm to appreciate undergraduate retention and graduation. The study contributes to research on undergraduate retention by examining the developmental experiences of successful students who cross the finish line, persisting to degree completion.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter provides a thorough review of the current literature on the FGCS experience. It points to research demonstrating that more students from historically underrepresented groups, including FGCS, are attending college than ever before (Saenz et al., 2007), while also highlighting that FGCS still remain at a disadvantage when it comes to college degree attainment. Subsequently, a review of the literature on degree attainment and retention is provided. Ways in which the study of retention in college could be enhanced through the use of developmental perspectives is explored. The chapter then presents developmental perspectives as a primary component of the theoretical lens of the proposed study. The theoretical lens also synthesizes sociological and educational perspectives along with perspectives on undergraduate student success. Finally, the chapter presents the research objectives and questions for this study.

The First-Generation College Student Experience

Advances in access to postsecondary education in the United States for historically underrepresented groups have resulted in more students attending college than ever before, including many first-generation college students (FGCS; Saenz et al., 2007). Although improvements in access should be lauded, the fact remains that FGCS remain at a disadvantage

when it comes to college persistence and degree attainment. Nationally, FGCS are twice as likely as non-FGCS to depart from an institution of higher education before the start of the second year (Choy, 2001). In an effort to shed more light on this issue, this section describes the characteristics of low-income FGCS. This section also describes barriers to FGCS degree completion as well as key factors linked to FGCS college persistence and degree attainment at four-year colleges and universities. Finally, programs and supports enhancing the persistence and completion rates of FGCS are shared.

Characteristics of First-Generation College Students

Inconsistent definitions. To appreciate the characteristics of FGCS attending four-year colleges or universities in the United States, it is first critical to recognize that there is not one universally accepted definition of FGCS. Researchers and practitioners as well as individual colleges and universities define FGCS differently. For example, researchers have defined FGCS as students from families in which neither parent has earned a college degree (Saenz et al., 2007); students whose parents never enrolled in postsecondary education (Nuñez & Cuccaro-Alamin, 1998); and students whose families have no college or university experience (Choy, 2001). In practice, definitions of FGCS vary by institution. For example, as a higher education administrator, I identify FGCS using the university's unique definition stating that a FGCS is a student from a family in which neither parent has earned a four-year undergraduate degree. Down the road, at Duke University, my colleagues identify a FGCS as a student who is the first person in his or her family to attend college. The Higher Education Research Institute at the

University of California at Los Angeles defines a FGCS as any student from a family in which both parents have no education beyond high school (Pryor et al., 2006).

Demographic characteristics. Current research indicates one in six first-year college students in the United States is a FGCS (Pryor et al., 2006). Students identified as FGCS in the United States are more likely than individuals not identified as FGCS to be students of color and outside of the 18-24 year-old age range (Choy, 2001; Hurtado, 2007). Of students identified as FGCS at four-year colleges and universities, 38.2% are Hispanic, 22.6% are African American, 16.8% are Native American, 19% are Asian, and 13.2% are White (Saenz et al., 2007). Many students identified as FGCS speak a language other than English at home (Warburton, Bugarin, & Nuñez, 2001).

Socioeconomic characteristics. FGCS are more likely than non-FGCS to come from low-income families (Hurtado, 2007; Thayer, 2000). Nearly 30% of FGCS are from families with an annual income less than $25,000 (Pryor et al., 2006). The experiences of FGCS may vary greatly depending on income and ethnicity. Research suggests that FGCS from middle-income backgrounds are less likely to have a difficult adjustment to college than FGCS from low-income families or from ethnic minorities (Thayer, 2000). Students who are both first-generation and from a low-income family are among the least likely of all undergraduate students to complete a four-year college degree (Thayer, 2000). African American and Hispanic FGCS are more likely than other FGCS to be heavily dependent on financial aid (Fischer, 2007). FGCS are more likely than non-FGCS to see higher education as an opportunity for upward social and economic

mobility, to believe it is important to be well off financially, and to give their children better opportunities than they had as children (Warburton et al., 2001).

Barriers to College Completion

Barriers can be broadly characterized as insufficient academic preparation, limited college knowledge, cultural conflict, limited familial support, and financial constraints (see Table 1). These barriers to four-year degree completion build cumulatively. They begin forming well before a student applies to college and continue after matriculation.

Insufficient academic preparation. College degree completion for FGCS is influenced by the quality and academic intensity of the high school curriculum, regardless of ethnic or socioeconomic status (Adelman, 1999). High school students whose parents did not attend college are less likely than non-FGCS to be prepared academically for the rigor of postsecondary education (Thayer, 2000). In particular, FGCS frequently lack sufficient academic preparation in mathematics. Students whose parents did not attend college are less likely than other students to enroll in advanced math courses during high school (Choy, 2001). The likelihood that a FGCS will take advanced math courses in high school is restricted by the limited course offerings in high schools that have large populations of FGCS. Similarly, there is limited availability of Advanced Placement, honors, and international baccalaureate programs in schools serving large numbers of FGCS (Horn & Nuñez, 2000).

Limited college knowledge. Many FGCS lack *college knowledge,* meaning that they are not aware of the steps required to apply to college, including how to apply for student aid, when to take required standardized tests, and how to make connections between desired

career paths and required education (Vargas, 2004). Many FGCS have limited college knowledge because they lack firsthand college experience such as visiting colleges prior to applying (Thayer, 2000). Limitations in college knowledge often result in FGCS not being fully aware of, or taking full advantage of, the entire range of options available for them in higher education (Vargas, 2004). For example, FGCS are more likely than non-FGCS to enroll in less-selective two-year or four-year institutions, even when they are qualified for more selective institutions (Pascarella, Pierson, Wolniak, & Terenzini, 2004).

College knowledge can also include an appreciation of the behaviors expected of students once they are enrolled in college (Collier & Morgan, 2008). The ability of FGCS to understand course material is necessary; but alone, it is not sufficient for success (Collier & Morgan, 2008). University students must also master the college student role. FGCS have differences from non-FGCS regarding time management and appreciating specific aspects of course work such as due dates and attendance policies. These differences have been demonstrated to negatively influence the ability of FGCS to respond to faculty expectations (Collier & Morgan, 2008). With limited college knowledge, FGCS may not take advantage of the range of curricular and co-curricular opportunities offered on campus. FGCS are less likely than non-FGCS to engage in academic and social experiences related to college success, including interacting with faculty, studying, participating in extracurricular activities, and utilizing on-campus student services (Lohfink & Paulsen, 2003; Nuñez & Cuccaro-Alamin, 1998; Pascarella et al., 2004; Pike & Kuh, 2005).

Cultural conflict. Many FGCS, especially those from low-income backgrounds, experience cultural conflict at college (Fischer, 2007; Thayer, 2000). FGCS are likely to perceive campus environments and faculty as less supportive or less concerned about them than other students (Pike & Kuh, 2005; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996). FGCS are also less likely than non-FGCS to live on campus and interact with faculty members (Pike & Kuh, 2005). FGCS frequently delay entry to college after high school and choose to attend an institution based on its proximity to their home, the ability to live at home while attending school, and the ability to work and go to school simultaneously (Nuñez & Cuccaro-Alamin, 1998). These factors make it less likely that a student will spend sufficient time in the college culture coming to fully appreciate the environment and engage in learning opportunities beyond the classroom. This may result in feelings of isolation or alienation. FGCS at four-year colleges and universities often find they are ill prepared to handle feelings of isolation and alienation experienced during their transition to college (Richardson & Skinner, 1992).

Limited familial support. FGCS are less likely than non-FGCS to receive help from parents in negotiating the college admissions process (Choy, 2001). FGCS are likely to perceive less familial support for attending college than non-FGCS (Thayer, 2000). FGCS have reported receiving little support as well as discouragement from their parents to attend college (Billson & Terry, 1982; Horn & Nuñez, 2000; Terenzini et al., 1996). Parents of FGCS may lack pertinent information about the process of going to college, especially in the realms of financial aid and college costs, which may lead to discouraging their children to pursue higher education (Vargas, 2004). Additionally, parents of FGCS who are unfamiliar with postsecondary education may not

be aware of the social and economic benefits of higher education (Volle & Federico, 1997). Once enrolled in college, FGCS often report strained familial and personal relationships in their home communities. FGCS sometimes find that relationships with family and friends who did not attend college are difficult to maintain once the FGCS are enrolled in college. FGCS may be perceived by their families or home communities as changing and separating. This separation and individuation can cause personal as well as academic stress for FGCS (Richardson & Skinner, 1992; Terenzini et al., 1996).

Financial constraints. FGCS often choose which institution of higher education to attend based on cost-related reasons, including financial aid and anticipated time to degree completion (Nuñez & Cuccaro-Alamin, 1998). This means that FGCS may choose to attend less selective institutions owing to financial constraints. Once enrolled in college, FGCS are more likely to work off campus and to work more hours than non-FGCS (Pike & Kuh, 2005; Terenzini et al., 1996). Pascarella and colleagues (2004) found that working while attending college has stronger negative implications on postsecondary outcomes for FGCS than it does for non-FGCS. Because FGCS frequently live and work off campus, they have fewer relationships with their peers and low levels of involvement in campus co-curricular activities (Billson & Terry, 1982; Pike & Kuh, 2005). Many FGCS attend college part-time because their financial situations require that they work full-time. FGCS are more likely than non-FGCS to be financially independent from parents, have dependent children, and be single parents (Engle & Tinto, 2008).

Factors Linked to College Persistence and Success

Academic rigor in high school. Taking a rigorous high school curriculum has been linked to college degree attainment (Adelman, 1999; Byun, Irvin & Meece, 2012; Cabrera & La Nasa, 2001; Choy, 2001; Wimberly & Noeth; 2005). FGCS who take progressively more complex courses over the course of their high school careers fare better in college. These courses should be part of a curriculum with clearly defined standards and high expectations. The curriculum should cumulatively build on previously learned concepts and skills and promote in-depth analysis as well as student mastery of content. In particular, taking advanced math courses in high school has been associated with four-year degree attainment (Horn & Nuñez, 2000).

Grant-based financial aid. Research has found that financial aid increases, in the form of grants, scholarships, and work study, positively influence the likelihood that FGCS will persist in college. Conversely, increases in student loans decrease the likelihood that students will persist (Lohfink & Paulsen, 2005). FGCS and their families are often reticent about taking on student loan debt to fund a college education. FGCS who are offered grant-based aid instead of student loans are more likely to remain enrolled in college.

Positive and early parental involvement. FGCS and their families often lack access to information on how to prepare, apply to, and pay for postsecondary education. College knowledge among parents of FGCS is limited by lack of experience as well as by limited access to information sources, including university websites, parent–teacher conferences, and college information nights. There are often social, economic, and language barriers restricting access to these resources (Choy, 2001; Oliverez & Tierney, 2005; Vargas, 2004; York-Anderson &

Bowman, 1991). As a result of these restrictions, FGCS are less likely than non-FGCS to complete the steps necessary to enroll in college, even if they are well qualified and aspire to attend college. Parental involvement and encouragement during high school increase the likelihood that students will take a rigorous high school curriculum and enroll in postsecondary education (Hossler, Schmit, & Vesper, 1999). Providing outreach to parents early in the high school career has been linked with college access and persistence. In particular, outreach emphasizing the importance of selecting challenging course work during high school can help improve a student's likelihood of college degree attainment.

Early access to information. FGCS benefit from receiving information concerning college opportunities, including student aid, college application processes, and the selection process, early in their high school careers (Choy, 2001). This information helps students choose a college at an appropriate level of selectivity. FGCS often choose to attend less-selective institutions, even when they are qualified to attend more selective schools (Lohfink & Paulsen, 2005; Nuñez & Cuccaro-Alamin, 1998). Research has found that the decision to attend a less-selective institution can negatively influence the likelihood that a FGCS will obtain a bachelor's degree (Pascarella et al., 2004; Vargas, 2004). Receiving early information concerning college opportunities helps FGCS choose a college well aligned with their needs and abilities. Whether or not FGCS apply to or enroll in college is influenced by educational expectations communicated to students during and prior to high school. Research has shown that educational expectations differ based on parents' level of education as early as eighth grade (Choy, 2001). By eighth grade, only 55% of students whose parents did not go to college aim to

earn a four-year college degree, whereas 91% of eighth-grade students whose parents went to college aspire to earn a four-year college degree. By 12th grade, 90% of non-FGCS expect to earn a bachelor's degree, whereas only 53% of FGCS expect they will earn a bachelor's degree (Choy, 2001). Increasing early access to college information increases educational expectations. FGCS who receive early access to college information are more likely to see attending college as a reasonable expectation and an attainable goal.

Campus engagement. Campus engagement in curricular and co-curricular activities in college, especially for FGCS from historically underrepresented populations, increases the likelihood that students will persist in college (Fischer, 2007). FGCS frequently have limited time management skills, limited knowledge of college finances, limited budget management skills, and lack of experience negotiating the bureaucratic processes of higher education (Thayer, 2000). Increasing FGCS participation in activities and their use of university resources promotes campus engagement. Encouraging FGCS to be active in the campus environment positively influences the FGCS experience.

College Programs and Supports

Transition programs. For the purposes of this review, I define *transition programs* as initiatives designed to encourage the successful transition of FGCS from high school to college. These programs introduce FGCS to and prepare them for the academic and social expectations of college. Summer bridge programs are a type of transition program offered to students during the summer prior to enrollment in the first full-time academic semester (Barefoot, Griffin, & Koch, 2012). Summer bridge programs offer students the opportunity to move on campus early,

make connections with faculty and campus resources, and take academic courses (Engle, Bermeo, & O'Brien, 2006). Nationally, summer bridge programs are offered most frequently to FGCS, students from low-income families, and students from historically underserved populations (Barefoot et al., 2012). These programs have demonstrated improved academic readiness for the first year of college as well as improved retention and graduation rates (Barefoot et al., 2012). For FGCS, in particular, students found summer bridge programs most beneficial when they continued to have access to program support staff and resources throughout the school year (Engle et al., 2006). Orientation programs and first-year seminars are additional transition programs that can positively influence the FGCS experience. The most effective orientation programs and first-year seminars frequently bring students and faculty together in small-group settings (Kuh, 2008). FGCS report that frequent and highly structured seminars with faculty helped them develop the structure and discipline requisite to be successful overall as a college student (Darling & Smith, 2007; Engle et al., 2006). Studies also reveal that writing-intensive courses are a key transition programs (Kuh, 2008). These courses provide students with repeated writing practice and can be especially beneficial for FGCS who come from under-resourced K-12 school systems (Darling & Smith, 2007; Engle et al., 2006).

Learning communities. Learning communities encourage intellectual investigation among a group of students within and beyond the classroom (Kuh, 2008). Offering common intellectual experiences, living–learning communities, and collaborative assignments to FGCS can help with transition and retention by situating students within a small community of learners. Common intellectual experiences can include a summer reading book for all new

students or attending a lecture and discussion as a group. It also includes the common core of classes that all students must take to graduate (Kuh, 2008). *Living–learning communities* are learning communities with a residential component, in which students engage in academic work together while living in the same residence hall (Barefoot et al., 2012). Residential living–learning programs have been demonstrated to help FGCS acclimate to the college environment (Engle et al., 2006). Collaborative assignments and projects, whether offered through living–learning communities or through offer venues, can help students learn to work and solve problems among a group as well as appreciate the perspectives of others (Kuh, 2008). Working in a collaborative learning environment can help FGCS make connections with peers, appreciate academic expectations, and, subsequently, enhance their transition to college (Engle et al., 2006).

Academic advising. Continuous academic advising from precollege enrollment to graduation can help FGCS navigate institutional culture, academic expectations, degree requirements, academic choices, and opportunities (Darling & Smith, 2007). Precollege advising has been especially helpful for FGCS as it prepares FGCS academically for college as well as involving parents in the college preparation process (Engle et al., 2006). Early warning systems are a type of academic advising program in which students are provided early academic feedback from instructors and opportunities for academic advising. A primary goal of early warning systems is the early identification of behaviors that could lead to academic difficulty (Barefoot et al., 2012). Academic advisors and faculty work with early warning systems to guide FGCS to use academic support resources on campus (Darling & Smith, 2007). Faculty office

hours are another critical part of academic advising supports and programs. For FGCS in particular, it is important for students to perceive that professors want to meet with them during office hours (Engle et al., 2006). Faculty office hours are most effective when FGCS perceive that professors care, they want to meet with students, and office hours are not limited or offered during inconvenient times.

Experiential learning. Experiential learning programs and supports can be especially beneficial to FGCS. For the purposes of this review, I classify service learning, undergraduate research, and diversity and global learning as *experiential learning.* These learning opportunities encourage FGCS to learn through activities and experiences inside and outside of the traditional classroom environment. Service learning involves field-based activities, community partnerships, and students applying what they have learned to a real-life setting (Kuh, 2008). It can be especially beneficial to students as it encourages a heightened sense of community and civic awareness as well as peer and faculty interactions (Barefoot et al., 2012). Undergraduate research also promotes student–faculty interaction (Barefoot et al., 2012). Finally, diversity and global learning can help FGCS, especially FGCS from rural communities, interact with diverse student bodies on college campuses (Engle et al., 2006). Diversity and global learning encourage students to explore perspectives, cultures, and life experiences different from their own (Kuh, 2008).

First-Generation College Students in Summary

Merely increasing access to higher education for FGCS does not guarantee degree attainment. Intentionally designed programs and supports are needed to enhance the

enrollment, persistence, and completion rates of FGCS at four-year colleges and universities. According to the literature on FGCS success, these programs and supports should begin prior to college enrollment, continue throughout the duration of the college experience, be multifaceted, strive to develop students' academic competence, and encourage campus engagement (Thayer, 2000). Examples of effective college programs and supports for FGCS include transition programs, learning communities, academic advising, and experiential education.

In addition to implementing these types of programs and supports to enhance the enrollment, persistence, and completion rates of FGCS, higher education researchers and practitioners may value more research on specific subsamples or settings of FGCS. The term *first-generation* is commonly used to refer to a very broad group of students in the United States. The FGCS experience can vary significantly depending on the socioeconomic status and ethnicity of individual students. The FGCS experience can also be quite different for students enrolled in four-year institutions than for those enrolled in community colleges. It can be different for students who are first-time, first-year students and for those who are transfer students. The factors influencing college persistence and completion are likely to vary among these, as well as other, groups and settings. More research on subgroups of FGCS, including FGCS at research universities, FGCS at community colleges, FGCS transfer students, and ethnic and economic subgroups of FGCS, is necessary.

The Study of Retention of Youths in College

The earliest studies of undergraduate retention in the United States occurred in the 1930s and focused on what was referred to at the time as *student mortality*: the failure of students to graduate (Berger & Lyon, 2005). The study of higher education as a whole began developing between the 1930s and 1950s. In the 1960s multiple publications, such as Gekoski and Schwartz's (1961) "Student Mortality and Related Factors," published in the *Journal of Educational Research*; Panos and Astin's (1968) article "Attrition Among College Students;" and Feldman and Newcomb's (1969) book *The Impact of College on Students,* the study of undergraduate retention began to take shape (Berger & Lyon, 2005).

The 1970s was the advent of theory in the study of college student retention (Berger & Lyon, 2005). Three main theories of retention emerged in the 1970s and 1980s: Spady (1970), Tinto (1975), and Bean (1986). All three theories include person–environment fit models. Person–environment fit models predict that poor fit between the characteristics of an individual and the characteristics of an environment will result in negative outcomes for both the person and the environment (Caplan & Harrison, 1993).

Spady's (1970) person–environment fit model of student dropout in higher education was based on Durkeim's suicide model and was the first widely recognized model in retention study. Spady proposed that five variables (academic potential, normative congruence, grade performance, intellectual development, and friendship support) contributed to social fit and could be indirectly linked to the decision to drop out of school through the intervening variables

of satisfaction and commitment. In 1971, Spady published an empirical study confirming the role of academic performance , in student attrition (Spady, 1971).

Tinto's person–environment fit model of student dropout was introduced in 1975, and it is the most widely used model of student retention (Berger & Lyon, 2005). Tinto's model, like Spady's, is based on Durkheim's suicide model. Durkeim's model proposed that individuals who do not fit into a group are more likely to commit suicide (Spady, 1971). Tinto used this idea to suggest that students who do not academically and socially fit into an institution are likely to drop out. According to Tinto (1975), poor fit between student characteristics and institutional characteristics results in weak student commitments such as institutional commitment, commitment to degree obtainment, and commitment to career path. The independent, yet complementary, processes of academic integration and social integration further influence commitment. When a student fails to fit into the academic and social norms of an institution, the student's commitments are likely to weaken, and the student is likely to drop out.

Bean (1986) built on Tinto's model of student departure. Like Tinto (1975), Bean proposed that attrition results from poor fit between the background characteristics of admitted students and characteristics of the college environment. Bean added two key elements to Tinto's model. First, in addition to academic and social integration, Bean proposed that there is organizational fit. Organizational fit includes the interactions and relationships a student has with college staff, advisors, and administrators. The ways in which a student interacts with the college bureaucratically or administratively are a part of organizational fit. Interactions may include meetings with the office of admissions or student aid as well as

opportunities for course selection, compliance with institutional rules and regulations, and engagement with academic and student services. Second, Bean added the concept of environmental pull to Tinto's model. Environmental pull is the way in which a student's background characteristics can directly influence attrition. Environmental pull may include financial hardship, a relationship with a significant other, employment, an opportunity to transfer to another institution, and family responsibilities.

In 1993, Tinto revised his model to incorporate Bean's ideas of environmental pull and an appreciation of the ways in which factors outside of the direct college environment are likely to influence fit. Additionally, the 1993 model also offered another explanation for poor transition and failure to persist: inability to negotiate rites of passage. The model proposed that students fail to negotiate rites of passage when they fail to fit into and adopt the values of the college environment. According to Tinto (1993), students would be retained at higher rates if they were able to separate themselves from their families and high school friends and engage in processes leading them to appreciate and adopt the values of students and faculty in the college environment.

As mentioned previously, Tinto's theory is still the most widely utilized theory in college student retention study and practice; however, Tinto's theory is problematic for several key reasons. First, the theory relies on a static person–environment fit model. Although some characteristics of person and environment are stable, other characteristics are changeable. This is especially true when talking about young people in college. Youth transitioning to and persisting in college are continuously developing and changing; and, as such, person–

environment fit is not a suitable model to study college students. Second, empirical support for Tinto's theory is modest. Braxton et al. (1997) examined 40 studies utilizing Tinto's model. The authors found that only 19 of the 40 studies demonstrated a link between academic integration and retention and social integration and academic integration are not equal predictors of retention; rather, social integration is a stronger predictor of retention than academic integration. Furthermore, Braxton and colleagues concluded that the model's definitions of academic and social integration were limited. Kuh and Love (2000) concurred with Braxton and colleagues and proposed that the separation between academic and social integration may be superficial as many activities on campus are a complex combination of both academic and social activity.

Other theorists question the developmental appropriateness and cultural sensitivity of Tinto's model. For example, Guiffrida (2006) pointed out the model's failure to link academic and social integration to the developmental needs of youths. Regarding cultural insensitivity, Hurtado and Carter (1997) and Guiffrida (2006) expressed great concern over the introduction of Tinto's rites of passage explanation. Hurtado and Carter (1997) questioned if students, especially those from historically underrepresented populations, must fit into the campus culture and adopt the values of that culture to persist to graduation. Hurtado and Carter (1997) found Tinto's rites of passage explanation lacks rigorous empirical scrutiny and suggested that it is more beneficial to encourage a sense of belonging at an institution than it is to encourage adoption of institutional values, especially if it means leaving behind familial connections and relationships. Guiffrida (2006) argued that Tinto's model should evolve to incorporate advances

in cross-cultural psychological research since 1993. Without such an evolution, the model will remain culturally insensitive and inadequate to describe the persistence and academic achievement of minority students (Guiffrida, 2006).

Furthermore, Tinto's theory is problematic because it is based on a model of suicide and is deficit-oriented. Brunsden and colleagues (2000) argued that building a retention model on Durkeim's suicide model results in Tinto's model being globally flawed. Durkeim's suicide model itself lacks substantial scientific support, and, even if Durkheim's model was proven to be a precise, accurate model of suicide, there remains serious uncertainty over the extent to which college dropout and suicide should be viewed as analogous behaviors.

