

## ABSTRACT

Title of Document: FIRST TO THE FINISH LINE: A CASE STUDY OF FIRST GENERATION BACCALAUREATE DEGREE COMPLETERS IN THE UNIVERSITY OF MARYLAND STUDENT SUPPORT SERVICES PROGRAM.

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This study explores factors first generation college graduates identify as impacting their successful baccalaureate degree attainment. This research was conducted using qualitative case study method, and a cross case analysis of individual case summaries was completed. Through a review of degree attainment, persistence, and first generation student literature, major pre-college and college themes/issues influencing degree attainment were identified and used to develop the study's theoretical framework. Data was collected through several methods: survey; in depth interviews and document analysis. Data was collected on a total of thirteen

participants representing the 2001-2004 University of Maryland Student Support Services cohorts.

An analysis of collected data revealed several factors participants perceived as significantly affecting their successful degree completion. These factors include academic preparation, college enrollment patterns, peer influence or participation in peer enclaves and perceived ability to pay. Family encouragement and support in both the student's pre-college and college experiences emerged as one of the most important influences upon first generation degree attainment. Further, results of this study revealed that mothers, in particular, play an important role in their first generation student's success. Mothers provide key motivational encouragement and support, regardless of their lack of familiarity with the college experience.

Another key factor that plays a positive role in the first generation student's successful graduation is participation in an academic support program. Results of this research demonstrate that the academic, counseling and referral services and support provided by these types of programs help close the gap in terms of amassing critical degree completion social/cultural capital and mitigating academic challenges entering first generation students often bring to their college experience.

The results of this study contribute to the dialogue on closing the gap in educational access and fostering degree completion success of first generation students. Implications for policy and practice are detailed in this study and suggest, to achieve maximum impact, educational access and degree completion initiatives must begin at least by the eighth grade and continue through college graduation. The study

also includes suggestions for future research on first generation students, their families and the initiatives developed to support their educational aspirations.

FIRST TO THE FINISH LINE: A CASE STUDY OF FIRST GENERATION  
BACCALAUREATE DEGREE COMPLETERS IN THE UNIVERSITY OF  
MARYLAND STUDENT SUPPORT SERVICES PROGRAM

By

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## **Dedication**

This degree is dedicated to:

My grandmother, Bessie Chvatal Pour, who never had the opportunity to go to college, but who taught me the true meaning of strength and resiliency and helped me believe I could face anything life offered me;

All first generation college students who have ever felt alone, scared and unworthy while they pursued their dreams,

and

My children, Erin and Ethan, who remind me every day about priorities and life's true purpose.

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## Chapter 1: Introduction

Access to higher education has increased over the past several decades. Overall, educational attainment figures in the United States are at an all time high. In 2003, 85% of all adults 25 years or older reported they had completed high school, and 27% of all adults had minimally earned a bachelor's degree (U.S. Census Bureau, 2005). Comparatively, in 1940, only 25% of the population had attained a high school diploma, and a scarce 5% had graduated from college with a baccalaureate degree (U.S. Census Bureau, 1993). While this progress may seem promising, a closer analysis of college completion rates across specific groups (e.g., race/ethnicity; socio-economic status) indicates that significant discrepancies still exist (U.S. Census Bureau, 2005). One group that consistently lags behind the general population is first generation students (Engle & Tinto, 2009). These individuals are often the first in their family to attend college. More specifically, first generation students are individuals whose parents may have taken some college courses, but never earned a college degree (Nunez & Cuccaro-Alamin, 1998). Many students who are considered first-generation also come from low-income backgrounds and are minorities (Choy, 2001; Engle, Bermeo, & O'Brien, 2006; Engle & Tinto, 2009; Nunez & Cuccaro-Alamin, 1998).

The first generation population consistently earns bachelor's degrees at lower rates than those students who are not first generation (Choy, 2001). While the Census Bureau does not track specific statistics on this group, data from the National Education Longitudinal Study of 1988 (NELS:88) indicated that only 22% of the

study's first generation participants pursued post-secondary education (Chen, 2005). Within this group, only 24% graduated with a bachelor's degree (Chen, 2005), and approximately 43% left postsecondary education with no degree at all (Chen, 2005). If first generation students begin their studies at a four year institution they are seven times more likely to graduate; however, in a review of data from the National Center of Education Statistics Beginning Post-Secondary Study (BPS 96/01), Engle and Tinto (2009) found that only 25% of the study's first generation students and low income students actually attended a four year institution.

While educational research on access and persistence issues for first generation students continues to evolve, the body of literature that focuses upon successful degree completion for this population remains underdeveloped. This study seeks to add to this work by examining the pre-college and college experiences of first generation students who successfully completed the baccalaureate degree.

### **Statement of the Problem**

As the demographic profile of America has shifted, so has the landscape of its colleges and universities. The population is getting older and is increasingly diversifying (Rendon, Hope & Associates, 1996). For example, approximately 24% of all undergraduate students are now from first generation and low income backgrounds (Engle & Tinto, 2009).

As their incoming populations continue to change, higher education institutions have slowly begun to develop initiatives to respond to the varying needs of their students. A report published by the College Board (2007) clearly defined some of these initiatives. In response to the college-going population shift, the College Board

(2007) addressed challenges associated with these changes, especially for first generation and low income students. This report further served as a “call to action” for higher education institutions to develop initiatives focused upon increasing first generation access to and successful completion of a college degree. The report outlined challenges currently facing students from low-income and first generation backgrounds and proposed an agenda for creating more inroads to higher education for this population (College Board, 2007). Some of these aims included: re-evaluating admissions procedures and financial aid packaging to ensure more equitable access for all students; increasing institutional investments in early outreach programs, and developing intensive academic support opportunities to increase graduation rates (College Board, 2007).

An analysis of data from the U.S. Department of Education’s 1988 National Education Longitudinal Study (NELS) indicated that first generation students who access higher education, particularly within four year colleges/universities, graduate at lower rates than students whose parents attend college (Chen, 2005). First generation students represented just under 25 percent of the study’s participants who entered postsecondary education between 1992-2000 (Chen). Many of these students entered the higher education pipeline at the community college level, and, regardless of where they started their higher education experience, only 24 percent had earned a bachelor’s degree within eight years of entering post-secondary education (Chen). Comparably, 68 percent of students who had entered post-secondary education within the same time frame and whose parents had graduated from college completed their baccalaureate degree (Chen).

Further, research has shown that first generation students face unique and often daunting challenges in accessing post-secondary education and persisting to the baccalaureate degree (Chen, 2005; Choy, 2001; Cabrera, Burkum, & LaNasa, 2005; Engle et al., 2006; Engle & Tinto, 2009; Ishitani, 2006; Pascarella, Pierson, Wolniak & Terenzini, 2004; Pascarella & Terenzini, 1991; 2005). Ishitani (2006), for instance, found that both pre-college factors such as high school academic rank and intensity and collegiate factors such as college choice, continuous enrollment and financial aid all affected whether a first generation student would complete his/her baccalaureate degree. Additionally, the first generation student's understanding of the value of a college education and college culture (cultural capital); access to social networks and resources in the college community (social capital) (Berger, 2000; Coleman, 1988; Pascarella et al., 2004; Perna, 2006) and their academic and social adjustment to college (Pascarella et al., 2004; Terenzini et al., 1994) have been found to be critical determinants in the student's successful completion of the bachelor's degree. The types of family and peer support received also strongly influence the first generation student's pre-college and college experiences (Cabrera, Burkum, & LaNasa, 2005; Hossler, Schmidt & Vesper, 1999; London, 1992; Murguia, Padilla & Pavel, 1991; Rowan-Kenyon, Bell & Perna, 2008; Terenzini et al., 1994; Terenzini, Cabrera & Bernal, 2001; Tierney & Auerbach, 2005; Tinto, 1987). Other social and cultural integration factors determined to critically impact the college experiences of this population include interaction with faculty, academic performance, choice of major, course-taking patterns and extra-curricular participation (Adelman, 2006;

Cabrera et al., 2005; Chen, 2005; Pascarella et al., 2004; Pascarella, Wolniak, Pierson & Terenzini, 2003; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996).

### **Purpose of the Study**

In an effort to better understand the first generation degree completion experience, the purpose of this study was to explore factors or incidents that first generation students identified as critical to their successful completion of the bachelor's degree. With this aim in mind, the following research questions were designed to guide this exploratory case study: What experiences do University of Maryland Student Support Services (SSS) first generation college graduates identify as factors that contributed to their successful completion of the baccalaureate degree? What experiences are suggested by the participant cases in the current study? To what extent do these experiences reflect or depart from those documented by the extant literature?

### **Study Design**

This study was conducted using qualitative case study method, and a cross case of individual case summaries was completed. The theoretical scaffold of this study was built upon emergent themes resulting from a rigorous review of various streams of literature associated with the first generation student's pre-college and college experiences. Data for the study was collected through a variety of methods including survey, document analysis (high school and college transcripts; admissions applications, and Student Support Services participant files) and one-on-one, in-depth interviews.



Thirteen participants, forming a representative sample of participants in the 2001-2004 University of Maryland Student Support Services program, participated in the study. These participants were selected through a “purposeful sampling” method (Merriam, 1998), and pseudonyms were used to ensure confidentiality. Data collected were analyzed to identify common themes and patterns related to pre-college and college degree completion experiences.

The specific design of this inquiry was informed by a review of literature that covered multiple research areas. These topics included: the first generation student; factors affecting degree completion for first generation students; social/cultural capital and the college experience; college choice, persistence and diversity literature, and Bean and Metzner’s (1985) model of non-traditional attrition. Because of their focus on first generation degree attainment, the work of Ishitani (2006) and Chen (2005) served as the foundation for developing a framework of significant factors (positive or negative) affecting first generation students’ completion of the baccalaureate degree. However, a critical gap in the work of both Ishitani (2006) and Chen (2005) included information about the first generation student’s social/ cultural integration into the college campus.

A significantly larger body of literature exists on the college experiences of first generation students, and a review of this literature, with particular emphasis upon the work of London (1992), Pascarella et al. (2003), Pascarella et al. (2004), Pike and Kuh (2005), Terenzini et al. (1994), and Terenzini et al. (1996) provided another dimension from which to consider factors affecting first generation students’ successful completion of the baccalaureate degree. In this review, these experiences

were considered within the context of recent research on both social and cultural capital and the first generation student (Berger, 2000; Bourdieu, 1986; Coleman, 1988; McDonough, 1997; Pascarella et al. 2004; Perna, 2006). Finally, the theoretical model for this study relied most heavily upon the work of Bean and Metzner (1985).

While much work has been done in the area of student adjustment and persistence theory, the non-traditional model advanced by Bean and Metzner (1985) emerged as the theory best suited to examine the collegiate experiences of non-traditional students. This model includes environmental factors such as family responsibilities, the role of significant others and finances, all of which seem more attuned to the needs and characteristics of first generation students.

### **Significance of Study**

This study has the potential to add value to the existing body of research on first generation students for several reasons. First, much of the research that is currently available focuses on access and persistence issues. As discussed in Chapter Two of this study, the body of literature that looks specifically at factors affecting first generation degree completion is limited, both in quantity and scope. Often, research on the first generation student focuses solely upon the first year experience (e.g. Pike & Kuh, 2005; Saunders & Serna, 2004). Studies that extend beyond the first year do exist; however, these studies do not specifically consider factors directly related to successful completion of the baccalaureate degree (e.g. Horn & Kojaku, 2001; Lohfink & Paulsen, 2005; Pascarella et al., 2004; Somers, Woodhouse & Cofer, 2004).

The majority of research available on the first generation population is quantitative in nature. Moreover, it relies on data from three national longitudinal studies: The National Education Longitudinal Study (NELS:88); The Beginning Postsecondary Students Longitudinal Study (BPS), and the Baccalaureate and Beyond Study (B&B) (e.g. Chen, 2005; Choy, 2001; Ishitani, 2006; Warburton, Bugarin & Nunez, 2001). While the findings from these studies provide a much needed framework for understanding the specific challenges and needs of the first generation student, additional qualitative research, particularly in the areas of degree completion and social/cultural integration into the campus community, can complement and expand upon the foundation provided in this body of quantitative work. More specifically, rigorous qualitative research can enhance and add depth to our understanding of these quantitative findings within the context of the literature. Rigorous qualitative study also may be used to identify further degree completion factors for exploration in larger scale quantitative, qualitative and/or mixed methods studies. The current qualitative study specifically focused on factors first generation participants identified as significantly affecting degree completion. The project also considered these factors within the context of participants' social and cultural experiences.

A final aim of this research project was to generate results that may contribute to the ongoing dialogue of policymakers and practitioners as they explore new ways to serve the changing needs of the college-going population and assess current programs serving at risk and first generation students. While initiatives addressing aspects of the first generation student's college access and degree completion experiences do

exist, the number of comprehensive programs that serve this population is small; the programs are often under-funded and very limited information has been garnered from research conducted on these initiatives (Breneman & Merisotis, 2002; Council for Opportunity in Education, 2010a; Perna & Swail, 2002). From the results of this study, emerged several critical findings related to pre-college and college experiences that can directly impact pre-college and college support programming. Some of these factors include the effect of positive parental involvement, the role of peer enclaves and the influence of structured academic and social support initiatives.

### **Description of the UM Student Support Services Program**

Participants in this study were selected from the University of Maryland (UM) Student Support Services Program. The UM Student Support Services program (UM-SSS) is a TRIO program, federally funded by the U.S. Department of Education. The TRIO programs emerged from Lyndon Johnson's "war on poverty," and the first program was implemented as a result of the Educational Opportunity Act of 1964 (Upward Bound) (Council for Opportunity in Education, 2010b). Talent Search, the second program, was established in 1965 and Student Support Services was established in 1968 (formerly Student Services for Disadvantaged Students) (Council for Opportunity in Education, 2010b). These programs were created as a means of increasing equity and promoting access to education for all citizens. TRIO programs' focus is upon first generation and low income populations (Council for Opportunity in Education, 2010b). Under federal guidelines, two-thirds of participants in all SSS programs must qualify as both first generation and low income (Student Support Services Program, 2009).

UM's Student Support Services program (SSS) received its first award in 1972 and serves over 350 students per year (Academic Achievement Programs, 2007). Like most of its peer SSS programs, UM's SSS program delivers specific services targeted to its participants. Per federal regulations, SSS programs can provide a range of services including: assistance for first time and transfer students in gaining admission to and obtaining financial aid for both four year institutions and graduate/professional school; tutoring support; academic support in areas such as math, English and study skills; academic advising; personal and career counseling, mentoring, and provision of cultural experiences to which participants may not otherwise have been exposed (Student Support Services, 2009).

The University of Maryland SSS program serves between 100-110 first time freshmen each year who come from first generation and/or low income backgrounds (Academic Achievement Programs, 2007). This program constitutes the largest single initiative on campus serving this specific population (Academic Achievement Programs, 2007).

UM's Program is unique in that it has created, through a marriage of state (Intensive Educational Development Program) and federal (Student Support Services) financial support, an aggressive, highly structured support program for students from low-income and first generation backgrounds (Academic Achievement Programs, 2007). This Program encourages student persistence and degree completion through academic, social, counseling and financial support. To the primary personal, academic and career counseling support provided by the UM-SSS program, the state-funded Intensive Educational Development program adds a structured academic

program (Academic Achievement Programs, 2007). The academic program consists of intensive English, math and study skills support, as well as supplemental instruction and peer tutoring for core academic courses offered in the first and second year (Academic Achievement Programs, 2007). The SSS program experience is most intense and structured during these years. After the second year of study, students declare a major and are eligible for academic advising through their individual colleges; however, they remain SSS program participants through graduation. As such, continuing students qualify and frequently continue to utilize the Program's academic and career advising, counseling and tutoring services. A final component of the SSS student experience is that all participants in the program enter the University through a six week bridge program called the Summer Transitional Program (STP). This hybrid program is referred throughout this study interchangeably as UM-SSS or Academic Achievement Programs (AAP), the name for the department that houses the Program. Participants often used these terms interchangeably when referring to their tenure with the Program. The STP program is referred to separately from the UM-SSS experience.

## Chapter 2: Literature Review

This study's literature review provides a context for exploring factors that contribute to the first generation student's successful completion of the baccalaureate degree and the extent to which these experiences reflect or depart from those documented by the extant literature. The review of literature is organized into the following areas: a) a definition of "first generation" college students; b) a discussion of first generation students' common experiences; c) a discussion of factors that research suggests "matter" in the persistence and degree attainment for this group of students, and d) a consideration of the Non-traditional model of student attrition (Bean & Metzner, 1985).

### **The First Generation (FG) Student**

This section of the literature review provides a framework for defining the term, 'first generation student' and for understanding the demographic background and common experiences of this student. From this point forward, the terms "first generation" and "FG" will be used interchangeably.

**Definition.** The definition of a 'first generation student' focuses on the highest level of a parent's education and includes varying degrees of 'acceptable' post-secondary education. Billson and Terry (1982) and York-Anderson and Bowman (1991) classified students as FG if "neither of their parents nor siblings attended college for 1 year" (York Anderson & Bowman, 1991, p. 116). Some researchers considered students 'first generation' if neither of their parents had more than a high school education (Pascarella et al., 2004; Warburton et al., 2001). Engle et al. (2006)

defined this student as one “whose parents have not attended college and/or have not earned a college degree” (p. 13), thus including both students whose parents had earned only a high school diploma and those who had some college in the same sample. Nunez & Cuccaro-Alamin (1998) provided further parameters in defining first generation students as “those [students] whose parents’ highest level of education is a high school diploma or less. In cases where parents have different levels of education, the maximum education level of either parent determines how the student is categorized” (p.7).

Some researchers have used even more specific parameters to compare “levels” of first generation students within large cohorts of data. For example, Choy (1998; 2001) divided her sample of FG students into two distinct groups to analyze findings about this population across three national longitudinal studies (NELS:88; BPS; B&B). She compared those students where at least one parent completed a minimum of a bachelor’s degree to two separate groups of FG students: (1) students whose parents had earned a high school diploma or less and (2) students whose parents had attended “some college” but had not earned a baccalaureate degree (Choy, 1998; 2001).

Ishitani (2006) also employed this stratified definition of FG students to further examine the role of parents’ education in degree completion. The sample for his study included three groups: (1) students whose parents had earned at least a bachelor’s degree; (2) students where at least one parent had some college and (3) students whose parents earned a high school diploma or less (Ishitani, 2006).



Because of this study's limited sample size and the focus of the research questions, a general definition that encompassed all of the "layers" of FG students described above was used in this research. First generation students were defined as those participants where neither parent completed a four year (bachelor's) degree. Students whose parents (either one or both) had: earned less than a high school degree, earned a high school degree or attended some postsecondary education were all considered equally.

**Common characteristics and experiences.** First generation students represent a growing segment of the college-going population and, as a group, share some common characteristics (Pascarella et al., 2004). Much of what is currently known about the characteristics of FG students has been derived from quantitative analyses of three national longitudinal studies: The National Education Longitudinal Study (NELS:88); The Beginning Postsecondary Students Longitudinal Study (BPS); and the Baccalaureate and Beyond Study (B&B). First generation students are more likely to be Black or Hispanic and are more likely to come from a low-income background (Chen, 2005; Choy, 2001; Nunez & Cuccaro-Alamin, 1998). These students are often older, married and have children (Nunez & Cuccaro-Alamin). They are also more likely to be female (Nunez & Cuccaro-Alamin).

First generation students not only share some common demographic characteristics, but also common pre-college and collegiate academic, social and cultural experiences. As a group, these students are less academically prepared for college; have lower educational expectations than students whose parents completed a baccalaureate degree; have parents that are less involved in their academic choices;

know the least about the cost of attending college and are less likely to enroll in college (Choy, 2001). First generation students who do attend college are less likely to enroll in a four year institution; are less likely to attend full time, are more likely to “stop out” and are more likely to leave without earning a degree (Chen, 2005; Choy, 2001; Engle, et al., 2006).

The literature suggests that some of these characteristics can be attributed to the first generation student’s lack of social and cultural capital in relation to the higher education experience (Cabrera et al., 2005; Chen, 2005; Choy, 2001, 2002; Engle et al., 2006; Ishitani, 2006; McDonough, 1997; Pascarella et al., 2004; Pascarella & Terenzini, 1991, 2005; Perna, 2006). In simple terms, social capital can be defined as “resources embedded in a social structure which are accessed and/or mobilized in purposive actions” (Lin, 2001, p. 29). In this particular instance, resources are those networks, individuals and information accessed to gain entry to and graduate from college. In his work, Coleman (1988) applies this concept to education and discusses several forms of social capital, which include information channels (methods of obtaining information), obligations and expectations (reciprocal favors, e.g. if I do you a favor/provide information, then an expectation exists that you will help me out in the future), and social norms (perceptions of common practice/values within a particular community). Typically, persons living in a community and sharing in these social norms, also share the same “worldview” because of their common experiences and communication (Berger, 2000). These shared experiences and belief systems are what Bourdieu (1986) defines as “cultural capital.” Specific applications of these

theories in literature relevant to the current study will be discussed later in this chapter, within the context of pre-college and college social experiences.

Building upon the work of Coleman (1988) and Bourdieu (1986), Perna's (2006) conceptual model for studying college access and choice recognizes the significance of social networks and habitus in the college choice process, particularly for first generation students and students from lower SES backgrounds. In her qualitative case study, McDonough (1997) also found that access to social networks and certain types of cultural knowledge were significant factors in the college choice process, especially in relation to SES and parents' education attainment levels.

Recent research has focused upon the influence of social and cultural capital for explaining how individuals choose college and also whether or not they succeed in adjusting to college itself (Berger, 2000; McDonough, 1997; Pascarella et al., 2004; Perna, 2006). Both Pascarella et al. (2004) and Berger (2000) relate the concepts of social and cultural capital to the college experience, and Pascarella et al. (2004) apply this theory specifically to the experiences of FG students. Pascarella et al. (2004) suggest that the FG student's lack of access to and knowledge of college social networks and cultural attitudes not only affects their college choice process, but also affects the decisions FG students make while they are enrolled. The authors argue that the result of this disadvantage "may translate into a comparatively less influential collegiate experience for first-generation students, and perhaps even lower levels of growth in the cognitive, psychosocial, and status attainment-oriented outcomes of college" (Pascarella et al., 2004, p. 252).

Developing social networks in colleges has been recognized as a key element in allowing students to adjust and succeed in college (Lin, 2001). Tangible “returns” of investing in developing social networks may include successfully navigating the financial aid process, establishing career networking opportunities or building relationships with faculty. These resources or networks, frequently taken for granted by many students and their parents, are forms of social capital that often elude those students from first generation backgrounds (Berger, 2000; Perna, 2006; Walpole, 2003). Pascarella et al. (2004) argue that the FG students’ challenge in building these social networks affects their ability to successfully navigate the college experience.

### **Significant Factors Affecting Degree Completion**

While the body of literature examining factors that affect persistence for FG students and determinants of degree completion for all students continues to expand, very little research focuses specifically on determinants of degree completion for FG college students. The exception to this rule is represented by two studies. Chen (2005) and Ishitani (2006) have produced the most comprehensive studies to date on factors related to FG student degree attainment. Using these studies as a foundation, factors that have proven significant in FG students’ completion of the baccalaureate degree can be divided into three general categories: demographic characteristics, pre-college and college experiences. In addition to the work of Chen (2005) and Ishitani (2006), findings from persistence literature were used to create this framework of factors influencing the first generation student’s progression toward the baccalaureate degree.

**Demographic characteristics.** Specific demographic characteristics found to affect degree completion for FG students include parents’ education (Choy, 2001;

Chen, 2005; Nunez & Cuccaro-Alamin, 1998), income level (Chen, 2005; Ishitani, 2006) and ethnicity (Ishitani, 2006). First, if a student's parents did not attend college, the student is not only less likely to enroll in college, but is also more likely to leave without graduating (Choy, 2001). Even after controlling for similar demographic backgrounds, enrollment trends and academic performance, Chen (2005) found that FG students earned bachelor's degrees at lower rates than students whose parents had completed college. This characteristic is important on both social and cultural levels. Parents who completed a college degree are more able to guide their students through the college process (Terenzini, Cabrera & Bernal, 2001); thus increasing a student's access to social and cultural capital networks critical to degree completion (Berger, 2000). Drawing from their own experiences, parents who negotiated the process of applying for admissions or financial aid; registering for classes; choosing a major, and interacting with peers and faculty are more able to help their children navigate the same challenges (McDonough, 1997; Perna, 2006; Terenzini, Cabrera & Bernal, 2001).

Income level is a second demographic factor that impacts degree completion for FG students. Many FG students come from low-income backgrounds (Choy, 2001; Nunez & Cuccaro-Alamin, 1998). Numerous studies support the finding that income level affects degree completion, yet none of these studies focused specifically upon a sample of FG students (Cabrera et al., 2005; Terenzini, Cabrera & Bernal, 2001; Walpole, 2003). In their respective work, Chen (2005) and Ishitani (2006) both found that income level negatively affected degree completion rates for FG students. Low income, FG students were particularly susceptible to attrition in the first year (Chen,

2005; Ishitani, 2006). Even if FG students persisted beyond the first year, they were still less likely to graduate in four, five or even six years than their higher income peers (Ishitani, 2006).

A third demographic variable that may affect degree completion for FG students is ethnicity. Research on degree attainment by race/ethnicity for all college students clearly demonstrates that bachelor degree completion rates for Black and Latino students lag behind those of Caucasian students (Frye, 2002; Harvey, 2003); however, findings specific to the FG population are contradictory. Ishitani (2006) discovered that graduation rates in the fourth and fifth year for Latino students were 59% and 31% lower than those of Caucasian students, while Black students were 58% less likely to graduate in four years. Chen (2005) suggested that, once other variables are taken into account, race/ethnicity was not a significant factor in bachelor's degree completion for FG students. Chen's finding is particularly interesting in light of the overwhelming evidence to the contrary when examining research on the general population.

**Pre-college experiences.** Factors affecting successful persistence to and completion of a college degree include both pre-college and college experiences. Related research findings on the pre-college experience can be divided into several major categories: academic preparation, secondary school influences, and family/peer influence.

**Academic preparation.** FG students who make it into the higher education pipeline typically arrive less academically prepared than their non first generation counterparts (Engle et al., 2006). This lack of academic preparation, which most

often includes high school academic performance as well as academic rigor, significantly affects the FG student's ability to complete the bachelor's degree (Adelman, 1999, 2006; Chen, 2005; Ishitani, 2006). Adelman (1999, 2006) has argued that the academic rigor of students' high school curricula serve as a significant indicator of students' degree completion. In his work, Adelman (1999) defines "rigor" as "academic intensity and the quality of one's high school curriculum" (p. 12). Using the standards recommended in *A Nation at Risk* (1983), Adelman (1999) developed a rubric to determine the "intensity" of a student's high school curriculum. For example, a curriculum that includes 3.75 units of English (no remedial) or at least one Advanced Placement course would be considered more intense (Adelman, 1999) or more "rigorous" (Horn and Kojaku, 2001) than a curriculum that had no Advanced Placement courses, delivered fewer than 3.75 units of English or included remedial instruction (Adelman, 1999). Horn and Kojaku (2001) took this base measure further and stratified "rigor" into three levels: core curriculum and below, (2) mid-level and (3) rigorous. In this definition, a rigorous high school curriculum included: 4 years of English, 3 years of a foreign language, 3 years of social studies, 4 years of mathematics (including pre-calculus or higher), 3 years of science (including biology, chemistry, physics) and at least one Advanced Placement (AP) course or test taken.

FG students have been shown to be less likely to complete a rigorous high school curriculum and, consequently, tend to enter college with deficiencies in English and math, and are less likely to participate in advanced placement testing (Adelman, 1999, 2006; Horn & Kojaku, 2001; Warburton, Bugarin & Nunez, 2001). In their analysis of the relationship between high school academic curriculum and college

persistence, Horn and Kojaku (2001) established that low income and first generation students were less likely to complete a rigorous course of study in high school than those who fell into higher socioeconomic brackets and had parents that completed college. After three years of college, they found that those who had completed only the core path had “left the bachelor’s degree track” at a significantly higher rate as compared to those who had completed a mid-level or rigorous track (Horn & Kojaku, 2001). Additionally, those students who had completed a rigorous track were also more likely to stay continuously enrolled than those who completed only the core curriculum (Horn & Kojaku, 2001). Further, Ishitani (2006) found that FG students who completed a more rigorous high school curriculum were more likely to graduate in four years than those who had not.

In evaluating degree completion patterns of students by SES, Cabrera and colleagues (2005) found that those students with higher academic preparation were more likely to graduate. However, only 25% of the lowest SES students had access to higher academic resources versus 59% of those at the highest SES levels (Cabrera et al., 2005). Interestingly, several studies found that those FG students and/or lower SES students who did complete rigorous high school academic programs and had access to higher academic resources, performed in college at a comparable level to their non-first generation and higher SES counterparts (Warburton, et al., 2001; Horn & Kojaku, 2001).

Another factor directly related to academic rigor that has been shown to affect the FG student’s success in completing a college degree is the level and caliber of a student’s mathematics preparation (Chen, 2005; Horn & Kojaku, 2001; Horn



&Nunez, 2000; Warburton et al., 2001). Students who are less prepared academically in this area are at greater risk of not earning a bachelor's degree (Chen, 2005). Specifically, Chen (2005) found that those who completed calculus, pre-calculus and trigonometry in their high school coursework or scored high on their college entrance exam completed their college degrees at a higher rate than those who did not complete this level of high school math or performed poorly on their entrance exams. Adelman (1999, 2006), too, found that math emerged as the most critical subject of study influencing degree completion. In fact, completing math beyond the level of Algebra II more than doubled the student's chance of completing a degree (Adelman, 1999, 2006).

The critical correlation between mathematic achievement and FG college success can be traced back to middle school (Horn & Nunez, 2000). Horn and Nunez (2000) found that taking algebra in middle school led to higher rates of participation in advanced math courses in high school. Consequently, they also determined that participation in advanced mathematics courses in high school directly impacted students' successful college enrollment within two years of high school graduation (Horn and Nunez). In their study, 64% of all FG students who completed advanced math courses in high school enrolled in college within two years of graduation versus a 34% enrollment rate for FG students who proceed no farther than Algebra 2 (Horn & Nunez).

Additional persistence literature also supported the finding that completion of advanced math courses in high school positively impacted college persistence (Adelman, 1999; 2006; Horn & Kojaku, 2001; Warburton et al., 2001). For example,

Horn and Kojaku (2001) found that individuals who completed a rigorous high school academic track, regardless of parent education or SES, were more likely to persist. This rigorous track included a minimum of 4 years of math, including pre-calculus (or higher) coursework (Horn & Kojaku). However, just as FG students were less likely to complete a rigorous high school academic curriculum, they were also less likely to complete calculus in high school (Warburton et al., 2001).

In conjunction with curricular rigor, academic performance also factors significantly into the first generation student's successful degree completion (Chen, 2005; Choy, 2001, 2002; Engle et al., 2006; Ishitani, 2006; Nunez & Cuccaro-Alamin, 1998). Academic performance includes high school cumulative grade point average, class rank, and performance on standardized college entrance tests (Adelman, 1999, 2006; DesJardins, McCall, Ahlburg, & Moye, 2002). Repeatedly, researchers have confirmed that students with higher GPAs, higher test scores and higher class rank are more likely to graduate from college, regardless of SES or FG status (Adelman, 1999; 2006; Cabrera et al., 2005; Chen, 2005; Ishitani, 2006; Warburton et al., 2001). In fact, Ishitani (2006) found students in the highest class rank quintile of his study were more likely to graduate in all time parameters used—four, five or six years. However, FG students, and those who are economically disadvantaged, are much less likely to appear in this group (Chen, 2005; Ishitani, 2006; Warburton et al., 2001). Even further, FG students were not only less likely to take standardized college entrance exams, but, also, they scored significantly lower on these exams than their non-FG counterparts (Warburton et al., 2001).

Because FG students often arrive at college under-prepared for the academic experience, this deficiency can create a “snowball effect” in triggering collegiate experiences that are also considered high risk factors for degree completion. For instance, those students who were less likely to complete a rigorous high school curriculum were also more likely to participate in remedial coursework during their first year of college (Horn & Kojaku, 2001; Warburton et al., 2001). This finding is not all that surprising given that academic preparation is a critical factor in student persistence and degree completion for all students (Adelman, 1999; 2006).

***Secondary school influences.*** Another factor that may influence FG students’ persistence to the bachelor’s degree is the role of school counselors. For students from low-income, first generation backgrounds, high school guidance counselors have proven especially influential in the students’ pre-college experience (Bryan, Holcomb-McCoy, Moore-Thomas & Day-Vines, 2009; Holcomb-McCoy, 2007; McDonough, 1997; McDonough, 2005). Often these students and their parents begin the college selection process with very limited social/cultural capital (Berger, 2000; Choy, 2001, 2002; Chen, 2005; Coleman, 1988; McDonough, 1997, 2005; Perna 2000, 2006; Terenzini, Cabrera & Bernal, 2001). For these families and for the students especially, information supplied by school counselors can stand in for the personal guidance or college preparatory resources that might otherwise be provided to students by parents who had attended college (Bryan et al., 2009; McDonough, 1997, 2005). However, these experiences are not always positive and, sometimes, even reflect the limited social/cultural capital of the counselors themselves (Bryan et al., 2009; McDonough, 1997, 2005).

McDonough (1997, 2005) found that the quality of college preparation counseling provided by school counselors varied between public and private secondary schools, as well as by socioeconomic areas. This range of quality service delivery can significantly impact the FG student's pre-college experience and college choices (Matthay, 1989; McDonough, 1997, 2005). Both Matthay (1989) and McDonough (1997, 2005) posit that high school counselors often lack the resources to provide comprehensive advising on the college application process and frequently rely on their own limited college experience to counsel students whose backgrounds, experiences and personal needs vary. This limited social/cultural knowledge can lead to negative experiences for students from first generation, under-represented or low income backgrounds. Research shows that students from these populations were more often discouraged from pursuing four year degrees and advised to pursue vocational/technical careers than their traditional peers (McDonough, 1997).

Interestingly, research on the role of secondary school counselors also indicates that the role of this resource may be more effective if the college choice counseling is initiated in middle school and more aggressively involves families, due to the proven influence of family upon college choice (Bryan et al., 2009; Matthay, 1989; McDonough, 1997, 2005). Furthermore, research has also shown that middle and high school college counseling should provide additional support for mothers, especially mothers of first generation students (Matthay, 1989). Mothers often serve as students' primary psychological support and, as such, can prove pivotal in the college selection process (Matthay, 1989). Mothers who did not attend college possess more limited social/cultural capital in regard to the college application

process, and this can negatively influence and/or limit their students' college choice (Matthay, 1989); thus, creating the need to increase college counseling support and resources for families and mothers, in particular.

***Family and peer influence.***

*Family.* Family has been shown to wield great influence over FG students' pre-college experiences, particularly in choosing to apply to and enroll in college. In their study of SES and higher education attainment, Terenzini, Cabrera & Bernal (2001) establish in no uncertain terms that "College-going starts at home" (p. 41) and argue that parents can act as either "assets" or "liabilities" (p.41). Research in this area, much of it focusing on SES and race/ethnicity, reflects two divergent views on the role of family in the non-traditional and first generation student's pre-college experience. The first and least commonly held view is that positive family support and encouragement factors significantly into a student's success in accessing college, regardless of FG or underrepresented parents' limited social/cultural capital in relation to the college choice process (Cabrera & LaNasa, 2001; Cabrera, Nora, Terenzini, Pascarella & Hagedorn, 1999; Haussmann, Ye, Schofield & Woods, 2009; Hossler et al., 1999; Nora & Cabrera, 1996; Perna, 2000; Rowan-Kenyon et al., 2008; Stage & Hossler, 1989; Tierney & Colyar, 2005). Furthermore, this familial support and encouragement is especially effective if it starts as early as the eighth grade (Cabrera et al., 2005; Choy, 2001; Hossler et al., 1999).

While the literature frequently uses the broad terms "support" and "encouragement" in reference to family influence, specific forms of this support have been found to be effective in student's pre-college academic success and access to

college (Cabrera et al., 2005; Hossler et al., 1999; Perna, 2000; Perna & Titus, 2005). Particularly influential are parents' financial support and involvement in elementary and secondary school activities (Cabrera et al., 2005; Hossler et al., 1999; Perna, 2000; Rowan-Kenyon et al., 2008). In their longitudinal study on factors that influence students' college choice decisions, Hossler and his associates' (1999) findings align with this interpretation of "family support." They describe this abstract concept as "action oriented activities that support the student's search [college search]" (p. 63) and provide specific examples of this assistance, such as saving money for college, taking their student on college visits and helping their child fill out the requisite forms to apply for college and financial aid (Hossler et al., 1999). Additional illustrative examples of practical parental support include Horn and Nunez's (2000) finding that first generation students whose parents were involved in the college application process were more likely to enroll in college and Perna and Titus's (2005) correlation between parents contacting schools regarding academic related issues and increased likelihood of their child enrolling in college.

In addition to these support activities, encouragement by family members (e.g. parents) has emerged in the literature as a significant factor in students' persistence and degree attainment (Cabrera et al., 2005; Cabrera & LaNasa, 2001; Cabrera et al., 1999; Hossler et al., 1999; Nora & Cabrera, 1996; Perna, 2000; Tierney & Auerbach, 2005). Tierney and Auerbach (2005) embodied the findings of their peers in their definition of parental encouragement as "the frequency with which parents and students discuss school matters and post-secondary plans" (p. 41). For example, while Perna and Titus (2005) acknowledge that levels of parental involvement vary across

racial groups, they found a direct correlation between dialogue parents have with their children about school and the likelihood that their child will enroll in a two or four year college.

A smaller stream of literature has demonstrated that mothers may provide important motivational encouragement to their children when deciding to go to college. Mothers can wield particular influence upon their students' educational aspirations and the college choice process (Bean, Bush & McKenry, 2003; Greif, Hrabowski & Maton, 2000; Kerpelman, Eryigit & Stephens, 2008; Nurmi, 1987). In their analysis of both European American and African American family dynamics and the impact upon adolescent self esteem and academic achievement, Bean et al., (2003) found that maternal support proved significant in African American adolescents' academic achievement, but not for European American youth. The authors theorized that this difference may, in some way, be attributed to "mother centered" families in the African American community (Bean et al., 2003).

Kerpelman et al. (2008) concurred with this finding in their study of African American adolescents. They posited that adolescents tend to reflect the "internal beliefs" of the mother in relation to education and values; however, this skew toward mother's values may, in some part, have been attributed to the large number of single mother households included in the study (Kerpelman et al., 2008). Further, mothers can especially play a significant role in the educational aspirations and achievement of African American adolescent males by teaching them to value education and demonstrating the rewards of a strong work ethic (Greif, Hrabowski & Maton, 2000).

While the majority of college access literature recognizes the value of parental support and encouragement, a more commonly held view is that family plays a negative or limiting role in their student's decision to attend college (Berger, 2000; Chen, 2005; Choy, 2001, 2002; Coleman, 1988; Horn & Nunez, 2000; McDonough, 1997; Perna, 2000, 2006; Terenzini, Cabrera & Bernal, 2001; Terenzini et al., 1994; Terenzini et al., 1996). Parents of first generation students, in particular, often possess little knowledge of the college choice process, are especially unfamiliar with college admissions and financial aid application guidelines and procedures, and are often less involved in their children's K-12 school activities (Berger, 2000; Chen, 2005; Choy, 2001,2002; Coleman, 1988; Horn & Nunez, 2000; McCarron & Inkelas, 2006; McDonough, 1997; Perna, 2000, 2006; Terenzini, Cabrera & Bernal, 2001; Terenzini et al., 1994; Terenzini et al., 1996).

Terenzini and his colleagues (1996) established that FG students, specifically, receive less encouragement from their families to attend college than their non-FG peers. Cabrera and associates (2005) further determined that parental encouragement varies by SES levels, with students at the lowest SES levels receiving the lowest amount of support to attend college from their families. A number of studies concur with this finding and offer some explanation for this disparity between non-traditional and traditional students (Berger, 2000; Engle et al., 2006; Somers et al., 2004; Terenzini et al., 1994). One explanation for this lack of support is parents' fear of losing their child to an unfamiliar culture (Terenzini et al., 1994). This fear often can be attributed to parental concern that their child will sever connections to family when they go to college, resulting in a rejection of family commitments and cultural



expectations (Engle et al., 2006; London, 1992; Rendon, 1992; Somers et al., 2004; Terenzini et al., 1994; Terenzini et al., 1996). Students, themselves, also admit that their obligations at home and learned cultural behaviors have negatively affected their decision to attend college (Engle et al., 2006; London, 1992; Rendon, 1992; Somers et al., 2004; Terenzini et al., 1994; Terenzini et al., 1996).

In conjunction with offering negative or minimal encouragement, parents of non-traditional students, and especially FG students, tend to be physically less involved in their children's school activities (Choy, 2001; Engle et al., 2006; Horn & Nunez, 2000; McCarron & Inkelas, 2006; Rowan-Kenyon et al., 2008). For example, Choy (2001) established that parents' involvement in their student's high school curricular choices as well as the college application process were directly correlated to parents' level of education. The lower a parent's education level, the less involved the parent was in their child's educational experience and the less parents knew about the cost of attending college (Choy, 2001).

Overwhelmingly, research on the negative influence of family in the non-traditional student's college choice process supports this notion that parents' lack of knowledge/experience with college and the application process is directly related to the limited or non-existent role they play in providing support and encouragement to their college-going student (Choy, Horn, Nunez & Chen, 2000; Engle et al., 2006; Perna, 2006; Rowan-Kenyon et al., 2008). Parents who have not gone to college or applied for admissions/financial aid have limited knowledge or insight about resources available, the process, itself, or what college is really like (Berger, 2000; Choy, 2001; Choy et al., 2000; Engle et al., 2006; McCarron & Inkelas, 2006; Perna,

2006; Rowan-Kenyon et al., 2008). Horn and Nunez (2000) tracked this limited support to the eighth grade where they found a direct correlation between a student's enrollment in Algebra and their parents' education level. Students whose parents did not earn college degrees were less likely to encourage them to enroll in Algebra, even if they were eligible for the course (Horn & Nunez, 2000).

Because of this deficiency in post-secondary social/cultural capital, numerous researchers have argued that outreach programs for parents at both the elementary and secondary levels can help bridge the gap in knowledge about the college choice process for parents and their FG students (e.g., Engle et al., 2006; Terenzini, Cabrera & Bernal, 2001; McCarron & Inkelas, 2006; Perna & Titus, 2005; Rowan-Kenyon et al., 2008).

*Peers.* Peers, too, have been shown to factor into student's pre-college experiences. The literature indicates that students whose friends plan to go to college are more likely to attend (Cabrera et al., 2005; Hossler et al., 1999; Perna & Titus, 2005; Terenzini et al., 1994). When it comes to college, the influence of high school friends should not be under-estimated. In their analysis of college enrollment across racial/ethnic groups, Perna and Titus (2005) established a positive correlation between the number of a student's friends who plan to attend a four year post-secondary institution and the likelihood that a student will enroll in a two or four year college or university.

The types of encouragement received from friends can also be influenced by socioeconomic status (Cabrera et al., 2005). Cabrera and associates (2005) discovered that, less than half of those students who fell in the lowest socioeconomic

bracket received encouragement from their friends to complete college. Contrarily, at least 75% of those participants from the highest SES level were encouraged by friends to complete college (Cabrera et al., 2005).

While parental encouragement and support continues to be one of the greatest predictors of a child's college aspirations, peer influence should not be underestimated (Hossler et al., 1999). The more friends a student has who plan to go to college or the greater the opportunity for interaction with peers who aspire to college (e.g. pre-college activities; college preparatory courses), the more likely a student is to also have post-secondary aspirations (Hossler et al., 1999). These types of relationships can increase the FG student's access to important information about college opportunities and information, thus providing important social capital that the student may not otherwise have gained (McDonough, 1997).

For high SES students, a peer network where college aspirations are expected and access to a wide range of college opportunities might be common, but, for FG and low SES students, this is not always the case (McDonough, 1997). If FG and low SES students have post-secondary aspirations, in many cases, they may be faced with making difficult choices in selecting high school friends (McDonough, 1997). Students may need to choose between those friends who have post-secondary plans and those that do not or risk their resolve to fulfill their educational aspirations (Terenzini et al., 1994).

**College experiences.** In their analysis of the college experiences of FG and non-FG students, Pike and Kuh (2005) found that FG students did not necessarily know how to become involved and engaged within the college environment. This

population has less experience with college campuses and how to navigate expected activities, behaviors and relationships with peers and faculty members (Pike & Kuh). Unlike their non first generation counterparts, FG students often do not possess the knowledge that students whose parents attended college might gain from their parents' experiences and insights nor do they have role models to imitate (Pike & Kuh). Areas affected by this lack of knowledge include academic, social and financial experiences.

*Academic experiences.* For FG students, three factors that critically affect successful completion of the baccalaureate degree include the type of institution they choose to attend (e.g. two year institution, private or public four year institution), continuous enrollment and their academic performance once enrolled.

Regardless of the type of institution chosen, FG and low income students are almost four times as likely to drop out of college after the first year versus their non FG, higher SES counterparts (Engle & Tinto, 2009). However, research also indicates that FG students who enroll in college immediately following high school and those students who immediately enroll in four year institutions are more likely to complete their degrees (Chen, 2005; Engle & Tinto, 2009). While the majority of FG students enter college through the two year and for profit sectors, the largest number of FG students that persist beyond the first year attend four year public institutions (Engle & Tinto, 2009).

Lohfink and Paulsen (2005) identified several reasons why this phenomenon might occur. First, large public institutions may have more resources and support opportunities available for FG students (Lohfink & Paulsen, 2005). Additionally,

given the importance of family to FG students and the large number of FG students that tend to live at home, large public institutions may give this population more opportunity to commute to school (Lohfink & Paulsen, 2005). Finally, because of its size, a large, public institution may provide FG students the opportunity to meet a more diverse population, thus providing increased opportunities to interact with individuals who may have similar experiences and life situations (Lohfink & Paulsen, 2005).

*First year performance.* Many first generation students arrive at college not only under-prepared academically, but also without the tools or knowledge to effectively navigate the academic bureaucracy that is part of the college experience (Hahs-Vaughn, 2004; Nunez & Cuccaro-Alamin, 1998; Pascarella et al., 2004). This disadvantage often surfaces in the students' academic performance (Engle et al., 2006; Pascarella et al., 2004; Terenzini et al., 2006). The literature consistently demonstrates that first year GPA and number of hours enrolled significantly factor into degree completion for all students (Adelman, 1999, 2006; Cabrera, Nora & Castenada, 1993; Chen, 2005). Independent of all other variables, grades are important. In their study on paths to degree attainment, Cabrera et al. (2005) found that, for every increase in GPA grade level, the likelihood of completing the bachelor's degree increased by 32 percent, regardless of student background.

In an analysis of background and environmental variables affecting persistence to the degree for non-traditional students, Metzner and Bean (1987) identified first year GPA and number of hours enrolled as significant factors directly affecting degree attainment. Academic performance during the first year serves as one of the greatest

determinants of student success, which is why academic performance must be considered in any discussion of the FG college experience. The literature on FG persistence and degree attainment consistently indicates that FG students also tend to enroll in fewer credit hours and earn lower grades than their non-FG counterparts during their first year (Adelman 1999, 2006; Pascarella et al., 2003; Pascarella et al. 2004; Terenzini et al., 1996; Warburton et al., 2001).