The critical problems with Tinto's model necessitate a new paradigm to appreciate college student transition and retention. It would be beneficial for the field of undergraduate retention to move away from the flawed person–environment fit paradigm that has dominated the study of undergraduate retention for the last 30 years. A model based on appreciating the potential for positive youth development would be more generative than a model based on suicide theory. Such a model would appreciate barriers and adversity even while its fundamental intention would be to describe positive outcomes, including successful transition, retention, and degree completion. It would be productive and useful to develop a model to describe the developmental nature of successful transition and retention. Although human development theories have been broadly applied to the K–12 educational experience (Meece & Eccles, 2010), they have not been extensively applied to understanding youth transition to and retention in college, nor applied to the development of programs and supports within higher

education to guide youths through these processes (Guiffrida, 2009). Developmental perspectives should be taken into account when studying college students.

Theoretical Lens of the Study

In the current section, I provide a theoretical framework or lens that guides this study. A researcher's theoretical framework or lens guides the entire research process from the formation of questions through collection and interpretation of data (Kilbourn, 2006). This study is based on a synthesis of the psychological, sociological, and educational perspectives. The lens is largely informed by Bronfenbrenner's (1979) bioecological systems theory. Developmental needs during adolescence also inform the lens as do perspectives on undergraduate student success.

Bioecological Systems Theory

This study's grand theory, providing an overarching conceptual framework for my research, is *bioecological systems theory.* The theory contends that developmental changes occur across the life span through dynamic relations between the individual and the multiple ecological levels of his or her environment, including family, peer group, school, community, and culture systems (Bronfenbrenner, 1979). These layers of a youth's developmental context change interdependently across time. There are bidirectional influences within and between the systems. Development occurs through progressive, mutual accommodation between the active and complex individual and the changing setting in which the individual lives. Relations between settings influence development as does the larger contexts in which the settings are

embedded influence development. Development does not happen to a person; rather, the person is an active agent in development.

The bioecological model includes a holistic approach to understanding human development (Bronfenbrenner, 1979). The purpose of the model is to describe developing individuals experiencing events and activities within specific contexts. The model includes the premises that personal experiences cannot be disconnected from the setting in which they occur and that individuals shape and are shaped by their social contexts. Bronfenbrenner described the developing individual as an agent both in and on his or her environment. The model includes five environmental systems that influence and are influenced by an individual: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The systems are conceptualized as five nested circles with the individual in the center circle. All of the systems in the model are considered dynamic and interactive (Bronfenbrenner, 1979, 2005). Each system is both part of a larger system and a container of smaller systems.

Conducting research from an ecological perspective is a complex undertaking that can take several years (Bronfenbrenner & Morris, 1998). Thus, for the purposes of this dissertation, the bioecological systems model serves as a broad framework to guide my research. This study concentrates on the microsystem level, with the understanding that all of the systems are mutually interdependent. The microsystem includes activities, roles, and relationships.

Activities, roles, and relationships. According to Bronfenbrenner (1979), the microsystem includes "activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics" (p.

22). Developing individuals engage in activities, take on cultural roles, and enter in to relationships with people, objects, and symbols in their immediate environment. How individuals perceive their experience of activities, roles, and relationships influences their development. To understand how an individual develops, it is necessary to understand the objective properties of an environment as well as the ways in which the properties are perceived by the individual in the environment (Bronfenbrenner, 1979, p.22). Personal characteristics influence individuals' experiences of activities, roles, and relationships. For example, attitudes and dispositions (e.g., interest, motivation), as well as gender and ethnicity, can influence how a student experiences the activity of going to class. It is important to note that activities, roles, and relationships cannot be isolated from one another; in the bioecological model, activities, roles, and relationships overlap with and influence one another (see Figure 1). In the microsystem, the individual forms social relationships such as the relationship between student and teacher. This relationship requires participation in specific cultural roles. The individual must play the role of student and assume the expectations and responsibilities associated with this role in the culture. Together, the student and teacher will engage in activities associated with their role and relationship such as classroom learning and mentoring.

Developmental activities are constant behavioral processes involving a single action or a progression of steps (Bronfenbrenner, 1979). Activities involve interactions with other individuals as well as interactions with objects and symbols (Bronfenbrenner, 1979, p. 23). Individuals can perform activities with other individuals or autonomously. Perceptions of

activities are important in shaping development. The way individuals perceive their engagement and their participation in activities influences how the activity drives development.

Throughout college students are likely to engage in a number of activities such as undergraduate research, study abroad, and participating in student organizations. Participating in activities that gradually increase in complexity over time can help college students advance towards positive college outcomes (Kuh, 2008; Light, 2001). For example, academic activities reoccurring across time and gradually increasing in complexity can include guided research opportunities or the application of study strategies. A student may begin working in a faculty lab initially observing research operations. Over time this activity may increase in complexity. The student may assist in the collection of data and then eventually collect data independently. Participating in a study group is another example of academic activity that can reoccur across time and increase in complexity. A student may initially join a study group and participative passively. Across time, the student may enhance her participation by helping to set the agenda for the study group, writing study questions, and eventually becoming a liaison between the study group and the course instructor. Describing this increase in activity can help us appreciate how over time the student learns how to appreciate and act on his or her environment.

Bronfenbrenner (1979) defines *developmental roles* as sets of relations and activities expected of an individual in a culture (p. 25). Within a culture, there are distinct behavioral expectations and responsibilities associated with particular roles. Through roles, individuals explore their environment and learn about themselves. For example, a student in the role of intern may learn what type of work he or she likes or does not like. When individuals learn to

function in new roles, they develop a deeper sense of identity. A student in the role of intern may discern likes and dislikes as well as identify personal strengths and weaknesses for different kinds of work. The student may also start to develop a vision of themselves working in the future as well as create goals to move toward that vision. Individuals may also enhance their sense of identity as they take on multiple roles. For example, an individual may play multiple roles in a culture such as the role of student, the role of employee, the role of friend, and the role of romantic partner. As an individual learns to function in these multiple roles, he or she is likely to develop a more complex identity as he or she grows to appreciate the expectations, behaviors, and tasks associated with each role. Furthermore, individuals may begin to associate themselves with members of the culture who fulfill similar roles. The intern working in a law firm may set goals to go to law school and begin to identify with lawyers.

College students are likely to take on multiple roles in their immediate environment (Evans, 2010; Light, 2001). When students enter the college culture, they are likely to assume a variety of new roles and responsibilities specifically related to the college context. The role of undergraduate in and of itself is an important role new college students must take on. College students are likely to take on additional roles such researcher or peer mentor. For example, in addition to being a student, an individual in college may be an employee, a club member, and a roommate. Over time, these roles can change in scope and importance. For example, a student employee may take on more role responsibility over time. The employee may move from a server to a shift leader. A student organization club member may take on more complexity over time, moving from a member to a leadership role such as secretary or committee chair. As

students perform in these roles over time and increase the complexity of the involvement in these roles, they will be stretched to grow and change. A goal of this study is to appreciate this change and its influence on the success of the student. In particular, changes in roles are likely to influence identify development (Bronfenbrenner, 1979).

Developmental relationships involve reciprocal interactions between two individuals (Bronfenbrenner, 1979). Reciprocal interaction means that there is an exchange between the individuals and both individuals are affected by the interaction (Bronfenbrenner & Morries, 1998, p. 798). For positive outcomes to occur, both individuals in the relationship must have mutually positive feelings, the connection between the individuals must endure over time, and both individuals must attend to each other's activities (Bronfenbrenner & Morris, 1998). In a developmental relationship, the balance of power slowly shifts towards the developing person with the developing person taking on enhanced responsibilities. The most common developmental relationship is the relationship between parent and child. As the child grows, responsibilities slowly shift from the parent to the child. Across life, developmental relationships may include relations with teachers, coaches, mentors, supervisors, peers, and colleagues.

Within the college context, developmental relationships include relationships between students and faculty members, peer relationships, and relationships between college personnel and students (Evans, 2010; Light, 2001; Pascarella & Terenzini, 2005). Interpersonal relations of college students are critical to college student success. For example, supportive relationships with faculty, including individualized, one-on-one attention has been related to enhanced

learning in college (Kuh, 2010). Faculty-student relationships can increase in complexity over time when, for example, a student moves from participating in a large class to working one-on-one with a faculty member during office hours. This student may then become a recitation leader for the faculty member and then, ultimately, a teaching assistant. This relationship is likely to develop over the course of several years and include advanced responsibilities that emerge as the relationship deepens.

Using Bronfenbrenner's theory of development, one of the important goals of this study is to identify and describe the common activities, roles, and relationships of successful FGCS. It is important to understand the activities, roles, and relationships of FGCS as these experiences shape the immediate environment of the developing student. Understanding these experiences can help us understand successful students. Describing the activities, roles, and relationships of successful students can present a picture of the ways in which successful students act on their environment and the environment acts upon them guiding students towards positive college outcomes including successful transition, retention, and graduation. The power of activities, roles, and relationships varies among individuals based on the characteristics of the developing person, the context of the processes, and the time period in which the experiences occur (Bronfenbrenner, 1979).

Proximal processes. Within and across activities, roles, and relationships there are key developmental processes. These processes in the immediate environment of the changing individual are called *proximal processes* (Bronfenbrenner & Morris, 1998). Proximal processes are enduring forms of interaction. Proximal processes are a joint function of the characteristics

of the individual and of the environment. They influence intellectual, emotional, and social development. Proximal processed involve individual interaction with the environment in a progressively complex manner as the individual becomes more competent (Bronfenbrenner, 1998, p. 798). Interactions must be reciprocal and occur on a regular basis over the course of time. Proximal processes are not limited to interactions with people. They also involve interactions with objects and symbols. Objects and symbols must invite attention, exploration, manipulation, elaboration, or imagination (Bronfenbrenner & Morris, 1998).

Within the college context, examples of enduring patterns of proximal processes are found in multiple activities, roles, and relationships. For example, a college student may take on the role of researcher. As a researcher the student may engage in the process of learning research skills. Learning research skills is considered a proximal process. Proximal processes have greater impact in more stable and advantaged environments (Bronfenbrenner & Morris, 1998). Continuing the example of research, if the student researcher works in the same lab where her responsibilities are gradually increased over time for the duration of his college career, the impact of the proximal process of learning research skills is more likely to have an impact on the student's development than if she is placed in several different labs and never given the opportunity to expand her role.

Engaging in mutually beneficial proximal processes is referred to as *adaptive developmental regulation* (Lerner, Lerner, Almerigi, Theokas, Phelps, Gestsdottir, & von Eye, 2005). Adaptive developmental regulation is the mutually beneficial way in which people act on their environment and the environment acts on them (Lerner et al., 2005). It makes the most of

the potential for change in the developmental system. Adaptive developmental regulation directs the developmental system to the advancement of positive outcomes throughout the life course. To understand adaptive developmental regulation among traditional aged college student, it is helpful to appreciate developmental needs during late adolescence.

Developmental Needs during Late Adolescence

Positive development during late adolescence is important for setting a foundation for continued optimal development throughout the duration of the life span (Zarrett & Eccles, 2006). Youths begin the passage to adulthood during late adolescence, which begins around the age of 18 years (Zarrett & Eccles, 2006). Eccles and Gootman (2002) have identified four primary developmental needs during late adolescence. First, individuals must learn how to manage newly acquired roles involving increased responsibility and autonomy. As students leave the K–12 school system and transition to the workforce, college, or vocational training, they take on new roles and responsibilities. For college students, the college context includes new freedoms and more autonomy than high school. With the transition to most college settings, young adults need to negotiate self-control or governance, the freedom to direct their own lifestyles, and separation and individuation from parents (Zarrett & Eccles, 2006). Second, Eccles and Gootman (2002) found that youth in late adolescence need to refine skills to perform in their new roles and responsibilities. To accomplish this, individuals must identify their strengths and weaknesses. For college students, this may include identifying strengths and weaknesses in areas such as academics, time management, developing new relationships, and seeking help. Students in college may learn to complete course readings and assignments

without management guidance from teachers and parents. They may also learn how to develop new relations with peers and faculty and seek help when they need assistance academically or socially. Third, during late adolescence, individuals strive to find a sense of meaning and purpose in their newly acquired roles. College students are more likely to succeed if they find a sense of meaning in their newly acquired role of a college student. For example, if a student is studying at a liberal arts institution, it will be important that the student finds his or her course of study meaningful and relevant to his or her long-term goals and interests (Evans, 2010; Kuh et al., 2006). Fourth, Eccles and Gootman (2002) pointed out that during late adolescence, individuals need to assess and implement appropriate life changes and then be able to cope with these changes. For example, college students need to identify areas in need of improvement to succeed in their newly defined roles and responsibilities. If students identify a need for improvement in their time-management or help-seeking skills, they need to be able to implement changes to help them better manage their time and seek out academic and personal resources on campus.

Perspectives on Undergraduate Student Success

In addition to describing the activities, roles, and relationships of successful FGCS, a goal of this study is to explore the ways in which these processes relate to undergraduate student success. Perspectives on undergraduate student success in college find that retention results from a combination of positive developmental experiences relating to academics, wellness, and engagement (Kadison & DiGeronimo, 2004; Kuh et al., 2006). Academic experiences include student participation in academic pursuits inside and outside of the classroom, wellness

experiences include opportunities for developing healthy behaviors contributing to one's overall physical and psychological wellness, and engagement includes participation in meaningful activities and relationships (Baxter Magolda, 2009; Love & Guthrie, 1999). Persistence and graduation are likely to be an outcome of positive academic, wellness, and engagement experiences (Kuh et al., 2006). Undergraduate student success as defined by both persistence and progress to degree completion as well as by a combination of academics, wellness, and engagement guides this study's examination of successful FGCS experiences.

Aims of the Study

Improvement in access to higher education has resulted in more students from historically underrepresented groups, many of whom are FGCS, attending college than ever before (Saenz et al., 2007). FGCS remain at a disadvantage when it comes to college degree attainment. More research on the lived experiences of FGCS, including FGCS at research universities, is necessary to develop programs and supports to encourage retention.

This study includes a rich and complex description of student success among FGCS. Student success in college is a combination of academics, wellness, and engagement (Kuh et al., 2006). As such, this study includes detailed accounts of academic, wellness, and engagement experiences among FGCS. Furthermore, a developmental perspective is employed to identify and describe the activities, roles, and relationships of successful FGCS. Proximal processes within and across activities, roles, and relationships are explored. Relations between activities, roles, and relationships, and the positive college outcomes of successful transition, retention,

and graduation are described. Finally, a major goal of the study is to critique, extend, and build upon current literature on FGCS experiences.

Research Questions

Question 1: Student Success

Objective:

Present a rich and complex description of undergraduate student success among FGCS.

Research question:

What are the academic, wellness, and engagement experiences of FGCS who persist to degree completion at a large, public university?

Question 2: Activities, Roles, Relationships, and Proximal Processes

Objective:

Present a rich and complex description of the activities, roles, and relationships of successful FGCS.

Research questions:

What are the activities, roles, and relationships of successful FGCS? What proximal processes exist within and across activities, roles, and relationships?

Question 3: Relations Among Activities, Roles, Relationships and Positive College Outcomes

Objective:

Identify relations among activities, roles, relationships and the positive college outcomes of successful transition, retention, and graduation.

Research question:

What relations exist among the activities, roles, and relationships of FGCS and the positive college outcomes of successful transition, retention, and graduation?

CHAPTER 3

METHODS

This chapter describes in detail the methods employed to investigate the research questions of this qualitative study. Guided by the theoretical lens presented in Chapter 2, this study utilized two data sources and multiple and varied strategies for analysis. Research findings have been validated through well-defined processes including triangulation, external audit, and negative case analysis. These procedures are discussed in detail in this chapter, as are the study contributions and limitations.

A Qualitative Study

Research on undergraduate retention has focused primarily on quantitatively measuring undergraduate retention and graduation rates among student populations. Researchers (i.e., Bowen et al., 2009) predominantly utilize regression analysis to assess the influence of multiple factors on degree attainment. Through this process, they identify factors or correlates that signify individual attributes, situational conditions, or environmental contexts that result in an elevated risk of attrition (Bean, 1986; Bowen et al., 2009; Spady, 1970; Tinto, 1975, 1993). This information is important for institutional planning and program development. Nevertheless, while quantitative data on enrollment trends among undergraduates are relevant and useful,

the base of research on retention could be enhanced through studies yielding qualitative insight into the lived experiences of students.

Qualitative study provides the opportunity for researchers to explore individual experiences. The knowledge gained from this exploration can meaningfully contribute to our understanding of how students experience their undergraduate careers. Qualitative methodologies examine people in naturally occurring settings and generate rich, holistic data emphasizing the lived experience of individuals (Miles & Huberman, 1994). Qualitative methodology offers researchers a way to share data on participants' perceptions about a particular context in a manner that creates an opportunity for empathetic understanding (Miles & Huberman, 1994). In particular, narrative, reflective methods, which focus on personal experiences expressed through language, have become increasingly valued among social science and humanities researchers, including researchers in psychology (Habermas & Bluck, 2000; McAdams, 2006). However, few, if any, studies have utilized narrative, reflective methods to enrich the current knowledge base on undergraduate retention.

Qualitative research assumes that an objective or value-free interpretation of an educational scene is not possible (Creswell, 2008). All researchers bring a set of beliefs and assumptions to a study. As such, research is inherently filtered through researchers' experiences and their orientations toward the educational scenes being studied (Schram, 2006). Appendix A provides a statement of positionality describing my orientation toward the educational scene under investigation.

Guided by a Theoretical Lens

For this study, the theoretical lens described in Chapter 2 was applied to qualitative data. Through applying this lens, which is dominantly informed by bioecological systems theory, my aim was to describe the essence of interactions among individuals and their environments. Such inquiry describes both the outward appearance and the internal experience of events and activities. The goal of this type of qualitative study is to unearth the central underlying meaning or essence of experience (Creswell, 2008; Rossman & Raliis, 1998). In this tradition, language is considered the principal symbol system through which humans construct and convey meaning (Holstein & Gubrium, 1994). As such, this study included verbal data collected through student interviews. Primary constructs from my theoretical framework, including activities, roles, and relationships from ecological systems theory and academics, wellness, and engagement from theories of student success, were utilized to code the data. While I applied these six specific constructs to the data, I still approached the project with an open mind. Having an open mind meant that I was not over reliant on my theoretical lens, I made room for the unexpected, and I provided space to allow meaning and structures to emerge.

Description of Data Sources

This project was a secondary data analysis utilizing deidentified interview transcripts and categorical student data from the Office of Institutional Research and Assessment (OIRA) at a large, public university in the south eastern United States. In 2010, the OIRA conducted approximately 100 interviews with senior undergraduates who entered the University in 2006. These interviews were with successful students who persisted to their senior year of college.

Further description of the data sources are provided in the following paragraphs. All data was kept on a password protected computer with Endpoint security software.

Interviews with Successful Students

In 2010, the OIRA at a large, public university in the south eastern United States conducted interviews with graduating undergraduate students to explore the curricular and co-curricular experiences of students on their paths to degree completion. Through the interviews, students were encouraged to "reflect upon your entire experience here at Carolina" (see Appendix B: Interview Protocol). Including 31 questions and lasting from 45 to 60 minutes each, the interviews resulted in rich, high-quality data. The interviews were highly structured to ensure consistency between interviewers. All interviews were conducted, recorded, and transcribed by trained, professional OIRA staff members. OIRA purposively sampled to ensure the students interviewed reflected the undergraduate population. This study worked with the 27 interview transcripts that were conducted with FGCS. These transcripts contained approximately 25 hours of interviews transcribed as 325 single-spaced pages. Before sharing these 27 transcripts, OIRA reviewed all of these data and redacted all identifying information. Names were not provided. Each transcript was assigned a case number. For each interview transcript, corresponding categorical data was also provided. Providing information as categorical data preserved confidentiality.

Categorical Data

Categorical data for each interview transcript included the following: parental education (some college or high school or below), male or female, underrepresented ethnic minority or

non-underrepresented ethnic minority, traditional college age or non-traditional college age, home residence in-state or home residence out-of-state, combined SAT score, financially needy or non-needy, academic major, and cumulative grade point average range (less than 2.000, 2.001 to 2.500, 2.501-3.000, 3.001-3.500, 3.500-4.000). The categorical data, provided in spreadsheet format, was used for two primary purposes. First, the information was used to purposively narrow down the study group. I sorted the demographic data to narrow the study group down to 16 cases with 3 common characteristics. All 16 cases were financially needy, came from a hometown within the state, and were graduating on time (within 4-4.5 years of starting their baccalaureate degree). Second, the information was used as I read and analyzed the transcripts and considered the experiences of each student case. The categorical data served as a valuable resource to cross reference items referred to in the interviews. For example, when a student discussed her challenges developing academic competencies, I referred to the spreadsheet data to see the student's SAT score and cumulative grade point average range.

Narrowing Down the Study Group

I analyzed the cases until I reached data saturation. In qualitative research, to reach data saturation the researcher continues to sample relevant cases until no new insights are emerging from the data (Glaser & Strauss, 1967; Guest, Bunce, & Johnson, 2006). Guest and colleagues (2002) suggest that when interviews are highly structured and cases in a study group share common characteristics, saturation may be reached between 10-12 cases. I believe that I reached data saturation between 12-14 cases, but continued to analyze 16 cases in the study

group to make my findings as rich as possible. This left me with 11 cases which I could set aside and use for the process of referential adequacy. Referential adequacy is a validation process in qualitative research. It is described in further detail later in this chapter.

Strategies for Analysis

Qualitative research involves the analysis of text or pictorial data to develop descriptions of the central phenomenon under study (Creswell, 2008; Johnson & Christensen, 2008). Qualitative researchers immerse themselves in data and avoid imposing assumptions on the data. By asking specific questions of the data, categories and patterns emerge through the process of analysis (Creswell, 2008). Multiple strategies may be utilized during this process. For this study, strategies including interim analysis, memoing, coding and developing category systems, and creating matrices were used with the text data. Each of these strategies, as well as the data entry and storage plan, is described in detail in the following sections. However, first, a description of analysis as an emerging process is provided to clarify how these strategies were intentionally utilized.

Analysis as an Emerging Process

In qualitative research, the research process is dynamic in nature. Creswell (2008) called qualitative research an "emerging process" because the researcher continuously refines and revises the process of inquiry and analysis throughout the study. These revisions are intentionally made as the researcher reflects on the research process and the status of data analysis. With this in mind, it is important to note that strategies for analysis may be revised or altered during the study.

Interim Analysis

Qualitative data analysis is an ongoing and nonlinear process. The iterative process of data analysis throughout a qualitative study is called *interim analysis* (Johnson & Christensen, 2008). During this process, the data are sorted and analyzed multiple times. To begin, I read the entire data set to develop a holistic appreciation. Next, I read the data again with an exploratory approach focused on identifying topics in the text. At this stage, I was looking for topics that emerged from the text. My focus was on a range of topics as opposed to the specific meaning of each topic. In particular, I read for reoccurring topics and identified clusters and regularities. The cyclical process of interim analysis was repeated multiple times as ongoing interim analysis, over time, leds to "successively deeper, fuller waves of analysis" (Miles & Huberman, 1994, p. 86).

Memoing

Memoing is a strategy I employed throughout the study. *Memoing* is the process of recording notes and reflections during the course of qualitative research. "Memos are notes the researcher writes throughout the research process to elaborate on ideas about the data and the coded categories" (Creswell, 2008, p. 642). The goal of memoing is for the researcher to write memos to the self about insights and thoughts on the data. The memos become additional data to be analyzed (Johnson & Christensen, 2008). The guide I used for memoing is included in Appendix C. Having a guide for the memoing process added consistency and organization. This was especially beneficial because one of the primary reasons for memoing is

to direct the inquirer's development of ideas and prevent paralysis in the writing and analysis process in the face of large amounts of data (Creswell, 2008).

Coding and Developing Category Systems

Coding and developing category systems was an essential part of my data analysis. Labels describing a segment of text in the analysis of qualitative data are called *codes* (Johnson & Christensen, 2008). During the coding process, I intentionally sorted the text into like segments and labeled the segments with codes. A master list of all codes was compiled, and the codes were continuously reviewed to avoid redundancies or overlaps. Eventually, the codes were folded into themes (Creswell, 2008).

Inductive and A Priori Codes

Both inductive and a priori codes were utilized in the analysis. Codes developed before examining the data are called *a priori codes* (Johnson & Christensen, 2008). A priori codes for this analysis came from the literature on bioecological systems theory and undergraduate student success. They include activities, roles, and relationships; academics, wellness, and engagement; and transition, retention, and graduation (see Appendices D, E, and F). Codes developed as the researcher examines the data are called *inductive codes* (Johnson & Christensen, 2008). In addition to the a priori codes, the data in this study was coded inductively. After the initial coding of the data, the data was summarized and organized. The codes were continuously refined and revised throughout the process of analysis.