Engle and colleagues (2006) posited that many FG students have difficulty making the academic transition to college because their high school academic experiences with both curriculum and teacher expectations are less demanding. For the FG population, this lack of academic preparation translates to experiences that negatively impact degree completion. In his analysis, Chen (2005) linked credit completion and grade performance in the first year to the FG student's success in completing the baccalaureate degree. Students more likely to complete the bachelor's degree were those who had earned at least a 3.0 GPA and completed a minimum of 30 credit hours in the first year (Chen, 2005). This finding appears to be consistent with Adelman's (2006) conclusion that students who fall below 20 credits during their first year decrease their chances of earning a college degree by 22.4%.

*Continuous Enrollment.* Of all the variables included in Ishitani's (2006) study, continuous enrollment had the most significant positive influence on degree completion for FG students. Those participants who stayed enrolled continuously were eleven times more likely to graduate in four years (Ishitani, 2006). Additional research on FG persistence and degree completion also suggests that full-time and continuous enrollment is a crucial factor in bachelor's degree attainment for FG

students (Adelman, 1999; 2006; Cabrera et al., 2005; Chen, 2005). FG students are less likely to enroll continuously or to earn their college degree at the first institution they attend than their non-FG peers (Warburton et al., 2001).

Pascarella et al., (2004) proposed that FG students' trend toward enrolling half-time and working significantly more hours than their peers may be attributed to a social capital issue. Because they are less familiar with the process of going to college and expectations related to timely degree progression, FG students fall behind the enrollment trends of their non-FG peers (Pascarella et al., 2004). One way to mediate this challenge, though, is through enrollment in summer terms (Adelman, 2006). The more summer term credits earned, the more students increase their chances of successful degree attainment (Adelman, 2006). Summer term enrollment has been shown to be particularly beneficial to increasing odds of degree attainment for African American students, especially when more than four credits have been earned (Adelman, 2006).

Additionally, the rate at which FG students stop out from college, withdraw from or fail a course is directly related to timely and continuous enrollment (Adelman 2006; Chen, 2005; Engle & Tinto, 2009). This risk factor is particularly pertinent for the FG population. FG students are four times more likely to stop out after the first year than their peers whose parents earned bachelor's degrees (Engle & Tinto, 2009). Further, they are more likely to withdraw from or repeat courses than the general population (Chen, 2005). Across all student populations, withdrawal from or repeating 20% or more of one's courses, can reduce a student's likelihood of completing a college degree by 50% (Adelman, 2006).

*Choosing a major.* Choice of major also factors into the FG student's successful quest for a degree (Chen, 2005; Pascarella et al., 2004; Engle & Tinto, 2009).

Selection of a major field of study is one area where the FG student's lack of social and cultural capital regarding the benefits and expectations of college is evident.

Choosing a major can be a difficult process for most FG students because they often do not have parents that can guide them through the process or the "know how" to find resources that will show them the wide range of opportunities available to them (Berger, 2000; Chen, 2005).

Given this challenge, Chen (2005) found that one in three FG students entered college with an undeclared major and enrolled in vocational/technical majors at a higher rate than their non-FG peers. This development is important when considering factors affecting degree completion for FG students. The graduation rates for students across all populations who enroll as undeclared majors or in vocational programs are lower than the graduation rates for all other majors (Chen, 2005).

Interestingly, when considered within the context of enrollment at a four year institution, there were not significant differences in the declared majors of FG and non-FG students (Engle & Tinto, 2009). In fact, FG students enrolled as undeclared majors at a slightly lower rate than non-FG students (Engle & Tinto, 2009). However, through the common experience of changing majors, FG students were most likely to remain business majors and less likely to remain math/science majors (Engle & Tinto, 2009). Ultimately, upon graduation from four year institutions, FG students were less likely than their non-FG peers to have majored in the following fields: humanities, education, math/science, and vocational/professional fields (Engle & Tinto, 2009).



Further, in all fields of study, FG students were more likely to have dropped out or not completed their degree than non-FG students (Engle & Tinto, 2009).

*Academic support/bridge programs.* Academic support and/or summer bridge programs have been shown to positively impact the persistence of students (Pascarella & Terenzini, 1991, 2005; Saunders & Serna, 2004). First generation college students have particularly benefitted from participation in these programs (Engle et al., 2006; Engle & Tinto, 2009; Terenzini et al., 1996). A number of support/retention programs for “at-risk” students have been developed over the years, but some of the most commonly recognized programs focus upon areas ranging from academic/study skills support to counseling and financial assistance (Kulik, Kulik & Shwalb, 1983; Pascarella & Terenzini, 2005). “Bridge” programs are typically offered during the summer and are designed to help at risk students transition to college life, both socially and academically (Pascarella & Terenzini, 2005).

The federally funded TRIO Student Support Services (SSS) program is one of the most commonly recognized support programs for at risk students and has been in existence since the late 1960s (Pascarella & Terenzini, 2005). The positive impact of FG student participation in these programs has been addressed in several research studies (e.g. Chaney, Muraskin, Cahalan & Goodwin, 1998; Engle et al., 2006; Engle & Tinto, 2009; Muraskin, 1997). Participation in support programs, like SSS, can not only provide key support in helping FG students transition to college, but, also, serve as a means through which students can engage with the campus (Chaney et al., 1998; Engle & Tinto, 2009).

In a national, longitudinal study of SSS programs, Muraskin (1997) established that participation in SSS had positive effects on its participants' freshmen GPAs, credits earned and retention. Furthermore, when considering the most "successful" SSS projects, five elements emerged (Muraskin, 1997). The SSS programs exerting the greatest positive impact upon their participants' college experience and persistence to the degree included at least several of the following: a freshman year experience; academic support for developmental courses or common freshman year core courses; consistent and frequent contact between staff and students (whether in a group or on an individual basis); incentives for participating in the program (e.g. written contracts outlining participant/program responsibilities), and a diverse and dedicated staff (Muraskin, 1997). The blend of academic and non-academic services typically offered by SSS programs also positively affects participants' successful integration into the campus environment (Chaney et al., 1998). While academic support is important, Chaney et al. (1998) found that the added benefit of attending workshops/instructional classes with cohorts of SSS peers and receiving instruction from peers both positively impacted student retention.

Saunders and Serna's (2004) qualitative study of first generation Latino students further demonstrates the critical role social networks and academic support programs play in FG underrepresented students' college adjustment. Saunders and Serna (2004) looked at college experiences of FG Latino students who were attending four year institutions and who had participated in a college access/intervention program. The college experiences of these students were considered within the context of social/cultural theory, social reproduction theory and critical theory, and the

researchers found the students' experiences fell into three categories (Saunders & Serna). These categories included: students that created new networks or relationships within the college setting and sought resources and support; students who continued to depend upon old networks rather than establishing new ones; and one student that did not maintain or create ties with any social network (Saunders & Serna). While both students who had created new networks and those who relied on the old ones were progressing toward degree completion, the students who had created new networks had achieved a higher mean grade point average and appeared more at ease and "confident" in their new environment (Saunders & Serna). The students who had relied solely on "old networks" were more dependent upon the project in which they had participated (Saunders & Serna). The results of this study suggest that support programs can be useful tools for the FG student in adjusting to college, building new social networks, and integrating into the campus.

*Social experiences.* Research on degree determinants for FG students does not address collegiate academic/social integration factors; however, the unique challenges first generation students face in adjusting to college are well-documented (Pascarella, et al., 2003; Pascarella et al., 2004; Terenzini et al. 1994; Terenzini et al., 1996). Three critical challenges include: family and peer influence (London, 1992; Terenzini et al., 1994; Terenzini et al., 1996), interaction with faculty (Lohfink & Paulsen, 2005; Pike & Kuh, 2005), and participation in extracurricular activities (Pascarella et al., 2003; Pascarella et al., 2004; Pike & Kuh, 2005). When considered together within the context of social and cultural capital theory, these issues pose a significant

risk to degree completion for first generation students (Berger, 2000; Pascarella et al., 2004).

Unlike the ‘traditional’ student, for whom it is the norm to attend college, FG students are breaking tradition and undertaking entirely new and foreign academic, social and cultural experiences (Terenzini et al., 1994). For FG students, validating or positive experiences that make the individuals feel they belong at the institution are critical to a successful transition (Terenzini et al., 1994). Through focus group interviews with students at four distinctive institution types, Terenzini et al. (1994) identified validating experiences that not only proved pivotal for FG students’ transition to college, but also reflect the findings of the limited body of literature on FG college adjustment experiences, as well as the experiences of other non-traditional and under-represented students. These experiences included positive academic encounters in the classroom and out of classroom interactions with family, faculty and peers (Terenzini et al., 1994).

*Family influence.* Like the pre-college literature, research on the family’s role in FG students’ adjustment to college and completion of their degree also falls into two distinct camps. One stream focuses upon how a family’s lack of social/cultural “college” capital can negatively influence their attitude toward and support of their student’s college experience (Berger, 2000; Engle et al. 2006, Engle & Tinto, 2009; Tinto, 1987, 1993). As a result of their limited knowledge, families can act as a barrier in the FG student’s quest for a college degree (Engle et al., 2006; Engle & Tinto, 2009; London, 1992; Somers et al., 2004; Terenzini et al., 1994; Terenzini et al., 1996; Tinto, 1987, 1993). This limitation can affect the student’s transition to

college in various ways. First, this lack of familiarity with the process can affect parental encouragement toward completing the degree (Cabrera et al., 2005; Lohfink & Paulsen, 2005). Cabrera and associates (2005) discovered that parental encouragement to persist toward the degree varied by student socioeconomic status. In their study, 92.7% of highest SES students reported receiving encouragement from their parents, while lowest SES students reported only 69% of their parents encouraged them to complete their college degrees—a difference of 23.7% (Cabrera et al., 2005). This finding is particularly relevant when exploring issues related to FG college students because this population is more likely to come from a low-income background (Chen, 2005; Choy, 2001; Nunez & Cuccaro-Alamin, 1998).

Secondly, FG parents' inexperience with college life may negatively impact their students' successful social adjustment to college (Pike & Kuh, 2005). For example, FG students and their parents are often unfamiliar with the significant role extracurricular participation not only plays in expanding students' academic and social networks, but, also, in providing a means for students to establish a sense of belonging on campus (Pascarella et al., 2004; Pike & Kuh, 2005). This lack of knowledge about how college culture works frequently leads to negative reinforcement from parents regarding the opportunity to become involved in the campus community (Pascarella et al., 2004; Pike & Kuh, 2005; Tinto, 1987, 1993). For many FG students, responsibilities at home come first (Pascarella et al., 2004; Pike & Kuh, 2005; Somers et al., 2004; Tinto, 1987, 1993). This lack of involvement can affect FG students' sense of belonging within the campus community, and,

ultimately, impact their successful persistence and graduation (Pascarella et al., 2004; Tinto, 1987, 1993).

The FG student's decision to attend college can lead to what Somers and associates (2004) term "boundary crossing." FG students often come from homes where appreciation for post-secondary education is non-existent (Somers et al., 2004). In this situation, family becomes a critical component of the collegiate transition and experience because students are straddling two different worlds (London, 1992). They are struggling to maintain a relationship with their families, while attempting to fit into an environment that their families and friends may resist or reject (Engle & Tinto, 2009; London, 1992; Tinto, 1987, 1993). For FG students facing this struggle, adjusting to college then requires that they negotiate new social networks and re-negotiate long-standing cultural expectations (College Board, 2007; London, 1992; Tinto, 1987, 1993).

For FG students from Black, Latino or Native American backgrounds, family plays an especially important role in the assimilation to their new surroundings (Terenzini et al., 1994). Cultural and familial expectations for these students create an additional, complex layer that impacts students' cultural transition to college. In addition to the academic and social changes that the college experience entails, these students often need to work through how the cultural expectations of their family will factor into their college transition (Terenzini et al., 1994). For example, some families and friends struggle with "letting go" and granting their student the space and autonomy necessary to adjust to their new environment and experiences (Engle & Tinto, 2009; Terenzini et al., 1994).

Tinto (1987, 1993) argued that this type of student's successful adjustment to college often depends upon their breaking ties with family and peers from home, especially for students from disadvantaged backgrounds or those students whose parents did not attend college. In his influential work, Tinto (1987, 1993) contended that the influence of "external communities" can negatively impact a student's successful integration into college culture because family and friends back home do not understand the college way of life, including the institution's traditions and expectations. Disadvantaged and FG students often retain significant ties to their responsibilities within these communities or continue to live at home, which prevents their ability to successfully integrate into the college community (Tinto, 1987, 1993). Because external communities serve as a deterrent to this important component of successful persistence and degree completion, the successful student must sever relationships or at least minimize contact with their family and friends in order to increase their chances of becoming an accepted member of the college/university community (Tinto, 1987, 1993).

Berger (2000) takes this theory a step further by arguing that students who are able to adapt to campus culture do so because they have inherited the "college" cultural capital from their parents who attended or completed college. These students come to college with some understanding of what college life is like and are able to adapt and integrate into the new society. Contrarily, students who do not inherit this critical cultural capital are unlikely to ever adapt (Berger, 2000). Because their family and community's values, beliefs and way of life differ so starkly from that of the college community, this population will not be accepted into the higher education

culture (Berger, 2000). Instead, they will become and remain marginalized members of the campus community and decrease their chances of earning a bachelor's degree (Berger, 2000).

Both Lohfink and Paulsen (2005) and Rendon (1992) took issue with Tinto's theory (1987) and further argued their counterpoint to the negative influence of FG families. In describing her educational experience, Rendon (1992), a FG Latina student, described her sense of cultural alienation first hand: "I believe that most students like me enter higher education through its windows only to find that all around us are walls that keep us secluded and marginalized" (p. 38). However, unlike Tinto (1987) and Berger (2000), she argued that it is not the individual who must disconnect from his/her family, community and culture, but the institution which must embrace the different levels of knowledge and life experiences its students bring to the college experience (1992).

Tinto (1987) did recognize there are some instances where disadvantaged and FG students' home communities can embrace a positive attitude toward college. In these rare cases, family and community may not have a negative influence on the students' adjustment to college (Tinto, 1987). A smaller stream of research takes a much firmer position on this issue and argues that parental encouragement and support, regardless of social/cultural capital, factors significantly into FG student's college success (Cabrera et al., 1999; Nora and Cabrera, 1996). Nora and Cabrera (1996) contend that, regardless of race/ethnicity, parental encouragement factors heavily in students' successful adjustment to college and degree completion. This theory also contradicts Tinto's (1987) argument that successful assimilation into college culture demands



that students separate themselves from family and community. In fact, positive parental encouragement can impact far more than student social adjustment (Cabrera et al., 1999; Nora & Cabrera, 1996). In studies of adjustment to college that included both minority and Caucasian students, parental encouragement was found to significantly and positively impact students' social adjustment, academic development and performance and their commitment, not only to the institution but also to finishing their degrees (Cabrera et al., 1999; Nora, 2001; Nora & Cabrera, 1996). Parental encouragement emerged as especially influential upon the success of African-American students, even mitigating the role of academic performance in student success (Cabrera et al., 1999).

*Peer influence.* Relationships with peers also can prove pivotal in the FG student's college adjustment (Astin, 1993a; Terenzini et al., 1994; Terenzini et al., 1996; Tinto, 1993). Like the literature on family influence, research shows that peers may have both negative and positive influences upon FG students' success in accessing college and completing a college degree. Friends who are attending college can provide the necessary social support to help students adjust to their new environment in terms of meeting new friends and exploring new opportunities (Terenzini et al., 1994). However, those friends who are not attending college can act as a barrier to the FG student's successful transition (Terenzini et al., 1994). Terenzini et al. (1994) argue that friends from home can function as "interpersonal anchors" that keep the student rooted in their pre-college life, rather than releasing them to build new social relationships and experiences that will help them navigate their new environment (p. 65). Using data from the National Study of Student

Learning (NSSL), Terenzini et al. (1996) also found that, compared to their traditional counterparts, FG students were less likely to report that their friends supported their decision to attend college. Some FG students, whose core group of friends did not choose to attend college, even experience “survivor guilt” for leaving everyone behind (Somers et al., 2004).

Once enrolled in college, peer selection and support can critically influence student success, particularly for the FG population (Dennis, Phinney & Chuateco, 2005). While parents’ positivity toward the college experience can provide motivation for students, peers offer several other modes of encouragement (Dennis et al., 2005). First, peers can aid in the often difficult social transition to college life. In the absence or deficiency of family support, FG students frequently turn to peers for help in the adjustment to college (Hahs-Vaughn, 2004). Much of the research in the area of peer influence and college adjustment has focused on under-represented groups (Dennis et al., 2005; Murguia, Padilla & Pavel, 1991; Nora, 2001; Rodriguez et al., 2003); however, this research can be applied to the FG population, especially since a significant number of FG students come from under-represented backgrounds (Chen, 2005; Choy, 2001; Nunez & Cuccaro-Alamin, 1998). For these students who are entering a world of which they know very little, establishing relationships with peers who have the same experiences and/or backgrounds can make the transition easier (Murguia et al., 1991; Nora, 2001; Rodriguez et al., 2003).

Murguia and associates (1991) argue that “enclaves” play a significant role in the successful persistence and graduation of under-represented students. In defining the concept of an “enclave,” Murguia and associates (1991) rely on Tinto’s Model of

Institutional Departure (1987) and Attinasi's (1986) work. Both Tinto (1987) and Attinasi (1986) found that students who successfully adjust to campus life often do so, not by relating to the campus as a whole, but by establishing their niche through one or more smaller subgroups on campus. These subgroups could range from student activity groups to religious organizations to athletic teams or clubs (Attinasi, 1986).

Murguia and colleagues (1991) focused on the role of ethnicity in adapting to campus life and discovered that students are often drawn to peers with the same ethnic background because this similarity provides them with a "sense of constancy" in an otherwise new world (Murguia et al., 1991). In the same sense that Tinto (1987), Astin (1993a), and Attinasi (1986) argued that students rely on membership in smaller groups that reflect their similar interests, attitudes or beliefs, so Murguia and associates (1991) found that some students relied on ethnic enclaves to meet this need and ease their adjustment to the larger academic and social demands of college life. Students were drawn to peers of the same ethnicity because they felt they had to spend less time explaining themselves, in terms of their beliefs and habitus or experiences (cultural capital) (Murguia et al., 1991).

Interestingly, Richardson and Skinner's (1992) exploration of FG minority students' experiences in pursuing college degrees contradicted this result. Instead, their findings revealed "Racially and ethnically based support groups whose members come from backgrounds of severely limited opportunity sometimes exert a negative influence by reinforcing each other's low expectations for achievement and feelings of alienation from the system" (Richardson & Skinner, 1992, p. 38).

Whether new friendships are established through participation in ethnic enclaves, classroom experiences, support programs or other extracurricular activities, peers also can help students access and build academic and social resource networks critical to student success (Richardson & Skinner, 1992; Rodriguez et al., 2003). Peer support emerged as a significant factor in the degree completion for participants in Richardson & Skinner's (1992) study. For those students from "traditional" backgrounds, peers provided valuable resource and networking information ranging from advice on choosing courses, majors and instructors to forming study groups to helping each other figure out how to deal with University "bureaucracy", like financial aid, the registrar etc. (Richardson & Skinner, 1992). Similarly, Dennis and associates (2005) found this same effect for FG students from under-represented backgrounds, particularly when it came to dealing with academic issues.

*Classroom experiences and interaction with faculty.* For students who, as a group, struggle with the question of, 'Do I really belong here?' classroom experiences and interaction with faculty can prove to be critical validating experiences (Cabrera et al., 2005; Hahs-Vaughn, 2004; Lohfink & Paulsen, 2005; Nora, 2001; Pascarella & Terenzini, 1991, 2005; Terenzini et al., 1994; Tinto, 1987, 1993). Positive or negative experiences with faculty in or out of the classroom (e.g. being recognized for contributions to class or, at the other end of the spectrum, being dismissed or disregarded) can significantly impact the FG student's self-perception in terms of both academic and social 'worthiness' to participate in the college experience (Terenzini et al., 1994). For low income students (many of whom also fall into the FG

category), positive experiences in the classroom can increase their chances to persist to graduation by as much as 15% (Cabrera et al., 2005).

For those FG students who arrive at college with very little or no support from family, positive interactions and support from faculty members can aid to close the gap between traditional students' understanding of the college classroom and academic expectations and FG students who have no prior frame of reference (Hahs-Vaughn, 2004). Positive encouragement from faculty can increase non-traditional students' sense of belonging in the college community and further mediate other documented challenges that they often bring to the table (Nora, 2001). For example, positive attention and support from faculty can frequently offset challenges specific to this population, such as academic performance (e.g. GPA and credits earned) to work commitments and family obligations (Nora, 2001).

The amount of interaction between students and faculty can also positively impact a student's academic engagement (Lohfink & Paulsen, 2005). In their comparative study between FG and "continuing generation" students at four year institutions, Lohfink & Paulsen (2005) suggested that increased frequency of interactions between FG students and faculty can have a positive effect upon a student's college experience and ultimate persistence. Faculty play an important role in reassuring students that they do belong in college and are capable of performing academically at the same or even higher level than their traditional peers (Lohfink & Paulsen, 2005; Terenzini et al., 2004). Because they found this experience to have such an impact upon the performance and persistence of FG students, Lohfink and

Paulsen (2005) suggested that faculty members should be increasingly involved in orientation and other activities outside the classroom for this population.

Unfortunately, the literature has also demonstrated that negative experiences with faculty in and out of the classroom can have a detrimental effect upon the experiences of non-traditional students (Richardson & Skinner, 1992; Terenzini et al., 1996). Just as validating encounters can boost a student's sense of self-worth and belonging, so negative experiences can make non-traditional students question their identity within the institution (Richardson & Skinner, 1992; Terenzini et al., 1994; Terenzini et al., 1996). Terenzini and colleagues' (1996) anecdote about one FG student's experience with a faculty member reflects this type of negative reinforcement:

An RBU student described an encounter in an elevator with one of her large class instructors. When she commented that she was in the instructor's class, he replied: 'So what?'

Other FG students have described faculty members as seeing students simply as "numbers," or being too busy, inaccessible or condescending (Engle et al., 2006; Terenzini et al., 1996). As a result, these students were hesitant to speak up in class or to pursue discussions/interactions with faculty outside the classroom (Engle et al., 2006; Richardson & Skinner, 1992; Terenzini et al., 1994; Terenzini et al., 1996). Even academic advisors did not appear to be helpful to many FG students for many of the same reasons (Engle et al., 2006).

*Involvement in extracurricular activities.* Another experience that contributes to social integration is extracurricular participation (Bean & Metzner, 1985; Pascarella et al., 2004; Tinto, 1993). Extracurricular participation can take a variety of forms

including living on campus, working on or off campus, volunteering, and participating in campus clubs/activities or athletic teams. Several studies show that becoming more involved in activities on campus can negatively impact the persistence of FG students (Lohfink & Paulsen, 2005; Pascarella et al., 2003). For some FG students, the timing of extracurricular events such as athletics, clubs or organizational activities can conflict with their need to work or fulfill commitments to family (Lohfink & Paulsen, 2005). In fact, because many FG students are focused primarily on going to college for academic purposes, extracurricular participation is not a high priority (Bean and Metzner, 1985; Tinto 1987, 1993).