Creating Hierarchical and Other Category Systems

Codes and categories can be related to one another through the creation of hierarchical levels (Johnson & Christensen, 2008). Some codes or ideas are more general than others, and as such, codes can be related vertically. For example, in this study I utilized the code "activity" to identify student activities then created several sublevels, including "research," "studying," "working," and "setting goals." Creating hierarchical category systems with codes helped identify patterns and connections. This strategy was employed in this study to aid in analysis; however, a hierarchical category system is just one way of representing a relationship among categories or codes. The nature of relationships in qualitative research can be broadly defined (Johnson & Christensen, 2008). In addition to hierarchical relationships, the segmented and coded data were also organized into matrices to allow relationships among categories to emerge.

Matrices and Showing Relationships Among Categories

Many matrices were created throughout the analysis process and several appear in this final document. Matrices involve placing segmented data into a grid or other spatial format to explore data systematically (Johnson & Christensen, 2008; Miles & Hubberman, 1994). During analysis, placing segmented data into categorized rows or columns in a grid helped relationships emerge among categories. For example, in this study I created matrices to identify relationship among proximal processes and positive college outcomes. As Miles and Huberman (1994) suggest, I used matrices as a tool to identify relationships during the analysis stage. I also use it show relationships in the final presentation of findings in Chapter 4.

Data Entry and Storage

Qualitative researchers typically transcribe data from interviews as well as memos and notes on analysis into word processing documents (Johnson & Christensen, 2008). The interview data for this study was transcribed and stored as PDF documents when I received it from OIRA. As the interview transcripts were analyzed, I worked with Microsoft Excel for mapping ideas and organizing written materials. I recorded memos and notes on the analysis process directly in Excel. I also used the software to code, organize, segment, and categorize passages from the transcripts.

Validating Findings

Validating findings is a critical part of the qualitative research process (Creswell, 2008; Johnson & Christensen, 2008). Corroborating and validating findings and interpretations does not occur at the end of the research process; rather, determining the accuracy and credibility of findings and interpretations should be an ongoing and continuous process spanning from data collection through analysis and study write-up (Johnson & Christensen, 2008). Qualitative researchers propose that all research is interpretive in nature, and as such, the validation of findings is essential to establishing trustworthiness and credibility (Creswell, 2008). Qualitative researchers must be self-reflective about their role in the research process, including their interpretations and claims. Furthermore, trustworthiness and credibility are enhanced when a qualitative researcher reflects on "his or her personal and political history that shapes his or her interpretation" (Creswell, 2008, p. 266). This reflection commonly occurs in a statement of positionality (see Appendix A). Utilizing specific strategies to validate qualitative findings and

accounts, including triangulation, negative case analysis, external audit, and member checking lends further credibility to the research study.

Triangulation

Triangulation is a strategy for validating findings in qualitative research. Through triangulation, evidence from multiple data sources, individuals, or types of data is corroborated. "The inquirer examines each information source and finds evidence to support a theme. This ensures that the study will be accurate because the information draws on multiple sources of information, individuals, or processes" (Creswell, 2008, p. 266). The goal of the triangulation process for this study was to find evidence in all data sources to support the themes and descriptions. In choosing the final themes to present in Chapter 4 of this study, I created a color coding system in which each theme was assigned a color. Using this strategy, I made sure that there was evidence for each theme in the interview transcripts, in the categorical data, and in the matrices before I included it as part of my findings. Through this process I also eliminated several themes that did not ultimately have enough evidence in each data source.

Negative Case Analysis

Negative cases are items of data that differ from the researcher's working theories, expectations, or assumptions (Brodsky, 2008). *Negative case analysis* is the process of searching for and examining negative cases. Negative cases contain elements of data that do not appear to support or that contradict patterns or explanations that emerge from the data (Creswell, 2008; Patton, 2002). Negative case analysis was repeated as necessary throughout the research study. It involved carefully refining themes until they explained or accounted for

the majority of cases. When negative cases were found, they were carefully examined to see if themes should be broadened or revised to accurately reflect the patterns emerging from the data. For example, early in this study I identified a theme of "study abroad." As I continued my analysis I came to realize that this theme had to be expanded as the patterns of student activity abroad included more than studying. To accurately reflect the patterns emerging from the data, I changed this theme to "study or travel abroad."

External Audit

An *external audit* occurs when a person outside of the study conducts a review of the study (Creswell, 2008). This person, or auditor, evaluates the strengths and weaknesses of the study, then provides clear communication back to the inquirer about the study. Auditors evaluate whether study findings are sufficiently grounded in the data, if themes are appropriate, if research decisions and methodology are sound, if strategies for analysis are well employed, and if strategies for validating findings increase credibility (Schwandt & Halpern, 1988). During analysis, I organized frequent external audits. I worked with four different external auditors: my dissertation committee chair, a faculty member with expertise in qualitative research, a professional colleague who works closely with retention programs for FGCS, and a graduate student who is a FGCS and mentors several undergraduate FGCS. Auditors provided written feedback as well as participated in detailed conversations regarding the codes, the themes, the organization of data, the comparison of data, and the development of findings. Aware that the bioecological perspective is deeply engrained in my approach, I utilized the external audit process to ensure that the theoretical lens was not overly imposed on the data.

To support an inductive and holistic reading of the data, I made sure I had some external auditors who have little or no familiarity with bioecological systems theory review the inductive coding and preliminary findings. Based on the feedback I received from auditors, I adjusted themes, including broadening some and narrowing others, and refined study findings.

Revised Member Check

Member checking is a process used to validate qualitative research findings. It can occur near the end of a research project by sharing study findings with participants to corroborate themes and comment on the authenticity of the work (Creswell, 2008). For this study, because the original study participants were unidentifiable and inaccessible, a revised member check was conducted. This revised member check consisted of meeting with two current FGCS at the institution were the study took place. During this meeting, representative quotes, matrices, and preliminary findings were shown to the students. The member checking process was described to the students and then students were given time to review the documents and ask questions. Students then provided feedback and suggestions. The students requested that I clarify terms and suggested that I reword some of the themes including changing “undergraduate research” to “faculty-mentored research” and changing “faculty and graduate assistant mentors” to “academic mentors.” Overall, their comments and insights were very helpful. One student emailed me later to share her thoughts on two of the other themes. After a few more weeks of analyzing the data, I contacted this student again to share a revised draft of the data. We met more one time for a brief meeting to discuss the changes. Ultimately, the students conveyed

that they felt the study findings accurately represented the experiences of successful FGCS at their institution.

Referential Adequacy

Because I narrowed down the final study group from 27 to 16 cases, I was also able to employ a process of referential adequacy at the end of the study. Referential adequacy involves identifying a portion of data to be archived, but not analyzed. The researcher then conducts data analysis on the remaining data and develops preliminary findings. The researcher ultimately returns to the archived data and analyzes it as a way to test the validity of findings (Lincoln & Guba, 1985).I reviewed the cases I did not use in the study and found the thematic findings were consistent with the data from the collection of interviews that were not analyzed.

Contribution of the Study

The goal of this study is to examine the lived experiences of successful FGCS at a large, public university. It is a necessary study for several reasons. It fills the void in the existing literature on undergraduate retention by documenting and illuminating the lived experiences of students who are first in their family to persist to college degree completion. Although literature on undergraduate retention includes examinations of the struggles of first-generation, low-income, and rural students, it does not include examinations of the experiences of successful students. Through this study, I describe the experiences of successful students utilizing the voices of students themselves. This study includes descriptions of what persistence looks like and feels like through the eyes of students from historically under-resourced and underperforming groups. Additionally, I apply a bioecological, developmental

theoretical lens to present findings at the microsystem level about the participants' immediate biological, cognitive, and social–emotional environments. The dominant paradigms used to study undergraduate retention have failed to appreciate the role of human development in student persistence. This study responds to this omission in the research by offering an empirical examination of the relations among proximal processes and positive college outcomes.

Understanding the social and educational experiences of FGCS and how these experiences relate to positive college outcomes is necessary for the development of future educational policies and practices. This study is useful in understanding ways to facilitate working with this dynamic population. Educators should especially be knowledgeable of the diverse experiences and needs of FGCS and use this information to guide their pedagogical decisions. This research is also beneficial for FGCS because it is useful in supporting and empowering individuals who are first in their families to attend college. Additionally, this study may help interrupt the intergenerational cycles of limited educational opportunity. Furthermore, by presenting the voices of successful students, this qualitative study seeks to provide the foundation and justification for continued research on the lives of students who successfully persist to degree completion. The ultimate goals of this study, beyond understanding, are to enhance awareness of the lived experiences of FGCS and to enrich the education of all undergraduates.

Limitations of the Study

It is important to identify limitations in an empirical study. Study *limitations* "are potential weaknesses or problems with the study identified by the researcher" (Creswell, 2008, p. 207). One of the primary challenges of qualitative research is that it is inherently "rife with ambiguities" (Patton, 2002, p. 242). It is important to note that qualitative researchers apply "purposeful strategies instead of methodological rules" (Patton, 2002, p. 242). There is no one absolutely right or wrong way to conduct a qualitative investigation. The intrinsically ambiguous nature of such an investigation can be difficult for consumers of research who are not comfortable with uncertainty. Although this study made best efforts and employed all possible resources to make purposeful and informed methodological decisions, the nature of the chosen research method inevitably results in the presence of some methodological ambiguity.

Furthermore, this study relied on interview data. Data collected through interviews are subject to recall error (Patton, 2002). Interviewees may not correctly recall an event or activity or may exaggerate or diminish the importance of an event. It is also important to note that I did not conduct the interviews. The interviews were conducted by OIRA staff members for the purpose of understanding the curricular and co-curricular experiences of graduating students. As such, the interview questions were not developed utilizing the theoretical lens of this study. This study also utilized categorical data from institutional records. Such records may be incomplete or vary in quality and completeness (Patton, 2002). I utilized multiple data sources as this can help a researcher "build on the strengths of each type of data collection while minimizing weaknesses of any single approach" (Patton, 2002, p. 307).

The goal of qualitative research is to advance a rich, complex understanding of a specific phenomenon or social context (Creswell, 2008). Qualitative research findings are context and case specific (Patton, 2002). Although the findings of this study contribute to knowledge of the FGCS experience, they are not generalizable to all FGCS.

CHAPTER 4

FINDINGS

In this chapter, I present the findings for the three research questions exploring the experiences of successful FGCS. These findings are a result of a thematic analysis utilizing a developmental theoretical lens. Before conducting the thematic analysis, I created a final study group, a description of which is located in the first section of this chapter. I then present findings in response to Research Questions 1, 2, and 3. Each of these questions sets the foundation for the subsequent question. Question 1 concerns the educational context of FGCS success. Question 2 involves looking within this context to identify activities, roles, relationships, and proximal processes. Finally, Research Question 3 connects the activities, roles, and relationships identified in Question 2 to positive college outcomes.

Study Group

Utilizing the data provided by the Office of Institutional Research and Assessment, I created a final study group of 16 cases (see Table 2). These cases told the stories of 16 young men and women who were the first in their families to earn an undergraduate degree. Fifty percent of the participants were men, and 50% were women. Of the study group participants 43.8% were white, 37.5% were from an underrepresented ethnic minority group, and 18.8% were classified as other. One hundred percent of study group participants were classified as

"financially needy" by the institution meaning that they received some form of need-based financial aid. All participants were in-state students, meaning that their home residences were in the state of the university. All individuals were enrolled full-time and graduated within 4 or 4.5 years of starting their bachelor's degree programs and included majors from the arts, sciences, and professional schools, including biology, linguistics, music, middle grades education, and journalism and mass communication (see Table 3). On average, 25% of students double majored, and most students had a cumulative GPA in the range 3.510–4.000 (see Table 4). Study group cases engaged in multiple activities during college (see Table 5). All students were considered traditional-age college students.

Research Question 1: Student Success

Question 1 concerns the educational context of FGCS success. The goal in answering this research question is to provide an overview of the context of FGCS success. Because student success has been theorized to be a combination of academics, wellness, and engagement experiences (Kadison & DiGeronimo, 2004; Kuh et al., 2006), Research Question 1 was composed as, "What are the academic, wellness, and engagement experiences of FGCS who persist to degree completion at a large, public university?" Analysis revealed several salient experiences including academic advising and major selection, challenging coursework, academic activity beyond the classroom, employment, co-curricular experiences, and high academic as well as personal satisfaction. Several of the experiences span across academic, wellness, and engagement. As Kuh and colleagues (2006) theorized, success truly seems to be a combination of all three areas.

During my analysis, especially regarding wellness, I appreciated the limitations of the interview protocol. It is likely that students in the study group had wellness experiences that were not captured by the interview protocol. In particular, to be well during college students need to avoid risky college behaviors such as underage drinking (Ham & Hope, 2003) and engage in healthy activities such as sleeping and eating well (Kadison & DiGeronimo, 2004). The interview did not include many questions regarding wellness nor did it provide many opportunities for students to discuss wellness behaviors. Because of the limited data related to wellness and because of the significant overlaps across academics, wellness, and engagement, I have not divided the findings for Research Question 1 into distinct categories. Rather, I present the findings as a collection of salient experiences describing the educational context of FGCS success (see Table 6). These experiences, described in this section, provide a broad overview of FGCS success.

Academic Advising and Major Selection

Academic advising was described as an important experience throughout the four years of college, but especially during the first two years. Related to academic advising, selecting a major was described as a significant event. Students described academic advising as influential to their major selection as well as to academic careers generally. More than one student described the challenges associated with changing a major. In particular, students found that the major they thought they wanted to pursue prior to starting college was not a good fit for them once they started. The majority of students in this situation described relying on academic

advising to help them learn of new major opportunities and pathways. Makayla discussed her major change from nursing to sociology:

> I came in as a nursing major, supposedly, but I switched after my freshman year into sociology, and I have really loved it, just the field itself, and the things I have learned. I always go home and I have questions about the things we have talked about, and how can we change the economic structure, 'cause it would be so revolutionary and everything. And so I think when I made that switch into sociology, and just having that background, has been absolutely wonderful to me.

Makayla originally chose nursing because she had a desire to help people and give back to her community. Through course work and talking with an academic advisor, she learned that there are other ways to give back to one's community. She explained that through her knowledge of sociology, she could engage her home community to consider changes in "economic structure" that she believes would be "revolutionary."

Other students described the changes associated with flipping back and forth between majors. One student, William, described how he moved back and forth between communications, dramatic arts, and journalism. At the end of his undergraduate career, he lamented, "I think if I had chosen a different major I personally and artistically would be in a stronger place." The student indicated that had he had a better relationship with an academic advisor, he may have made a better major choice. In addition to navigating major selection and academic advising, students had to navigate the collection of courses in which they enrolled. Students described working with academic advisors to choose courses that met degree requirements and courses that would challenge them to grow academically.

Challenging Coursework

The second salient experience among successful FGCS is that they engaged in challenging coursework. Study participants enrolled in courses required to fulfill degree and major requirements, but they also intentionally enrolled in courses that they believed would be particularly challenging. Students enrolled in these courses even when they were not required or necessary for degree completion. Students described challenging courses as "intellectually stimulating" and "thought-provoking." Donovan shared that in challenging courses, faculty members "challenged me to improve my writing." Students shared that they derived satisfaction from the challenge of coursework. As a case in point, when describing his courses Manny said, "I've enjoyed challenge and working hard."

Many students enrolled in courses that required challenges beyond the typical course such as field-based research and study abroad. To fully participate in such courses, students made sacrifices financially and socially. For example, students spent money earned from part-time work to travel abroad to fulfill course requirements. They also decreased their participation in social activities to meet the demands of challenging courses. Challenging courses stimulated students within and beyond the classroom.

Academic Activity beyond the Classroom

All of the study participants engaged in academic activity beyond the classroom. These activities included both credit-based coursework and non-credit bearing academic activity. For some students, these activities were in the form of formal and informal academic conversations with faculty members, graduate students, and peers across campus. Sophie described how she

continued the formal academic activity for her course “Introduction to Islam” through informal conversations in her residence hall and in the dining hall. She shared that these conversations helped her “see the big picture” of what she was studying in class. Other successful students participated in field settings, study abroad, and community-based and service learning. Finally, students described activities involving academic skills development. Students worked with tutors, teaching assistants, and student service offices to develop their academic skills including reading, writing, and asking questions. They also joined and formed study groups. Students described visiting faculty-office hours regularly to ask questions, develop skills, and receive advice for participation in academic activities beyond the classroom. Both inside and outside of the classroom, faculty members served as important mentors for students’ academic development.

Employment

Another salient experience among successful FGCS was part-time employment. All participants in the study group received some form of need-based financial aid. Eleven of the 16 participants, worked at least part-time. Even though these students received financial aid they still found it necessary to work to pay for books and living expenses. In general, students described their employment activities as very positive experiences. For example, Gianna described working for the Psychiatry Department on campus, “I met people, other work-study students… My boss is great. And that job has really helped me grow…” Other students, like Tessa, described employment as teaching valuable skills including time-management,

responsibility, and working in teams. Most students described employment experiences on or close to campus and most students worked all year.

Co-Curricular Engagement

Co-curricular engagement was an important part of successful FGCS experiences. Co-curricular activities in this study included activities offered for students on or close to campus that were not academic credit bearing, but offered learning experiences or complements to the undergraduate curriculum. All study group participants engaged in co-curricular activities including student organizations, community service, and joining a small community such a themed housing community or an intramural sports team. Students largely described co-curricular activities as critical to feeling connected to the university. For example, Ethan described co-curricular activities as helping him feel "a part of the community." Noah described co-curricular activities occurring in the residence halls. He said that these activities "definitely established a smaller sense of community and friendship…" Overall, students described developing a connection to the community and personal satisfaction as a result of their co-curricular experience.

High Academic and Personal Satisfaction

Students in the study rated and described both their academic and personal satisfaction. On a scale of 1-10, with 10 being the highest level of satisfaction, students indicated they had a high overall sense of academic satisfaction. On average, study group members had an academic satisfaction rating of 8.8. (see Table 6). One student, Sophie, indicated that her academic satisfaction was "probably at least a nine. . . . I think it's been really great. All of my professors

have been top notch, and just all the stuff I've learned, so I think it's really fulfilled in that respect." Like Sophie, several students indicated that enjoyment of learning and good professors were described as part of why they gave high academic satisfaction ratings.

On a scale of 1–10, on average, study participants rated their personal happiness and satisfaction a 9.1. Several students commented that they were currently happy; however, freshman year was a significant challenge. One student, Gianna, commented that her rating was

> a 9 or 10. I was a little bit lost coming freshman year, and kind of unsure what I wanted to do. Like I said, I graduated from a small high school and I came from a small town. So it was kind of culture shock. There were more people in my dorm freshman year than I'd ever seen in my high school. So, I mean, that was kind of intense, a little bit lost, but, I mean, after you realize how many resources there are to help you it's just, I don't know, it's fantastic. There's so much stuff to do here, and I just wish I had more time to take advantage of everything.

Gianna gave a high rating of satisfaction but also appreciated that there were challenges to her experience. Other students, such as Noah, provided more glowing responses: "Ten. Easily. I met my girlfriend who is now my fiancée here. I'm graduating with a great major. I've got a great job. National championship basketball team. Just a great sports, great campus." Mackenzie described that her sense of satisfaction resulted from a significant change in life plans and perspective:

> I'd give that a 10, 'cause there's several aspects of my life that have changed greatly, just relationships and different things over the past few years and just my ultimate life plan. Like I said, I was very headstrong headed towards law school and now [after graduation] I'm moving overseas to work as a missionary for the next 2 years. . . . I'm much happier with that decision and I feel like it's more of me and who I am and not pressures from parents and just society to go all the way, get a good job, be successful in terms of what society claims is successful, economic success. And I guess the university's just played a big role in that and just my personal growth.

Mackenzie found that the university experience played a central role in her decision to change life pursuits. She perceived this change as positive, which resulted in a high satisfaction rating.

Research Question 1 Summary

The findings for Research Question 1 provided a broad overview to successful FGCS experiences. Successful FGCS participated in academic advising, selected majors, took challenging coursework, and participated in academic activity beyond the classroom. Many of them were also employed. All participants engaged in co-curricular experiences and had high academic as well as personal satisfaction. There was one experience identified in my analysis that did not ultimately have enough support to become a theme, but that I believe warrants mention. The experience concerns the desire to give back to one's community. The desire to give back to one's home community was not an experience consistent across the majority of cases; however, those that did mention it had compelling things to say. For example, Makayla described choosing the topic for her honors thesis based on her desire to contribute to her home community. She chose to study immigrant children and their families' communication with elementary schools. The student described coming to this topic because when "I moved from Colombia [at age 12] . . . my grandparents raised me [and] they didn't know anything about the school system." The student described her research as a means to give back to her home community. Donovan described wanting to become a teacher so others could have the support he had when he was in school:

> I want to be the best teacher that I can. I want to impact the lives of the students that I have. And so my goals are to do exactly that, and to be effective, and so to constantly be reflective on how I can better educate my students. I really desire to impact my students

> the way that my teachers throughout my childhood, throughout my high school career really impacted me.

Only a quarter of the students in the study group described this desire to give back to their home community, so I did not include it as a salient experience in the discussion of student success. Still, for those who did mention this, it was a compelling topic of discussion. For these students, a sense of giving back to their home community was an important part of their college experience.

In the bioecological perspective, it is critical to appreciate the context in which human development occurs (Bronfenbrenner, 2005). The findings in response to Research Question 1 provide a broad overview to the context of FGCS success. Question 2 looks into this context to identify activities, roles, relationships, and developmental processes. Research Question 1 has set the stage for the next research question which further investigates the developmental context and processes of development.

Research Question 2: Activities, Roles, Relationships, and Proximal Processes

The context of the immediate environment of the developing individual is called the microsystem (Bronfenbrenner, 1979). The microsystem includes overlapping activities, roles, and relationships (see Figure 1) in which a developing individual participates. Within activities, roles, and relationships developmental processes guide growth. These developmental processes in the immediate environment are called proximal processes (Bronfenbrenner, 1979). Research Question 2 is: What are the activities, roles, and relationships of successful FGCS? The goal of this question is two-fold. First, the activities, roles, and relationships in the microsystem must be identified and described (see Table 7). The second goal of Research Question 2 is to

identify the developmental processes occurring within and across the activities, roles, and relationships. Because developmental processes are influenced by personal dispositions and attitudes, the final section of the findings for Research Question 2 explores some of the attitudes and dispositions noted among study group participants.

Activities

Developmental activities are constant behavioral processes involving a single action or a progression of steps (Bronfenbrenner, 1979). Activities involve interactions with other individuals as well as interactions with objects and symbols. Individuals can perform activities with other individuals or autonomously. From an ecological perspective, perceptions of activities are important in shaping development (Bronfenbrenner, 1979). The way individuals appreciate their engagement and their participation in activities influences how the activity drives development. To understand development, the objective properties of an environment as well as the way the environment is experienced must be elucidated. To this end, study participants are featured here as describing their activities as well as their lived-experience of activities. Overall, students described themselves as positively evolving and changing through activities with persons, objects, and symbols in their environment. Common activities students described included curricular activities, co-curricular activities, and employment activities. It is important to note that these experiences are classified in this study as activities, but they span across roles and relationships. For example, employment is defined here as an activity; however, it overlaps with both relationships (the relationship between employee and supervisor) and roles (the role of being an employee). The curricular, co-curricular, and

employment activities of the successful FGCS in the study are described in the following sections.

Curricular. Through my thematic analysis, I identified curricular activities as activities relating to credit-bearing, undergraduate courses or to the formal academic curriculum for undergraduates. Curricular activities included engaging in coursework, participating in faculty-mentored research, and studying or traveling abroad. Curricular activities involved academic credits counting towards degree completion.

Engaging in coursework. The first curricular activity described by study group participants was engaging in academic coursework. Participants engaged in coursework by participating in class, completing course assignments, working on group projects, completing research projects, communicating with peers, working with teaching assistants, and working with instructors. Successful students did not simply go to class and go home to do homework. They also actively participated during course meeting times and invested several hours each week working on course content outside of the class meeting time.