In their two year longitudinal study examining college experiences of FG students at the community college level, Pascarella et al. (2003) found that FG students worked more than their traditional counterparts and were less likely to join a Greek organization. Research on the second and third year college experience showed that FG students continued to work more hours per week; were less likely to live on campus and were significantly less likely to interact with peers outside of class activities (Pascarella et al., 2004). Additionally, FG students participated in extracurricular activities at a lower rate than non FG students, including both volunteer activities and athletics (Pascarella et al., 2004). Because many FG students are juggling multiple commitments between their school life and external obligations, some perceive time spent on campus as an inconvenience, especially when it often includes trying to deal with bureaucratic issues or problems (Richardson & Skinner, 1992). FG students also, often delay participation in extracurricular activities until

later in their college experience (Cabrera et al., 2005; Lohfink & Paulsen, 2005; Pascarella et al., 2004; Pike & Kuh, 2005).

Others disagree with this line of thinking and argue that engagement in academic activities, inside and outside the classroom, has a positive effect upon FG students' adjustment to college and sense of identity within the campus community (Hausmann et al., 2009; Pascarella et al., 2004). Hausman et al. (2009) argued that establishing a "sense of belonging" is so critical to student success that an inability to achieve this status could lead to a decline in one's physical and mental health. Pascarella and his associates (2004) reported that those FG students who did participate in extracurricular activities and were engaged in the classroom or in academic activities at higher levels reflected increased positive outcomes in the second and third years in "critical thinking, writing skills, openness to diversity, learning for self-understanding, internal locus of attribution for academic success, preference for higher-order cognitive tasks, and degree plans" (Pascarella et al., 2004, p. 280). The authors suggest that these particular experiences, along with increased extracurricular participation, may be more critical to the FG student's college experience than that of his/her peers (Pascarella et al., 2004). These events, along with relationships built through participation in clubs, groups etc. can help FG students accumulate the necessary knowledge and connections to more smoothly navigate the academic and social networks that make up the college experience (Pascarella et al., 2004).

**Perceptions of racial/ethnic climate on campus.** Establishing a sense of belonging on campus is important to the adjustment of first generation students



(Hausmann et al., 2009; Murguia et al., 1991; Terenzini et al., 1994). Student perceptions of the racial/ethnic climate on campus can affect their transition to college, both socially and academically (Cabrera et al., 1999; Engle et al., 2006; Hurtado & Carter, 1997; Murguia et al., 1991; Nora & Cabrera, 1996; Richardson & Skinner, 1992; Terenzini et al., 1996). In particular, perceptions of discrimination or prejudice can negatively affect the student college experience, can lead to feelings of isolation and, ultimately, can impact student persistence (Cabrera et al., 1999; Hurtado, Carter & Spuler, 1996; Smedley, Myers & Harrell, 1993).

Research indicates that minorities tend to perceive more levels of discrimination or prejudicial behavior in the classroom than their White counterparts and also tend to assume that this behavior is targeted to them directly (Cabrera & Nora, 1994). This difference may be attributed to the belief that minority students have more experience with discriminatory behaviors than their White peers (Cabrera & Nora, 1994). For example, Hurtado et al., (1996) found that some Latino students struggled to adjust during their first year of college because they felt unwelcome and discriminated against based upon their ethnicity. These students perceived that they had entered a hostile environment where they were looked at as “special admits” because of their racial profile (Hurtado et al., 1996).

Another important factor affecting adjustment for minority students is the physical and psychological stress that results from students’ perceptions that racial/ethnic tension exists between themselves or peers from various racial/ethnic groups and the White students and/or faculty at the institution (Smedley et al., 1993). This challenge is particularly significant when considered within the context of

predominantly white institutions (PWIs) (Smedley et al., 1993). Because many first generation students are also from under-represented groups, this experience must be considered in discussions of factors affecting the first generation student's adjustment to college. In fact, Terenzini et al. (1996) discovered that FG students were more likely to report personal experiences with racial discrimination, thus suggesting that campus climate plays a key role in many first generation students' college experiences.

An institution's structural diversity (makeup of students on campus) can also factor into students' perceptions of the campus climate. While the research on an institution's student composition and its impact on the student experience is limited, Chang (2000) represents the majority in his argument that increasing structural diversity within universities is critical to fostering an environment where students socialize across racial/ethnic lines. This interaction with peers from diverse backgrounds can positively impact educational outcomes, including retention rates and students' sense of satisfaction with an institution (Astin, 1993a; Chang, 2000). Terenzini, Cabrera, Colbeck, Bjorkland & Parente (2001) further found that a "medium" level (30-40%) of diversity in class composition can have a positive effect upon learning experiences. Not all research reflects these findings, though. In an analysis of data from a national, longitudinal survey, Hurtado et al. (1996) did not find evidence to support that interacting across racial/ethnic groups positively affected Latino students' adjustment to college.

Researchers have also studied the effects of "diversity" in the classroom on the student experience (Cabrera & Nora, 1994). Classroom interactions have emerged as

one area of the college experience that particularly influences students' perceptions of campus climate (Cabrera & Nora, 1994). Collaborative learning in the classroom can significantly impact individuals' perceptions of themselves as well as their understanding and openness to those from diverse backgrounds and experiences (Cabrera et al., 2002). In fact, the positive effects of collaborative learning can extend beyond the classroom to increase racial/ethnic understanding across all aspects of the academic and social college experience (Cabrera et al., 2002; Saenz, Ngai & Hurtado, 2007). Through these collaborative learning experiences, students' understanding of other cultures may increase in conjunction with "de-bunking" pre-conceived notions they may have about peers from different backgrounds (Cabrera et al., 2002).

However, not all students adjust to the campus climate at the macro level. Some, at least initially, gravitate to peers that share the same ethnic/racial backgrounds (Engle et al., 2006; Murguia et al., 1991). By identifying and socializing within sub-groups or enclaves of peers who share some of the same cultural and life experiences, these students "protect" their self-identity as they adjust to a climate that may be very different from their pre-college experiences (Engle et al., 2006; Murguia et al., 1991).

**Paying for college.** Both the real and perceived ability to pay for college consistently emerges in literature as significant factors affecting the persistence and degree completion of FG students (Cabrera et al., 1990; Choy, 1998, 2001; Cuccaro-Alamin, 1997; Pascarella & Terenzini, 1991, 2005; St. John, Paulsen & Carter, 2005; Terenzini, Cabrera & Bernal, 2001). First, FG students often perceive they cannot pay for college because they and their parents possess very limited, if any, knowledge of the true cost of attending and financial aid options available (Berger, 2000; Choy,

2001; Engle et al., 2006; Rowan-Kenyon et al., 2008; Terenzini, Cabrera & Bernal, 2001). For those students who do learn the actual cost of attending college, this information strongly influences their college choice (Paulsen & St. John, 2002; Terenzini, Cabrera & Bernal, 2001). Once enrolled, this limited knowledge about college costs and how to pay them also affects the student's decision to persist and complete (Pascarella & Terenzini, 1991, 2005; St. John, Cabrera, Nora & Asker, 2000; Terenzini, Cabrera & Bernal, 2001). For low income students, not only does the actual cost of college strongly influence their college choice and decision to attend, but, following enrollment, tuition increases continue to factor into persistence (Paulsen & St. John, 2002). Tuition escalation, an increasingly common and consistent occurrence in higher education and an event that may not impact a higher SES student's progress toward degree completion, can significantly affect the lower SES student's decision to stay enrolled in school (Paulsen & St. John, 2002).

Students' perceptions of their ability to pay can also affect their involvement and integration in the campus (Cabrera, Nora & Castenada, 1992; St. John et al., 2000). St. John et al., (2000) employed Maslow's theory to explain this correlation. For students who demonstrate financial need (e.g. low income or first generation backgrounds), the necessity of meeting basic needs like paying tuition or buying books, can prevent them from becoming involved in campus life, an activity that provides more abstract benefits (St. John et al., 2000). Instead, they may spend a significant portion of their time worrying about money or working long hours at off campus jobs (St. John et al., 2000; Terenzini, Cabrera & Bernal, 2001).

The effects of financial aid awarded also impacts degree completion rates for students, particularly those from low income backgrounds and/or FG backgrounds (Cabrera et al., 2005; Terenzini, Cabrera & Bernal, 2001; Paulsen & St. John, 2002). Not surprisingly, low income students need more financial aid to finish their degrees, yet financial aid packages often fall short of students' real financial need (Terenzini, Cabrera & Bernal, 2001; Engle et al., 2006; Paulsen & St. John, 2002). Cabrera and associates (2005) found that low income students who received loans increased their probability of earning a bachelor's degree by 11%. Ironically, though, the combination of high tuition, combined with high loan amounts does not promote persistence to the degree for this population (Paulsen & St. John, 2002). Some argue that financial aid awarded appears to play only a minor role when compared to other financial factors (e.g. ability to pay; employment) influencing degree persistence and completion (Pascarella & Terenzini, 1991, 2005; Stampen & Cabrera, 1986).

Employment, both on and off campus, consistently emerges in the literature as a significant factor in students' successful attainment of the baccalaureate degree (Cabrera et al., 1992; Choy, 1998; 2001; Cuccaro-Alamin, 1998; Engle et al., 2006; Ishitani, 2006; Pascarella et al., 2003; St. John et al., 2000; Stampen & Cabrera, 1986, 1988; Terenzini, Cabrera & Bernal, 2001). Employment off-campus can negatively affect persistence of FG and low income students (Bean & Metzner, 1985; Pascarella & Terenzini, 1991; 2005; Terenzini, Cabrera & Bernal, 2001). The more hours students spend working off-campus, often at jobs not related to their academic endeavors, the less time students have to invest in their academics and campus extracurricular activities (Bean & Metzner, 1985). FG students are also more likely to

work more than twenty hours per week than their non-FG counterparts (Engle & Tinto, 2009).

Contrarily, on campus employment, and FWS opportunities, in particular, can positively affect student persistence and degree completion (Cabrera, Stampen & Hansen, 1990; Ishitani, 2006; Pascarella et al., 2003; St. John et al., 2000; Stampen & Cabrera, 1986, 1988). Ishitani (2006) observed that, for the FG population, participation in work-study had a positive impact on four year graduation rates. Compared to students who did not participate in work-study during their first year of college, work study students were 81% more likely to graduate in four years (Ishitani). This finding appears to be consistent with other research that established a significant, positive correlation between work-study and persistence (Stampen & Cabrera, 1986, 1988) and/or degree completion (Adelman, 2006).

It has been argued that work study programs may be particularly beneficial to underrepresented college students (e.g. St. John et al., 2000). By providing students an avenue to increase their financial resources without leaving campus, work study programs can provide students opportunities to build critical social and cultural capital networks (St. John et al., 2000). In addition to providing much-needed financial support, these positions help student build important contacts and skills within campus networks and provide opportunities for increased interaction with institutional staff and faculty members (Cabrera et al., 1990). This exposure to campus culture and social networks provides students the opportunity to further integrate into the academic and social life of the institution (Cabrera et al., 1990).

## **Persistence Theory and Adjustment to College**

Much of the research on degree completion factors and college experiences of FG students is grounded in student adjustment or persistence theory. A number of theorists have informed research on traditional student adjustment and/or persistence (e.g. Tinto (1987, 1993), Astin (1993b), Weidman (1989)); however, the theory most relevant to this study is Bean and Metzner's (1985) model of non-traditional attrition. Bean and Metzner's (1985) model most closely fits with the goals of this study because of its concentration on non-traditional students, its focus on external environmental variables as significant factors in non-traditional student attrition and its ability to adapt to the study of various student populations in different settings.

Bean and Metzner (1985) define the non-traditional student as one who is primarily a commuter student, an older student and/or a part-time student. Non-traditional students are also individuals who are more interested in the academic value of attending college than the social "environment" in which these academic programs or services are delivered (Bean & Metzner, 1985, p.489).

While Bean and Metzner's (1985) definition of the non-traditional student does not mirror the profile of FG students participating in this study, two aspects of their work with non-traditional students are critical to this research. First, non-traditional students have been found more likely to be first generation students than traditional students (Bean & Metzner, 1985, p.498). Thus, aspects of this theory may be more relevant to studies of FG persistence than traditional models. Secondly, specific external social variables, such as finances, work, and support from family, friends and even employers are identified as significant factors in non-traditional student attrition

(Bean & Metzner, 1985). As demonstrated in this literature review, these specific issues also continually surface in persistence studies on FG students (London, 1992; Terenzini et al., 1994; Terenzini et al., 1996).

Bean and Metzner's (1985) conceptual model of non-traditional student attrition was developed from a review of two bodies of literature. First, the variables for this model were derived from literature on non-traditional students (Bean & Metzner, 1985). Second, the relationships between variables were drawn from "models of traditional student attrition and other behavioral theories" (Bean & Metzner, 1985, p. 486). This path model examines non-traditional students' dropout decisions in light of three significant constructs: academic variables (e.g. study skills and habits, academic advising, absenteeism, student's degree of certainty about major, and course availability); background and defining variables (age, enrollment status, residence, educational goals, high school performance, ethnicity and gender), and environmental variables (finances, number of hours per week that students were employed, external encouragement, family responsibilities and transfer opportunities) (Bean & Metzner, 1985). While Bean and Metzner (1985) do not exclude institutional social integration variables such as extracurricular participation or interaction with faculty from their model, these issues are considered only "possible" effects of attrition versus "direct" effects (p.491). In their model's inclusion of environmental variables and minimization of social integration variables, Bean and Metzner (1985) significantly deviate from the structure of traditional models.

Metzner and Bean (1987) validate this conceptual model of non-traditional student attrition in a study drawn from a sample of part-time freshmen commuter



students. The study's results suggest that, for this specific population, the most significant direct factors related to dropout were academic factors, such as GPA and intent to leave, and number of hours enrolled, a background variable (Metzner & Bean, 1987). Contradictory to the findings of Tinto (1987) and Pascarella (1980) yet consistent with the conclusions of Bean and Metzner (1985), Metzner and Bean (1987) established that social integration factors were not significantly related to dropout and intent to leave. Interestingly, this study even suggests a positive correlation between student-faculty contact out of class and students' intent to leave (Metzner & Bean, 1987).

While the work of Bean and Metzner (1985) and Metzner and Bean (1987) is not focused upon FG students, this research suggests that non-traditional students' paths to the baccalaureate degree do not necessarily follow the "traditional" route. In the absence of a comparable attrition model for FG students, Bean and Metzner's (1985) theory was used to support this study's conceptual framework.

## **Summary**

Research shows that FG students face unique challenges in adapting to college and persisting to the baccalaureate degree; however, very limited results are available regarding factors that influence completion of the baccalaureate degree for FG students. Chen (2005) and Ishitani's (2006) findings provide a framework for exploring factors that influence baccalaureate degree attainment for FG students; however, a critical gap in this research is the exploration of how collegiate experiences may affect FG students' degree attainment. The growing body of research exploring the role of social/cultural capital and the differences in collegiate

experiences between FG students and their peers provides undeniable evidence that the FG student college experience must be considered within the context of degree completion. Of particular interest is whether these specific experiences, positive or negative, impact a FG student's progress toward a baccalaureate degree. Using a qualitative design, the goal of the current study was to expand upon Chen (2005) and Ishitani's (2006) research to include an exploration of pre-college and college experiences FG students identify as influencing the successful completion of the baccalaureate degree.

### **Chapter 3: Methods**

First generation students face particular challenges in their path to degree completion (Chen, 2005; Choy, 1998; 2001; Ishitani, 2006; Pascarella et al., 2004). While some of these obstacles are academic in nature (e.g. curricular choices or academic performance), other challenges lie outside the realm of academic performance and often outside the institutional context (Bean & Metzner, 1985; Cabrera et al., 2005; Engle et al., 2006; Terenzini et al., 1994). As a means of better understanding and explaining the first generation student's journey to the baccalaureate degree, the purpose of this study was to explore the nature and characteristics of these experiences. In particular, this study examined the following research questions: What experiences do UM Student Support Services first generation college graduates identify as factors that contributed to their successful completion of the baccalaureate degree? What experiences are suggested by the participant cases in the current study? To what extent do these experiences reflect or depart from those documented by the extant literature?

#### **Study Design**

These research questions were addressed through interpretive case study, using 13 participant "cases" in a cross-case analysis. Each individual participated in a semi-structured, 90 minute in-depth interview and completed an online demographic survey. Archival data, including specifics such as admissions information (H.S. GPA, high school attended, SAT scores, math and English placement, and admissions essays); high school transcripts; college transcripts (indicating grades, major, courses

enrolled, enrollment trends), and Student Support Services participant files, served as secondary data in compiling each case summary. The rationale for this qualitative design as well as the detailed application of this approach is outlined below.

Qualitative inquiry includes a number of elements that fit well with the research questions guiding this study, the most important of which is a focus upon the meaning of individual experiences (Creswell, 2003). Qualitative research focuses upon in-depth investigation and interpretation of individual experience within a specific context or phenomenon, and its methods of inquiry include components that promote the detailed description necessary for this type of investigation (Ritchie & Lewis, 2003). These components include smaller sample sizes; interactive data collection methods such as interviews or observations, and data analysis using classification or tracking systems that permit the researcher to map emerging themes or ideas (Ritchie & Lewis, 2003).

I chose interpretive case study as the qualitative mode of inquiry for this research because this method uses rich, thick description to “develop conceptual categories to illustrate, support or challenge theoretical assumptions held prior to the data gathering” (Merriam, 1998, p. 38). Instead of simply providing a ‘detailed account’ of a specific phenomenon as a descriptive case study would, the data collected was used to develop conceptual categories that “illustrate, support or challenge” theoretical assumptions about determinants of degree completion for FG students. Additionally, each participant in this study was considered a ‘case,’ and a cross case analysis was used to determine general themes or common experiences across participants. These themes or common experiences were then analyzed within the

theoretical framework derived from current research and outlined in the literature review.

**Site Selection.** Research indicates that FG students who enroll in four year institutions immediately following high school are more likely to earn their baccalaureate degrees (Adelman, 2006; Chen, 2005; Ishitani, 2006). However, access literature shows that, while overall numbers of diverse groups accessing higher education are increasing, the distribution of these numbers are misleading, particularly in relation to “selective” four year institutions (Astin & Oseguera, 2004). Employing data from the Cooperative Institutional Research Program’s (CIRP) Entering Freshman Survey, Astin and Oseguera (2004) examined the accessibility of selective higher education institutions for diverse groups. For the purposes of their study, selectivity was defined as “the mean Scholastic Aptitude Test (SAT) score (verbal plus mathematical composite) of the entering freshman class,” and the most selective institutions fell within the top 10% of selectivity (Astin & Oseguera, 2004, p. 325). Using these parameters, the authors found that FG students were five times less likely to attend a highly selective institution than students from families where both parents had earned at least a baccalaureate degree (Astin & Oseguera). A report released by the College Board (2007) also indicated that the over-reliance on quantitative measures such as the ones used to determine selectivity put FG students at a disadvantage in accessing a “first-rate education” (p.15). This inequity in the admissions process, combined with the discrepancy in graduation rates between FG and non-FG students (Chen, 2005; Choy, 2001; Engle & Tinto, 2009; Ishitani, 2006), leads one not only to question the FG student’s odds of successfully completing a

bachelor's degree, but also to consider what factors contribute to the success of those FG students who do graduate.

To explore this question, the site selected for this study was University of Maryland, College Park (UM). UM is an institution of higher education that is categorized as "most selective" (U.S. News & World Report, 2008), is nationally ranked for its number of minority students that earn degrees (University of Maryland, 2008b), and, in its commitment to increasing diverse access to higher education, each year admits a group of FG students that do not meet traditional admissions standards (Academic Achievement Programs, 2007).

Over the past ten years, UM has become increasingly competitive among research institutions. This increasing competitiveness is evident in its growing number of "ranked" programs, and in its escalating admissions profile (Office of Institutional Research, Planning & Assessment, 2008; University of Maryland, 2008a). Concurrently, the institution has maintained a commitment to diversifying its student population (University of Maryland, 2006). An example of the University's commitment to diversity is its support of the University of Maryland Student Support Services (UM-SSS) program.

The UM-SSS program is a federally funded TRIO program that primarily serves FG and low income students (Academic Achievement Programs, 2007). This program not only serves the largest localized group of FG students at the University, but a majority of these students' profiles fall in the lowest 10% of all students admitted in their respective cohort year (Academic Achievement Programs, 2007). In fact, all students in this program were originally denied admission to the University

but were subsequently offered conditional admission based upon their participation in the UM-SSS program (Academic Achievement Programs, 2007). Despite their challenged academic profile, a significant number of these students are able to navigate the college experience and successfully graduate from UM, a “selective” institution. Given the unique profile of this sample, my research sought to investigate what distinctive factors influenced the successful graduation of these individuals.

The FG population is one that tends to be transient; therefore, tracking FG college graduates has presented specific challenges for researchers (Engle et al., 2006). The researcher’s unique access to administrators, students and data within the SSS program at University of Maryland helped mediate this challenge and also contributed to the site selection.

**Sample size and participant selection.** The subjects (cases) for this research were determined through “criterion-based selection” or “purposeful sampling” (Merriam, 1998, p. 51). The sample had to meet specific criteria which were critical to this study. First, participants must have been students in the UM-SSS program cohorts that entered the University as first-time freshmen in 2001-2004. These cohorts were selected because they were the most recent cohorts for which six year graduation rates could be obtained. Secondly, participants had to meet the definition of FG student as used in this study. Finally, participants must have completed the baccalaureate degree within six years. Using these criteria, the study yielded a pool of 13 participants, which reflected diversity across demographic factors such as gender and race/ethnicity and met the criteria for the point of saturation. No “magic” number of interviews exists in qualitative research in relation to reaching the “point

of saturation” for new material (Kvale, 1996). However, for studies that are primarily exploratory or descriptive in nature, Kvale reasoned that this saturation point tended to be “around  $15 \pm 10$ ” (Kvale, 1996, p. 102). In other words, Kvale suggested that the saturation point typically ranges anywhere between 15 and 25 subjects. For this particular study, the saturation point was met with 13 participants.

The primary strategy employed for participant selection was invitation to participate via email. Following IRB approval, contact information for all FG students in the 2001-2004 UM SSS program cohorts who graduated within six years was secured from both Academic Achievement Programs and the registrar’s office. These distinct lists included the most current contact points for graduates in the form of phone, email and address information. The two lists were cross-checked to verify the most updated contact information. From an initial list of 162 potential participants that met the selection criteria, contact information could be verified on 140. Forty seven eligible participants were from the 2001 cohort, 35 from the 2002 cohort, 41 from the 2003 cohort, and 17 from the 2004 cohort. Seventeen potential participants responded to the invitation to participate, and 13 were selected for the study.

A letter of invitation to participate in the study, co-signed both by the executive director of UM-SSS and the researcher, was sent to each potential participant via email (see Appendix A). The purpose of this letter was to introduce potential participants to the researcher and to assure these individuals that the Program was aware and supportive of the research being conducted. Furthermore, the researcher’s role as an administrator in the program and first generation student was disclosed in the correspondence.



As a further means of incentive for participating in the study, \$25.00 gift certificates to Starbucks or Borders also were offered to the first 15 participants who completed all phases of participation. Following the initial contact, if the graduate expressed interest in participating, his/her contact information was verified; an interview time/location was scheduled; and a follow-up email (Appendix A), including an electronic link to the project's demographic survey (Appendix B), was forwarded to the participant to complete.

A second strategy used to recruit participants was "snowball" sampling. Merriam (1998) refers to this type of purposeful sampling as "chain" or "network" sampling (p. 63), and Patton (2002) explains that this method is a means of identifying "information rich key informants or critical cases" (p. 237). During the initial contact, the graduate was asked for referrals for other possible participants from this cohort. The researcher also followed up on these connections to recruit participants. Because FG graduates can be difficult to locate (Engle et al., 2006), this networking technique helped the researcher generate a viable pool of eligible participants.

### **Data Collection**

Primary and secondary data was collected to complete a rich and detailed history of each participant's journey toward successful completion of the baccalaureate degree. Primary data collected for each participant included interview data and a completed demographic survey. Secondary data collected for each participant included: admissions data and essays, math/English placement results, SAT scores, high school and college transcripts and SSS program files, including their application for admission to the STP program and information on participant program activities.

Several efforts were made to secure participants' financial aid information from the UM financial aid office, but I was unable to secure this data in a timely fashion; thus all financial aid information is based upon self-report through interviews and the online survey. All information was collected to create a single database on each participant/case.

**In-depth interviews.** In-depth interviews with participants were used as the primary source of data collection. In-depth interviews generally take place face to face with the participant and are interactive in nature (Ritchie & Lewis, 2003). Furthermore, based upon the interactions between researcher and participant, this type of interview permits the researcher some flexibility to work within a structured interview protocol (Ritchie & Lewis, 2003). Data provided are not static, and the researcher can follow up interview questions with probes in order to gain a deeper understanding of the participant's individual experience and to explore new themes/ideas that may emerge during the interview process (Ritchie & Lewis, 2003). The researcher can use this form of data collection to provide rich descriptions of student experiences as they progressed toward their baccalaureate degree and to garner as much detail as possible in identifying significant themes in the data.

The in-depth interview conducted with each project participant were scheduled for 90 minutes in duration and took place in an office or private setting identified by the participant. Before beginning the interview, each participant read and signed a hard copy of the informed consent form indicating his/her willingness to participate in the project and granting the researcher access to his/her student records. Participants had also signed this form electronically when completing the online survey. Prior to

initiating the interview, participants also were provided the opportunity to ask questions whenever they felt the need and were reminded that they could withdraw from the study at any time. Participants were then assigned a pseudonym that was used throughout the study to protect their confidentiality, and permission to tape record the interview was also requested. Once these steps were completed, the interview commenced.

Interview protocols can be organized by topic or lists of questions and are designed to keep the researcher focused during the interview (Patton, 2002). They also provide the necessary latitude to probe into individual experiences further or to explore new ideas/themes that may emerge during the interaction (Patton, 2002). The interview protocol for this study drew upon themes that emerged in the literature review and included questions regarding student perceptions of pre-college and college experiences and their perceived role in the student's degree attainment (see Appendix C). These themes included factors such as demographic background, academic experiences (H.S. preparation and college academic performance; enrollment trends, and financial aid), and social/cultural experiences (building social/cultural capital; family/peer influence; interaction with faculty, and extracurricular engagement). The interviews were semi-structured in nature, and the protocol included room to build in follow-up probes or to explore new/emergent themes (see Appendix C).

All interviews were recorded, transcribed by an independent professional and reviewed by the researcher for accuracy and completeness. Once all interviews were transcribed and checked by the researcher, the researcher used the interview

transcript, in addition to the survey and archival data, to create a case summary for each participant. This case summary was sent to each participant and he/she had an opportunity to submit written comments to clarify and/or connect ideas. This process of verifying the researcher's credibility in relation to data collected and preliminary interpretation of this data is referred to in the literature as "member checks" (Creswell, 1998, p. 202; Merriam, 1998, p. 204). This mode of evaluating the validity of the researcher's data analysis is a critical component of rigorous qualitative research (Creswell, 1998).

**Demographic survey.** Prior to their interview, each participant was asked to complete a brief, online demographic survey. This survey was designed using questions from UCLA's CIRP freshman and senior surveys and additional demographic inquiries based upon major themes identified in first generation degree completion and persistence literature. The survey requested general background information on items such as parents' highest education levels; high school grade point average and curriculum choices; ethnicity; educational aspirations, and family income (Appendix B). The survey provided basic demographic information as well as a snapshot of the participant's self-reported extracurricular activities, work commitments and financial aid packages, all experiences identified as factors critical to successful completion of the bachelor's degree. The purpose of this survey was two-fold: (a) to provide the researcher an opportunity to collect background information pertinent to themes being investigated during this project, and (b) to allow the researcher to capture this important background data with minimal imposition upon the limited interview time available to meet with participants. The

survey was hosted and administered through the University's survey generator server. The electronic survey link was sent to each participant via email immediately following his/her agreement to participate in the study and prior to his/her interview.

**Document review.** Data triangulation is an important element of sound research design and serves as a means of validating the findings of a study (Merriam, 1998). Patton (2002) defines this term as “the use of a variety of data sources in a study” (p. 247). In addition to interviewing each participant and collecting survey data, secondary documents were reviewed to inform this study. Specific points of data collected included: students' institutional and program records, and student's high school and college transcripts. Once the participant had signed the electronic and hard copy informed consent forms, these records were requested from the registrar and the Academic Achievement Programs office. The institutional and program records included critical data on admissions (e.g. SAT scores, H.S. GPA and student admissions essays); math/English placement; documentation of program participation in UM-SSS services (e.g. tutoring, counseling support, math/English support), and the participant's application for the Summer Transitional Program (STP). An analysis of student transcripts provided information on enrollment trends, course selection and registration, and academic performance. The information provided in these secondary sources was analyzed for each individual participant and included in every participant's case summary.

### **Data Analysis**

Patton (2002) warns: “The challenge of qualitative analysis lies in making sense of massive amounts of data” (p. 432). In order to effectively manage the large amount

of data collected in this study, the data analysis was completed in several stages. First, individual case records/summaries were created for each individual participant (Patton, 2002). These case records or summaries were descriptive in nature and included preliminary themes/ideas identified through an analysis of primary and secondary data collected. Second, categories were created based upon the preliminary themes/ideas identified. Third, these categories were contextualized within a larger theoretical context, prominent patterns were analyzed. Next, using the case summaries for each participant, a cross case analysis of prominent patterns or clusters of data were completed. Finally, generalizations were made based upon these findings.

All interviews were transcribed by an independent professional and reviewed by the researcher against the audio tapes to verify accuracy. Using the constant comparative method (Merriam, 1998), the researcher identified preliminary themes and patterns that emerged from the words, phrases and sentences used by participants during their interviews. Merriam (1998) likens this method to sorting different items in a grocery store. For example, one can divide grocery store items into separate categories by constantly comparing these items against each other to find commonalities (Merriam, 1998). Likewise, categories can be constructed in case study by constantly comparing pieces of data against each other to identify similarities or differences (Merriam, 1998).

In addition to the participant interviews, this method also was applied to the data collected from the online survey and document review. Using the list of themes and patterns identified from all of these sources, categories were constructed. Merriam

(1998) purports these categories “should reflect the purpose of the research” (p. 183). Additionally, all relevant data should “fit” into a specific category; category characteristics should not overlap; the names of categories should reflect the specific points of data in that category and all categories should be “conceptually congruent” (e.g. one would not establish a category entitled “professional sports” and another category labeled “baseball”) (Merriam, 1998, p. 184). Category names were developed within the context of the literature on determinants of degree completion and persistence for first generation students. Additional category names were developed for emergent themes or patterns not reflected in the literature.

The coding of data and development of categories was managed using NVivo, a qualitative management software. Once the categories of data were refined, a cross-case analysis of coded categories was conducted between each case to identify common themes or patterns among participants.

Memoing was used as a means of recording my own impressions and observations (Merriam, 1998). Patton (2002) argues that the researcher’s debriefing activity is an important factor in data analysis. Because of its importance, debriefing should occur in the period immediately following interviews (Patton, 2002). This time is “a time of quality control to guarantee that the data obtained will be useful, reliable, and authentic” (Patton, 2002, p. 384). As my own means of debriefing, I scheduled time after each interview to craft a memo that reflected upon the following areas: clarification of data that might have been gathered during the interview; initial impressions/observations about the interview or information gathered; identification of emerging themes, and reflection upon my own reaction to the interviewee, data

collected and ability to remain objective. These memos were input into NVivo and tracked for common themes/issues that impacted the data analysis.

### **Ethical Issues**

To protect the privacy of participants and to encourage ‘full disclosure,’ confidentiality was a critical component of the study’s data collection piece. All participants were provided an informed consent form prior to the interview. In this form, participants were advised of the goals of the study, their rights as participants, particularly their right to withdraw from the study at any time, and the researcher’s responsibility. Additionally, all participants were assigned pseudonyms to be used as identifiers to ensure confidentiality. Tapes of all interviews were stored in a locked, fireproof safe. All hard copies of surveys, survey results and additional documents were stored in a locked filing cabinet throughout the study and will continue to be stored in this cabinet for a minimum of ten years from the study’s completion date. At the end of this period, all materials used in the study, including interview tapes and all documents, will be destroyed.

When considering ethical issues in research design, Creswell (2003) argues: “Means need to be considered for reciprocating between the researcher and the participants” (p. 65). The balance of power between researcher and participant should be maintained and, at no time, should the participant feel threatened or coerced. To ensure a balance of power between researcher and participants in this study, participants were invited to involve themselves in the process through member checks. Participants had the opportunity to review their case summaries and provide written comments to clarify or correct information.



## **Issues of Validity**

**Internal validity/trustworthiness.** Merriam (1998) defines internal validity as a means of matching research findings to reality. Critical questions researchers should consider are: “How congruent are the findings with reality? Do the findings capture what is really there? Are investigators observing or measuring what they think they are measuring?” (Merriam, 1998, p. 201). To ensure internal validity in this study, I employed the following strategies (Merriam, 1998):

Triangulation—Qualitative data in the form of interviews were cross-checked against documents collected (e.g. demographic surveys) and student records.

Member checks—Member checks were completed to verify the accuracy of information gathered from interviews.

Researcher’s Bias—As a first generation college student, myself, and having spent the past 20 years working specifically with first generation and low-income students, I recognized that my perceptions of the challenges facing this population could be influenced by my own experiences. To ensure that I was constantly aware of any potential bias, I maintained a system of debriefing memos and a consistent schedule of peer debriefing sessions.

Rich Data—Collection of rich, descriptive data through a verbatim transcription of interviews helped to ensure that I captured the true essence of the participants’ responses.

**External validity and reliability.** Because this study focused on the experiences and perceptions of a limited population, the results are not easily generalizable or replicated to a larger population or different type of institution. However, because of

the narrow amount of research in this area, the intent of this study was not necessarily to create generalizable results, but, instead, to provide a richer perspective of student experiences critical to successful degree completion. As Merriam (1998) argues: “In qualitative research, a single case or small nonrandom sample is selected precisely because the researcher wishes to understand the particular in depth, not to find out what is generally true of the many” (p. 208). The contribution of this study was to provide a template and preliminary findings from which to build a research agenda that could expand our insight into pre-college and college experiences that may positively influence degree completion for first generation students.

## Chapter 4: Case Summaries

This study employed the case study method to understand factors that first generation graduates from the UM SSS program identify as impacting their successful completion of the baccalaureate degree. The case study method used to collect and analyze data included in-depth interviews. The chapter begins with a description of the background characteristics of study participants, followed by individual case summaries. Several points of data (e.g. academic experiences, extracurricular participation, faculty and peer interactions) were used to build each case profile. The information for the case profiles was gathered through a variety of means: survey, document review and face to face interviews. Data was organized around the central themes identified in the literature affecting persistence and graduation of first generation college students. These themes were separated into pre-college and college experiences on the guide used for in depth interviews, and each case summary was organized following these same principles. The research questions guiding this study are:

1. What experiences do UM-SSS first generation college graduates identify as factors that contributed to their successful completion of the baccalaureate degree?
2. What experiences are suggested by the participant cases in the current study?
3. To what extent do these experiences reflect or depart from those documented by the extant literature?

## **Background Characteristics**

The participants in this research are first generation graduates from UM, participated in the Student Support Services program and entered the University as first time freshmen between 2001 and 2004. A total of thirteen participants meeting this criteria were interviewed, six of them from the 2001 cohort; four from the 2002 cohort, two from the 2003 cohort and one from the 2004 cohort. All participants were offered conditional admission to the University upon successful completion of the UM Summer Transitional Program.

The demographic profile of the sample in this study closely approximates the mean profile for all students entering the UM SSS program from 2001-2004 (see Table 1). Of the thirteen participants selected, six (46%) were male and seven (54%) were female. Additionally, the sample includes a racial/ethnic participant breakdown of seven (54%) Black, one (8%) Asian, three (23%) Latino and two (15%) White participants. The number of Asian participants in the study is slightly less than the 2001-2004 cohort mean of 17.5 (16.5%), and no Native American participants were available for this study.

Table 1

*Demographic Breakdown of 2001-2004 UM SSS Entering Cohorts*

	2001	2002	2003	2004	Mean	Mean %
Male	44	47	47	48	46.5	43.8
Female	66	59	60	53	59.5	56.1
Black	48	43	45	43	44.7	42.1
Asian	20	17	14	19	17.5	16.5
Latino	24	24	23	17	22	20.7
White	11	17	19	10	14.2	13.4
Native Amer.	0	1	1	0	0.5	0.05
Unreported	7	4	5	11	6.7	6.3
Total	110	106	107	101	106	

Source: Academic Achievement Programs, 2007

UM-SSS graduates were chosen as the participant pool for this study because their academic profiles typically fall in the bottom 10% of all UM first time freshmen in their respective cohorts (Academic Achievement Programs, 2007). Aggregate academic profile data for 2001-2004 UM entering first time freshmen, AAP entering first time freshmen and the participant sample are presented in Table 2. The mean high school GPA for this study's participant sample is 1.03 points lower than the mean for all UM entering first time freshmen in 2001-2004 (see Table 2).

Furthermore, the mean total SAT score for the participants in this study is 341 points below the mean score for all UM entering first time freshmen in 2001-2004.

Table 2

*Mean Aggregate Academic Profiles for 2001-2004 Entering First Time Freshmen*

	HS GPA	Total SAT Score
UM	3.83	1254
AAP	2.99	919
Participant Sample	2.80	913

Source: Academic Achievement Programs, 2007; Office of Institutional Research, Planning and Assessment, 2005.

Detailed demographic information for each participant is listed in Table 3. This information includes each participant's gender, race, income status, high school attended, and parents' highest level of education.

Table 3

*Participants' Demographic Information*

Participant	Gender	Race	Low Income	High School	Father's Educ.	Mother's Educ.
Ann	F	Asian	X	Public	Some college	H.S. graduate
Betty	F	Latina	X	Public	Some college	Postsecondary
Erin	F	Black	X	Public	H.S. graduate	Some college
Jane	F	Black	X	Private	H.S. graduate	Some college
Karen	F	White		Public	H.S. graduate	H.S. graduate
Lynn	F	Latina	X	Public	H.S. graduate	H.S. graduate
Mary	F	Black	X	Public	H.S. graduate	Some H.S.
Bob	M	Black		Private	Postsecondary	Postsecondary
Jim	M	Black	X	Public	H.S. graduate	H.S. graduate
John	M	Black		Public	Some college	Postsecondary
Mike	M	Black	X	Public	H.S. graduate	Some college
Steve	M	Latino	X	Public	Grammar school	H.S. graduate
Tim	M	White		Public	Postsecondary	H.S. graduate

Of the 13 participants, nine (69%) entered the University as “low income” students. The U.S. Department of Education defines “low income” as “an individual whose family’s taxable income for the preceeding year did not exceed 150 percent of the poverty level amount” (U.S. Department of Education, 2009), and this study employs the same parameters for use of the term. The income level is reset each year and published on the U.S. Department of Education’s website. The UM-SSS program

also uses this definition to help determine eligibility for its program (two thirds of each cohort must be both first generation and/or low income students).

Additionally, 11 (85%) of the participants had attended a public high school in Maryland and two (15%) had attended a private school in Maryland. Six (46%) of the participants' mothers had attended some type of postsecondary education, including some college, while only five (38%) of their fathers had continued education beyond high school. Only two (15%) of all the participants' parents' highest education was less than high school graduate.

Next, I turn to the case summaries for each of the 13 study participants. These summaries include details of each participant's pre-college and college experiences, specifically focusing on three areas: (1) pre-college preparation and college choice, (2) academic and social adjustment to college, and (3) critical challenges in pursuing their baccalaureate degrees.

### **Profiles of Study Participants**

**Case Summary #1-Ann.** Ann is an Asian female who moved to the United States from a country in Southeast Asia during her sophomore year of high school. She immigrated with her parents and her two siblings. Ann's native language is Mandarin; she spoke no English when she moved to the U.S., and she is a first generation student from a low income background. Ann's father finished some college, and her mother is a high school graduate.

Education has always been an important part of Ann's life because her parents continually stressed the importance of a "good education." According to Ann, education is a critical component of the Asian culture. It is assumed that you will



immediately pursue a college education upon completion of high school. Ann attended a large, public high school in Montgomery County, Maryland and pursued a college preparatory curriculum as a student there.

Ann found that her high school experience in the U.S. differed from her experiences in Taiwan. In Taiwan, students primarily sat for exams in all subjects, but in her U.S. high school, course requirements included projects, papers and some presentations. While in high school, Ann completed 4 years of math; four years of English; four years of science courses, and two years of a foreign language. She completed three honors courses and four AP courses while in high school and graduated with an un-weighted GPA between 3.40 and 3.50. Her total SAT score was between 900-1000.

Ann credits her high school counselors with the courses she chose in her college preparatory curriculum. She met with a counselor every semester to discuss her progress, particularly because she had a lot of “catching up” to do because she came to the U.S. in her second year of high school. Once she fulfilled graduation requirements in a particular area, Ann would ask counselors and teachers what further courses she could take to improve the strength of her college application. Ann’s friends were also good role models for her in terms of being “successful” high school students because many of them were enrolled in AP and honors courses and involved in extracurricular activities. Ann was very active in various extracurricular activities throughout high school, including academic clubs, band, and working as a tutor.

Because of the cultural expectations placed on her, the decision to attend college was never an option for Ann. She applied for college with the ultimate goal of

achieving a Ph.D. However, Ann's lack of familiarity with the U.S. college application process caused her a great deal of anxiety. Because Ann and her family did not understand the college application process, Ann "asked around" for help and received a great deal of support from friends, her high school teachers and her counselor. She was particularly panicked about the SAT part of the application process, so, whenever she knew someone her age, she asked them, "Have you taken the SAT yet? Have you applied to college yet? What's your experiences and how can I get help?" Ann's counselor walked her through the FAFSA process and applying for scholarships and also told her about an SAT prep course that would help her prepare for the qualifying exam, while her teachers provided recommendation letters and helped Ann edit her personal statement. Even though Ann's parents were not familiar with the application process, she still spoke to her family frequently about how the application process was progressing and, based upon information she received from her teachers and counselor, assured them that she would get financial aid.

Ann ultimately applied to four schools; UM was her second choice. Ann chose to attend UM because of its academic reputation and because her eligibility for in-state tuition made it an affordable option. Ann was not initially accepted to UM. Instead, she was referred to AAP's Summer Transitional Program. After successfully completing the six week summer bridge program and earning four college credits, she was admitted to UM in the Fall and participated in the SSS program. Ann also entered the University with four AP math credits.

Ann credits AAP and the SSS program with helping her adjust to college. Because she had not been raised in the American culture, Ann said she had a lot of

“things to learn” when she began her studies at UM. She especially found it difficult to make connections with others on campus, both in and out of the classroom. In this regard, her experience with AAP helped Ann create networks because most of the students in AAP were first generation students, and they were all at the University to pursue an education with “a little bit of help.”

Some of the biggest challenges Ann faced at UM, particularly in her first and second year, were choosing a major and learning that sometimes it is okay to get bad grades. Ann started her college experience as a pre-pharmacy major because everyone (primarily friends) told her to study pharmacy. When she learned that she would need to transfer to pharmacy school after two years, she got scared and worried that she would not be competitive enough to get in. As a result, Ann decided to postpone pharmacy school and study something more general. After consulting with a friend, she chose a major in biochemistry because biochemistry serves as a foundation for a number of sciences, and the major would be helpful if she chose to go to medical school.

Ann enjoyed her biochemistry courses, but often felt intimidated by her classmates and the material. Everyone around her seemed so talented, competitive and focused on either going to pharmacy or medical school, yet sometimes she struggled to understand even the materials in class. Ann constantly felt like she was “catching up.” She persisted with her biochemistry courses, but, ultimately, decided to major in nutrition because it was a less demanding major and was a better “fit” in terms of her ability and skills. Ann’s boyfriend at the time was integral in this decision, since she talked to him frequently about her struggles in biochemistry, He

helped Ann explore other departments and colleges on campus to find a less rigorous option.

During this whole process, Ann credits AAP, tutors, TAs and friends in her classes with providing the bulk of her academic support. She was able to study for her biology and physiology courses with peers in AAP, and she also received support from the tutoring groups and classes offered through AAP. Ann indicated that, perhaps, the most important support she received from AAP was its counseling services. Ann always knew a counselor was available to meet with her to discuss her progress and to make sure she was doing “okay” when she was struggling. Ann also indicated that participation in AAP was important because she learned valuable information about the Honors Program, scholarships and other tutoring type resources, like where to get old exams or practice exams for courses.

Even though Ann felt intimidated, she performed well her first year, earning over a 3.0 grade point average and gaining admittance to the Honors Program. As indicated in her interview, Ann did encounter some academic challenges along the way, failing one course in her major and withdrawing from another. However, the Honors Program proved to be an important resource for Ann during her time at UM because, through this experience, she learned about other research, study abroad and scholarship opportunities.

Most of the friends Ann had at UM, she made through her connection to AAP because she had so much in common with the other students in the program. After AAP, the friends Ann made at UM were more like acquaintances, not the kind of friends you keep in contact with on a regular basis. Even those friends she made

through AAP, she mostly “hung out with” only on campus, participating in only a few group social events with AAP and limiting her social activities with individual friends from AAP to studying or having dinner on campus. The friends Ann spent the most time with during college were people who went to her church. Most of the time spent with these friends was on weekends and related to church activities. A number of these peers also went to UM, so they, too, were able to give her advice when she asked.

While at UM, Ann lived both on-campus in the residence halls and an apartment and off-campus in a rented apartment. She also participated in extracurricular activities on campus. During her first few years at UM, she tried a dancing club and a language club, but still spent the majority of her free time at church and with friends from church. Later, as an upperclassman, Ann was accepted into an undergraduate research program that prepared students for graduate school.

During Ann’s first couple of years at college, her family was very supportive of her studies. She would go home on weekends, and sometimes her mom would come to campus to visit or her family would call, so it was not too hard for her family to adjust. However, as time went on, Ann’s family would sometimes complain that she did not come home that often. They questioned whether she was really studying or just ignoring them. To help them understand, Ann would give them progress reports, like, “I have to do research this weekend” or “I have an exam next week.” When asked who had the greatest influence on Ann’s completion of a bachelor’s degree, she indicated that no person really influenced her success. In Ann’s culture finishing

college is a norm, so there was never really any question about whether she would finish.

At the beginning of her college career and with the help of her counselor, Ann completed the FAFSA and secured enough funding to pay for the first two years of college. However, during her third through sixth years at UM, Ann did have to pay for tuition, so she began taking student loans to cover the cost. At this time, Ann also began working part-time jobs on campus, including federal work study positions, and averaging 16-20 hours per week. Later, she participated on research teams, earning a stipend for working 20-25 hours per week.

Ann enrolled continuously throughout her college career and graduated with two bachelor's degrees, in five and six years respectively. Her degrees were in Biochemistry and Dietetics. Ann is currently searching for jobs and applying to graduate school at the same time. When asked what piece of advice she would offer to a first generation student starting his/her journey toward the bachelor's degree, Ann said: "I will say making more connections and friends and get as much resources as possible. This...for a minority student, I think sometimes we don't know where the resources are and we don't know where to look for information."

**Case Summary #2—Betty.** Betty, a Latina female, is a first generation student and also comes from a low-income background. Neither of her parents earned a bachelor's degree, although her father attended some college. Betty's mother attended post-secondary school other than college and worked as a nurse in Central America before moving to the United States. Betty has two siblings and appears to be very

close to her family. She attended a public high school in Montgomery County, Maryland and completed a college preparatory curriculum.