Overall, when students actively engaged in coursework, they were able to access further academic opportunities. For example, students described courses as gateways to academic areas they were previously unfamiliar with and as gateways to potential majors. As a case in point, Sophie described taking her first linguistics course. Prior to college she had never heard of linguistics. She shared with an academic advisor that she really enjoyed French courses in high school. The academic advisor recommended that she enroll in a linguistics course. The

activity of taking this course and fully engaging in it led to what Sophie ultimately described as "the best part" of her academic experience:

> I think the best part is before I got here I didn't know what linguistics was and I'd always loved learning French and when I found out that I just thought it was really exciting, like this new thing to learn that I really loved. And I've just loved almost all my courses that I've taken in linguistics . . . coming in to college I had no idea what I would be majoring in. I had no idea.

By engaging in the linguistics course, Sophie found her major and developed an ardent interest in an academic area that was entirely new to her.

Gianna described a similar experience. Gianna never heard of sociology prior to college. Then she took one course with Dr. Karol from the Sociology department. The activity of taking the course opened up to several more activities and opportunities. First, it led to academic advising from Dr. Karol. Academic advising resulted in Gianna's major selection and a research opportunity:

> I took Dr. Karol's Sex and Gender in Society class, and it kind of opened my eyes to a whole other aspect of things that I had no idea even existed, sex and gender inequalities and things like that. I was terribly interested by the course… She [Dr. Karol] is what helped me make my decision to major in sociology… and also choosing to write an honors thesis, those are probably two biggies that really shaped my academic career here.

The activity of engaging in the course led to the development of an important relationship with a faculty member. It also led to the decision to write a thesis. By fully engaging in the coursework, the single class opened up to multiple opportunities and academic pathways for the student.

Participating in faculty-mentored research. Nearly all students, 15 out of 16, described participation in faculty-mentored research, including writing honors theses, completing

capstone projects, participating in field and lab experiences, and doing research projects in credited courses. Most students described these experiences occurring after their first year in college. Students described faculty-mentored research that was a structured part of the curriculum of a course. As an example, Gianna shared,

> I'm in a class this semester where I'm actually doing a research project for sociology of Islam. We actually did a survey with the whole class, and we're using some of the survey data to generate our own results after we've done a lit review on the same topic. I'm actually writing it about the varying attitudes towards Islam by religious affiliation in the United States.

Students also described participating in faculty-mentored research through field placements. Alexandra participated in an internship abroad that included field research in South Africa:

> I [researched] the politics behind the AIDS crisis in South Africa. And I interviewed people and just worked on that. . . . [My faculty mentor is] an expert in Africa so that was really helpful. . . . I gained a better understanding into the connections between politics and health care.

Students indicated that participating in faculty-mentored research helped them to formulate original ideas as well as better understand and contribute to the academic enterprise. Faith shared that research

> pushed me to formulate original ideas and come up with new ways of looking at things. . . . It wasn't just evaluating and researching what was already there. It was about giving something else, putting something else into the academic world.

Ethan described "having to come up with . . . a research topic, carry it out," and see it through to completion. Through this experience, Ethan realized that "every detail to that research project was important," and this realization helped him "understand the detail that goes into research, especially being at a research university." It appeared that students,' such as Ethan's, growing appreciation of research and experience with research helped them

understand the college environment better. Understanding the value of research and the labor of research helped FGCS better understand the world surrounding them.

Students described research as being highly valued in the university community. Understanding this value helped the students feel connected and accepted in the community. Students also shared that in addition to research, global perspectives were highly valued. Several students, such as Alexandra, were able to bring research and global perspectives together when they conducted research abroad.

Studying or traveling abroad. Ten out of 16 students in the study group studied or traveled abroad during their undergraduate experience. All 10 of these students described their time abroad as a defining moment in their undergraduate career. Most students studied abroad between the end of their sophomore year and the first half of their senior year. Students also recommended that all undergraduates should travel abroad during college. As a case in point, Orlando shared,

> I went to Ireland one summer and loved it. I'm actually going to Turkey and Cairo this summer after graduation. I think travel is crucial. . . . I think everyone in some way, some manner, while they're in their college career, should travel. . . . Get out there. Soak up everything you possibly can. And what better time in your life than to travel, to get out there?

Students described their experiences abroad as boosting their self-confidence and their belief that they can accomplish their goals. For example, Gianna described her study abroad experience as bringing her "out of her comfort zone" and "out of her shell." She indicated that studying abroad was "the best decision I ever made." For Alexandra, an internship at a children's hospital in South Africa confirmed for her "that I really wanted to be a doctor." A

third student, Brian, described his time abroad as confirming that he could accomplish his goal of becoming a working artist. He said that the experience established "that I can do that, that I can successfully put myself out there to be creative in the way that I want to be." Many students reflected that the confidence they developed abroad continued to serve them once they returned to their home campus. Students described being more willing to develop relationships with people they did not know and to participate in new activities. As students discussed their experiences abroad, confidence was a continuous theme. Additionally, students repeatedly discussed feeling independent.

Benefits of curricular activities. Study participants benefited from their participation in curricular activities. These activities included engaging in coursework, participating in faculty-mentored research, and studying or traveling abroad. By engaging in coursework, students learned of new fields of study, found majors, developed important relationships, and accessed pathways to enhanced academic opportunities including research. Through faculty-mentored research students developed original ideas as well as gained a better understanding of and an opportunity to contribute to the academic enterprise. Students also gained confidence and appreciated the values within their environment through research activities. Through the activity of study or travel abroad, students gained confidence, independence, and a sense of efficacy for completing their goals.

Co-curricular. In my thematic analysis, I identified co-curricular activities as social and learning experiences that complement the formal undergraduate curriculum, but are not connected to academic, credit-bearing courses. Co-curricular activities included participating in

student organizations, participating in community service, and joining a small community on campus. Co-curricular activities may or may not be coordinated by the university, but they are all a part of the university environment.

Participating in student organizations. All case study participants (16 out of 16) participated in student organizations, with half of the participants engaging in organizations with a religious or an ethnic or cultural affiliation (see Table 5). Study participants described participating in student organizations across all 4 years of college. Students described some organizations, especially ones with religious affiliations, as having a transformative influence on their lives. For example, Donovan described the significant role a Christian student organization and a Christian fraternity played in his development throughout college:

> There is a campus ministry called Every Nation Campus Ministry, a really small one, one of the smaller campus ministries. . . . It completely transformed my life and my college experience. So yeah, that organization was really instrumental in just my growth as a college student and I've been involved with them since the end of my freshman year. . . . And another community or extracurricular was I guess my fraternity I was a part of. It was . . . [a] Christian fraternity and kind of the same kind of things as the campus ministry provided, no, no, a little different because, I mean, it's still a fraternity exclusively for guys. And so, in this I was able to find brotherhood and build stronger relationships.

Another student, Mackenzie, described a religious organization called "Campus Crusade for Christ" as the thing "that most influenced" her time in college. Some students, such as Lauren, who participated in ethnic or cultural organizations described their experiences as "fun" and "time to relax." Others found that their experience with ethnic or cultural organizations challenged them to explore their cultural identity and their community. For

example, Faith said that her participation in the "Hispanic Student Association" challenged her to explore the "fine line between self-segregation and promoting your culture."

Overall, students portrayed their participation in student organizations as personally beneficial. Many students commented that participating in an organization made the large university community feel smaller. One student, Manny, described how he gained a great deal from student organizations and that while such gains may not be demonstrable on a resume, they were highly beneficial to his career prospects nonetheless:

> So I feel like I've grown personally through all these different extracurricular activities and it may not show maybe through a resume or through an application but that I will be well versed in cultural knowledge and social justice knowledge as I move forward in my career.

Students also described finding peer mentors through student organizations. These peer mentors helped guide students through the college experience. In addition to peer mentors, two students described valuable relationships they developed with professional staff who supervised student organizations. Mentors from student organizations, both peers and staff, also encouraged students to participate in community service. Many students participated in community services projects such as Habitat for Humanity and food donation drives with a student organization.

Participating in community service. Nearly all students in the study group (15 out of 16) indicated that they participated in community service during their undergraduate experience. Students described participating in community service from as early as the first week of school all the way through to graduation. Some of these activities were connected to courses but

occurred outside of the classroom, such as Faith's experience volunteering in an elementary school:

> I took an immigration geographies course and I volunteered at [an] elementary school with kindergarteners. It was great. I love it. . . . It's helped me educate myself about other cultures, not just Latin, or American culture, but Burmese. A lot of the kids that I worked with were Burmese. And I'm so, yeah, just expanding my understanding of the world.

The student found that the volunteer service opportunity broadened her appreciation of cultures beyond her own culture. Another student, Makayla, described the way community service work influenced her major choice and career pursuits. She found that volunteering at the "Family Violence Prevention Center" gave her vital experience that helped her come to the conclusion that social work was the right field of study for her. She said that volunteering helped confirm that she could "emotionally handle" social work. She elaborated,

> So that [volunteering], to me, was really meaningful, and it was really directed towards what I wanted to do, and that's why I picked social work . . . last summer I was there . . . I was the only Spanish-speaking person they had during the summer.

The student shared how meaningful it was to her that she could use her language to provide service to the community.

Several students indicated that community service provided them with stress relief, enjoyment, and an escape from the pressures of college. For example, Lauren described her service experience at a children's hospital:

> I like to help out, especially at the hospital with kids and stuff. They're really fun. I think it's like a reliever off from school. I just get my mind off it, and just hang out with the kids, and just play with them. So it was really fun. They're all interesting and have different personalities, so I think that's what I liked about meeting kids at the hospital too, and they make me appreciate my life, and just to see how strong they are.

Lauren described community service as a means to give back to her community and as a way to socialize and make friends. Service provided Lauren and others with the opportunity to build friendships with peers who held common interests and valued volunteerism. Many students shared that they were very active in service during high school and continuing service during college was a helpful way to transition into the university environment.

Joining a small community. All participants described joining at least one small community within the university environment. In particular, students identified major departments, student organizations, work settings, campus recreation, and housing communities. For example, Makayla described the importance of her membership in a small housing community: "my suite, I loved the people in my suite, and I became really, really close to them, and they became some of my best friends." Another student, Ethan, described his small community as the "fitness community" based in the university's campus recreation center:

> I've been working in the Student Recreation Center. It's the primary fitness center on campus. . . . So through that and from working out there regularly for the past 4 years, I just met people as I worked out to where I maybe out somewhere on campus or even off campus and I see someone that I know through that there and also we're having conversation and everything, people that I would not know had I not worked there or worked out there. So you know, so it makes me feel more a part of the community. I can walk around and see people all the time saying hey to me that I know from there alone. So that's been very important. It made me feel a part of [the university].

For this student, being a member of the small fitness community helped the student connect to the university and feel like a part of the collegiate environment. Another student, Sophie, also described how joining a small community helped her feel like she was a part of the university. She described feeling lost for all of her first year of college. It was only in her second year, when

she became a member of a small community, a student organization with a religious affiliation, that she began to feel she belonged on campus: “being a part of Campus Crossroads really made me feel like I had somewhere to go to and make the campus seem a little smaller.” Other students echoed the importance of student organizations as small communities. Mackenzie shared that being

> involved in an organization enables you to be part of a smaller community, and then within those organizations even smaller communities. Probably the one thing that’s influenced me most is my small group Bible study. And it’s all 4 years the same girls, and just to see how we’ve grown and relied on each other and helped each other and encouraged each other, I can’t imagine what my college career would’ve been without that group. And that’s just 12 girls, so that’s very small group.

Being a member of the small community of a student organization was significant enough to Mackenzie that she could not imagine what her college career would have been like if she were not involved in the community.

Benefits of co-curricular activities. Students benefited from their participation in co-curricular activities. Co-curricular activities included participating in student organizations, participating in community service, and joining a small community on campus. Through each of these activities, participants found the large university environment began to feel smaller. Students developed important relationships with peers and developed a connection to the community. Students also benefitted from stress-relief, satisfaction, and enjoyment derived from co-curricular activities.

Employment. In my thematic analysis I identified employment activities as activities involving working for pay at least part-time. Eleven out of 16 students worked on or close to campus while enrolled in a full course schedule (12–18 credit hours). Only one student

indicated that he worked more than part-time. He worked between 20 and 35 hours per week, whereas all of the other students worked fewer than 20 hours per week.

Working part-time. Most students found the activity of employment as generally beneficial. Only one student indicated that working part-time detracted from her college experience. This student, Makayla, shared that "when you have to work, that also takes away from other extracurricular activities that you could be doing." Even though this student noted this limitation, at other points in the interview, she shared that she had gained many favorable things from her work experience. Largely, students expressed great value gained from their part-time employment. One student, Gianna, described her work-study position at the university hospital as "probably the most positive small environment" to which she had belonged on campus. She shared,

> I had some more support there. My boss is great. And that job really helped me grow, and it's definitely helped me in my job search thus far that I was a research assistant and I have all these responsibilities and things like that.

Another student, Tessa, described her work experience as a valuable opportunity to be "part of a team and work on team building skills." One student, Manny, described how working one summer "as a door-to-door solicitor" motivated him to become more engaged in college. The student said he realized through his summer work experience what he did not want to be doing post graduation and that he had to take more advantage of what the university offered. Manny's unsatisfactory work experience led to his decision to study abroad the following summer and seek out paid internship opportunities.

Benefits of employment activities. Overall, students described part-time work as supporting their growing independence and feelings of self-confidence. Employment helped students learn how to work effectively as part of a team. Students also benefitted from the activity of employment as it helped them learn how to manage multiple responsibilities.

Roles

A role is comprised of a set of relations and activities expected of an individual in a culture (Bronfenbrenner, 1979). Individuals develop an increasingly complex identity as they learn to function in new roles. Students in a college culture may assume a variety of new roles and responsibilities specifically related to the college context. In this study the roles participants most frequently discussed included being an undergraduate, being a researcher, and being an employee. Students articulated each of these roles as positively contributing to their college experience. Roles included distinct responsibilities and autonomous as well as social behaviors. Throughout the interviews, students discussed vital skills they had to develop to perform in their roles and meet expectations. The roles influenced identity development among the students.

Undergraduate. Study participants described their experiences as they took on the role of undergraduate in the college culture. To be successful, students had to learn how to play the role of college student. Several students described initially feeling like an imposter in their role of undergraduate. Students expressed worry that the university made a mistake with their admission and that they would soon be found to be an imposter. For example, Orlando described his initial experience in his new role of college student

> It is overwhelming . . . the first time you buy a textbook and you look at it, and you're like, "Why does the name match the person who's teaching this course?" You're looking at the, "Written by John Andrews," and you're looking at your course, it says "Teacher: John Andrews," and you're like, "Oh, no." You realize for the first time exactly what you've gotten yourself into, that you're like this isn't some dusty old guy out in the middle of nowhere writing this book. The guy that's teaching wrote this book. And it's overwhelming. You're thinking, "This person's going to see through everything. They're going to realize that somehow or another my high school messed up, and somehow or another the admission board messed up, and I'm here but I'm not qualified at all to be here," and you panic.

Orlando went on to explain that through a relationship he had a with a faculty member, he began to genuinely feel like he belonged and like he could fully inhabit his role of undergraduate. By learning the student role, Orlando was able to live up to the expectations and responsibilities of being an undergraduate such as participating in study groups, visiting faculty during office hours, and meeting degree requirements.

Brian described serving in the role of undergraduate as learning that "you are not invincible." What I believe Brian meant by this was that a person cannot be involved in every student organization, participate in multiple social activities, and naturally excel in ever subject. Brian described learning that he must put in time and effort to perform on the college level. Performing on the college level was different than when he served in his role of high school student. Brian found that in his former role of high school student he did not have to invest much effort to succeed, and he could participate in as many extracurricular and social activities as he desired. His role as undergraduate was significantly different than his former role. This change led Brian to reflect on his identity and his former sense of invincibility.

Other students shared unique insights in to the role of undergraduate. William described the role of undergraduate as someone who must take a broad array of courses.

Gianna explain that being a FGCS undergraduate requires that you have faith in yourself and that you constantly remind yourself "you belong here and can do it." Orlando shared that being an undergraduate "is a pretty important part of my identity." Overall, students described being an undergraduate as a role that one does not automatically play without an investment of time and energy. Students had to actively think about their new role and how best to perform in this role.

Researcher. Researcher was an important role which overlaps with the activity of research and the relationship of academic mentor and mentee. Fifteen of the study participants reported participating in faculty-mentored research and described the importance of their role as a researcher in their overall undergraduate experience. Makayla described that in the role of researcher, "you definitely see it all come together," including the ability to ask academic questions, write, and draw conclusions. Brian described that as his role of researcher increased in complexity over time, he became more confident. He described feeling honored that eventually, after several years as a researcher, his faculty mentors let him become a principal investigator for a study:

> Dr. Feltz and Dr. Picano and the Psychology Department had mentored me, and helped me do my own studies. I'm the principal investigator for a study [now]. They let me do the IRB process. As an undergrad, instead of working with them, I did my own and that's pretty cool that they let me do that.

Ethan articulated the importance of being a researcher to connect with faculty. He described a particular faculty member as being unapproachable in class: "during a lecture, like he never seemed like personable at all." When the student became a researcher for the faculty member, "when we needed help, when I went to his office and everything, he was very

helpful." Through the researcher role, the student was able to make a connection and develop a relationship with the faculty member even when he could not do this through the lecture class. Brian, like several other students, indicated that overall being a researcher helped him identify his academic interests and prioritize his goals. From his research experience, Brian learned "my first priority is getting into grad school, and continuing my research in social psychology because that's what really interests me."

Employee. The role of employee overlaps with the activity of employment. Through the role of employee students developed in multiple ways. Ten of the 16 students worked part-time while enrolled in full-time course work. These students described their role of employee as largely beneficial. For example, Mackenzie found that through her role as a babysitter, she became a part of a family away from home and that she felt cared for and needed in this role:

> I just fell in love with the family, they were great and the kids were great and I just ended up keeping them up until last year when they went to school. So it was two days a week and it went from me going to their house and sitting with them to picking them up from their little preschool and taking them home and just playing and cooking them lunch and just kind of become part of the family.

Mackenzie described the responsibility and accountability expected of her in this role. Ethan also commented that through his role of employee, he learned responsibility, accountability, and how to communicate and interact with other people. In particular, Ethan commented that his job taught him "a lot about this how to deal with other people . . . like knowing how to work with others is very critical, working with co-workers and everything." Ethan went on to explain that his role of employee taught him how to "be real diligent about

work" and "serious on the job," which will aid him in his future vocational aspirations beyond college.

Benefits of roles. Study participants engaged in multiple roles in the college environment. These roles included being an undergraduate, being a researcher, and being an employee. Through the role of being an undergraduate, participants benefitted by learning how to be a college student and overcoming feelings of being an imposter. Through the role of researcher, students developed relationships with academic mentors, identified academic interests, and prioritized goals. As an employee, participants benefitted by developing responsibility, accountability, and skills for future vocational activities.

Relationships

A developmental relationship involves reciprocal interactions between two individuals (Bronfenbrenner, 1979). Both individuals in the relationship must attend to each other's activities. Over time, increasingly complex patterns of reciprocal activity are likely to emerge from the relationship. In a developmental relationship, the balance of power slowly shifts towards the developing person with the developing person taking on enhanced responsibilities. In developmental relationships there should be mutually positive feelings and enduring attachment over time (Bronfenbrenner & Morris, 1998). All study group participants described at least one beneficial, developmental relationship with a more experienced peer, faculty member, or adult (see Table 8). Many students described multiple relationships that positively influenced their college experience. The most common relationships they described included academic mentor, student mentor, and employment mentor. All students described having at

least one of these relationships, and some reported relationships in all three of these categories.

Academic mentor. Relationships with academic mentors included relationships students developed with faculty members or graduate students, including teaching assistants and research assistants. Students described the relationships they developed with academic mentors as positively influencing their engagement in course work. As such, the relationship of academic mentor overlaps with the activity of engagement in course work. Relationships helped students make important academic choices and decisions.

The relationship of academic mentor also overlaps with the activity of research. Students shared that they met their academic mentors through a course or research project but their relationship ultimately extended well beyond the occasion for their initial interaction. Manny's description of how he met his academic mentor is a demonstrative of this occurrence:

> As a sophomore . . . I took his [my mentor's] class Analyzing Public Opinion and it was applying statistical methods and using the statistical program's data to analyze political science survey data and I really, really enjoyed it and pretty much aced his class so he asked me to help him with his dissertation so I did a lot of getting information from various political surveys and putting it into this program's data and I did the management, cleaning up the data and basic analyses and then one day we just got together and went through all the data and I was probably there for twelve hours that day but I did a lot of work with him and it was really cool because after he got his PhD he got an assistant professor at Cornell and for about a year I still worked with him over the Internet and he provided me a really good recommendation for graduate school and I'm still in contact with him from time to time so he was a really good mentor and provided me a lot of good feedback and it was a really good experience with him.

Bronfenbrenner described relationships as bi-directional in nature (Bronfenbrenner, 1979). Manny's experience is a good example of this as the relationship positively influenced the development of Manny, the student, and it positively influenced the development of the

mentor. Manny's relationship with his mentor grew out of the activity of research and, over time, it took on significance beyond the research activity.

Another student, Gianna, described a similar situation. Whereas she initially connected with her academic mentor for a research project, she ultimately found that while she was "a great advisor to my thesis," she was also "a great mentor" overall and someone to whom she could turn "just with anything":

> If I had a problem with anything, if one of my friends had a problem with anything, if we needed that faculty support or just that outside ear, that outside advice, she's been absolutely great this year.

Student mentor. Students described having a peer mentor through a student organization. These mentors were not part of assigned mentoring programs but stemmed from two peers being in the same organization. In most cases, the mentors were more experienced with college but not necessarily older. Orlando shared that he valued "having a role model your age" and indicated "it's very satisfying to see someone your age doing well who you respect, actually respect, respect as much as you would any professor or an adult." Orlando went on to say that having a peer mentor helped him feel valued and more confident about his own goals:

> You hold them [peer mentor] in high regard, and you're convinced . . . "Well, gosh, I hold this person in such high regards and we seem to have similar goals, so I must be doing something right."

Tessa commented that the best thing about having peer mentors from student organizations was that "we were all looking out for each other." Donovan explained that his peer mentor interactions helped him feel valued and seen. Donovan's peer mentor was from a student organization with a religious affiliation:

> Every Nation, the campus ministry . . . he's been there since my freshman year, and I met him the first night that I went to the meeting, the first meeting ever that I went to my freshman year, and he was the first person that really reached out to me during my college experience. His first question to me was, I mean, after the surface level questions, like where are you from? Immediately after that he asked me, what is my story? And then I talked to him for an hour after that and just kind of told him about me. And that was the first time that anybody took a genuine interest, and was sincere, and then he followed up, and called me the next week, and called me, and prayed for me, and asked me to get dinner, and all these things, and so he then pretty much began to mentor me and kind of teach me different things about my Faith, and so I went freshman year, sophomore year, meeting up with him every week.

William also reported that a peer mentor from a student organization "challenged me" and "made me think of things in a different way." In this case, the relationship of student mentor overlaps with the activity of goal setting. William shared that his student mentor influenced the development of his goals. William was inspired by the fact that his peer mentors "all want to do things with their life and do very important things."

Employment mentor. The relationship of employment mentor overlaps with the activity of employment. Several students described their employee supervisor as an important mentor during their college experience. Of interest, these students described work supervisors who were college graduates and could relate to their college experience. Two female students described babysitting jobs they worked throughout college for families with professional parents who graduated from college. The young women described developing caring and supportive relationships with their supervisors who could relate to their college experience. Ethan described working on campus for a relatively recent college graduate ("my boss at the rec center. He's definitely become a mentor in my life") who could relate to his struggles in college

and discuss plans for life after college. In this case, the developmental relationship of employee mentor interacts with the activity of goal setting.

Manny also described working with the housing department on campus and having several recent college graduates as his supervisors:

> A couple of supervisors through housing. . . . They're just really good people to talk to. I met with them once per week . . . they've been through school and they see all of the things that are going on and they're very understanding as far as like you being really busy and if you need an outlet and they're always there and they provide really good feedback.

Manny and his supervisor shared mutual feelings of positive regard and were able to connect around the shared experience of college including its challenges and opportunities.

Benefits of relationships. Study participants benefited from multiple relationships in the college environment including academic mentor, student mentor, and employment mentor. From the academic mentor relationship, students benefitted from goal setting and making academic choices and decisions. They also received important guidance from their academic mentors; and, in some cases, the students were able to support their mentors in return. Student mentors served as role models, helped with goal setting, and helped students feel valued and appreciated in the college environment. Through the employment mentor relationship, participants were able to connect with people who were caring and supportive. The employment relationship also positively influenced goal setting and making plans for future vocations and pursuits.