As part of her college preparatory curriculum, Betty completed four years of math; four years of English; four years of science, and four years of a language. Her coursework also included honors classes in English, science and a foreign language. Betty felt that her honors classes were challenging, but thought she could have done better in them. She admitted that she was kind of “lazy” when it came to coursework.

Betty’s extracurricular activities while in high school seemed to make a more significant impression upon her life aspirations than her coursework. She was interested in nursing because her mom had been a nurse, and, as a result, took part in a volunteer program at a local hospital. Betty also worked with a mentor all through high school. Her mentor was an older woman employed in the public school system. During Betty’s first year of high school, Betty’s father made a networking connection with the woman through the PTSA. Betty began meeting with her once a week from freshmen through senior year and, eventually, Betty and the woman became friends. In addition to the hospital and mentoring programs, Betty also participated in a cultural club, a competitive sports team and a spirit club. Betty graduated from high school, with an un-weighted GPA between 2.5-3.0 and an SAT total score between 900-1000.

Betty admits thinking about college really late—junior year of high school. She wanted to earn a bachelor’s degree because her parents did not have the opportunity. Successfully achieving this goal would make her the first in her family to graduate from college. Much of the information Betty obtained about college came from her

high school counselor and from her mentor. Betty's mentor answered questions about how the college process worked and was helpful when she was applying to schools. Betty also took an SAT prep course as part of her high school curriculum. She talked to her parents and some friends about applying to college as well, but these conversations really revolved around choosing her major. Later in the application process, Betty and her parents spoke more about how to pay for college.

It was not until senior year that Betty started to understand the financial cost of a college education. She distinctly remembers reviewing materials from a local, private university and discovering the actual cost of attending. Before this point, Betty had not really paid much attention to how much college cost. She then began to worry about being able to pay for her education. Betty did not want her parents to be in "huge debt" and also did not know if she was going to get a job when she was done.

Betty applied to a total of four schools, but UM was her top choice, primarily because (1) her parents wanted her to attend UM, (2) the institution had an excellent academic reputation, (3) the school offered her money, and (4) the institution was close to home. Betty was conditionally admitted to UM through AAP's Summer Transitional Program. Fortunately, her high school counselor was familiar with AAP and its programs and guided Betty through the process of gaining acceptance into the STP. The counseling center at Betty's high school also provided some information about how to pay for college and provided assistance for students and their parents to fill out the FAFSA.

Immediately following graduation, Betty participated in UM's Summer Transitional Program. She completed the six week bridge program and enrolled as a



first year student in UM's SSS program. Betty's interest and experiences in nursing prompted her to initially enroll in the University as a pre-nursing major.

Betty encountered a number of academic and social challenges as she adjusted to life at a big university. Academically, there were some classes that she really enjoyed, but others she discovered that she did not like at all. She really struggled with the material in these courses. Among her least favorite classes were math and science, critical courses for a pre-nursing major. Betty also struggled with transitioning to an academic environment that was very different from high school. In high school, homework was often due at the end of a quarter, but, in college, a specific due date was set for assignments, and you had to motivate yourself to meet stricter deadlines. Betty was further intimidated by the big classes and large numbers of people because she was typically a very quiet person.

In the interview, Betty also recounted an unfortunate incident that occurred during her first year at the institution. In an English class, she and another Latino student were told by a professor that they were not going to be able to get an "A" or "B" in the class, even though Betty was doing "fine" in the class and still had one paper to turn in. The incident ended up going to the Dean's office. Betty did not know if it was a "race thing," but she and the other student were the only two Latino persons in the class. Betty said incidents like this one prompted her parents to say, "There's people that don't want you to succeed."

Betty's experiences in AAP during her first year were very helpful in transitioning to college. She was required to attend mandatory classes and to go for mandatory help with her coursework [tutoring]. Additionally, she participated in field

trips through AAP and made friends through the Program. Today, she still maintains friendships with fellow AAP students.

Betty's second year at the University was a very difficult one. Her most challenging academic experiences came in her science and math courses. She took these courses in the same semester during her second year at the University, failed math and did not earn a passing grade for her major in the science course. Beyond understanding the material in these courses, Betty struggled with learning how to balance her time and classes. She also began to feel lost during her second year because she was on her own to choose whatever courses she wanted. At some point during her first two years, Betty changed her major to dentistry but, ultimately, knew she could not pursue this major based upon her course failures.

Still feeling lost, Betty returned to AAP in her third year to talk to her former counselor. They sat down together to discuss how Betty could overcome her academic challenges and what major she should pursue. Her counselor sent her to the library to take a personality test and, out of this experience Betty decided to major in criminal justice. To find out more about this major, Betty spoke to friends from AAP who were majoring in criminal justice and visited the career center.

Betty lived at home throughout her college career. Because of familial commitments, Betty typically would head straight home after her classes. In addition to commitments at home, she also worked approximately 20 hours per week off campus. She did participate in some community service activities as a result of an environmental course she took junior year, but, otherwise, focused upon school, work and spending social time with friends outside of class. Unfortunately, some of Betty's

relationships with friends at home began to drift apart when she started college.

Socially, most of Betty's time while she was at UM was spent with friends she made through AAP. She and her friends would go to each other's houses, go out to eat, spend holidays together, go clubbing and study together.

Betty's family was supportive during her entire college experience, and Betty identified her mother as having the greatest influence on her successful completion of the bachelor's degree. She credits her mother with providing the most financial support toward her education, so Betty did not want to let her mother down. She had to finish.

Betty was diligent not only about continuously enrolling in courses during her time in college but also about completing the FAFSA by February 15<sup>th</sup> of each year (priority filing) she attended UM. Betty enrolled in summer school every summer except one and transferred credit toward graduation for two courses she took at a community college one summer. Furthermore, she was able to pay for college entirely with support from her parents and grants. She did not have to take any loans at all.

Today, Betty is not doing anything related to her degree because she is still deciding what path to pursue. She is currently employed in the medical field. When asked what piece of advice she would give to a first generation student beginning his/her journey toward a bachelor's degree, Betty advised: "To ask a lot of questions and to really get involved. I regret I didn't want to get involved with student things on campus. I think that really helps in opening doors when you're out of college."

**Case Summary #3—Bob.** Bob is a Black male who was born in the Caribbean and is a permanent resident of the United States. His parents' highest level of education is some post-secondary education other than college. Bob also has four siblings.

Bob attended a private, parochial high school in Prince George's County, Maryland and completed the college preparatory track offered by the high school. This college preparatory curriculum included four years of math; four years of English; three years of science, and four years of a language. All of Bob's foreign language courses were on the Honors track. In high school, Bob did not give much attention to how the courses he took might prepare him for college nor did he spend much time talking to family, friends or others about courses he should take. He just assumed that because he attended a high school that was considered "college prep" the courses he completed would prepare him for the academic challenges of college. He thought a high school diploma would be all he needed to get into college. Instead, Bob focused more on the SATs because he knew this exam was a prerequisite for college. He performed "fairly well" on the PSATs and, with his mother's encouragement, enrolled in a SAT prep course to help increase his score on the college entrance exam.

Outside the classroom, Bob was very active in extracurricular activities. He played on a varsity athletic team; performed with the orchestra; was a member of an international student association and was active in his church. During his junior and senior years in high school, Bob also participated in a special pre-college program on the UM campus. His mother found out about a summer program that focused on

science and provided high school juniors and seniors with a stipend for participating. Bob's mother discovered this opportunity because she worked on campus, and she would try to get Bob and his siblings involved in "college-related" activities while they were in high school.

Bob primarily credits his parents with his decision to pursue a bachelor's degree. Bob's parents encouraged him to further his education, partly because his mother worked on the UM campus and saw first-hand the opportunities afforded by a college education. Bob also thought that there was always more room for him to "succeed" beyond a high school diploma.

Bob applied to a total of three institutions, but UM was his first choice. His mother's employment at UM and Bob's subsequent eligibility for tuition remission was the main influence in selecting UM as his top choice. Bob was also influenced by UM's proximity to home, and its reputation, not only for academics but also for sports and for being an "all around" good school. Bob credits his parents with influencing his decision to pursue a bachelor's degree, and with helping him through the application process. He recalled his mom always being "on top of me" to fill out and submit his application. She also used her contacts at the University to follow up on the status of his application and to make sure the University had received all the requisite materials. This connection proved useful because, during the application process, Bob's mother discovered that the admissions office had not received anything. As a result, Bob had to re-apply and ask his guidance counselor to re-assemble his transcripts and letters etc. Bob's mom hand-delivered the second application, walking it over the admissions office and ensuring that it was received in

person. This experience created some stress for Bob because, at one point, he really was not sure if he would get into UM.

Bob did not worry as much about finances to pay for college. Because he was aware of the institution's tuition remission policy, Bob was confident that this benefit would be a great financial help. Furthermore, he hoped to get additional financial aid, in the form of grants and scholarships. Bob completed the FAFSA and applied for some financial aid opportunities. While he did not receive any scholarships, he did receive some grant aid.

While in high school, Bob spoke frequently to both his parents and friends about the college application and financial aid processes. Conversations with friends revolved around post-high school plans and, once college applications were completed, where everyone got into school, particularly because many of Bob's acquaintances had also applied to UM. Discussions with his parents were focused more upon what Bob would study once he got to college. Because he was good in math, Bob was trying to decide between majoring in engineering and business, but it was important to him to get a sense of what his parents' expectations were in terms of major and career aspirations. His parents also were very diligent in asking about updates on the status of his application and asking how things were going during his last year of high school.

Bob enrolled in UM's six week Summer Transitional Program in July following high school graduation. After successfully completing this bridge program, Bob enrolled as a first year student and participant in the AAP's SSS program. He entered the University as a Spanish language/literature major.

Bob encountered several academic challenges as he transitioned from high school to college; he was intimidated by the class size and also the lack of individual attention. Bob came from a small high school with an average class size of thirty students and suddenly found himself in classes so large everyone was assigned to graduate assistants who “probably didn’t know your name.” Bob also found both the lack of individual attention and professors’ teaching styles challenging. After spending four years of high school with teachers who made sure students understood the subject matter, Bob was suddenly forced to teach himself course material because his professors would simply read straight from the textbook or from distributed material, all things Bob thought he could do on his own.

Bob overcame these academic challenges primarily by teaching himself the material and by participating in study groups with peers he met through UM-SSS. Bob also indicated that the supplemental instruction classes he participated in while an SSS student were very helpful in transitioning to and succeeding in this new academic environment. He particularly valued the one on one instruction he received from the instructors in these classes.

Meeting frequently with teaching assistants (TAs) was also helpful to Bob in his academic transition to college. He often emailed and met with his TA to ensure that he understood homework, such as problem sets, before they were due. Bob detailed a specific example of a time, late in his college career, where he was having difficulty balancing academic and personal challenges, and he met with a TA in one of his most challenging classes. The TA spent almost three hours reviewing materials with Bob

and answering all of his questions. Bob attributed his academic success in his most challenging classes to this type of faculty support.

His experiences with STP factored greatly into Bob's first two years at the University. Bob indicated that coming in to the University before the "normal" semester started was a valuable experience in terms of making connections with people on campus and giving students a "head start." He also felt that it was very beneficial to come in with a cohort of people who had gone through the same "journey" he had and who, by virtue of participating in AAP had to participate in many of the same mandated activities. To this day, Bob is still friends with some of the people he met in AAP. In terms of the intensive and mandatory classes and activities required of students who participated in AAP's Student Support Services, in retrospect, Bob understands the value of these experiences, but, at the time, he had a negative overall impression of the program. Bob felt like participants were "spoon fed" all the time, being told to do "X,Y, and Z" or you may be kicked out of the program. He also resented the program's mandatory attendance policy.

Even though Bob came into the University as a Spanish language and literature major, he still was interested in majoring in either Engineering or Business. After his two years in AAP, Bob ultimately chose to major in business over engineering because so many people kept saying, "You'll never get into the business school because it is so hard." Bob decided to prove people wrong by completing all the prerequisites for the business school and applying. He ultimately was accepted into this limited enrollment program.



Bob lived at home for his entire collegiate experience; however, he spent a significant amount of time on campus participating in extracurricular activities. Not only did he participate in an academic support program, Bob also was involved with an international association, participated in numerous intramural sports, attended student activities such as football games and athletic events and hung out with friends who lived on campus. Bob estimated that he easily spent at least twenty hours per week involved in extracurricular on-campus activities. In addition to social activities, he also worked as a student office assistant on campus.

Academic challenges were not the only obstacles that Bob faced in his journey toward the bachelor's degree. He also struggled with an issue that he referred to, in our interview, as "the gorilla in the room." While he maintains it did not prevent his ability to learn and he did not feel discriminated against, Bob's classes included few under-represented students. Bob felt this situation forced under-represented students to work harder to make themselves stand out, whether that meant performing at a higher level than their peers or making an extra effort to reach out to a TA or professor.

Bob also faced some personal challenges along the way toward his degree. Because of a budget freeze while he was in school, his mother lost her campus job. Unfortunately, this layoff occurred in the middle of a semester. As a result, Bob had to pay his tuition for the entire semester and then had to find a way to continue paying tuition that, previously, had cost nothing. He was forced to take out student loans and emergency loans. Fortunately, the University re-hired his mother two semesters later, so, once again, Bob was able to participate in the tuition remission program. During

this time, Bob also started learning some difficult lessons regarding credit, since he participated in some of the many credit card opportunities marketed on campus and used these credit cards to purchase the amenities of college life.

Throughout his college career, Bob's family remained very supportive of his goals, and they adjusted well to his role as a college student. Even though he lived at home, his parents gave Bob a lot of latitude by respecting his need to stay out late with his friends and to experience college as it should be. He felt that this change from the tighter regulations they had while he was in high school positively affected the personal relationship he had with his parents.

During his junior and senior years at the University, Bob obtained an internship, started working and started losing interest in school. Consequently, he fell behind in his studies and, at one point, considered dropping out of school. He also failed several courses in his major during this time and had to repeat them. Bob identified his fiancée (girlfriend at the time) as the most influential person in his journey toward a bachelor's degree because it was at this point that she gave him a "reality check." She made sure he realized that he "can't do anything without a college degree." With her support and the support of his family, Bob did persist and earned a B.S. degree in Finance with a minor in Spanish Language and Business. Bob had continuously enrolled at UM for six years, including four summer sessions and three winter terms.

Bob is currently employed in a higher education setting. When asked what piece of advice he would offer a first generation student beginning his/her journey toward a bachelor's degree, Bob said, "Know what it is you want to do, sit down and make a

plan to accomplish that, and don't let anyone derail you from that. Stick to it. Stick to it.”

**Case Summary #4—Erin.** Erin is a Black female, originally from Africa. She has two siblings and is very close to her mother. Erin's father's highest level of education was a high school degree, and her mother attended some college. Erin attended a public high school in Prince George's County, Maryland and was not very impressed with her experiences there. She felt that the teachers were “as lost” as she was, and she did not feel the counselors were very knowledgeable either. As a result, Erin did not know what courses she should take to enroll in college; she just focused on which classes she needed to graduate.

While in high school, Erin completed a college preparatory track of study: three years of English; four years of math, including trigonometry; three years of science, and three years of a foreign language. Erin did not enroll in any honors courses in high school, but she did take an AP class her senior year. While clearly not enthralled with much of her high school experience, Erin indicated that her English courses did aid in preparing her for college and she identified one English teacher as particularly helpful, especially with writing papers. Erin participated in numerous extracurricular activities, including singing with her church and the high school choir. She spent a summer working as an office assistant at UM, and she also participated in a pre-college program that prepares talented high school youth for college. Erin participated in this program in eleventh grade, but did not find it very helpful because, at the time, she was not really thinking about college.

Erin did not decide she was going to go to college until she was in twelfth grade. In fact, at one point, she even doubted whether she would be admitted anywhere because of her poor performance on the SAT exam. She took the SAT during eleventh grade and earned a total score of 600. Even though Erin was very unhappy and concerned about her performance on the college entrance exam, her mother encouraged her to continue to apply to colleges. Ultimately, Erin decided to apply to college not for herself, but for her family. According to her, she did not know what having a bachelor's degree really meant, but knew her family wanted her to "have one."

Most of Erin's information about how to apply to college and how to obtain financial aid came from her mother, who worked at UM. While Erin's mother provided much of the information about how to apply to the University, Erin's sister helped her with preparing for the SATs and with completing her application. Erin's sister was unable to go to college when their family first came to the U.S., so she provided a great deal of support and encouragement to Erin during the application process. Erin really did not talk to anyone outside her family about going to college, mostly because she felt her teachers and counselors were neither helpful nor knowledgeable about the process.

Erin applied to one other institution, but UM was her first choice. Erin's primary motivation for choosing UM included its proximity to home; the fact that her mother wanted her to attend the University; the financial assistance available; UM's academic reputation, and her impression that graduates from UM get good jobs. Erin was ultimately accepted to the University through AAP's Summer Transitional

Program and was eligible for tuition remission because her mother was an employee of the University. However, Erin still had concerns about how she would fund her education because her mother was a single mother with two other children. Erin was not sure how her mother would fund expenses outside tuition, like the residence hall costs, food, a computer etc. Erin's mother insisted that she not worry about those issues. She told Erin to, instead, focus on getting admitted. At the time of her enrollment, Erin was considered a "low-income" student under federal guidelines.

Erin graduated high school with an un-weighted GPA between 2.0-2.5, and enrolled in UM's AAP Summer Transitional Program the summer following graduation. Erin earned four college credits during this six week summer bridge program and, in the fall, was admitted to the University as a student in the Student Support Services program. Erin applied to the University to be an Art Studio major, but started her studies intending to major in Math.

Erin encountered a number of difficulties adjusting to college, both academic and social. The term that Erin repeatedly used to describe her first three years at the University was "lost," primarily, she says, because she had gone to school to please family members, not herself. Academically, she struggled quite a bit. She performed poorly in a number of classes, and changed her major several times. First, she thought she would be a math major, then an accounting major, then a communications major. Finally, after a life-changing experience, Erin discovered her passion--writing, and settled on English as her major.

Erin's academic performance suffered as she searched for her niche. During her sophomore year, Erin was put on academic probation, and this was very difficult for

her. She continued to take courses in subjects she thought she'd excel in, like math, but then found herself struggling, unable to grasp the material. During this critical period, Erin received much of her academic support through AAP. After being placed on probation, Erin participated in mandatory counseling/advising through AAP twice per week and also received tutoring from the college study skills coordinator and met with peer tutors for a number of courses as well.

This cycle continued until her junior year, when Erin took a creative writing class with a faculty member who made a lasting impression upon her. Erin had always loved to read, but never actually thought she could be a writer. Then, in one of her communications classes and after reading one of her papers, a professor said, "You know, why don't you be a writer?" She thought about this idea for awhile, and the next semester Erin began taking creative writing classes. Through these classes, she met other faculty members, two in particular, who showed her "the beauty of fiction from a writer [sic] perspective."

Erin began spending a great deal of time in her English professors' offices and also in the English department. She said the English department provided a great deal of counseling, particularly in terms of courses she needed to complete her degree and the grades she needed to maintain. Her professors continued to help Erin develop her writing style by suggesting writers to read and providing support after class and during office hours. Now that she had found her niche, Erin continued working toward her bachelor's degree; however, she still struggled with some social challenges.

When Erin first came to UM, she encountered difficulties adjusting to college life. In our interview, she described herself as “introverted” and explained that, for most of her life, she had not been comfortable talking in front of people. Because of her shyness, Erin had a hard time living away from her family. Sharing personal space with a virtual stranger in the residence halls also made Erin very uncomfortable.

Erin did become socially involved on campus through extracurricular activities and participation in AAP, and these experiences helped in her adjustment to college life. Erin’s freshmen year roommate, also a fellow AAP participant, ultimately became a very close friend. They are still friends today, even though Erin moved to another state after graduation, and her friend remained local. Erin also credits AAP with creating an environment that was “comforting and warm.” Because she felt comfortable in this environment, she made a number of friends through the program.

During her time at UM, Erin also lived both on and off campus. On campus, Erin lived in the residence halls. During her junior year, Erin applied to and was accepted to participate in a living/learning program for writers. Erin spoke glowingly about this experience. Her roommate was a poet, whose work she enjoyed reading; she loved the writing classes she had with professors in the program and enjoyed meeting visiting writers. When she lived off campus, Erin lived with her family. Additionally, Erin spent approximately three hours per week participating in an international student association, a group that held regular social functions/activities.

Erin’s family was very supportive and encouraging as she made the transition to college, but her mother missed Erin just as much as Erin missed her. The two talked

on the phone numerous times each day, and Erin talked to her mother in person on a daily basis as well, since her mother worked at UM. Erin also maintained her relationship with her small circle of high school friends. They all went to college in the area, so they still saw each other on weekends and spoke regularly on the phone.

During her time at UM, Erin gained most of her information about the financial aid process and her yearly award through her mother. Erin's mother essentially handled all the financial aspects of college, and often her older sister would also get involved. Erin thought that she probably started filling out the FAFSA by herself halfway through college. She did work during school, but not until senior year. At that time, Erin worked approximately 12 hours per week as a federal work study student.

Erin remained continuously enrolled at UM throughout her entire academic career; enrolled in summer school every year, except one, and graduated with a B.A. in English. She is currently pursuing a master's degree in writing. When asked what piece of advice she would offer to a first generation student beginning his/her journey toward a bachelor's degree, Erin said, "It's kind of cliché, but don't take anything for granted...."

**Case Summary #5—Jane.** Jane is an African-American female who is an only child and is very close to her parents. She comes from a low income background and can be considered a first generation student because neither of her parents earned a baccalaureate degree. Her father is a high school graduate, and her mother attended some college. For high school, Jane attended a private boarding school in Maryland as a day student. While in her first year of high school, Jane suffered a devastating



loss when she tragically lost her cousin and both grandparents within a two month span. The period following this loss was personally difficult for Jane and, as a result, her grades suffered during her freshman year.

While in high school, Jane completed a college preparatory curriculum, including: four years of math; four years of English, three and one-half years of science and the equivalent of three years of a foreign language. She did not enroll in any advanced placement, honors or international baccalaureate (IB) classes. When asked about her high school academic experiences, Jane indicated her academic preparation was very rigorous. She would frequently spend two to three hours per night studying for one class. During high school, Jane was also very involved in extracurricular activities that included but were not limited to participation in a cultural club, an ethnic student association, athletics, church activities and study abroad. Jane graduated from high school with an un-weighted GPA between 2.0-2.4 and earned a total SAT score of between 900-1000.

Jane could not pinpoint the exact moment she decided to go to college because her parents always pushed education. She said the idea that she would go to college was “instilled in her as a kid.” Three factors that influenced Jane’s decision to apply to UM were: (1) its proximity to home, (2) cost, and (3) the fact that her cousin who passed away attended UM for a short time before transferring to another institution.

Jane received minimal help from a guidance counselor at her high school when applying to college and obtained information on financial aid/completed the requisite financial aid paperwork on her own, with support from her parents. While in high school, Jane spoke frequently to her parents, particularly her mother, about financing

her college education. Jane applied to a total of four colleges/universities and was conditionally accepted to the UM through AAP's Summer Transitional Program.

In the summer following high school graduation, Jane enrolled in STP. After completing the six week bridge program, Jane was admitted to UM as a first year student and participant in the UM-SSS program for the fall semester. She began her college career intending to major in history, but, in her words, "that didn't last long." Ultimately, Jane majored in criminal justice and was motivated to switch to this major because she enjoyed readings associated with this subject and was fascinated by TV shows like FBI Files.