Proximal Processes

Within and across activities, roles, and relationships, developmental processes influence individual growth (Bronfenbrenner, 1979). I identified seven proximal processes for successful FGCS. These processes are embedded in social context and time with the processes becoming progressively more complex over time. These processes include (a) forming attachments to people and places; (b) developing academic skills; (c) setting goals; (d) coping with change and challenges; (e) finding purpose and meaning in learning; (f) developing autonomy; and (g) forming and solidifying social and occupational identities.

Forming attachments to people and places. Throughout the study, students described the process of forming attachments to people and places. Mackenzie described the process of making attachments when she said that her academic experience "was kind of pulling you personally in to what was happening." When Mackenzie's instructor connected course content to the lived experiences of the students in the course it led to Mackenzie forming an attachment to the course content as well as to the people in her course and the place of college. Donovan described forming strong bonds and attachments to peers in his Christian fraternity and student organization. He described his strong attachment as "brotherhood." Noah described forming an attachment to his future wife. He met her in college and they planned to get married right after graduation. Many students described forming an attachment to the physical campus and looking forward to being an alumni and returning to campus for visits.

The process of forming attachments to people and places was critical to students establishing a connection to the community. The process occurred across activities, roles, and relationships. Students formed attachments through participating in student organizations and community service as well as through engaging in coursework and working with academic mentors. When students joined a small community, they became attached to the people and places associated with the community. These attachments helped create a sense of stability in the big and dynamic college environment.

Setting goals. All case study participants described formulating clear, short-term and long-term personal and academic goals. Many also described a detailed vision of themselves in the future. All 16 cases indicated that they had plans and goals post graduation. Setting goals was a process within relationships as students engaged with academic advisors, faculty members, mentors, peers, and family members to set goals. Although students developed clear goals, they were not rigid or inflexible, and many students adapted their goals based on changes in their environment or new information they acquired over time. One student, Mackenzie, described setting a goal of being a communications major based on a class she took her first year in college. Then she slowly added more depth to that goal as she engaged with faculty and took more advanced courses. She explained that through her second communications course, she realized "that communication between men and women is where I really enjoy studying." After her third course in communications, the student set a career goal of becoming a marital counselor: "through that class and then following that one led me to the decision to go into marital counseling as a career." Over time and through continued

interaction with her immediate environment, the student developed increasingly complex goals that facilitated her career choice.

One student, Manny, described developing goals as an activity he engaged in with a faculty mentor. The mentor helped the student conduct undergraduate research in biology and oversaw the student's lab hours. The student shared that the mentor "helped me figure out what I really wanted in my research experience." Over time, the discussion morphed from the immediate research project and lab experience to what the student might want to explore in graduate study. The mentor helped the student set immediate goals for the lab project and develop long-term goals for graduate school. Another student, Tessa, described setting goals for post graduation and her relationship with a faculty member:

> I was a teaching assistant for one of my courses, so I had a lot of interaction with that professor. And we were just talking and she kind of helped me get into contact with some people for stuff that I want to do after graduation, just to give me some advice to make sure this is the right thing. So she really helped me out, as far as planning my next step after graduation.

The faculty member helped the student connect with other individuals in the environment and refine her plans for future activities. Lauren summed up her college experience in the following statement about her goals: "I've made very big changes in my life and my life goals, but I feel like they're the best for me, which is what the whole purpose [of college] is."

Developing academic skills. Students described developing academic skills as a critical process, especially during the first 2 years of college. Students described developing skills in the areas of writing, studying, and asking academic questions. They explained how skills were

developed through interactions with faculty members, peers, graduate students, academic advisors, tutors, and course materials. Developing academic skills was a clear process in developmental relationships. Students engaged in the activity of developing academic skills with influential individuals in their immediate environment.

Several students, including Donovan, described how faculty members "challenged me to improve my writing." One student, Noah, shared that when he began college, "I really didn't know how to write at the college level." Another student, Ethan, lamented that in high school, "writing papers was so hard for me to do," but that in his first year of college, a faculty mentor "taught me how to write well." Several students expressed shock at having to improve their writing and study skills. For example, William shared,

> I knew it was going to be a lot harder than high school, [but I] did not really understand the amount of work you'd have to put into college. First semester was not the best [as far as] learning how to study. [I] took some pretty difficult classes. Western Civilization was the first C of my life and really kind of a wake-up call. . . . [I was] kind of like a deer in the headlights.

Several students reported experiences similar to William's. During the first semester, students struggled to appreciate how much time it would take to complete assignments and how much effort was required for success. Tessa shared,

> I expected to be part of a lot of organizations and still do well in school and get good grades. Pretty much things I did in high school. But that changed when I got to my first classes and realized it wasn't the same. So I had to study more and I had to back off on being part of a lot of organizations for it to make sure I did well. . . . I learned how to balance my time.

The majority of cases mentioned the importance of developing time management skills.

Students also reflected on the academic skill of asking questions in multiple contexts. Students discussed learning how to ask questions in class, how to ask questions in recitations and study sessions, and, more broadly, how to move from focusing on answers to thinking about diverse perspectives and approaches to a topic. Students recounted struggles with courses that required them to focus more on developing probing questions than finding correct answers. Students described asking questions in academic contexts as a learned skill as well as a conceptual shift from memorizing content to exploring, examining, and investigating content. Students reported faculty members challenged them "to come up with my own ideas, and my own conclusions, and to listen, and to take everything in, but ultimately create my own perspective and ideas" (Faith). One student, Mackenzie, described, "She [teaching assistant/graduate student mentor] just encourages you to think about things. . . . She allows you to look at all the options and to just kind of form your own opinions." Mackenzie described the challenge of being encouraged to ask her own questions and then answer them. Another student, Sophie, found, "It [coming up with a research question] was very difficult. . . . I felt like any question I'd come up with is already going to be done or not make any sense." Overall, students described the important academic skill of learning to ask questions in academic contexts.

Finding purpose and meaning in learning. Each student in the study group described the process of finding purpose and meaning in learning. Students found purpose and meaning in learning, in part, by making connections among varied coursework. All 16 students described

applying information learned in one course to topics in other courses. They also found topics reoccurring in different classes. For example, Sophie noted,

> A lot of time I'll get the feeling, it's really weird. I'll be in a class, I'll be in two classes at the same time and we'll talk about the same subject in two completely different classes like two days apart. I remember I was taking astronomy and geology and we talked about the light spectrum on the same day. I thought that was really interesting. And even this semester I'm taking a French literature course and philosophy and we both happened to read Descartes for both of those.

Another student, Mackenzie, described the way in which her major served as a vehicle for her to make connections among all of her courses, regardless of whether courses were in her major area:

> Overall I feel like my major in communications has kind of spilled out into all the classes and regardless of what the topic is or what the class is studying, I apply communication theories and ideas to those classes. So just the act of doing that and the knowledge I've gained in the Communications Department just kind of shapes the way I think about everything now and I feel that's definitely the overall take away from my college career. It's just analyzing things and maybe what's the purpose behind them or why it was done the way it was done and how it affects people and mainly the interaction between people.

Making connections among courses helped students appreciate and value their college experience, as Mackenzie described. She found that the connections she made among courses led to her "overall takeaway" from college. The overall take away Mackenzie is essentially describing at the end of her statement is research activity ("analyzing things… what's the purpose behind them… why… how it affects people"). By making connections among varied coursework, Mackenzie came to see the importance of research in her educational experience. In many cases, making connections among classes meant that students had to adjust the way they see their world and, subsequently, cope with change.

Coping with change and challenges. From the moment they step on the college campus, students engage in a process of coping with change and challenges. The transition and adjustment to college requires coping with a new environment and changing expectations. Coping with change and challenge was an important process described by students from the beginning of college through selecting or changing a major, studying abroad, and setting goals for life after graduation. In particular, coping with change was a process described within relationships. Relationships provided support for coping with change and challenges. Gianna described the relationship she had with her father as pivotal to her process of coping with change and challenge:

> My dad has been there for me. As I said, he's not educated, but, I mean, even if he couldn't help me with academic things and support me academically he was always that person if I was upset or having a problem with something that was like, "I have confidence that you can do it. Why don't you? Like, "You can do this." It's really good to have that motivator standing behind you. He's really helped me through everything here [at college].

Gianna's father encouraged her to have faith in herself and motivated her to respond to challenge in a productive manner.

Mackenzie described the relationship she had with peers in her student organization. Mackenzie shared that these relationships were "where I got support just for generally in my life." The student organization made her feel supported so that she could engage in the process of coping with change and challenge.

Orlando described changes he experienced academically: "There were classes that I had to fight tooth and nail and claw my way up from the bottom of the hill." He went on to explain that he had to change to meet the challenge of his courses. Tessa described a very similar need.

She had to change her approach to her academics including adjusting her schedule, time on task, managing her time, and developing needed academic skills. Within and across activities, roles, and relationships, students were successful in school because they engaged in the process of coping with change and challenge. Gianna, Tessa, Orlando, Mackenzie, and all of the students in the study could have recoiled from challenge and change; but, instead, they built on the resources within supportive relationships to respond to the challenges in a manner that was helpful and productive.

Developing autonomy. Study participants described developing autonomy as a vital process through which they explored, made mistakes, and then learned from their mistakes. Developing autonomy happened as students explored majors and new academic areas as well as when they explored living independently outside of the family home. Students also described developing autonomy by making choices and then taking on new responsibilities as a result of their choices. For example, choosing to work part-time or take on a research project. The process of developing autonomy spanned across activities, roles, and relationships.

Individuals discussed developing autonomy especially through study abroad, faculty-mentored research, relationships with academic mentors, and the role of being an undergraduate. Study abroad and faculty-mentored research helped students develop self-confidence and the belief that they could accomplish complicated tasks on their own. When describing his study abroad experience, William said, "…it taught me that I can function on my own and that I can be, it was a very real-world experience." The process of developing autonomy was apparent in faculty-mentored research and relationships with academic mentors

as students gradually became less and less dependent upon their academic mentor to complete complicated academic and research tasks.

The process of developing autonomy was also evident in the role of undergraduate. As an undergraduate, students had to develop self-sufficiency and to take responsibility for pursuing self-chosen goals. It was clear through activities, roles, and relationships that the process of developing autonomy did not mean that students became totally independent. Rather, students developed more balanced interactions and relationships with their social environment where they were partially responsible and others in the environment were partially responsible.

Forming and solidifying social and occupational identities. Across and within activities, roles, and relationships, students worked on the process of forming and solidifying social and occupational identities. Students explored different social identities including friend, romantic partner, classmate, and member of a student organization, fraternity, or sorority. Students differentiated among student groups and organizations ultimately identifying with some groups and not identifying with others. Upon joining particular student groups, students communicated to others in the community who they identified with by participating in group sponsored events and sharing their experiences with peers, faculty, and staff.

Several students described significant changes in identity across the college years. Mackenzie described coming in to college with plans to go law school immediately after graduation; however, a change in identity and sense of purpose led to Mackenzie pursuing missionary work instead. Orlando talked extensively about not understanding college identity

when he first came to college. He described not understanding people who participate in university traditions and are passionate about their alma mater. By the end of college, Orlando appreciated this identity and even said that "[College] is a pretty important part of my identity now… I'm lucky to have been here…"

For many students, within the activities of employment and research, the process of solidifying occupational identity was especially important. For example, Alexandra's research experiences helped her realize "I really wanted to be a doctor." Several students used their employment experiences to explore and tryout future occupations. Students learned what they did and did not want to do occupationally. They subsequently made commitments, such as going to graduate school, associated with their chosen identifies. They also adapted values and beliefs associated with these identities.

Attitudes and Dispositions

Personal characteristics influence proximal processes (Bronfenbrenner, 1979). The attitudes and dispositions of an individual can invite or discourage reactions from the social environment. Attitudes and disposition may foster proximal processes or disrupt the operation of proximal processes. In this study, there were several attitudes and dispositions I identified that appeared to foster the operation of proximal processes. These included being flexible and willing to change, feeling independent, perceiving challenges as opportunities for growth, and risk taking. These personal characteristics were evident across the majority of cases. Some students may have developed these characteristics during college while it is likely that other students came to college with these characteristics.

Being flexible and willing to change. Students described working with faculty, advisors, and peers to become less rigid and more flexible or agile. Students described learning to be more flexible concerning academic as well as personal plans and decisions. Learning to be more flexible included taking in feedback from the environment, such as grades and advice from mentors then deciding to change course, such as picking a new major, if it would better serve the student. One student, Faith, described "academic growth" as "being able to see diverse perspectives." As she learned of new perspectives and new opportunities, Faith reported that she became more flexible with her major and career plans. When she was aware of fewer perspectives or knew less of academic opportunities her career plans were more restrictive and inflexible. This was a theme among many students during their first two years of college.

Some students described becoming much more flexible with major plans just by learning about the breadth of opportunities available at the University. One student described how she had never heard of Linguistics before attending college and how learning about this field of study opened up many new possibilities and potential pathways for her. Another student described that he had never heard of Biostatistics before talking to a faculty mentor, but how this one conversation helped him become much more flexible with his future plans. Sophie commented on the value of flexibility by recommending that all college students should: "keep an open mind and just try to find what you're passionate about and learn a lot of different things and try to really have a well-rounded experience." Some students described the struggles of their peers who they viewed as inflexible or staunchly committed to pursuing only certain types of courses or majors or career paths they picked in middle or high school. Makayla

described how important it is to take in feedback from one's environment and adjust accordingly. After one semester of low grades in science courses, Makayla took this feedback to realize that being a Nursing major was not the right path for her. She realized she really enjoyed and excelled in Sociology classes and that she should change her course of studies.

Students described being open to change when opportunities arose or when they learned new information that changed their perspective or understanding of available opportunities. Fourteen of the 16 students described changing or at least refining their major selection based on feedback from course work, such as grades, or interactions with faculty, staff, or peers. Many students described important changes to their academic goals and career paths as a result of being flexible. Across the 16 interviews, students mentioned the importance of "getting out of your comfort zone" more than a dozen times. The activity of getting out of one's comfort zone, being flexible, and appreciating multiple pathways or opportunities appeared to help students persist in school. Students described how an outlook of flexibility helped them keep momentum moving forward toward degree completion. Several students described peers who were less flexible and subsequently felt stuck or like they did not have many options during their academic career. These students were likely to come in with a major choice and an unwillingness to consider other majors or other opportunities that may have taken them out of their comfort zone. For the students in the study group, the majority of whom actively sought to get out of their comfort zone, it is likely that their flexibility and willingness to change was connected to how they perceived challenges. All students in the

study described expecting to encounter challenges in college. The vast majority of students described challenges as opportunities for personal growth.

Feeling independent. Students described feeling independent and personally responsible for their well being while studying abroad. Abroad students saw themselves as traveling independently and needing to make independent choices and decisions. In addition to feeling independent when studying or traveling abroad, students described feeling independent when conducting research; specifically, when developing research questions or considering a new project. Others described feeling independent when setting goals. Across the broad range of experiences discussed in the interviews, just about every student mentioned developing their sense of independence at some point during their college experience.

Many students shared that especially because they were the first person in their family to attend college, they had to be self-reliant and personally responsible for their academic and personal goals. Students commented on having to serve in an independent role to complete the application process to attend college and apply for graduate school. Additionally, students talked about having to find opportunities such as study abroad programs and undergraduate research projects on their own as they did not have family members who were familiar with these activities. One student, William, declared that he was “totally independent” and on his own to figure out that these opportunities existed. Lauren talked extensively about the challenge of being responsible for one’s own course selection. Lauren, like other students, appeared to be very independent during high school and was initially reluctant to work with an academic advisor or utilize university resources when she arrived at college because she had

not done so in high school and was relatively unfamiliar with asking for help. Ultimately, students conveyed a great sense of pride in their independence. Such pride was well expressed by Noah, who shared, "I made the right choice about coming [to college]. I think I've really harnessed everything that I can at this moment for my degree. I have a sense of pride walking out of here."

Perceiving challenges as opportunities for growth. Across all 16 student stories, students expressed that they expected to be challenged during college. All students in the study entered college with this expectation. Overall, students did not recoil from this challenge; rather, they welcomed it as an opportunity. Sophie explained, "I expected it to be difficult academic wise, very competitive." Noah shared, "I knew it was going to be a lot harder than high school," and Lauren said, "I just expected it to be really hard. I knew I was going to work hard because, based on when I was applying to college, I knew they [the university] had high expectations for students which means things are going to be hard there." Many students communicated that they carried this expectation throughout their college career with them, meaning that they did not think it was going to just be initially difficult but that college overall would be challenging. Mackenzie shared,

> There were times where I've done much better than I thought I would and there have been times where I've really been challenged and I've had to remind myself that I knew coming in that it was going to be challenging.

Many students compared the challenge in college to a lack of challenge in high school, with Manny recounting, "I found myself in high school sometimes not being challenged and I've definitely been challenged here, particularly in the last two years I've enjoyed challenge and

working hard." Most students described welcoming challenge and described challenge as an opportunity for personal growth. Challenge was also connected to academic and personal satisfaction. Students like Manny described finding satisfaction in challenging experiences. Through my collective analysis of student's experience of challenge, it appears that expecting to be challenged may be a healthy mental attitude that prepares students for the challenges of the college environment.

Throughout the interviews, students connected challenges inside and outside of the classroom to personal interest, growth, satisfaction, and development. Making these connections appeared to positively contribute to psychological well-being. Overall, students found courses personally challenging and made connections between their own lives and the content taught in the classroom. As an example, Mackenzie described,

> [Courses] were relevant to my life. . . . I really enjoyed that because it wasn't [just] looking at things that had happened, while we did do that we were [also] comparing them and the focus was on what's going on today, which was relevant to my life and everyone around us. . . . So it was kind of pulling you personally into what was happening and studying the academic side of it.

Similarly, Jayden explained, "Virtually all of the classes I've taken here have had some benefit to me as a student and as a member of society, as a person." Upon reflecting on challenging course work, Donovan commented, "I was able to find some things that really led to maturity and growth in me as a person. So, I was able to find myself ultimately, and since then I've been pursuing that and trying to grow in that." Faith described connections between a challenging course and her life as having a significant influence on her:

> I took Latino studies last semester. . . . It was close to home . . . it wasn't just about evaluating the readings, and the authors. It was kind of like myself, and my experiences,

> and trying to make sense of that within our community. So I think that's why that had the greatest impact just because it's so close to me.

Faith and other students described the challenges of their course work as intertwined with their personal growth and serving as a catalyst for personal reflection.

Risk-taking. Study participants described themselves as willing to take risks academically and socially. Students repeatedly mentioned the importance of getting out of one's "comfort zone" during college. For some this meant taking challenging coursework even when it meant that they might not get a high grade in the course. For others it meant pursuing an area of study they had never heard of before starting college. Others took risks by developing relationships with people from cultural backgrounds different than their own. Study and travel abroad was specifically discussed in relation to taking risks. Gianna said that study abroad helped her realize, "It's okay to be a little bit uncomfortable and step outside your comfort zone and try something new." Faith shared that trying new things resulted in "expanding my understanding of the world." Faith shared that she came to college "really open to new experiences" and this helped her take risks and try new experiences.

The disposition of being willing to take risks was important, in particular, to the process of forming attachments to people and places. Students had to feel comfortable taking a risk to develop new relationships and connect to new people and places. It also helped students develop autonomy. Students had to be willing to take the risk of trusting themselves and trying activities on their own to develop autonomy.

Research Question 2 in Summary

The findings in response to Research Question 2 were two-fold. First, the activities, roles, and relationships of the microsystem were described. Second, the seven proximal processes within and across the elements of the microsystem were described. These seven processes are (a) forming attachments to people and places; (b) developing academic skills; (c) setting goals; (d) coping with change and challenges; (e) finding purpose and meaning in learning; (f) developing autonomy; and (g) forming and solidifying social and occupational identities. Through these developmental processes, students expanded their understanding of the collegiate environment and formulated ideas about their place within this environment. Attitudes and dispositions influenced developmental processes including being flexible and willing to change, feeling independent, perceiving challenges as opportunities for growth, and risk-taking. Findings in response to Research Question 2 provide a base from which Research Question 3 builds. Research Question 3 connects activities, roles, and relationships to the positive college outcomes of successful transition, retention, and gradation.

Research Question 3: Activities, Roles, Relationships and Positive College Outcomes

What relations exist among the activities, roles, and relationships of FGCS and the positive college outcomes of successful transition, retention, and graduation? The goal of Question 3 of this study was to identify relations among activities, roles, and relationships and positive college outcomes. Students provided rich descriptions of their experience of positive college outcomes. In this section, the activities, roles, and relationships previously discussed are related to positive college outcomes (see Table 9). For example, transition is related to (a) the

activity of participating in student organizations, (b) the activity of participating in community service, (c) role of being an undergraduate, (d) the academic mentor relationship, and (e) the student mentor relationship. Specific activities, roles, and relationships were important to the individual stories of success in college. The following sections include discussion of these experiences as related to transition, retention, and graduation.

Transition

In the words of one student, Alexandra, transition to college "was a struggle . . . it was an adjustment." Another student, Noah, found that for his transition, the "main thing . . . [was] just getting through the first semester to kind of get my feet back on solid ground without being so afraid of college." Most students shared that transition was a challenge, but they also pointed out that there were very helpful experiences that ultimately led to a successful transition experience. Specifically, two activities were related to the positive college outcome of successful transition. These activities included participating in student organizations and participating in community service. These activities helped students as they entered the university as a new student and learned both the social expectations of the environment.

The role consistently described as related to transition was being an undergraduate. Students had to become comfortable in their role of undergraduate to successfully transition into the college environment. As Orlando described, several students initially felt like imposters in their role of undergraduate. Once students adapted to their role and appreciated the expectations and responsibilities of that role, they were able to find their place and develop a connection to the community. Specifically, students described needing to learn faculty

expectations of the undergraduate role. These expectations included behaviors in class and out of class. As students picked up these expectations, such as visiting office hours, communicating with teaching assistants, and utilizing campus resources such as The Learning Center, students described feeling as if they belonged and could succeed in their new environment.

Within the role of being an undergraduate, the proximal process of developing academic skills was critical to transition. This process included developing writing skills, study skills, learning to formulate academic questions, and finding connections across courses. As I discussed earlier and exemplified with quotes from Ethan, Noah, and Donovan, students described their struggles transitioning prior to developing these skills and their subsequent success upon working with faculty, peers, and staff to develop these skills. Several students described feeling ill-prepared by their high school education to transition to college-level work. Only upon acquiring new academic skills did most students feel they were able to meet their potential in the new, college environment. Students described the acquisition of new academic skills as most critical during their first and second years at the university.

The relationships students repeatedly described as related to transition were academic mentors and student mentors. Students described not feeling connected to the university until they established a relationship with a faculty mentor or a mentor from a student organization. One student, Donovan, shared that his mentor from a student organization was the first person at the university who genuinely showed interest in him “as a person.” When the peer showed interest, it was a significant moment for Donovan as this was the first time he started to feel like he was recognized as a member of the university and as a person who had something of

value to contribute to the community. It was an especially important moment in the student's transition to the college environment. Many other students described similar events. In particular, students described how building relationships with faculty members helped demystify the role of faculty and helped students understand that they could approach and work with faculty members.

Retention

Students in the study described their paths to college completion. Path to college completion included their continued enrollment from semester to semester. As one student, Orlando, described, there was a pivotal moment when many students realized that being a college student had become "an integral part of my identity." This realization helped many students stay on the path toward degree completion. Additionally, several of the activities, roles, and relationships I discuss throughout this chapter, helped students decide to continue enrollment and stay on track to degree completion even when they were feeling doubtful or frustrated. Specifically, I have identified activities, roles, and relationships relating to retention. These include (a) the role of undergraduate; (b) the activity of working part-time; (c) the role of employee; (d) relationships with academic mentors; (e) relationships with student mentors; (f) relationships with employment mentors.

The activity most frequently described as relating to retention or continued enrollment was working part-time. Employment appeared to offer a consistency that stayed with students during and between semesters. Most students described being employed in the same position

during the semester and between semesters. This consistency, especially when students worked on or close to campus, encouraged continued enrollment.