Jane credits AAP with helping her adjust to college and with "setting the foundation" for the help she received academically while she was at UM. Jane explained that the biggest challenge adjusting to college was the transition from a small school where "I was just catered to" to "a place where if you want to be known, you have to make yourself known." She specifically referred to AAP's one credit counseling classes, academic support classes and network of friends established through the Program as integral to her adjustment to such a big campus. Jane also felt that AAP helped further develop her self-confidence and provided the tools to establish networks and utilize resources throughout her tenure at UM.

Jane spoke more positively about her collegiate academic experiences than her high school academic career; however, she did indicate that her most challenging experience at UM was passing her Economics and Statistics classes. Jane failed one of these courses and enrolled in a later semester, but then withdrew. She initially earned a "D" in another required course, but, subsequently, re-enrolled, earning an

“A+.” In fact, Jane’s graduation was delayed from the spring semester to the summer of her final year because of the course she had to re-take.

Jane lived in University housing during her entire college experience. For the first several years, she lived in the on-campus residence halls; during junior year, she moved to an off-campus University owned apartment. Jane participated in extra-curricular activities while at UM. In particular, Greek life became a big part of her social world. She joined a sorority during her sophomore year and then became an officer for the Panhellenic Council. She spent anywhere from 10-20 hours per week on her involvement in extracurricular activities, which primarily revolved around Greek life. When asked about some of her most challenging experiences in college, Jane indicated that she did not have too many “personal” things happen, but she did have some academic challenges resulting from balancing her time commitment between studies and her commitment to her sorority. Jane indicated that her GPA was negatively affected when she first joined the sorority because she was so involved and had difficulty managing her time.

Jane’s mom was “anti” work-study because she wanted her daughter to focus on school and not worry about work, so Jane initially did not work while she attended UM. Instead, her mom gave her an allowance, which continued until she graduated. However, starting her junior year, Jane began working various jobs both on and off campus for a total of 20-30 hours per week. The on campus jobs included student office assistant positions, while off-campus jobs included various retail work. Jane worked these jobs primarily for additional spending money, not to pay tuition or

room/board. Jane's parents had not saved money for her to attend college, and loans ended up representing a substantial portion of her financial aid package.

Jane's parents were very supportive of their only child prior to and during her college experience. Jane identified her mother as the person who had the greatest influence on her success in completing the bachelor's degree because her mom worked so much to make sure that Jane would be "comfortable" and have the things she needed to achieve her goal. While she was at school, Jane's mom also showed support by bringing home-cooked meals to her every week and picking up Jane's laundry. During college, Jane talked to her mother every single day.

Besides her family, Jane surrounded herself with supportive friends, spending the majority of her time with friends in the AAP program, other high school friends who attended UM and, later, friends from her sorority. When she began her college career, Jane had a boyfriend who did not adjust well to her new life because he thought she would forget about him. While that relationship did not last, Jane likes to think she did have a positive influence upon him because they are still friends; he ultimately did decide to go to college, and he will receive a bachelor's degree this year.

Jane enrolled in courses continuously throughout her college career, including summer sessions every year and a Winter term course during her last year of study. Jane graduated in four years with a bachelor's degree in Criminal Justice. She is currently pursuing a graduate degree in forensic science and is employed full time in the criminal justice field. Because she is enrolled in graduate school, Jane still has not paid back her loans, but she has already started a college fund for any children she

might have in the future. When asked what piece of advice she would offer to a first generation student beginning his/her journey toward a bachelor's degree, Jane said, "study and be motivated."

**Case Summary #6—Jim.** Jim is an African-American male who has two siblings. Both of his parents had earned high school diplomas, and his father owns his own business. For as long as Jim could remember, his parents, and particularly Jim's father, stressed the importance of going to college and "getting ahead in life." Jim attended a public high school in Howard County, Maryland.

Jim completed the college preparatory curriculum at his high school which included: four years of math (including college algebra and trigonometry); four years of English; four years of science; and three years of a language. Jim also completed two honors courses, one in English and one in Social Studies. Jim really did not know what courses he should be taking to prepare for college. Family members and counselors told him to "take what you want." In the end, it was friends who encouraged Jim to take "harder" classes. In his junior and senior years and after other students encouraged Jim to challenge himself more, he started thinking, "Maybe I should take some harder classes," and enrolled in honor courses. At the time, Jim did not know about AP courses or understand their significance in earning college credit. Jim was also very active in extracurricular activities in high school. He participated in athletics and was a member of both a band and a choir. Jim graduated from high school with an un-weighted GPA between 2.5 and 3.0. His total SAT score was between 900-1000.

When it came time to apply to college, UM was one of Jim's top choices. Jim was primarily attracted to UM because of its name. He also found its proximity to home and the opportunity to be part of a "big campus" very attractive. However, Jim's high school counselor discouraged him from applying to UM. She argued that Maryland might be too big for Jim and suggested going to a smaller school. Jim did not take the advice of his high school counselor and applied to UM for admission.

Throughout the application process, Jim talked to both his parents and friends/acquaintances about the schools to which he was applying. His high school counseling center and assigned counselor also provided information about the application and financial aid processes. At the high school, Jim attended mandatory meetings that focused upon how to apply to college; however, students were on their own to obtain the actual applications. Jim also took an SAT prep class after he did not perform as well as he had hoped the first time he sat for the SAT exam.

As far as financial aid options, Jim admitted that he did not spend much time investigating financial opportunities. He knew about scholarships and sometimes spoke to friends about them, but, for the most part, did not pay too much attention to obtaining financial aid. Jim's father had indicated that he would take care of college costs, so Jim did not worry about how he would pay for college.

After graduating from high school, Jim began UM's AAP Summer Transitional Program during the second half of the summer. He earned four credits during the six week bridge program and was accepted as a full-time UM student in the SSS program in the Fall. Jim credits this summer experience as the biggest influence on his education. The bridge program helped Jim prepare for the academic challenges of

college, in terms of course load. The summer program was very intense and, for Jim, was actually harder than his first full semester at the University. His summer experience also helped Jim get accustomed to navigating the campus.

Jim chose to enter the University as a Kinesiology major because of his interest in sports and similar activities. Prior to finalizing this decision, Jim spoke to his mother and to one of his STP instructors about choosing a major. During his second year at UM, Jim encountered some difficulty when he tried to pass Biology, a requirement for the major. Jim said Biology was the “toughest class ever for me.” He withdrew the first time he took the class in the summer, re-enrolled in the fall and withdrew again because, as he said, “I just couldn’t do it.” After this experience, Jim consulted the course catalog to review his options and ended up choosing to major in Family Science as his only viable alternative to Kinesiology.

Jim’s overall adjustment to college involved a series of up and down experiences. At times Jim thought college was easy and even felt relaxed at times, but other times, particularly during what is commonly referred to by college students as “crunch time,” when he had to prepare for multiple tests at one time, things became very stressful. Jim would also become very agitated if he did not understand the material in a particular course. To deal with the stress, he would spend more time on campus studying at the library. At one point, he also received guidance on speaking in front of groups and “calming down” from the study skills coordinator in AAP. While teachers and his parents would encourage Jim, he really felt that it was his own drive that got him through these challenging times. Another decision Jim made to propel

him forward through his undergraduate experience was to enroll in summer school. Jim took classes during three summer sessions over the course of his tenure at UM.

Jim lived at home as a commuter student throughout his entire college career and often felt that he was missing out on social activities. He would attend class, finish his homework on campus and then go home. Jim did participate in some extracurricular activities, averaging about ten hours per week, mostly during his first two years at the University. Each Fall, Jim would participate in intramural sports, and he also participated in a cultural organization which met once per week. At some point, this experience became boring for him and he stopped attending. Jim also participated in several religious groups throughout his experience at UM.

During the second half of his college career, Jim worked approximately thirteen hours per week for his father's company. He also held a part-time job on the weekends as a test administrator and completed an internship as one of his major requirements. As far as financial aid, Jim would make occasional trips to the UM financial aid office to obtain information, but he did not end up taking any loans or grants to pay for college. His father paid tuition and all other costs associated with school. Both Jim and his parents had saved money before he started college, and he did earn a few scholarships in high school, all of which were applied toward his tuition bill.

Jim's parents had strongly encouraged Jim to go to college and continued to support him once he was there. Jim describes his family's adjustment to his life at college as "pretty natural." He also had support from friends, since most of his closest friends went to schools very similar to UM. Academics was also a big priority for



many of Jim's friends, so it was normal for he and his friends to talk about school. Socially, Jim spent the most time with a friend he had met in a religious group during his second year at UM. As a result of this friendship, Jim became active in a new religious group during the second half of his career at the University.

When asked who had the greatest influence upon his successful completion of the bachelor's degree, Jim said it was difficult to identify just one person. In fact, he said that the greatest influence came from within. Jim said that he always dreamt about crossing the stage at graduation and wearing "the robe." He earned his bachelor's degree in Family Science four and one half years after enrolling at the University. He had remained continuously enrolled throughout his entire time at the institution.

Currently, Jim is working toward a master's degree in social work. While he is in school, he continues to work for his father's business. When asked what one piece of advice Jim would offer to a first generation student beginning his/her journey toward a bachelor's degree, he said, "I guess it depends upon the person, but the one thing I would tell them to do is...stay focused. There's so many distractions in college...everybody knows about them, but bottom line I think is just to stay focused."

**Case Summary #7—John.** John is an African American male with two siblings, one older and one younger. Both of John's parents had attended some type of post-secondary education, but neither had earned bachelor's degrees.

John began his high school career in a private parochial school, but finished his last two years in the D.C. public schools. He followed a college preparatory

curriculum, but, with the exception of English class, did not believe his courses really prepared him for college. John completed four years of math; four years of English; four years of science, and two years of a language. He took one advanced placement English course.

John remembers that his English teacher expected a great deal from him, and, as a result, he was driven to do well in her class. He also recalls his private school coursework as significantly more rigorous than the last two years of courses.

According to John, he used the skills and information learned from his freshman and sophomore year to “coast” through junior and senior years. As far as extracurricular activities, athletics was an important part of John’s life in high school. Besides sports, John also participated in a pre-college access program and worked while attending school. John graduated from high school with a grade point average between 1.5 and 2.0 and a total SAT score between 900 and 1000.

When the time came to apply to college, John depended mostly upon himself to complete the process. He received some help from his pre-college access program; in particular, the program paid for his UM application fee waiver and provided scholarship money. The mission of the program was to encourage students who attended public schools in Washington D.C. to go to college.

John’s parents valued education and showed their commitment by investing in the education of all their children—whether it was sending John to an expensive private school or paying the tuition for his older sister to attend an ivy league institution. Because of this stress on education, John always assumed he would attend college. Besides his parents, others also had high expectations for John. His

athletic coach, teachers, teammates and parents of teammates all expected and knew he was going to go to college. Because of their high expectations, during the college application process, John just started telling people he had been accepted to an Ivy League institution because he thought that was what they wanted to hear. Once accepted at UM, he just told everyone he had chosen to go to Maryland instead.

John spoke only occasionally to his parents about going to college, and most of the questions revolved around where he wanted to go and how the application process was unfolding. John already had a sister who was attending a highly selective institution, so he felt pressure about attending a college that was not “too far below” his sister’s. He applied to a total of three schools, but UM was his number one choice. UM seemed like a “good mix” to John because it was a highly regarded school, but easier to get into than some of the elite institutions. He also liked UM because of its athletic reputation, particularly for basketball, and its proximity to home.

John was accepted to UM through AAP’s Summer Transitional Program. He successfully completed this program and entered UM as an SSS student in the Fall. He entered the University expecting to major in business.

John had difficulty adjusting to college, especially in relation to academics. He remembers, “When I first got there, everything was, like, in another language to me. I mean I failed everything.” In fact, John did struggle academically his first and second year, failing courses and being placed on probation. John felt that he spent his time “treading water.” During this period, he did go to the Writing Center and worked with the math department at AAP to help with papers and classes. While John knew

these individuals were knowledgeable about their subject areas, their teaching styles did not work well for him, and he gained little from them.

Additionally, John felt he had to deal with discrimination on a number of levels. First, John's experiences with UM confirmed to him that the higher education system is set up for a certain type of student, one that is not a minority and whose socio-economic status enables them to come into the system with coursework, credits and knowledge that only certain schools and money can provide. John specifically chose to attend a PWI versus an HBCU because he had learned "the school with the most white kids is going to prepare you for the world because, I guarantee you, the people I go against in the work field are not always going to be minorities. That's how it was explained to me through my parents and that's how I interpret it, so therefore Maryland was a great evaluation for how I compete against, you know, Billy, Jim and John." He got frustrated when he sat in classes where students showed up every once in awhile and got Bs, while he was struggling, or other students who came in with AP credits. He did not have the opportunity at his high school to earn advanced placement credit.

John also had to deal with instructors who discriminated against students in AAP. He recalled one instructor in particular who had once worked with AAP, but no longer was affiliated with the program. According to John, this instructor failed every AAP student in the class, including him. After that experience, John started to look more discriminately at the courses and instructors he chose. He began enrolling in courses that large numbers of athletes took because he was sure that teachers would not fail athletes. He also began taking more summer courses because John felt

summer classes were easier than the classes taught during the academic year. Even with these tactical decisions, John admits he was focused on “having fun” and did not care much about the academic “stuff.” Ultimately, he was dismissed at the end of his second year. At that point, he took a semester off to work full-time. He then began taking courses at a community college, while maintaining a full-time work schedule.

John describes himself as an individual who has a great deal of common sense and is “street smart.” He relied heavily on these abilities to navigate his college experience. During his two year absence from UM, he learned two valuable pieces of information: how to maneuver the transfer credit system between community colleges and UM and how to start breaking down information in classes so that he could understand it.

He learned about transfer credit information on his own. He did receive some help from an advisor and instructors at the community college. Perhaps the most important information he learned was that he only had to attend UM for his last thirty credits in order to graduate from the institution. Based on this information, he spent a great deal of time investigating which courses would transfer. He successfully transferred credits equivalent to a full year at UM. While he still ended up enrolling in more than thirty credits in order to complete his major, John had saved a great deal of money by attending the community college and had managed to boost his grade point average and even made the Dean’s List at UM.

When John returned to UM two years after being dismissed, he entered as a Criminal Justice major. John chose this major for a variety of reasons. Growing up, he wanted to be a Secret Service agent, but, more importantly, Criminal Justice was a

popular major and, in John's opinion, many of the courses were based upon common sense. This was important to John because, as he said: "If I had a choice between a major that was based on my common knowledge as opposed to one I have to actually learn, I'm going to take the major that I have a grasp in, and I had a natural grasp of criminal justice."

Also when he returned, John spent his last two years at UM living at home. The first part of his career at UM John had lived in the residence halls. John chose not to participate in extracurricular activities at UM because he felt that many of the people he met were "groupies." Instead, throughout his tenure at UM, he spent most weekends going home to hang out with friends from high school and his neighborhood. He also spent a great deal of time working. During his time at the community college and his last two years at UM, John worked full-time off campus.

John did not have to worry about paying for college; his parents covered expenses related to his education. John did not even realize how loans worked until his junior and senior years. John admits he did not take the funding of his college education very seriously.

During college, John's parents and friends were very supportive of his goal of earning a bachelor's degree and did not have too many difficulties adjusting to his role as a college student. John's mother missed him when he lived away from home, but she still saw him a great deal because he was home on weekends to see friends. Some of his friends were at college on athletic scholarships; some had flunked out of college and others had pursued opportunities other than college. However, all of John's friends were very proud of the fact that he was at UM.

On campus, John established a strong relationship with his SSS counselor and with the Associate Director of the UM-SSS program. John describes the associate director, “like a mother to him [his counselor] and a grandmother to me.” John felt that the associate director really wanted to see him succeed, and she was one of the reasons he decided to return to Maryland. His counselor was a Black male who also was from D.C., who shared many of John’s philosophies and, out of this, they formed a powerful bond.

Amidst all this support, John identified his mother as having the greatest influence on his successful completion of the bachelor’s degree. He specifically recalled an episode that occurred in the semester that he was not in school. At one point, John said: “Maybe I’ll just work a job and go about my life.” His mother answered: “No, don’t say that; you’re going to finish school.” She said it only once and, from that point, John determined that he would graduate for her.

John faced his greatest challenge during his last semester at UM. He mistakenly registered for the wrong class and found out after he dropped it that he was short one course for graduation. As a result, John was able to walk in the May graduation ceremony, but had to make up the last course during the summer, with no financial aid support. John’s greatest disappointment with this challenge was that his name was not included in the graduation program. He returned to campus the following fall, specifically to secure a program with his name in it.

Including the semester he took off, the time he spent at community college and consistently enrolling in summer term courses, John graduated with a bachelor’s degree in Criminal Justice in six years. His mother’s support meant so much to him

that, after graduation, John gave her a copy of his diploma. His advice to first generation students embarking upon their journey toward a bachelor's degree is: "...if they choose to accept this challenge, they're doing it for a reason, and if that reason is a valid enough reason for you to honestly...go through, probably honestly, the hardest four years of your life..if your reason is that, validate it and don't ever quit."

**Case Summary #8—Karen.** Karen is a Caucasian female who grew up in Maryland with both her parents and a younger brother. Both of Karen's parents earned high school diplomas, but neither attended college.

Karen attended a public high school and enrolled in a college preparatory curriculum. In high school, Karen completed four years of English; four years of math, four years of science, and the equivalent of four years of a foreign language. During the course of her studies, Karen took twelve honors courses, including math, science, social science and English courses, and three AP courses in psychology, literature and algebra. She did not take the AP qualification tests for any of these subject areas because Karen had test anxiety and was convinced she would not pass. Additionally, Karen only took the SAT because she knew it was a requirement for college admission. Her total SAT score was in the 900-1000 range.

Karen was extremely active in extracurricular activities during high school, particularly in sports. She competed on two high school athletic teams, played club sports and participated in a summer swim league. She also spent a year participating on the pompon squad and, at various times during high school, served as manager of several athletic teams. Additionally, she spent three years working as a counselor in a camp for underprivileged children.



Karen knew that she wanted to be a teacher when she was in fifth grade. It was at the same time she determined she would go to college, because Karen knew that was the only way she could be a teacher. Her parents played an important role in keeping her “on track” for college, specifically, by keeping the “pressure” on to meet homework deadlines and by editing papers and helping with her homework throughout school.

Much of Karen’s information about applying to college and accessing admissions applications came from her own research on the internet. Her high school had a career center and colleges/universities from the area sent representatives to visit the school. Karen only went to one of these talks because they were held during lunch, and she was unwilling to give up her lunch period. She also spoke with many of her friends, particularly those involved in sports, about applying to college. These discussions mostly focused on dealing with how stressful the application process was, reassuring each other that they all had completed the steps necessary to apply and discussing “plan B” if they did not get into their first choice schools.

Karen and her parents did not initially agree on the institutions to which Karen applied. She was determined to go out of state, but her parents insisted that it would be too expensive, and they were assuming the cost of Karen’s education. After extensive discussions with her parents, Karen applied to six schools, with UM as her first choice. Karen identified the following factors as critical to choosing UM as her first choice school: academic reputation, social reputation, cost, her visit to campus, and the impression that UM graduates get good jobs.

Initially, Karen was rejected by UM. Following receipt of her rejection letter, she and her parents spent a great deal of time discussing the feasibility of attending a community college and transferring to UM. Then, she received a letter offering conditional admission at UM if Karen successfully completed AAP's Summer Transitional Program. Because she and her family did not know very much about this bridge program, they debated the worth of pursuing this avenue of admission. Ultimately, she enrolled in STP, but also accepted admission to another, local four year university as a back-up plan.

Karen's involvement in finding out how to pay for college was minimal. Her father handled all issues related to this aspect of the college choice process and paid for her entire education. Prior to and throughout her college experience, Karen never even filled out the FAFSA. Her father thought it would be a waste of effort to complete the time consuming process because, on paper, they would not qualify for any aid. Karen believed her parents had saved some money toward her education and invested it in mutual funds.

Karen graduated high school with a GPA between 3.0 and 3.5, and she successfully completed the UM Summer Transitional Program in the summer immediately following graduation. She entered the University through the UM-SSS program that fall and planned to major in education.

Karen approached her adjustment to college as a "step" and did not find any particular aspect of the transition to college life particularly challenging. From the beginning of her college career, Karen made sure to involve herself in many activities and to seek out support where she needed it most. Academically, while at UM, Karen

never changed her major, never earned a grade below a “C” and, from the beginning, was focused upon the goal of graduating in four years. To accomplish this goal, she relied heavily on services from the UM-SSS program, enrolled continuously in summer and winter term courses (with the exception of the summer prior to senior year) and surrounded herself with strong social support from peers and family. During one summer, she even enrolled at the local community college to complete and transfer core requirement courses.

Karen felt that participation in UM-SSS helped her maintain a sense of balance and kept her on track during her first two years at the University. Even though she had several advisors throughout her experience with the Program, and one of her early advisors enrolled her in courses she did not need to take, Karen still believed that the tutoring and academic support services, combined with networking referrals, helped her adjust to academic life at UM. Karen also particularly cited the helpfulness of the UM Writing Center when drafting papers for class. She found out about this center from staff in AAP. Karen also valued the opportunity she had to “talk out” the material she learned in class through the extra tutoring and study sessions that AAP offered.

Karen indicated that her experiences with AAP helped her develop confidence as a college student because she performed so well in the program and was surrounded by people who supported her goals. She referred to AAP as her “home away from home.” Karen particularly valued her peers in the program because they were going through the same experiences as she. She referred to her peers in the program as a “support group” because they all talked together and studied together. Karen often

felt more comfortable going to her peers in this group to work through problems than approaching higher officials because the students could relate to each other more effectively.

Besides her participation in an academic support program, Karen became actively involved in other extracurricular activities from the beginning of her college experience. She participated on a club sports team all four years, joined a sorority during the second semester of her freshman year and participated in a community service organization her junior and senior years. Additionally, she chose to study abroad for a semester. Karen identified her involvement with the community service group as a “changing” experience because it enabled her to feel she was making a difference in the world through peaceful activism.

Karen lived both on and off campus during her four years at the University. She lived in the residence halls, in a sorority and in an off-campus house with friends. She did not work consistently through her college experience, but, during her junior year, held an off-campus position at a restaurant to earn some extra spending money.

Karen’s friends did not have any particular issues adjusting to her role as a college student;; however, her family did have some difficulty with her new independent role. Karen’s father was use to knowing her schedule and activities and struggled with her newfound independence. Her mother also had to adjust to the fact that her older child no longer lived at home.

A self defined “very focused individual,” Karen made it clear that she came into her college experience with the specific goal of becoming a teacher and graduating in four years. When asked who had the greatest influence upon her successful

completion of a bachelor's degree, Karen said, "Me, myself. I mean I could say my dad, he paid for it, but he didn't do it. I did."

Karen did achieve her goal of graduating with a bachelor's degree in four years. Today, Karen enjoys her career as a teacher, and the advice she offers to a first generation student embarking upon his/her college career is "Just work hard and go for your goal because you can do it."

**Case Summary #9—Lynn.** Lynn is a Latina female who has two siblings. Both of her parents' highest degrees are high school diplomas. Lynn attended a public high school and participated in a business program "track" versus the traditional college preparatory curriculum. As part of this program Lynn completed four years of English; four years of math, including trigonometry; three years of science and three years of a foreign language. Additionally, she took courses in accounting, finance and computers. Lynn did not complete any honors or advanced placement courses. She graduated with a grade point average between 3.0 and 3.5, but below the top 50% of her class. She scored between 800 and 900 on her SAT exam. While in high school, Lynn participated in several business related organizations affiliated with the school and within the community. She also competed as a high school athlete and volunteered in the community.