The role students most frequently discussed as relating to retention was the role of undergraduate. Developing academic skills was an important process within the role of undergraduate. Developing academic skills related to retention as students described the need to constantly refine their academic skills as they progressed from one level of learning to another. To be prepared to the next level of coursework, students had to continue to grow their learning strategies and further develop their academic skills. For example, Lauren shared, "I think every single year I changed my study habits based on the classes I took, and what worked . . . learning new ways to study and absorb material. " Lauren, like most other students in the group, described needing to continuously refine their academic skills as they continued their enrollment from semester to semester and year to year. Gianna described the desire to continue her enrollment in college as she became more competent and confident with academic skills including writing and asking academic question. When students fully inhabited their role of being an undergraduate, it seemed that continued enrollment became a natural expectation. Noah described that fully functioning in the role of undergraduate helped him realize, "I made the right choice coming to college." This self-affirmation helped Noah to stay connected to the university and on track to degree completion. In the role of undergraduate, students described themselves as responsible for their education and did not expect other people in their lives, such as parents or advisors, to remind them to enroll in the subsequent

semester. William described the role of undergraduate as “you get what you put in to it” and expressed his belief that college should be seen through to completion.

The role of employee was also described as connecting to retention. As described under the activity of employment, being an employee gave students a sense of stability. Being an employee provided a sense of purpose as well as expectations of the individual even when classes were not in session. Especially when students consistently held the same job, the role of employee was described as connected to continued enrollment. Most students served as employees on campus or in close proximity to the university. This helped them stay connected to campus and likely to continue enrollment.

The relationships related to retention included multiple types of mentor relationships. These were academic mentors, including mentoring relationships with faculty members and graduate students. Additionally, mentor relationships included peer mentors from student organizations and work supervisors. Students frequently described mentors as inspiring and as serving as a resource should students have questions, doubts, or feelings of uncertainty. They described mentoring relationships as creating a sense of accountability between the student and a caring individual connected to the campus community. William serves as a good illustration of such accountability. He described struggling in a course, saying, “Oh, it’s definitely frustrating . . . I actually tried to drop [the class but] . . . my roommate was like ‘No. Let’s just stick with it.’ So eventually we stuck with it.” William went on to say that his roommate, his peer mentor, held him accountable by encouraging him to stay in the class, not to give up when it was challenging, and to put in the time and effort needed to succeed. Students like William

and others described wanting to persist at college for their own sake as well as to please or stay connected to their mentor. This was true whether the mentor was a peer, faculty member, graduate student, or employment supervisor.

Graduation

Upon approaching graduation, one student, Orlando, shared the following:

> [College] is a pretty important part of my identity [now]. . . . I'm lucky to have been here, and whereas, as I said, not being the biggest sports fan, I always used to grimace through the whole [school song]. I don't know the song, which is embarrassing, so, again, sorry, for whoever's listening to this. I get it. After 4 years, I get it. I see why there's passion. I see why people are willing to paint themselves [i.e., at a basketball game], and I understand it now.

In his statement, the student describes his changing identity as he nears graduation and reflects on his sense of commitment to the university. After four years of college, the student appreciates the passion and sense of commitment individuals express to their alma mater. Many study participants described activities, roles, and relationships that were related to ongoing commitment to degree completion and ultimately attaining the successful outcome of graduation. In total, three activities, roles, and relationships related to graduation: (a) the role of researcher, (b) relationships with academic mentors, and (c) relationships with employment mentors. Students described these processes as related to their fulfillment of undergraduate degree requirements. Additionally, the process of goal setting was frequently described as relating to graduation.

Students connected acting in the role of a researcher to graduation. Through research, many students engaged with their education in a novel and exciting way. Connecting with their education in a novel and exciting way made students more interested in and committed to their

field of study and ultimately to completing degree requirements. Research also opened up relationships among faculty and graduate students who encouraged students to pursue graduate school and opportunities post graduation. Several students expressed pride in being a researcher and having the opportunity to engage in activities often reserved for those who have already graduated.

Relationships students described in connection to graduation included relationships with academic mentors and employment supervisors who served as mentors. Students found these relationships encouraged them to move toward degree attainment and beyond. All study participants indicated that they had at least one faculty mentor to whom they could go for a reference letter. This finding is important because it indicates that all students had at least one person who believed in their potential to get to graduation and beyond. Academic mentors helped students stay on track to graduation and consider life beyond graduation, including career and graduate school opportunities. The academic mentors and employment supervisor mentors served as role models helping students envision themselves in the future and what they could do once they earned a college degree.

Students frequently discussed the process of goal setting in relation to graduation. Ethan describes everything leading up to the best part of college, graduation, as steps toward the goal he set to earn a degree:

> The best part is finishing, to be honest with you. I'm about two weeks away from that, so that will be the best parts. I guess everything that's leading up to me finishing and, you know, passing all my classes and all that kind of stuff, it's all been a step towards that goal of, you know, getting a degree.

In addition to the long-term goal of earning a degree, case study participants described formulating clear short-term goals. Many, like Ethan, found that the short-term goals fed into the long-term goal of degree completion. Students also described holding themselves to high expectations and developing a vision of themselves in the future in which they are college graduates. These personal expectations and goal for a future self were related to students remaining committed to earning a degree.

Research Question 3 in Summary

The findings presented in response to Research Question 3 indicated that supportive relations exist among the activities, roles, and relationships of FGCS and the positive college outcomes of successful transition, retention, and graduation. The activities, roles, and relationships I identified in this study were described as connected to the positive outcomes of successful transition, retention, and graduation. These experiences led to individual student change across the course of the college years. The reciprocal and reoccurring interactions between the student and the environment were important to the overall success of FGCS in the study.

Chapter Summary

Chapter 4 presented findings for the study questions. Each question and its findings laid a foundation for the subsequent question to build on. Question 1 described the educational context of FGCS success including students' academic, wellness, and engagement experiences. These findings described the setting or environment in which FGCS development occurs. Appreciating context is critical to understanding human development in the bioecological

perspective (Bronfenbrenner, 2005). To understand development, it is necessary to appreciate the setting, environment, and circumstances in which development occurs. Describing the experiences of successful FGCS set the stage to explore activities, roles, and relationships, and proximal processes in Question 2. Question 3 built on Question 2 by identifying connections among activities, roles, relationships, and positive college outcomes.

The next chapter and last chapter of this dissertation will compare study findings to the current literature on FGCS experiences. Chapter 5 will explore ways in which findings critique, extend, and build on the FGCS literature. Additionally, the chapter will examine study findings and interpretations specifically as related to theories of human development. I will explore the ways in which study findings support and extend the literature on development during late adolescence. Recommendations for practice within college programs and supports for FGCS, suggestions for future research, and reflections on the research study will also be provided.

CHAPTER 5

DISCUSSION

Almost 50% of the population within higher education today consists of FGCS (U.S. Department of Education, 2010). Nearly 90% of FGCS in the United States fail to graduate within 6 years of enrollment in college (Saenz, Hurtado, Barrera, Wolf, & Yeung, 2007). With the costs of higher education rising and sources of federal funding decreasing, it is critical to determine how to keep students on path to degree completion. There is limited empirical research on the experiences of FGCS. Additionally, there is a need for a new paradigm to study undergraduate retention. Through this study, I have addressed this gap in the FGCS literature and the need for a new paradigm to study undergraduate retention by empirically investigating the lived experiences of successful FGCS with a developmental theoretical lens. I have examined the experiences of successful FGCS who are retained and on path to degree completion.

The literature that exists on FGCS experiences focuses on student attrition and not on student success. We have learned from this literature that FGCS experience several barriers to college completion, including insufficient academic preparation, limited college knowledge, cultural conflict, limited familial support, and financial constraints (Adelman, 1999; Choy, 2001; Collier & Morgan, 2008; Horn & Nuñez, 2000; Thayer, 2000; Vargas, 2004). In its efforts to

elucidate the experiences of successful FGCS, the current study has identified common experiences among successful FGCS. These experiences can be synthesized in to four thematic areas describing the experience of successful FGCS (see Table 10): (a) mentoring, (b) developing academic competencies, (c) engagement and exploration, and (d) developing goals and autonomy. These thematic areas contribute to what is known about FGCS experiences. This contribution is important for the development and implementation of proactive retention and degree-completion strategies. Recommendations for enhancing college programs and supports for FGCS are included in this chapter.

The study also serves to respond to an omission in the literature on FGCS experiences. Although researchers have examined the struggles of first-generation and low-income students, they have not examined the experiences of successful students. In this study, I have described the experiences of successful students utilizing the voices of students themselves. Contrasted to prior retention research, I used a qualitative approach to examine the lived experiences of successful FGCS. All students included in this study successfully graduated from a 4-year research university. I have described what persistence looks like and feels like through the eyes of students from historically under-resourced and underperforming groups. In the current chapter, I utilize study findings to critique, extend, and build on the current literature on FGCS experiences.

In this study, I have also responded to the need for a new paradigm for appreciating undergraduate retention. I have utilized a developmental perspective to study the experiences of successful students in their immediate environment. In this chapter, I explore study findings

and interpretations by discussing the ways in which the study aligns with and contributes to the literature on human development, including bioecological systems theory, developmental needs during late adolescence, and thriving during late adolescence. In concluding this chapter, I also discuss and highlight the benefits of studying student success. Additionally, I provide suggestions for future research and reflections on the study.

Critiquing, Extending, and Building on Current FGCS Literature

In what ways do study findings contribute to what is known about FGCS experiences? The goal of this section is to utilize the major study findings, the four thematic areas describing the experience of successful FGCS, to critique, extend, and build on the current literature on FGCS experiences. Similarities and differences among the study findings and the FGCS literature are discussed. Furthermore, I critically analyze meanings of any gaps or similarities to literature and explore ways in which findings extend or build on the literature.

Thematic Area 1: Mentoring

All study participants reported having a faculty member or a graduate student as an academic mentor. Moreover, many students reported having a peer mentor from a student organization and/or an employment supervisor who served as a mentor. These study findings align with literature on student success. Researchers of student success have stated the importance of interpersonal relationships to college success, including faculty, peers, and staff, for well over a decade (Evans, 2010; Kuh, 2010; Light, 2001; Pascarella & Terenzini, 2005). Supportive relationships can help students negotiate challenges and continue on an optimal educational trajectory (Crosnoe & Elder, 2002). In particular, supportive relationships with

faculty, including individualized, one-on-one attention, are related to learning in college (Kuh, 2010). Students in the study clearly described positive influences faculty mentors had on their learning. However, it is important to note that all study participants did not immediately connect with faculty. For example, Ethan initially found his faculty mentor unapproachable, and Orlando described originally feeling greatly intimidated by faculty. This, too, aligns with literature on student–faculty relationships that described some FGCS perceiving faculty as unapproachable (Pike & Kuh, 2005; Terrenzini et al., 1996).

It is very important for students to have the opportunity to overcome initial impressions of fear or unapproachability with faculty. It is also very important to have ample activities, such as undergraduate research, work-study, and student organization activities, through which mentoring relationships can develop. What was interesting about the ways in which study participants discussed mentoring is that, while all students described having a mentor, none of the mentors were assigned to students through a mentoring program. This is a very interesting insight given that many college programs assign mentors to new students. All of the mentoring relationships I describe in this study developed through an activity in which both individuals engaged together. Over time, this led to the more experienced individual mentoring the less experienced individual.

If helpful mentoring relationships develop in this manner, it would make more sense for programs and services to provide activities through which a mentor relationship can develop than to develop programs that involve assigning dyads of students and mentors. This would be a significant change for practice, as many college mentoring programs focus on assigning

students to a mentor based on a common characteristic such as major or hometown. Instead of operating in this way, mentoring programs would provide opportunities for mentors and mentees to engage in activities together and create the conditions under which a mentoring relationship could organically develop.

Thematic Area 2: Developing Academic Competences

Successful students in this study described several common approaches to academics as well as defining activities that played prominent roles in their development of academic competences. Students worked on developing academic skills during their transition to college, participated in faculty-mentored research, made connections among varied course work, found academic advising and major selection important to their overall academic experience, found course work personally meaningful, and had a medium-high to high overall sense of academic satisfaction. The finding that students worked on developing academic skills, including study and writing skills, during their transition builds on the literature that has described FGCS as likely to come to college from high school with insufficient academic preparation (Adelman, 1999; Choy, 2001; Horn & Nuñez, 2000; Thayer, 2000). Such students are unprepared for the academic rigor of college and must develop study skills and strategies to succeed.

Several of the other findings regarding academic experience also build on the literature. For example, the finding of participation in faculty-mentored research builds on literature that has suggested that students who engage with faculty in highly structured learning activities develop the structure and discipline requisite to be successful overall as college students (Darling & Smith, 2007; Engle et al., 2006). The finding regarding students valuing academic

advising and major selection as important to their overall academic experience aligns well with literature that has included the recommendations that academic advising throughout college can help FGCS navigate institutional culture, academic expectations, degree requirements, academic choices, and opportunities (Darling & Smith, 2007).

Study findings in the thematic area of academic experiences that are not well reflected in current literature include making connections among varied course work and self-reported ratings of high academic satisfaction. Although there is no current literature examining the ways in which students make connections among varied college courses and succeed in college, there is research that appreciates that college-age students strive to find a sense of meaning and purpose in the new role as a college student (Eccles & Gootman, 2002), and college students are more likely to succeed if they find their courses of study meaningful and relevant to their long-term goals and interests (Evans, 2010; Kuh et al., 2006). Finding one's college studies relevant and meaningful appears important to success in college. Making connections among courses may be a way in which students create meaning out of their college experience. Furthermore, these connections may be a part of the sense of academic satisfaction successful students feel.

Thematic Area 3: Engagement and Exploration

Themes regarding engagement and exploration included participating in community service, participating in student organization(s), studying or traveling abroad, joining a small community on campus, and working part-time. Themes within this area largely align with current literature on FGCS experiences and student success. The engagement activities

students described align with literature on the positive influence educational activities outside of the traditional classroom setting have had on learning and development. In particular, when students participate, for example, in service or study abroad, and they must apply what they have learned to a real-life setting, this can be especially beneficial to college student success (Barefoot et al., 2012; Kuh, 2008). Learning activities outside of the classroom and participation in small communities within the large campus culture encourage a heightened sense of community and civic awareness (Barefoot et al., 2012).

One observation of interest in this particular thematic area is the very important role student organizations appeared to play in the lives of study participants. Sixteen out of 16 of the participants participated in at least one student organization, and several participated in more than one. Half of the students participated in an organization with a religious, ethnic, or cultural affiliation. Although the literature exploring student engagement among FGCS notes the benefit of membership in small communities (Barefoot et al., 2012; Engle et al., 2006; Kuh, 2008), a literature review I conducted while writing this chapter did not result in any peer-reviewed articles examining the role of student organizations in the FGCS experience. In the current study, student organizations played a profound role in the undergraduate FGCS experience. Research on the role of student organizations, especially those with religious, ethnic, and cultural affiliations, in FGCS success may be useful.

The last theme in this area concern FGCS who work part-time while enrolled in a full course of study. Participants in the study described their part-time work as largely beneficial. This finding is a departure from the majority of literature addressing the role of work in the

FGCS experience. Most literature focuses on the negative repercussions of having to work, including spending more time off campus, disconnecting from campus social opportunities, and having fewer occasions to engage with faculty members (Pike & Kuh, 2005; Terenzini et al., 1996). Researchers have described employment resulting in FGCS having fewer relationships with their peers and low levels of involvement in campus co-curricular activities (Billson & Terry, 1982; Pike & Kuh, 2005). Participants in the current study described work as having predominantly positive influences, including the development of mentoring relationships, membership in a small community, role models, and supportive peer relationships. Although the vast majority of literature focuses on the negative aspects of work among FGCS, at least one study does explore the positive benefits of work for low-income FGCS. Mamiseishvili (2010) found that work can be beneficial for FGCS when they perceive college as their priority. According to Mamiseishvili's study, when FGCS view being a student as their primary role and being an employee as a secondary role, they are more likely to persist, no matter how much time they devote to working or what kinds of jobs they hold.

Thematic Area 4: Developing Goals and Autonomy

Within the thematic area of developing goals and autonomy, three of the themes are well represented in the literature on student success but not specifically for FGCS. The themes well represented in the literature are setting immediate and long-term goals, possessing a sense of independence, and developing a sense of flexibility and willingness to change course if necessary. The current literature on development for traditional-age college students indicates that students need to access and implement appropriate life changes and then be able to cope

with these changes (Eccles & Gootman, 2002). Students in the study described this behavior frequently occurring throughout their college experience. Students assessed their performance in majors, career paths, and relationships and then demonstrated flexibility by implementing appropriate life changes to cope with their current situations. Students in the study also described asserting their independence and developing autonomy. This finding aligns with research including accounts of late adolescent students learning to negotiate self-control or governance, the freedom to direct their own lifestyles, and separation from parents (Zarrett & Eccles, 2006). The positive influence of setting goals and connecting short-term goals, such as completing courses, to long-term objectives, such as graduation and career goals, is also contained within the literature (i.e., Evans, 2010; Kuh et al., 2006).

The majority of students in the study expected college to be challenging—a pointedly different and more arduous experience than high school. This expectation is not well explored in current literature. It is possible that the expectation of challenge helps students adjust to the college environment. This expectation might help students negotiate adversity because they are not surprised by the adversity. Expecting challenge also might motivate students to proactively invest time and energy into their academics.

While satisfaction with college has been long present in the retention literature (Bean, 1986; Tinto, 1975), satisfaction as a part of personal happiness and overall sense of well-being has not been deeply explored in relation to positive college outcomes.

Interest in the relations between happiness and positive events has grown over the last decade (Lyubomirsky, 2001; Chekola, 2007; Fave, Brdar, Freire, Vella-Brodrick, & Wissing,

2011). In the field of positive psychology, such examinations have included connections between happiness and success in life generally (i.e., Linley, Maltby, Wood, Osborn, & Hurling, 2009). Far fewer studies exist concerning happiness and student success in college. One study (Okun, Levy, Karoly, & Ruehlman, 2009) involved an examination of dispositional happiness and academic performance. Findings indicated that happiness positively influenced cumulative grade point average. Another study (O'Donnell, Chang, & Miller, 2013) included results suggesting autonomy and happiness were related to success in college. Studies applying positive psychology paradigms to the college student experience are likely to increase in upcoming years.

Critiquing, Extending, and Building on Current FGCS Literature Summary

This study resulted in multiple thematic findings across four thematic areas. I described similarities and differences among the study findings and current literature and explored several ways in which findings build or extend on the literature. The most compelling findings are ones that reinforce the value of faculty–student relationships and learning opportunities that actively engage students. It is impressive that 100% of participants in the study had faculty mentors and nearly all, 15 out of 16, participated in faculty-mentored research. These results demonstrate the importance of faculty–student relationships as well as the importance of offering research opportunities for undergraduates. Another very common experience among successful students was participation in student organizations. All study participants joined at least one student organization. It is interesting to note that half of the students participated in

organizations with cultural, ethnic, or religious affiliations. In addition to participating in a student organization, 15 out of 16 students also engaged in community service.

Two thematic findings offering unique insights into the FGCS experience concern student happiness and part-time employment. Study participants reported very high ratings of student happiness and personal satisfaction, averaging 9.1 on a scale of 1–10. Happiness or well-being as related to student success has not been well explored in current educational or psychological literature, especially for FGCS. The thematic finding regarding employment is of special note as the participants in the study had highly positive employment experiences. This is a departure from much of the literature on FGCS, which describes employment as a burden, a distraction, or a hindrance to FGCS success.

Alignments With and Contributions to Theories of Development

Study findings align with and contribute to the literature on human development. In particular, study findings exemplify several of the fundamental principles of Bronfenbrenner's (1979) bioecological systems theory. In this section, I describe these exemplifications and explore connections to relevant research on sociocultural theories of human development, including Rogoff (1990, 2003). Rogoff's research is helpful in this discussion as Rogoff sheds light on the ways in which individuals internalize Bronfenbrenner's processes. I discuss the ways in which findings also align with research on developmental needs during late adolescence and thriving during late adolescence.

Bioecological Systems Theory

To understand how an individual develops, it is necessary to understand the objective properties of an environment as well as the ways in which the properties are perceived by the individuals in the environment (Bronfenbrenner, 1979). This study has examined the lived experience of students to explore how developmental situations in college are experienced by the people who participate in them. The findings of this study illustrate several tenets of Bronfenbrenner's (1979) bioecological systems theory, especially as related to activities, roles, and relationships. For development to occur, an individual must be an active agent in his or her environment. The participants in this study were active agents as they repeatedly sought out activities, learning experiences, relationships, and opportunities for participation in the college community. In the findings section, I identified multiple enduring forms of interaction in the immediate environments of developing students. These forms of interaction were a joint function of the characteristics of the individual and of the environment. For example, a characteristic of many study participants was that they needed to develop academic competencies. In particular, multiple students described the need to develop college-level writing skills. These students sought support within the college environment to develop these skills. Environmental characteristics included being rich in faculty resources and learning activities for writing skills development. Developing the academic competency of college-level writing was thus a joint function of the characteristics of the individuals and of the environment rich in learning resources.

Another tenet of Bronfenbrenner's (1979) theory is that to develop intellectually, emotionally, and socially, an individual must interact with the environment in a progressively complex manner as the individual becomes more competent. This was demonstrable repeatedly throughout the study. For example, Manny described the progressively complex manner in which he participated in faculty-mentored research. Initially, he served as a research assistant completing simplistic organizational tasks. Over time, Manny's relationship with a graduate student led to him becoming intricately involved with analyses and then eventually suggesting future projects and developing research questions. As Manny's competence as a researcher increased, his research tasks and responsibilities increased in complexity. The growth Manny experienced was a result of reciprocal interactions occurring on a regular basis over the course of time. These interactions included the activity of the research project, the relationship with the graduate student, and the increased responsibility he took on in his role of researcher. Proximal processes are reciprocal in nature; all parties involved in the interaction are influenced by the interaction (Bronfenbrenner, 1998); Manny's case showed this, as the graduate student was also influenced by the interaction with the undergraduate. The graduate student was aided by the undergraduate and went on to complete his research and accept a faculty position at another university. The graduate student and Manny continued to work together and support one another even after one of the parties left the immediate college environment.

Proximal processes are not limited to interactions with people. They also involve interactions with objects and symbols. Objects and symbols must invite attention, exploration,

manipulation, elaboration, or imagination (Bronfenbrenner, 1998). As Rogoff (2003) suggested, learning requires keen attention and observation. In this study, Orlando keenly attended to the symbols of the college environment. He struggled with these symbols over the course of his college career and indicated that initially the university traditions, logos, songs, and other symbolic representations of school spirit made him uncomfortable. As a FGCS, these symbols may have initially seemed foreign and unwelcoming to the student, who had no frame of reference or previous experience with a culture of school spirit or alumni pride. Orlando described that over the course of his 4 years in college, he began to see the symbols of the college environment differently, and although he never became completely comfortable with these symbols, by the time he was within sight of graduation, he said, "I get it . . . I understand it now." In Orlando's experience, the objects and symbols in the educational environment invited attention and exploration that led to his growing appreciation and acceptance of the culture. This illustrates Bronfenbrenner's premise that through proximal processes, individuals come to appreciate their environment and understand their place in it (Bronfenbrenner, 1998). It also aligns with the findings of researchers such as Rogoff, Goodman Turkanis, and Bartlett (2001), who suggested that individuals learn through cultural symbols as well as through communal narratives and dramatizations. In Orlando's experience, the school song and the university logos were communal dramatizations of school allegiance, commitment, and pride. Through Orlando's interactions with these dramatizations, he came to appreciate the culture of the university and understand why members of the culture feel a particular way.

The activities, roles, and relationships I describe in the study findings promoted learning, growth, and development. By engaging in activities, study participants enhanced their understanding of their environment and how to act on the environment in a beneficial manner. For example, the study identified common activities including working part-time, setting goals, and developing academic skills. One student, Ethan, explained that the activity of working presented him with challenges through which he developed social competencies. Ethan shared that his job taught him "how to deal with other people." His job taught him social competencies for being a member of a team and developing positive relations with co-workers. This finding aligns with literature from Rogoff et al. (2001) on student participation in activities. Rogoff and colleagues suggested that individuals learn through intentional participation in activities. Activities center on social collaboration. Through participation in activities, individuals access cultural information and develop skills that enable them to be responsible contributors to their community. Through his participation in the activity of employment, Ethan developed the skills and competencies to communicate with others in his community and positively contribute to a team.

Roles also presented challenges through which study participants developed academic and social competencies. This study identified three roles for successful FGCS: undergraduate, employee, and researcher. Rogoff (2003) suggested that development occurs when individuals feel their role is valued within a community and when community members help individuals accomplish activities associated with their role. This was evidenced in the study when students took on the role of researcher and worked with a mentor on a research project. Students in the

study described the role of researcher as distinctly valued in the academic community. Students also described being eager to fulfill the responsibilities of their role as researcher and valuing an academic mentor who helped them negotiate their role of researcher.

When learners obtain knowledge through interactions with more experienced individuals in a social, learning context, it is called *cognitive apprenticeship* (Rogoff, 1990). The student researchers and academic mentors in this study illustrated cognitive apprenticeship. As the students fulfilled the responsibilities and participated in activities associated with the role of researcher, academic mentors guided them. Rogoff initially described cognitive apprenticeship among children, but in recent years, cognitive apprenticeship has been applied to mentoring undergraduate research (e.g., Fair, King, & Vandermaas-Peeler, 2004; Hagstrom, Baker, & Agan, 2009). The ways in which faculty mentors and graduate students guide novice researchers in formal settings, including labs and classrooms, as well as through informal interactions and collaboration on research activities has been referred to as cognitive apprenticeship in undergraduate research. In this study, faculty-mentored research was much more than a learning experience through which an expert transferred knowledge to a student. The academic mentors and the students in the study identified with their roles of researcher and mentor. That is, they assumed the responsibilities and expectations of these social roles. They also engaged in research with an emphasis on intent participation. Through intent participation, learners actively observe community activities as they participate in a shared endeavor (Rogoff, 2003). The shared endeavor of research exemplified collaborative learning through a contextualized activity. Contextualized activities involve the development and

application of foundational skills in a specific context of interest to a student (Johnson, 2002). Through identification with valued communal roles, intent participation, and contextualized activity, the study findings exemplified cognitive apprenticeship in undergraduate research.

The roles students described in the study increased in complexity over time as students took on enhanced responsibility and responded to higher expectations. For example, students took on roles of increasing independence by, for example, the activity of studying abroad. Being independent and studying abroad resulted in students being challenged to develop autonomy and responsibility for their travel, learning, and living arrangements in a new environment. Sociocultural theories of development emphasize the importance of learning through participation in everyday cultural activities within a community (Rogoff, 1990, 2003; Vygotsky, 1978). Sociocultural theories can be appreciated in contrast to formal, traditional learning practices, in which a learner is provided decontextualized information in an isolated setting. As previously indicated, intent participation puts an emphasis on engagement in activities of importance to the community in an embedded, contextualized process of learning (Rogoff, 2003). In this study, when students engaged the community abroad, they became active observers of a new, cultural community and experienced important social development through informal interactions, including participation in culturally relevant routines such as sharing housing, traveling, and sharing meals. Developing independence, especially through study abroad experiences, was a process that presented a challenge for students in the study. This challenge ultimately resulted in students developing social competencies such as negotiating new relationships and learning new cultural customs.

In this study, I identified three relationships: having a relationship with an academic mentor, having a relationship with a student mentor from a student organization, and having an employment supervisor who serves as a mentor. Mentoring is a relationship in which a protégé interacts with a more experienced individual through intentional interactions as well as through informal contacts (Fletcher & Mullen, 2012). The mentoring relationships students described in this study provided important social support. Mentors can positively influence mentee social functions when they work together with individuals to develop confidence and provide emotional support (Johnson, 2007). Participants in the student consistently described mentors as serving in this capacity. For example, upon describing her mentor and student organization, Mackenzie said, "That's where I was involved most, where I made all of my friends, where I got support just generally in life." Donovan shared that with his mentor, from a Christian fraternity, he was "able to find brotherhood and build stronger relationships." Mentors positively influence social functioning through multiple means, including modeling, counseling, affirming, and showing acceptance (Ragins & Cotton, 1999). In this study, mentors from student organizations, in particular, were described as modeling the role of college student, providing social counseling, affirming choices, and showing acceptance of choices. Students described mentors from student organizations as especially valuable to new students as they transitioned to the university. Students described mentors who were close in age but a bit more experienced with the university community as being particularly helpful at the beginning of their college career. For example, several students mentioned the benefit of peer residential advisors during the first and second years of college. These advisors were available

to help students acclimate to living on campus and developing social skills associated with living outside of the family home. After the first or second year, as students became more accustomed to the college environment, they were less likely to mention the helpfulness of resident advisors. This type of mentoring is similar to what Rogoff (1990) described as *guided participation.* Guided participation involves a more experienced individual helping a less experienced individual develop the skills necessary to function in a community. As the less experienced individual becomes more adept in the requisite skills, the more experienced individual begins to fade away. As the students became more adept at living outside of the home, the role of residential advisor became less important.

The mentors students described in this study also helped students learn the norms of the academic culture. Rogoff proposes that students observe their peers to learn the practices of their community (Rogoff, 2003). Several students, including Orlando and Donovan, clearly described observing their peers, graduate students, and faculty members to appreciate the norms of the academic culture. For example, students described observing their peer mentors interact with classmates and instructors regarding course performance. These interactions included asking questions in class and devoting time to study groups and review sessions. This behavior of peer observation aligns with theories of development, including perspectives on the utility of relationships to allow for the exchange of cultural knowledge, norms, and skills that help individuals negotiate challenges in the environment (Bronfenbrenner, 2005; Crosnoe & Elder, 2002). By observing their peers, students in this study learned the cultural norms of successful students in the college environment. For example, Orlando and Donovan observed

their peer mentors going to faculty office hours and participating in study groups. These observations led to the students understanding the norms within the community and then deciding to participate in these norms. Having supportive relationships provided students with the encouragement to participate in activities with which they were previously unfamiliar. Observing a peer participating in these norms gave the student a pathway to participating in the normative behavior. Students described feeling more comfortable doing new activities when they saw a peer participate in the activity first. Students also described feeling they had the backing of a caring individual on which to rely when they felt unsecure during their exploration of new roles, such as being an active study group member, and their exploration of unfamiliar environments, such as faculty office hours. When performing in new roles and in new activities, participants in the study looked to mentors to receive feedback on their performance. This aligns with literature on mentoring that describes positive influences on mentee social functioning as a result of mentor feedback, active listening, constructive critiques, and encouraging growth (Nora & Crisp, 2008).

The ways in which study findings illustrate aspects of Bronfenbrenner's (1979, 2005) theory contributes to the literature on human development. Furthermore, the ways in which the study findings illustrated the activities, roles, and relationships of successful students presents a picture of the ways in which successful students act on their environment and the environment acts on them, guiding students toward positive outcomes.

Developmental Needs During Late Adolescence

The study findings build on the literature on developmental needs during late adolescence. Through acquiring new roles and responsibilities, traditional-age college students in the study worked on developing academic competencies as well as developing goals and establishing autonomy. This aligns with Zarrett and Eccles's (2006) research on the need for late adolescents to develop independence and enhance their responsibilities through establishing new roles and relationships. Furthermore, through their new roles, study participants explored their identities, for example, a student exploring her identity as an American student while traveling abroad, or a student exploring what it means to be a biology major or a researcher. During late adolescence, individuals explore new roles as they shift and synthesize identifications from their childhood with new possibilities to develop a refined sense of self (Kroger, 2007). Through the activities, roles, and relationships I described in the study, individuals explored possible social identities (college student, researcher, etc.) and made identify-defining decisions such as choosing a major or a vocational path. As students explored and refined new identities, they engaged in activities that helped them sharpen skills necessary to succeed, such as developing communication skills, writing skills, and study skills. This finding aligns with literature, including perspectives on late adolescence as a time during which youths need to hone skills and competencies to meet the expectations of new roles and responsibilities associated with the shift from dependence to autonomy (Eccles & Gootman, 2002).

During late adolescence, individuals endeavor to find a sense of meaning and purpose in their newly acquired roles (Eccles & Gootman, 2002). Students in the study demonstrated this in their new role of college student by articulating ways in which they found their course work personally meaningful and by drawing connections among varied course work. Students also described finding a sense of meaning and purpose through roles such as being a member of a small community and being an employee. As students became more proficient and experienced in their new roles, they refined their goals and plans for the future. For example, as Manny described his role as a researcher increasing in complexity and as he became more proficient working on more complicated tasks one-on-one with his academic mentor, he began to refine his goal to attend graduate school. Manny described honing in on the area of study he would like to pursue as a graduate student and reported that his confidence that he could perform in a graduate school setting gradually increased.

Thriving During Late Adolescence

The study findings are also relevant to research on thriving during late adolescence. Individuals demonstrate thriving through an increased capacity to appreciate and act on their environment (Eccles & Gootman, 2002; Hamilton, Hamilton, & Pittman, 2004). Thriving results from "the growth of attributes that mark a flourishing, healthy young person" (Lerner, Lerner, von Eye, Bowers, & Lewin-Bizan, 2011, p. 1109). These attributes are positive developmental outcomes, including competence, confidence, character, connection, and caring (Eccles & Gootman, 2002). These five developmental outcomes, known as the five Cs, are based on reviews of adolescent development literature and the experiences of practitioners (Eccles &

Gootman, 2002). It could be argued that the successful students in this study learned how to appreciate and act on their environment and that they were thriving. The themes include demonstrations of growth in competence, confidence, character, connection, and caring. Competence is a positive domain-specific view of one's self in areas such as social settings, academic settings, or vocations (Eccles & Gootman, 2002). As study participants described their final days, weeks, and months before graduation, they conveyed feelings of pride, accomplishment, and a sense of competence in the domain of being a college student. As Gianna said, "I'm so pleased with what I've done here," and Noah said, "I have a sense of pride walking out of here." By the end of their experience, students described feeling competent in their role of college student. They also expressed a sense of confidence that aligns with Eccles and Gootman's (2002) definition of confidence as an individual's global sense of regard or self-worth. Approaching the finish line of graduation, students expressed a positive self-regard and self-assurance. Throughout the study, students also described growing connections, which Eccles and Gootman (2002) described as positive, mutual bonds among youths, peers, school personnel, family, and community. The development of mentoring relationships and participation in a small community are examples of such connections that study participants developed. The outcome of character involves an individual sense of right and wrong, integrity, and respect for community and cultural standards (Eccles & Gootman, 2002). Participants exhibited growth of the outcomes of character. Over time, they became members of the campus community and adapted to the university's expectations and academic culture. Participants described respect for the campus community as well as an appreciation o fthe

rights and responsibilities of individuals in the community. Caring is an outcome defined by capacity for empathy and sympathetic sensibilities (Eccles & Gootman, 2002). Participants developed caring as their relationships grew from consisting of helpful or useful interactions to interactions grounded in genuine care or concern. For example, Gianna described that originally, her academic mentor was a "great advisor to my thesis," but over time the relationship deepened so that the mentor became someone to whom she could turn "just with anything."

Growth of the five developmental outcomes discussed here results in youth being "more likely to be on a life trajectory marked by mutually beneficial person ↔ context relations that contribute to self, family, community, and civil society" (Bowers et al., 2010, p. 5). This contribution is the sixth C. Contribution occurs when youths are exhibiting behavior of active and engaged citizenship. As I covered in chapter 4, several, but not all, students in the study shared a desire to give back to their communities. While there was not enough evidence to present *desire to give back to the community* as a theme, those who did mention this desire gave compelling and noteworthy descriptions. This could be evidence of a desire to contribute to their community among some, but not all, participants.

Summary of Alignments with and Contributions to Theories of Development

Overall, the findings of this study contribute to the literature on human development. The activities, roles, and relationships of successful FGCS that I identified in the study positively influenced student learning and growth. Through activities, roles, and relationships students engaged their environment, exploring roles and trying out different identities. Mentors and

positive relations served to create a supportive environment for exploration. Findings also align with the literature on developmental needs during late adolescence and support the literature on the outcomes of positive development: competence, confidence, character, connection, and caring.

Student Success

Study findings align with perspectives on student success in college that describe student success as a combination of positive developmental experiences relating to academics, wellness, and engagement (Kadison & DiGeronimo, 2004; Kuh et al., 2006). Findings included academic experiences, such as the development of academic competences and student participation in academic pursuits inside and outside of the classroom. Findings included only a few wellness experiences, including opportunities for developing healthy behaviors contributing to one's overall physical and psychological wellness. There were several engagement experiences including participation in meaningful activities and relationships. Study findings provide support for claims that persistence and graduation are likely to be an outcome of positive academic, wellness, and engagement experiences (Kuh et al., 2006). Study findings contribute to our understanding of positive college outcomes by sharing the academic, wellness, and engagement experiences of students who successfully transition, are retained, and graduate from college.

A Positive Paradigm for the Study of Undergraduate Retention

In this study, I utilize a developmental paradigm to appreciate positive college outcomes. This paradigm diverges from the theoretical tradition in the study of undergraduate

retention. Traditionally, retention researchers have not focused on student success; rather, they have focused on attrition. Theorists (Bean, 1986; Spady, 1970; Tinto, 1975, 1993) have attempted to explain the negative outcomes of dropout or attrition. There is limited empirical support for these attrition models (Braxton, Sullivan, & Johnson, 1997; Kuh & Love, 2000), indicating that the potential of these models to guide research on undergraduate retention is limited. Researchers have proposed that these models are fundamentally flawed (Brunsden, Davies, Shevlin, & Bracken, 2000) and culturally insensitive (Guiffrida, 2006; Hurtado & Carter, 1997). The models fail to take account of the changing nature of the student and the environment over the course of the student's interaction with the institution (Guiffrida, 2006). In this study, I have demonstrated that the attrition paradigm can be replaced with a perspective that takes into account the adaptive development of successful students.

The new paradigm has yielded a study with useful findings. The findings take account of the activities, roles, and relationships of successful students and provide insight into how students can meet their potential in the college environment. The study findings provide an array of challenging activities and supportive relationships that can be nurtured in the college environment toward advancing positive college outcomes. As I discussed in Chapter 1, researchers have argued for a paradigm shift away from the pathological study of college learning and persistence (Walker, Gleaves, & Grey, 2006). In this study, I have responded to this argument. I describe positive experiences and outcomes. My exploration of optimal academic functioning has provided a snapshot of flourishing students who are fulfilled, accomplished, and learning. Describing optimal functioning is important because students will not flourish if we

simply cure pathology and eliminate behavioral and emotional problems; rather, flourishing requires building and capitalizing on human strengths and capacities (Fredrickson & Losada, 2005). Research on the experiences, strengths, and capacities of successful students is thus necessary. The following section includes recommendations that can take the findings of optimal student experiences and bring them into practice for all students.

Recommendations

This section contains recommendations for developing proactive retention and degree-completion strategies. These recommendations can enhance the practice of educators who work with FGCS. The recommendations are organized within each of the four thematic areas that describe the undergraduate experience of successful FGCS: (a) mentoring, (b) developing academic competencies, (c) engagement and exploration, and (d) developing goals and autonomy.

Recommendations for the first area, mentoring, center on offering mentoring opportunities. The study findings highlight mentoring as an important part of the student experience, and it is thus recommended that colleges and universities support developing mentoring relationships for FGCS. However, participants of this study described mentoring as relationships that developed from joint participation in an activity such as research or employment. This is different from how many mentoring programs work on college campuses. Often administrators assign mentors to mentees based on a common interest or background characteristic. I recommend here that administrators of mentoring programs focus more on

creating activities through which mentoring relationships can develop than on assigning mentoring dyads.

Recommendations for the second area, developing academic competencies, focus on the first 2 years of enrollment in college. Through the study findings, I described the need for FGCS to refine academic skills during their transition to the university. I recommend that FGCS be provided with ample opportunities to acquire study skills and strategies for college-level course work. In particular, universities should offer opportunities to develop writing skills early in the college career and include one-on-one or small-group instruction. I also recommend that students be provided with guidance on how to ask questions in multiple contexts within the college environment, for example, how to ask questions in a large lecture class, how to ask questions during faculty office hours, how to formulate academic questions, and how to write questions for a scientific investigation. Talking with students about their questions and helping students to ask questions so that they get useful responses can be an important task for faculty members, academic advisors, and instructors of first-year seminar courses. Learning how to ask well-developed questions can help students orient to their new role in the college environment and within a community of scholars.

For the area of engagement and exploration, I recommend that all FGCS have access to high-impact practices (HIP). HIP are widely tested evidence-based teaching and learning practices that are beneficial for college students from many backgrounds (Kuh, 2008). Undergraduates who engage in HIP are retained and graduate at higher levels than those who do not (Kuh, 2008). HIP include faculty-mentored research and study abroad. FGCS are

more likely to be unfamiliar with HIP or enrichment opportunities within the college environment (Hurtado, 2007). I recommend that undergraduate research programs and study abroad opportunities be marketed directly to FGCS and that supports be provided to help FGCS become familiar with these programs. The steps for participating in these activities should be explicit. Providing peer guides who previously participated in these experiences could be especially helpful. How engagement in these activities can be beneficial to the overall experience of FGCS as well as to vocational paths and graduate school opportunities should be clear. Participation in student organizations and service opportunities is also important. There should be multiple opportunities for new FGCS to become familiar with and join a student organization. In particular, campus communities may want to make sure their FGCS are aware of student organizations with cultural, ethnic, and religious affiliations.

Additionally, for the area of engagement and exploration, I recommend that instiutions offer ample opportunities for students to be employed on campus. All of the students in this study who worked viewed work as positively contributing to their collegiate experience. This is likely to be because the students worked on or close to campus. Perna (2010) suggests that in today's economic environment, institutions of higher education must recognize that most undergraduates will have jobs while enrolled in college and that it is necessary to reframe working for undergraduates as an activity that can enhance student success. This can be accomplished through on-campus work opportunities that complement prevailing institutional policies, practices, and structures.

For the area of developing goals and autonomy, I recommend that FGCS be challenged by the college environment, while also taking advantage of supportive relationships to help them meet the challenge. During orientation and admissions events, university professionals should help FGCS develop the expectation that college will be challenging and that challenge is a part of growth and learning. Activities should provide FGCS with the opportunity to set short- and long-term goals and consider potential obstacles they may encounter as they move toward their goals. Students should work on developing their goals in collaboration with academic mentors and more experienced peers. Because successful students reported such high levels of happiness and personal life satisfaction, I also recommend that programs and services for FGCS include activities for cultivating personal well-being early in their college career.

Suggestions for Further Research

The results of the study imply several areas that would be useful for future research. First, studying successful students proved to be a useful endeavor. I suggest that many more studies of the experiences of successful students be conducted. The literature on education and development should include investigations of thriving and success in learning activities. I also suggest research into the benefits of FGCS working part-time while enrolled in a full-time course load. Whereas employment during college can be detrimental to some, for many others, it may offer highly beneficial opportunities, including exploration of vocational paths and mentoring. Additionally, it would be beneficial to explore differences among successful students by gender and ethnicity.

More research should also explore ways in which mentoring relationships develop. As I noted several times throughout this study, the important mentoring relationships students described developed through joint participation in an activity. Understanding how mentoring relationships develop could inform practice and offer the best support possible to mentors and mentees. Studying this process is especially critical given how important supportive relationships are to helping FGCS respond to and navigate challenges in their environment.

All of the case study participants reported involvement in a student organization. Half of the students described, in particular, participation in organizations with cultural, ethnic, or religious affiliations. I suggest that further research be conducted into the role of these organizations in the FGCS experience. Several of the students who discussed their participation in cultural, ethnic, or religious organizations described their involvement as life changing. It would be beneficial to understand this phenomenon more deeply. Do most students have this experience, or is this unique to FGCS? What does participating in cultural, ethnic, or religious organizations offer that participating in other student organizations does not? Is this phenomenon unique to the southern region of the United States? Answers to these questions could help institutions offer refined co-curricular activities and opportunities for participation in student organizations.

Finally, I suggest that connections among happiness, personal satisfaction, and student success be empirically investigated. As I previously mentioned, recent studies have examined the role of well-being in student performance. I recommend further research specifically in to

the role of happiness and personal satisfaction in relation to the positive college outcomes of successful transition, retention, and graduation.

Researcher Reflections

In this, the penultimate section of my study, I offer brief reflections on my bias, assumptions, and experiences both before and after the study was completed. I also briefly report on how I changed because of the study. Finally, I provide a reiteration of study limitations.

One thing that surprised me about this study was the emphasis multiple students put on the need to "get out of their comfort zone." To me, *getting out of one's comfort zone* means being actively challenged by a new environment, relationship, role, or activity. I was surprised by how many students declared a desire for this to happen during their college experience. I assumed that for many FGCS, the act of going to college itself was getting out of one's comfort zone. I was surprised to see even within this challenge successful students craved even more challenge, more opportunities for exploration, and more risk taking. I believe this is why HIP and opportunities beyond the classroom are so important. To meet the desired challenge, students participated in study abroad, undergraduate research, and service learning. This led me to reflect on how students learn about opportunities outside of the classroom, especially if they do not have a family member encouraging them to study abroad or apply for a competitive internship during the summer.

In the opening chapter of this dissertation, I reported on advancements in access to higher education resulting in more FGCS attending college than ever before. Now, as I close this

dissertation, I am reflecting on how it might be time for the conversation about access to change. Instead of examining just access to college for students from low-income and historically underserved populations, it might be time also to examine access to HIP once students are on campus. If successful students participate in activities such as study abroad and undergraduate research, it may be an opportune time to ask how many FGCS participate in these activities. Is there anything that can be done to increase access for FGCS to these opportunities? Now that colleges have made advancements in access, should the focus move to access to HIP like study abroad, undergraduate research, and service learning? Will enhancing FGCS access to HIP areas improve graduation rates? I believe these are all questions worth exploring in research and practice.

Through this study, I have provided rich and complex descriptions of successful FGCS. I have also provided opportunities to make recommendations for educational practices and suggested directions for future research. This study is limited by the fact that it only included successful student experiences. The study did not explore the experiences of unsuccessful FGCS. Future research exploring the experiences of unsuccessful FGCS, especially in this particular context, would add richness and depth to the appreciation of FGCS experiences.

I also appreciate that this study is limited by my use of interview data. As I stated in the methods section, data collected through interviews are subject to recall error (Patton, 2002). Interviewees may not correctly recall an event or activity or may exaggerate or diminish the importance of an event. Throughout this study, I have wondered about the fact that all of the students in the study completed their interviews while they were quickly approaching the finish

line of graduation. In some cases, students completed the interview just a day or two before graduation. I know that sometimes in my life, as I near the end of a very challenging and life-altering experience (such as the birth of a child or even the end of graduate school), I have developed a rosy picture of the past experiences that made up my journey to this approaching, final destination. I have wondered if this happened with the students in the interviews. Did they paint a rosy picture of their experience because they were just so happy to be done? I have thought this on more than one occasion throughout this project; but then, before fretting too long, I let go of this worry because I firmly believe stories of student success must be told—rosy or not. The accomplishments of the young people in this study are noteworthy. It is true that qualitative research findings are context and case specific, and although the findings of this study contribute to knowledge of the FGCS experience, they are not generalizable to all FGCS. Still, I am privileged to have shared in the growth and development of these students. It is an honor to capture a snapshot of students, many of whom have had the cards stacked against them, as they step across their finish line and become college graduates.

Summary and Conclusion

Chapter 5 concludes this research study. Understanding the social and educational experiences of FGCS and how these experiences relate to positive college outcomes is necessary for developing educational policies and practices. This study is useful in understanding ways to facilitate working with the dynamic FGCS population. Educators should be especially knowledgeable of the diverse experiences and needs of FGCS and use this information to guide their pedagogical decisions. This research is also beneficial for FGCS

because by sharing stories of success, it supports and empowers individuals who are first in their families to attend college. Shedding light on the experiences of FGCS may help interrupt intergenerational cycles of limited educational opportunity. Furthermore, by presenting the voices of successful students, this qualitative study has provided the foundation and justification for continued research on the lives of students who successfully persist to degree completion. The ultimate goals of this study, beyond understanding, have been to enhance awareness of the lived experiences of FGCS and to enrich the education of all undergraduates.

In response to the need for a new paradigm for appreciating undergraduate retention, I utilized in this study a developmental perspective to study the experiences of successful students. In this way, I contributed to what is known about FGCS experiences. The findings produced four thematic areas describing the undergraduate experience of successful first-generation college students: (a) mentoring, (b) developing academic competencies, (c) engagement and exploration, and (d) developing goals and autonomy. Recommendations support developing and implementing proactive retention and degree-completion strategies. In response to an omission in the literature on FGCS experiences, I examined in this study the experiences of successful students and presented these experiences utilizing the voices of students themselves.

TABLES

Table 1

FGCS at four-year Colleges and Universities

	Factors
Barriers to completion	Insufficient academic preparation
	Limited college knowledge
	Cultural conflict
	Limited familial support
	Financial constraints
Factors linked to persistence and completion	Academic rigor in high school
	Grant-based financial aid
	Positive and early parental involvement
	Early access to information
	Campus engagement
Features of effective programs and supports	Begin prior to college enrollment
	Continue for the duration of the college experience
	Multifaceted
	Develop students' academic competence
	Encourage campus engagement
Effective programs and supports	Transition programs (summer bridge, orientation, first-year seminars, writing-intensive courses)
	Learning communities (common intellectual experiences, living–learning communities, collaborative assignments/projects)
	Academic advising (precollege advising, early warning systems faculty office hours)
	Experiential learning (service learning, undergraduate research, diversity and global learning)

Table 2

Demographics of Study Group

	N	Percentage
Male	8	50.0
Female	8	50.0
Underrepresented minority	6	37.5
Other	3	18.8
White or Asian	7	43.8
Financially needy	16	100.0
In-state residency	16	100.0

Note. $N = 16$.

Table 3

Study Group Cases Academic Characteristics

Case	Pseudonym	SAT total score	Degree	Major(s)	Years to degree
1	Makayla	1330	BA	Sociology; Romance Languages	4
2	Sophie	1320	BA	Romance Languages; Linguistics	4.5
3	Mackenzie	1070	BA	Communication Studies	4
4	Lauren	1280	BS	Biology	4
5	Gianna	1280	BA	Sociology	4
6	Tessa	1160	BS	Clinical Lab Science	4
7	Faith	1240	BA	Music	4
8	Alexandra	1190	BA	International Studies	4.5
9	Ethan	1270	BA	Exercise and Sport Sciences; Psychology	4
10	Noah	1200	BS	Information Science	4
11	William	1420	BAJMC	Journalism and Mass Communication; Dramatic Arts	4
12	Brian	1230	BS	Psychology (BS)	4.5
13	Jayden	1390	BA	Linguistics	4
14	Manny	1350	BSPH	Biostatistics	4
15	Donovan	1080	BAED	Middle Grades Education	4
16	Orlando	1390	BAJMC	Journalism and Mass Communications	4

Table 4

Study Group Academic Characteristics

	Characteristic
Average SAT	1263
Double major	25%
Average cumulative GPA range	3.510–4.000
Average years to degree completion	4.1

Table 5

Undergraduate Student Experiences

	N	Percentage
Faculty-mentored research	15	94.0
Study or travel abroad	10	63.0
Community Service	15	94.0
Student organization	16	100.0
With religious affiliation	5	31.0
With ethnic or cultural affiliation	3	19.0
Employed at least part-time	11	69.0

Note. *N* = 16.

Table 6

Self-Reported Satisfaction on a Scale of 1–10

	M	Range
Academic	8.8	6–10
Personal	9.1	7–10

Table 7

Activities, Roles, and Relationships in the Microsystem of Successful FGCS

Activities	Roles	Relationships
Curricular	Undergraduate	Academic mentor
Co-curricular	Employee	Student mentor
Employment	Researcher	Employment mentor

Table 8

Student Reports of Mentors

	N	Percentage
Mentor of any kind	16	100.0
Faculty mentor	16	100.0
Student mentor	6	38.0
Employment mentor from work, service, or internship	7	44.0
Family member as mentor	3	19.0
Graduate student or teaching assistant as mentor	5	31.0

Table 9

Activities, Roles, Relationships and Positive College Outcomes

	Positive college outcomes		
	Transition	Retention	Graduation
Activities	Curricular Co-curricular	Curricular Co-curricular Employment	Curricular Employment
Roles	Undergraduate	Undergraduate Employee	Researcher
Relationships	Academic mentor Student Mentor	Academic mentor Student Mentor Employment mentor	Academic mentor Employment mentor

Table 10

Synthesis of FGCS Experience Themes

Mentoring	Developing Academic Competencies	Engagement and Exploration	Developing Goals and Autonomy
Academic mentor Student mentor Employment mentor	The role of being an undergraduate Participating in faculty-mentored research Academic advising and major selection High overall sense of academic satisfaction Developing academic skills	Forming attachments to people and places Participating in community service Participating in student organizations Studying or traveling abroad Joining a small community Working part-time Solidifying and forming social and occupational identities	Perceiving challenges as opportunities for personal growth Setting goals Developing autonomy Feeling independent Coping with change and challenges Being flexible and willing to change Having a high overall sense of personal happiness and satisfaction

FIGURES

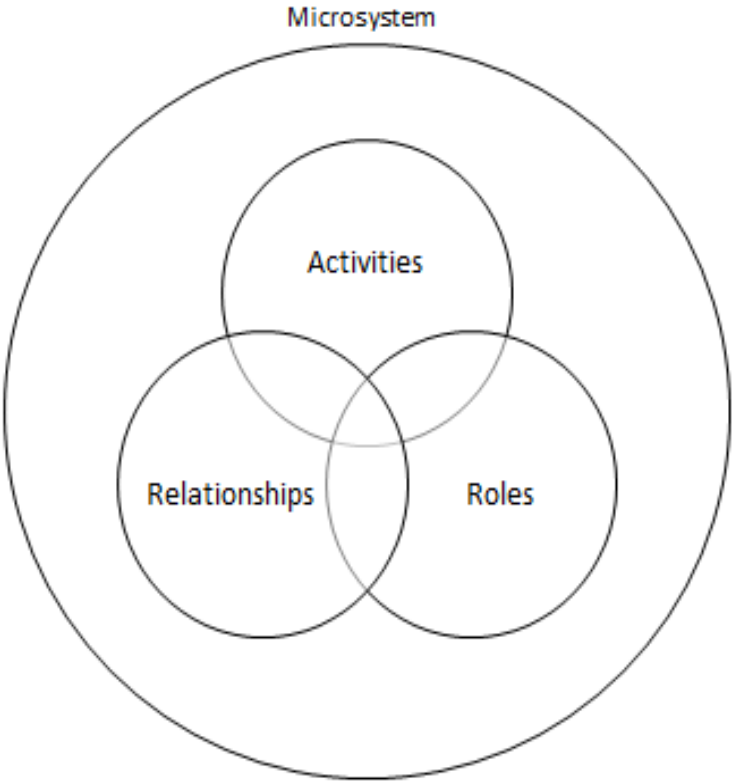


Figure 1. Bronfenbrenner's (1979) microsystem.

APPENDIX A

STATEMENT OF POSITIONALITY

In *Negotiating the Complexities of Qualitative Research in Higher Education,* Jones (2006) argued that the interpretation of qualitative data is inevitably influenced by the worldview and experiences of the researcher. How a researcher positions himself or herself within a study is critical to data interpretation. The authors propose that, as such, qualitative researchers must pay special attention to how their social identities "influence what is said and what is understood" (p. 106). Researchers should scrutinize their positionality and its role in the interpretation of data as well as the representation of study participants. Furthermore, Jones and colleagues found that researchers must examine roles of power and privilege in the research process. Qualitative researchers should also be reflexive throughout their research processes by reflecting on their values, biases, and assumptions (Creswell, 2008). Reflexivity should include the researcher's historical and geographical relatedness to the study as well as his or her personal investment in the study (Gergen & Gergen, 2000; Glesne, 1999).

In this statement, I position myself within the educational scene of the study. My positions are as both an insider and an outsider. I also see myself as an ally. I examine the power and privilege I pose in an attempt to appreciate and mindfully balance these throughout my research. I have identified these positions through reflecting on related experiences and worldviews that have influenced the development of my social identity. These experiences and worldviews include my education and upbringing, my cultural heritage, my research interests,

and my professional work. This statement also addresses my geographical and historical relatedness to the study as well as my personal investment in the study.

Familial Influences: A Commitment to Education

My mother was the first and only person in her family to go to college. She began college after having two babies and while working a full-time job. She had four children in total and slowly finished school over the course of many years. Her goal was to finish her PhD by age 60 years. She graduated in May 2007, 3 months before her 60th birthday. To understand me and my positionality, my approach to education and research, it is helpful to start with my mother. Education was paramount in our household. Learning and creativity were valued immensely, and commitments were taken seriously. Projects and plans were seen through to the end. This background influences how I experience the world today and my commitment to education both professionally and academically. My professional work is in undergraduate retention. In essence, my work is to help students graduate—to help them see their plans for higher education through to the end. As a child, our home always felt like a safe haven. The children were continuously encouraged to be active and to play. When we needed help, we felt comfortable enough to ask for it, while simultaneously being encouraged to seek our own solutions. These experiences influenced what I value today in my work with undergraduates. I believe every student has the right to feel safe at school, to feel secure enough to express himself or herself creatively and intellectually, to be mentally and physically well, and to have access to the resources necessary to help him or her succeed.

Cultural Heritage: Communication Is Communal

My cultural heritage is part of my positionality. I come from a large New York family of Spanish and Italian descent, among whom all information is considered communal. A strong network of family and friends is highly valued, and engagement with this community is central to decision making. There is an expectation that community members will lift up, protect, and support one another as well as communicate respect and gratitude. This influences my understanding of how people in a community optimally interact and how individuals can be successful through the support of a group. As an adult, my current class and educational background are also part of my positionality. I am well educated, as is my husband, and we both work at a university. We value higher education, appreciate living and working in an educational community, and believe in the basic potential of education to make life better. This heritage has influenced my beliefs that education can improve individual lives, that learning is relational, and that approaches toward success in school must include a supportive community. My research decisions have also been shaped by my heritage. I would like to engage in research that is reciprocal and that communicates gratitude. It is important to me that research ultimately serves students and their communities.

Academic Position: Ecological Human Development

I am a doctoral student in the Educational Psychology, Measurement, and Evaluation program at the University of North Carolina at Chapel Hill. My research interests include academic motivation, academic achievement, and development. I am concerned with the role of mental health and wellness in academic performance. I study models of ecological student development that view the changing student in a reciprocal relationship with a dynamic,

educational environment. My theoretical framework argues that schools should provide opportunities aligned with the developmental capabilities and needs of their students to foster positive developmental outcomes.

Professional Position: Identifying Student Strengths

I work full-time in the Office of Undergraduate Education at the University of North Carolina at Chapel Hill as the director for retention. I develop initiatives to increase student retention and to guide students on their paths to graduation. I work closely with students who are among the least likely to graduate from Carolina, including first-generation college students and students from low-income families. My professional practice is grounded in positive psychology and in taking a strengths-based approach to encouraging student success, including identifying individual academic strengths and cultivating resilience and optimism. I believe student success in college is a combination of academic success, wellness, and engagement. In my work, I have found that college students can overcome academic setbacks by identifying their strengths and learning to leverage their strengths against their weaknesses. I believe appreciating emotion, motivation, and psychological orientation are critical to understanding success in college.

In my work, it is important that I am a good listener and that I understand students' stories as well as the paths they followed that ultimately brought them to me (generally, if a student is in my office, he or she is on academic probation or ineligible to stay in school). I am committed to helping students identify what went wrong as well as what went right. Even when a student is on academic probation, at least one thing in his or her learning went right. I am

committed to helping students ultimately take responsibility for their academic choices and decisions. I listen for how events beyond the classroom influenced academic performance. Working with students, and in all of the other aspects of my life, I strive to be patient and reflective. I try to exercise and meditate several times a week. I believe this helps me clear my mind so that I can see things anew and manage my commitments. This practice also influences my approach to writing and research. Sometimes the best thing I can do for my research is to walk away from it for a little while and then revisit it with a fresh perspective.

Educational Scene: My Position in the Scene

I am the director for retention at the university where this study takes place. I am also the faculty advisor to Carolina Firsts, the student organization for first-generation college students at this university. I am also active in professional organizations for academic advising and undergraduate retention. My activity in these organizations has including presenting at national conferences and publishing articles about the experiences of first-generation college students. One of my professional goals is to raise the retention and graduation rates of first-generation college students both at my home institution and nationally. My professional background is important to my reflexivity. As an administrator, I am aware of strengths and limitations of the undergraduate educational opportunities for first-generation college students at Carolina. In this study, it will be critical that I reflect on how my prior knowledge of and professional experiences with first-generation college students influence my research. I must consider how my prior knowledge and experiences influence how I understand what

participants say and how I interpret their stories. I will reflect on whether I am imposing my own meaning on the experiences of students.

Working in academic administration at a competitive research institution situates me in a position of privilege and power in the context of this study. I am privileged to work at an institution where most students succeed. The retention and graduation rates are very competitive. Nonetheless, being a first-generation college student is one of the strongest predictors of failure to persist at this institution. My professional work has attempted to increase the retention and graduation rates of first-generation college students by making first-generation college students a point of pride for our institution. I spearheaded efforts to share the stories and experiences of successful students, faculty, and staff who are or were first-generation college students. We call first-generation college students at our institution "Carolina Firsts" as part of this effort to make first-generation college students a point of pride. These initiatives stem from a positive intervention model. Most retention practices are deficit orientated in that they try to "fix" students who are struggling to persist. In general, the study and practice of undergraduate retention has historically focused on students who fail to succeed (Shushok & Hulme, 2006; Swail, 2004). In this study, I am exhibiting some elements of both power and privilege by turning this paradigm on its head and looking at students who are succeeding.

I consider myself both an insider and an outsider in this study. I see myself as an insider in that I work at the university where the study will be conducted. I meet with first-generation students on a regular basis, and I am familiar with many of their unique challenges and

accomplishments. I also consider myself an insider because my mother was a first-generation college student; however, there is an important difference between my mother's experience and the experiences of the students in this study. My mother was a nontraditional college student. She was a working mother older than 24 years of age when she was in college. My study focuses on traditional-aged first-generation college students. Still, I expect some of the experiences my mother faced to be similar to some of the experiences of the students in this study. Growing up with my mother in college as a first- generation college student throughout my childhood, I developed a profound respect and admiration for first-generation college students and the obstacles on their paths to success. This experience with my mother makes me a bit of an insider as well as an outsider. I am not a first-generation college student myself (outsider). My mother was a first-generation college student (insider), but my mother's experience was different than the experiences of the participants in this study (outsider). In addition to my position as both an insider and an outsider, I write as an ally of first-generation college students. As the faculty advisor for Carolina Firsts and the director of retention, I am a supporter of first-generation college students and want to see them succeed.

Jones (2006) described the evolving nature of qualitative researchers. They find positionality and social identities are dynamic in nature throughout the research process. To assure quality, the researcher must be continuously reflective and recognize limitations in understanding. I describe the positions of insider/outsider and ally here to advance my reflective practice as a researcher. My goal as a qualitative researcher is to balance my own interpretation with the voices of the students. As a member of the university community in

which the study takes place, reflecting on my geographical and historical relatedness will be critical to the study's overall success. It is also important for me to acknowledge my personal investment in study. This study will be a partial fulfillment of Ph.D. program. I have a personal and professional stake in earning my Ph.D. to advance my education and opportunities for career development. I am also personally invested in and care for first-generation college students. First-generation college students play a role in my personal, professional, and academic lives.

APPENDIX B

INTERVIEW PROTOCOL

Undergraduate Experience Interview Protocol 2010

Thank you so much for coming to the interview today. I would like to use the next 45 to 60 minutes to ask you some questions that will help you to reflect on your entire experience here at Carolina. Do you have any questions before we start?

Section I: General Experience

1. When you first came to Carolina, what were your initial expectations? How have those evolved over the course of your time here?
2. Do you feel that you received the academic and social support you needed as a first-year student? If yes, what did you find most helpful? What did you find least helpful or lacking? If no, what services would have been helpful?
3. What are the critical events/courses/people/experiences that have contributed to or shaped your learning experience at Carolina?
4. Is there a single faculty member/staff/peer/family or community member who you would say "profoundly affected you" during your studies here? If yes, who was it, and more important, how did he or she profoundly affect you?

Section II: Academic Experience

5. Is there a single course that you would say "profoundly affected you" during your time here? If yes, what was it, and more important, why? Please focus on the substance of a course, or its organization, or the way it was taught, or the instructor's teaching style rather than just stating, for example, that "the instructor was a nice guy."
6. Did you take a First Year Seminar?
   If yes, was it a positive experience? We don't need to know names of instructors, just about your experience and why it was positive or not so positive. As you think about that experience, did it help you make the transition to the university? Did it help you make connections with faculty and other students?
   If no, did you take any small-size classes that helped you with transition?

Undergraduate Research

7. Have you taken any courses in which you need to do a research project, or have you worked on a research project outside the class? If yes, can you describe the research you did?
   a) Did you have a mentor for your research? If yes, were you mentored by a graduate student or a faculty member/professor, or both? Was the mentoring relationship positive? Was it helpful in completing and/or understanding your work? How so?
   b) How much was your work mainly assisting a faculty member's or graduate student's research versus giving you an opportunity to ask significant questions of your own design and choosing?
   c) What have you learned from the research experience? Skills, knowledge, new insights?

Study Abroad Experience

8. Have you studied abroad? [INTERVIEWER: If no, go to Question 9. If yes, ask the following questions and then go to Question 10]
   a) Where abroad did you study, and what kinds of courses or experiences were involved? What was the length of time for your study abroad program, for example, a semester, a summer, a year? How has the experience affected you?
   b) What were the most important things you learned from your program of study? Name two or three things that come to your mind.
   c) In which ways has the study abroad experience helped you make connections between your course work and global issues?
   d) Has the experience helped you develop a sense of global citizenship? If so, how?
9. Have you ever been abroad? If yes, what did you do there? How has the experience helped you learn about and experience other cultures?
10. Tell me about your global issues course(s). Did the course change your thinking? Do you remember having any new insights? What were they?

Questions About the Curriculum and Making Connections

11. Think about the courses that you have taken so far. Have any of your courses allowed you to make connections to knowledge or experiences outside of that class or helped you see connections between things you learned in different courses? What has been your actual experience? Please give an example.
12. Were there any places where one or more components or requirements of the General Education curriculum didn't seem to be meaningfully related to your educational goals?
13. What has been the best part of your academic experience so far? Please comment on specific as well as general topics.

14. On a 1–10 scale, where 10 means really great, how would you rate your overall academic satisfaction here at Carolina? And addressing a slightly different question, on that 1–10 scale, how would you rate your personal happiness (life satisfaction)? [INTERVIEWER: If the numbers are very different, ask WHY?]

Section III: Extracurricular Involvement, Volunteer Experience, and Campus Life

15. Do you feel you have been a member of any small communities here on this big campus? If yes, what have they been? Do you believe that being part of a small community is a critical ingredient that makes you feel "part of this place"? Which smaller communities have had the most positive effect on you and your Carolina experience?
16. Where did you live for the past few years? How have your living arrangements shaped your experience at Carolina?
17. How often have you gained a deeper understanding of other perspectives through conversations with fellow students who differed from you in some way?
18. Tell me about one or two of the activities or organizations that you have listed on the Extracurricular Activities Inventory. What did you hope to get out of these activities? Are you getting what you hoped for out of them?
19. Have you been involved in any volunteer work or service learning projects so far? [INTERVIEWER: If yes, ask the following subquestions.]
    a) On average, how many hours per week have you spent doing service?
    b) What organizations benefit from your service? Where are they (in Orange County, in North Carolina, in another state, outside of the United States)?
    c) Through whom are you doing your service (i.e., name of on-campus organizations, off-campus nonprofits, or government organizations)?
    d) How did you first get involved in public service? (How did you hear about the opportunity?)
    e) During your time doing public service, did you develop a relationship with someone whom you would describe as a mentor to you? If so, who was this person? How did you meet? What did you learn from him or her?
    f) Are you a Public Service Scholar?
20. How have public service and the extracurricular activities related to your educational and personal goals?

Section IV: Advising and Interactions With Faculty

21. What is the single best bit of academic advice you got during your time here? Who gave it to you? Did you take it? If so, why was it so helpful?

22. How did you choose your major(s)? Did you feel well enough informed to choose a major wisely? How many times did you officially change your major? What are the one or two key factors that influenced your choice?
23. Did you receive advice in designing a program of study that fulfilled personal goals and met requirements of the new curriculum?
24. Did your advisors help you to identify opportunities for interdisciplinary and experiential learning, such as Maymester or undergraduate research?
25. How many professors do you know well enough to ask for a letter of recommendation in support of an application for a job or for graduate school? Would you call any of these professors a mentor? If so, how did that relationship happen? If not, do you regret not having a mentor? Did you try to develop that type of relationship?
26. In retrospect, looking back on your time here, what, IF ANYTHING, regardless of advice from others, would you have done differently ACADEMICALLY?
27. In retrospect, looking back on your time here, what, IF ANYTHING, would you have done differently WITH NONACADEMIC PARTS OF YOUR LIFE HERE?

Section V: Suggestions and Future Plans

28. If you were advising the chancellor of the university about a single, constructive change he could make to create a better undergraduate experience for students, what would it be? Pretend you are "dean for a day."
29. What advice would you offer to incoming first-year students?
30. If you are the sort of person who sets goals for yourself, do you have one or two specific goals regarding life after college? Why are they important to you?
31. Is there anything that I didn't ask that would have given you the opportunity to say more about your undergraduate experience? Is there anything more that you want to add?

That is the end of our interview. Thank you very much for your time.

APPENDIX C

INFORMED CONSENT FORM FOR INTERVIEWS

Study of the Undergraduate Experience at UNC-Chapel Hill 2010

Written Statement Provided to Participants

Introduction and Purpose of the Study

- We are inviting you to be part of the University's study of the undergraduate experience at UNC-Chapel Hill.
- We are conducting interviewing with a selected group of seniors.
- The purpose of the study is to investigate and assess how students have made connections between their academic, co-curricular, public service, and other experiences and activities to enhance the overall value of their education at UNC-Chapel Hill.
- We would like to record your interview in order to capture your views in your own words. The interview will last approximately 1 hour.
- We will also ask you to share copies of previous academic papers or other projects that would enable us to assess the extent to which students are learning to integrate concepts from various courses and disciplines in their work.

Your Privacy Is Important

- We will make every effort to protect your privacy.
- What you say in the interview and any papers or other work products you share will not be shared in an identifiable way and will not have an impact on your grades.

After Our Interview

- If you have questions, you can send an email to Dr. Anna Li at lianna@unc.edu at the Office of Institutional Research and Assessment, 209 Carr Building, University of North Carolina, Chapel Hill, NC, 27599 or call 919-962-8474.

Please check the box below.

☐ I give consent for my interview and papers to be used in this curriculum evaluation project.

(Please sign below.)

Signature _____ Date _____

Written Name _____

APPENDIX D

GUIDE FOR MEMOING

Date:	
Recent Study Activities	**General Thoughts and Reflections on the Research Process**
Ideas Requiring Further Development	**Thoughts on Codes and Categories**
Connections Back to the Literature	**Questions to Consider**

APPENDIX E

A PRIORI CODING MATRIX 1

		Mechanisms of Development		
		Activities	**Roles**	**Relationships**
Domains	**Academics**			
	Wellness			
	Engagement			

APPENDIX F

A PRIORI CODING MATRIX 2

		Positive College Outcomes		
		Successful Transition	**Retention**	**Graduation**
Mechanisms of Development	**Activities**			
	Roles			
	Relationships			

APPENDIX G

A PRIORI CODES AND DEFINITIONS

academics	pursuits of learning, both inside and outside of the classroom, related to the undergraduate curriculum
activities	reoccurring on a regular basis outside of the classroom and increasing in complexity over time; can include curricular activities such as participation in a course study group and cocurricular activities such as membership in a student organization
engagement	participation in activities and relationships related to the university that a student finds meaningful and personally rewarding
graduation	fulfilling undergraduate degree completion requirements
relationships	sustained interpersonal connections between the student and other individuals including peers, faculty, staff, and family
retention	the continued enrollment of a student from semester to semester
roles	reoccurring social behaviors of undergraduates in relation to their environment such as the role of student, employee, mentee, friend, and child
transition	the process of entering the university environment as a new student and learning both academic and social expectations of the environment
wellness	activities and experiences related to developing healthy behaviors and contributing to one's overall physical and psychological wellness

APPENDIX H

CONTEXT OF THE STUDY

This study investigated the experiences of students at a University with a long-standing commitment to academic excellence among undergraduates. The University offers many supports and services as well as high impact opportunities including undergraduate research, study abroad, and service learning. The University also has a history of service and outreach to underserved youth including first-generation and economically disadvantaged students. Eighty percent of undergraduates enrolled in the institution are from in-state. The University has a well-known commitment to making college possible for qualified students regardless of their financial means. Through this commitment, eligible low-income students who are admitted to the University can enroll without worrying about how they will pay for it. And, if they work 10 hours to 12 hours per week in a federal work-study job, they can graduate debt-free. The University also offers academic and personal support services to help students make the most of their college experience and succeed in completing their undergraduate degree program.

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