Lynn knew that she definitely wanted to go to college somewhere between ninth and tenth grade. Participation in her high school's business program served as a strong factor in this decision because Lynn decided she wanted to pursue a career in business. Lynn's working class roots were also a factor in her decision to attend

college. She knew that she wanted to have more opportunities and realized a college degree would help her achieve some of her goals.

Because neither of her parents had attended college, Lynn had to find most of the information about applying to college and securing financial aid on her own.

Fortunately, her high school counselor proved to be a valuable source of information during the college choice process. Lynn would visit her counselor's office, and the counselor would provide information on different scholarship opportunities and encourage Lynn to apply for them. The counselor also explained the FAFSA process to Lynn during her senior year of high school, so she could apply for federal student aid. Lynn also conducted a great deal of her own research online. She would go online, locate and apply for scholarships, as well as secure admissions information about different schools. She started with general searches for college and scholarship information and then narrowed these searches down to more specific information.

Lynn spoke frequently to both her parents and friends about applying to college and, more specifically, about how to pay for her college education. Education is very important to Lynn's parents, so they assured her that they would figure out a way to pay for college, even if they had to take out loans. Most of Lynn's closest friends also planned to pursue higher education, and their conversations often revolved around what to major in and the merits of attending a private versus public institution.

Lynn ultimately applied to five schools. UM was her first choice, primarily because it was in-state and close to home; it offered a large number of programs and it had a diverse population. Prior to applying, Lynn had researched the institution on the internet, read brochures/mailings she had received and had visited campus. She

could see that there was a great deal of student and community involvement and this, too, was an important factor in her college choice decision.

She was not initially accepted to UM but was referred to AAP's Summer Transitional Program. During the summer immediately following high school graduation, Lynn completed the STP bridge program and successfully gained admission to the University for the fall. Lynn began her freshman year as a SSS participant and planning to major in accounting.

Lynn faced both academic and social challenges as she adjusted to college life. One challenge in particular was the academic workload. Sometimes Lynn struggled to balance her time when she had several papers due in one week, along with all her other homework. Her experiences with STP and the UM-SSS program helped her deal with this adjustment. Both in the STP program and during the first year of the UM-SSS program, Lynn took study skills courses that included time management components. In these courses, Lynn learned strategies to use on her own. These tactics, combined with talking through issues with peers, helped Lynn deal with this challenge throughout her college career.

Additionally, Lynn struggled with her math classes and had a very difficult second year because she failed several other courses. In response to these trials, Lynn attended tutoring through AAP and met with her professors for help with both math and the courses in which she struggled. It was during this period as well that Lynn began to realize she did not really enjoy her business and accounting courses. Lynn's UM-SSS advisor referred her to the career center. Advisors at the center helped her explore career interests and options, and she discovered that majoring in

communications could also provide inroads to business careers. As a result, Lynn changed her major to communications at the end of her second year.

Adapting to such a diverse campus population also posed a challenge for Lynn. She came from a high school that primarily served Latino and Black populations and, suddenly, she was exposed to many different cultures. Lynn did not view this as a negative experience, just something new. The AAP department provided a “safe” place for Lynn to learn about other individuals, whether they were from diverse socio-economic or ethnic/racial backgrounds. She embraced this opportunity and broadened her world view simply by talking to her peers and learning about them. At the same time, AAP also provided a place where she could seek out those who had similar backgrounds, specifically those who had the same life experiences, were of the same ethnic background or were the oldest child/sibling in their families.

Lynn lived in University housing both on and off campus throughout her time at UM. During her first two years, she lived in the residence halls, then moved to University owned apartments off-campus for the remainder of her enrollment. She also participated in extracurricular activities. Lynn continued her commitment to community service by participating in a service learning program. This program combined relevant coursework with community service projects. She also continued service within her home community throughout her time at UM. To earn spending money, Lynn also assumed a part-time, on-campus job.

Senior year became a very stressful time for Lynn. One of the primary reasons for this stress was due to the manner in which she had financed her education. Lynn’s college expenses had primarily been paid through student loans. She had also



received some grants (e.g. Pell grant), but these monies represented a smaller portion of the funding. During her last year, Lynn began dealing with the harsh reality that she needed to find a full-time job to start re-paying her loans.

Lynn's family was very supportive of her desire to earn a bachelor's degree, but the adjustment to her role as a college student was difficult for all of them. She was the oldest child, had younger siblings and had never been away from home for extensive periods of time. Ultimately, everyone took some time to adjust to the change from Lynn, the dependent child, to Lynn, the independent college student. Lynn's friends had much less difficulty adjusting to her new life. Many of them went to college out of state, so her move to campus was not a shocking change.

While she maintained relationships with high school friends, Lynn also met new people at UM, with whom she spent a great deal of time. She made a number of friends through AAP and also became close friends with her freshman year roommates. Today, she still remains close to these individuals. Although her friends were an important part of her college experience, Lynn identified her mother as the person who had the greatest influence upon her completion of the baccalaureate degree. Lynn credits her mother with teaching her and her siblings the value of an education and inspiring Lynn through her hard work.

Determined to achieve her goal, Lynn enrolled continuously and took summer school courses every year that she was at UM. She successfully earned her bachelor's degree in Communications after five years. Today, she works in the marketing field. The advice she would give to a first generation student starting college is, "pursue [your] goals and although at times it may seem as if those goals are impossible to

reach, they're really not if you set your mind to it and you really work hard for it and you have individuals that are very supportive of you.”

**Case Summary #10—Mary.** Mary is a Black female who is a first generation student. Her father’s highest level of education was a high school diploma, and her mother had completed some high school. Mary is the youngest of eleven children. Her father passed away when she was in middle school, and Mary is very close to her mother. She spent her early childhood in the Caribbean, but, like her siblings before her, was sent to the United States to attend high school. While Mary was in high school, her mother left their home in the Caribbean to join her children in the U.S. The family rented an apartment in Maryland, and Mary’s mother worked hard to support Mary and her siblings.

Mary attended a public high school and completed a college preparatory curriculum. Her coursework included four years of math; four years of English; four years of science, and two years of a language. Mary also enrolled in honors classes, but decided not to take advanced placement courses because she was working and participating in extracurricular activities. She did not want to be “bogged down.” Looking back, Mary acknowledged she is an overachiever and thinks perhaps she was just scared about performing well in the challenging courses. She graduated high school with a grade point average between 3.0 and 3.5, and her total SAT score was between 800 and 900. Mary began working to help support herself and her family during her freshman year of high school, yet she still managed to participate in a variety of extracurricular activities that included academic, dance and social issue organizations/clubs.

Mary did not identify exactly when she knew college was in her future, but, at some point, she decided that she wanted to be a lawyer and knew college was the first step in the process to obtain a law degree. Even though Mary's mother never attended college, she always encouraged Mary to pursue higher education. Her (Mary's mother) commitment to education was also evident in her decision to send all her children to the U.S. to attend high school. Mary thought her mother did this to help prepare her children to get into good colleges.

Mary spoke frequently to her mother about applying to college, and her mother was extremely encouraging. Most of their discussions focused upon where Mary wanted to go and what type of career and major she wanted to pursue. She also spoke with friends and members of her church about going to college. With the exception of two friends, all of these individuals were very encouraging and supportive. Mary is an individual who sets high expectations for herself and takes pride in the fact that she surrounds herself with positive people who can help her grow. While her two "discouraging" friends from high school never said, "You shouldn't go to college," they did not seem to take the whole application process seriously and had settled on attending community college. As a result, Mary's friendship with these individuals "drifted off," and she began focusing on friends whose goals were more aligned with hers.

Mary obtained almost all of the specific admissions and financial aid information for college from her high school guidance counselors. Mary's counselors helped her through each step of the process, whether she was attending financial aid workshops or meeting with them individually about the admissions process and scholarship

opportunities. It was Mary's guidance counselor who advised and encouraged her to accept the invitation to participate in the Academic Achievement Programs at UM.

Mary applied to two colleges, but UM was her first choice. The primary reason Mary chose UM was because her mother had recently re-located to Maryland, and she wanted to stay close to home. Cost and UM's academic reputation were also important factors in Mary's decision.

Mary's adjustment to college life began before her first full semester at the University. She had been conditionally accepted to UM through AAP's Summer Transitional Program and had to successfully complete the six week summer bridge program in order to gain full admission to the University. Mary knew UM would not admit her unless she performed well in STP, and, looking back, she identified this event as one of her most challenging college experiences at UM. Mary completed STP with a 4.0 grade point average and was admitted to UM as a SSS participant. She began her college career as a pre-law major.

Once admitted to UM and with the extensive academic services provided by AAP, Mary felt she had a strong system of support during her first year. AAP provided a network of tutors, staff and peers in terms of getting her work done and excelling academically. However, during Mary's second year at UM, events in her academic and personal life combined to challenge even her steadfast determination to succeed. Mary had decided to apply to the business school, so she enrolled in a number of challenging business courses. Also, she moved off campus; she was working a lot of hours, and her brother passed away. In order to balance all of these commitments, after work, Mary would return to campus late at night to study or to

attend tutoring sessions. At the same time, she began struggling with her difficult business courses, and her grades began to suffer. However, she was unable to drop any courses because of the negative impact a drop would have on her financial aid funding. During that year, Mary earned her lowest grades and failed a course.

Mary credits the networks she made through SSS and her classes with helping her overcome this difficult time in her college career. Through SSS, Mary was able to secure additional tutoring for her courses. Using the connections she made in class, Mary also joined student work groups and was able to attend workshops run by her professor, both experiences she sees as critical to helping her make it through a tough second year and to succeed in her subsequent coursework.

Mary's second year experiences also prompted her to rethink her choice of major. She entered UM with a career goal of practicing corporate law, which led to her choice of a major in business. During sophomore year, she took a full load of taxing business courses. It was then that she realized business did not interest her; in fact, she was so disinterested she kept falling asleep in class. The one class she did find stimulating was an introductory level public speaking course. Mary "fell in love" with public speaking and was intrigued by her communication instructor whose focus was public health. As a result of these experiences, she decided to pursue a major in communication. The decision to change her major was not easy because she needed to take additional courses to graduate. The decision to switch her major ultimately impacted Mary's enrollment. She graduated in four years, but only after enrolling in summer courses every summer for the duration of her tenure at UM.

Mary's experiences with AAP and her immersion in UM's diverse community impacted her social adjustment to college. Mary described her college self as a "very anti-social" person. She says that STP and SSS helped her "open up" because she was able to build new relationships with peers and she met her best friend through the program. Mary characterized the AAP department as "a family away from my family" and knew that she could always come back to the AAP for advice, whether personal or academic, and, no matter what her issue, knew that someone would be there to help her. Mary's interactions with others across campus also contributed to her social experience. Because of the diverse population at UM, Mary developed a further appreciation for cultures other than her own. During this time, these experiences helped her develop her own identity as a bi-racial woman.

Mary lived both on and off campus during her time at UM. During her first year, she lived in the UM residence halls. After the first year, she moved off-campus to live at home. She spent most of her time with her best friend and became close friends with several others who lived on her residence hall floor. During freshman and sophomore year, Mary actively participated in various extracurricular activities, including social activities with friends, a dance club and a student association. She also volunteered at her church.

After Mary's second year, she concentrated on preparing for law school, so extracurricular activities included "application-building" material, like taking LSAT courses and participating in an internship. Mary's mother also became ill after her second year at UM and, as a result of this situation, Mary began working full-time to help pay the bills.

Mary's family was very proud of her and supported her desire to earn a college degree. One of Mary's siblings had attended a post-secondary proprietary institution, but no one else had gone to a university. Because Mary is the youngest in her family, all of her sisters were working and had families, so they did not see a great deal of each other before she started college. As a result, her transition to being a college student did not have a great impact on family relationships. Mary still continued to see her mom and visit family on weekends.

College did change her relationships with friends. Mary did not maintain any contacts with friends from high school and saw life at UM as "a new start for me, a new life for me." Once in awhile she would see old friends over holiday breaks, but her focus was on the new friends she had made. In fact, when asked who had the greatest influence upon her completion of the baccalaureate degree, Mary pointed to her best friend, who she met through AAP during her first summer at UM. Mary said her best friend was there for everything: good times, bad times, family issues, and academic issues. Today, they are still best friends and continue to encourage each other.

Mary enrolled continuously, attended summer school and graduated in four years with a bachelor's degree in Communications. After graduating, Mary's passion for communication prompted her to choose graduate school over law school. Currently, she is enrolled as a master's student in a communication program at a prestigious private university. She advises first generation students who are beginning their collegiate journey to "Live it for the moment and enjoy it because, once it's gone, it is really gone and you will never have an experience like an undergraduate degree. I

would tell them to live on campus. I would tell them not to worry about the financials; get a good education. Right now there's so many grants and scholarships out there and you will get funding, so that's probably the best advice that anyone has ever given to me...I would tell them to take advantage of clubs, anything that they have to offer, any help, any assistance. There's always someone that has their hand open willing to help you, and I would say just to always take help, always take advice and help from anyone that's willing to give you advice or help because you never know. Building networks and building bonds and relationships, you don't know how far...you know, when you graduate you can always probably come back and know that, "Hey, you helped me and now I can be able to help you or visa versa."

**Case Summary #11—Mike.** Mike is a Black male who grew up in Maryland and is the oldest of four children. He is a first generation college student because his father's highest level of education is a high school diploma, and his mother attended some college and earned an associate's degree. Mike attended an inner city public high school that was not known for having a strong college preparatory curriculum. During high school, Mike's coursework included four years of math; four years of English; three years of science and no language. He enrolled in one honors course during his senior year, only after approaching his guidance counselor and asking for more college preparatory coursework. Mike graduated from high school with a grade point average between 3.0 and 3.5 and in the top ten graduates of his class. His total SAT score was between 600-700. While in high school, Mike participated in a variety of extracurricular activities including band, academic clubs and a federally funded pre-college program.



Education was always an important focus in Mike's life. His mother encouraged Mike to pursue as much education as possible because it would help him get better career opportunities. Mike's participation in a pre-college program was very influential in motivating him to pursue a college degree. Through this program, Mike got experience living and taking classes on a college campus, and also saw fellow classmates in the program go on to college with full scholarships. Mike was further motivated to go to college because he personally knew people who had gone to college and become very successful. However, Mike did not really start believing *he* was going to college until he physically began receiving acceptance letters from schools.

Mike collected information on applying to college from a variety of sources including: guidance counselors; admissions counselors, and staff members at UM. He also received information from workshops and counselors in his pre-college program. During his senior year, Mike spent a great deal of time during free periods talking to his high school guidance counselors about applying to college and especially about scholarship opportunities and financial aid. Through the pre-college program, he also attended workshops that broke down each step of the financial aid process.

In addition to these school resources, Mike frequently talked to his mother about attending college. He has a very close relationship with his mother and discussed many aspects of the application process with her, from school size to geographic location to student teacher ratios and financial aid. Throughout the process, she reassured Mike that this was his choice and wherever he decided to go was fine with

her. At the time that Mike was applying to schools, his mother was enrolled in college courses and working toward an associate's degree.

While his parents, teachers and counselors all encouraged his decision to pursue a college degree, Mike's peers were not always supportive. Mike attributed this challenge to the fact that he grew up in an inner city environment and, because of this, many of his peers had different values and goals. Some tried to persuade him that he did not need college to get a "regular job and be OK," while others extolled life on the street. Mike, who describes himself as "self-motivated," disregarded these arguments and focused on his personal goal of going to college.

Mike applied to a total of five colleges/universities, but UM was his first choice. He was specifically drawn to UM because of its reputation for producing successful graduates who contributed to the workforce and to society in general. Also, Mike was very drawn to, as he put it, the UM "brand" and was excited at the possibility of becoming part of the UM name. Other factors that contributed to his decision included encouragement from relatives and counselors, the cost of attending and financial aid. Mike was conditionally admitted to UM through AAP's Summer Transitional Program, and his expected major was computer science. Mike successfully completed the STP program and, as a participant of the SSS program, gained full admittance to the University for the fall semester.

In adjusting to college, Mike's most challenging experience was the social environment. Mike came from an area where the general population was "one color or one nationality" and, at UM, suddenly he was interacting with people from a variety of cultures and backgrounds. One of the things that drew Mike to UM was its

reputation for having a diverse population, so he was open to meeting new people and broadening his horizons, but he still had to learn how to interact and work with people who might not look like or believe the same things he did. Additionally, while Mike never felt that he was a target of discrimination at UM, he did experience the impact of social class, often feeling like he did not have as much as others because his mom did not make a certain income level.

Academically, Mike also encountered some obstacles as he adjusted to college. Mike described his academic experience at UM as “up and down”—some semesters were good and others were difficult. Coming into college, Mike felt that he was not as academically prepared as many of his classmates. As a result, he sometimes struggled in his classes and ended up failing or repeating some courses. During those times, Mike drew from within to find the strength to persevere. He also used AAP as a resource by spending extra time with tutors or counselors. Because math was a particular challenge for Mike, he spent additional hours in the AAP math lab, getting help from instructors.

AAP, and STP in particular, also proved helpful in Mike’s social adjustment to UM. Living on campus and meeting fellow students the summer before his freshman year helped Mike feel more comfortable finding his way around and also helped him establish a core group of friends that he stayed close to throughout college. Most of Mike’s closest friends were from AAP or another enrichment program in which he participated. While Mike ended up with college friends from different walks of life, he remained closest to this group because they all had common experiences, and they could understand some of his struggles as a student at UM. During his college career,

Mike also established key relationships with several mentors, a professor and a business professional. These relationships served as resources for him when he had questions about career options or college in general.

Mike's exposure to different experiences at UM also led to his decision to switch majors. Mike entered the University as a computer science major. He chose this major because he wanted to make money when he graduated. Everyone he knew advised him to pursue computers or business because of the high income potential upon graduation. However, once Mike got into some of the math courses and requirements for a computer science degree, he realized that he was not all that interested in the courses and did not feel that the major was a good fit. In the end, one day when Mike had some free time, he attended one of his friend's criminal justice classes. Mike found the class and the professor very interesting and, ultimately, ended up pursuing a degree in criminal justice.

During his time at UM, Mike lived in the residence halls and an apartment on campus, as well as at home with his family. He also participated in cultural and academic clubs on campus and volunteered in after school programs in the surrounding communities.

Mike and his mother made sure to stay abreast of deadlines and opportunities for financial aid throughout his tenure at UM. Counselors with AAP and his other enrichment program reminded him of FAFSA and scholarship deadlines, so he was able to secure scholarships, grants and loans to pay for his education. Because Mike was able to depend upon these funds, he did not work until his senior year. At that

time, he began working an off campus job for approximately six to twelve hours per week.

Throughout college, Mike's family remained supportive of his determination to earn his bachelor's degree. When he went home to visit, family members would ask, "How's school going? Do you like it? Are you enjoying yourself?" Of all the people who supported Mike, he sees his mom as having the greatest influence on his successful completion of the bachelor's degree. Even during his greatest struggles, Mike's mom would encourage him and, because of this, he did not want to let her down.

College did seem to affect some of Mike's high school friendships. When Mike came home from college and tried to have even the most general conversations with friends who did not go to college, their conversations often would feel like they were on "two different levels." They just did not have that much in common anymore.

After enrolling in several summer sessions and taking a course at a local community college, Mike graduated with his bachelor's degree in five years. Today, Mike works full time and attends graduate school part-time. He is working on his MBA. When asked what one piece of advice he would offer to a first generation student starting college, he said, "Find a mentor. It could be a professor or a counselor. Just, in general, find someone who is doing a positive thing...and actually has been where you've been."

**Case Summary #12—Steve.** Steve is a Latino male who is a first generation college student. His father's highest level of education is grammar school, and his

mother is a high school graduate. He is an only child who grew up living with his mother. His mother worked hard and earned a very modest income.

Steve completed a college preparatory curriculum at a public school in Maryland. Steve remembers that, at some point in high school, he was told that he could receive college credit for AP courses, and these courses looked good on a college transcript when applying for college. He was able to enroll in AP courses starting his junior year and earned twelve hours of AP college credit. Steve graduated from high school with a grade point average between 2.5 and 3.0 and a total SAT score between 1100 and 1200.

Steve was not able to pinpoint the exact moment he decided to go to college, but remembers it was very early on. He was influenced by the fact that no one in his family had earned a college degree, and his family also pushed him toward college. In fact, Steve had many conversations with his mother about applying to college, and he frequently remembers her saying, “You’re going to college, whether or not you want to...” During these talks, Steve’s mother also pushed him to find information about applying to college. She stressed how important a college education would be to his future.

While Steve’s mother and even some of his high school teachers were very encouraging about going to college, other teachers were not as supportive. In classes, Steve often observed that teachers did not treat students equally, as if they had already determined who was worth their time and who was not “going anywhere after this class.”

Steve's high school counselor gave him some assistance in applying for college, but, for the most part, he and his mom learned by trial and error, sometimes making mistakes along the way. Steve remembers that he did not realize there were early deadline dates for admissions and he really had no idea what a "good" admissions essay looked like. He just filled out the application as well as he could, wrote the essay and "hoped for the best."

Learning about how to pay for college was also a struggle for Steve and his mother. He and his mom had several in-depth discussions about financing his education. Steve's mom would say things like, "Let's do our best to find a way to find scholarships, loans if necessary to pay for college because it will end up being necessary." Because of items he had read in popular media and from the information shared by teachers and others, Steve was concerned that paying for college would be an issue. His family consisted solely of him and his mother; she had a modest salary, and she insisted that he not work during the school year. During the application process, Steve and his mother began working with a federally funded education program in the community to learn more about financial aid options. The counselors for this program helped Steve and his mother understand the financial aid process and how to apply for financial aid. Steve also saw this program as integral to his choosing to attend UM.

Steve applied to a total of four colleges/universities, but UM was his top choice. He was specifically interested in attending an in-state school because of financial and other issues, such as living close to home. He also knew that UM was the biggest, most prestigious school in Maryland. Initially, Steve believed he had been denied

admission to UM outright, but the counselors in the community education program helped him understand the admissions decision letter by explaining what Academic Achievement Programs was and how participation in the STP could provide an avenue for admission to the University.

Steve chose to participate in STP. After successfully completing the summer bridge program, he was admitted to UM in the fall as a SSS participant. When he began his freshman year, Steve planned to major in psychology. Steve chose this major because, in high school, he completed an AP Psychology course and performed better than most of his classmates. His instructor pointed this success out to him and suggested that Steve may want to look into this field in the future.

Mastering effective time management and study skills was Steve's greatest challenge in adjusting to college life. In high school, Steve rarely had to study and never felt that his classes were too demanding, so when he got to UM the amount of work required for each class was somewhat overwhelming. Early on, Steve struggled with making time to study and maximizing the time he did have. In fact, he failed several courses and earned a number of "D"s; most of these grades occurred during his first two years at UM.

While Steve did not enroll in an "Introduction to College" type course that many universities, including UM, now offer, his experience with UM-SSS did help him learn important academic skills. Through study skills courses offered in STP and throughout his freshman year, Steve eventually learned techniques to help him manage his time and study effectively; however, this mastery took a great deal of practice and much of his success was motivated by a fear of failing.



During most of his college career, Steve lived off campus with his mother and extended family, including an aunt, uncle and cousins. Even though his family was always supportive of his goal to finish college, the house was often full of people, and he found it difficult to find the space and the solitude necessary to focus on studying. This, too, contributed to a bumpy adjustment to college life. As a means of coping with this challenge, Steve often studied late at night, sometimes starting his homework after midnight. His late hours concerned his mother, but she continued to support him, saying, “If that’s [staying up late] what you need to do, then do it. Try to do it in a healthy way, but, if that’s what you need to do, then go ahead and do it.”

Steve experienced another academic challenge in his journey to the bachelor’s degree when he decided to change his major. He decided “late in the game” to abandon his decision to pursue a major in psychology for two reasons: he had lost interest in the area and his grades did not qualify him for entry into the major. At that juncture, Steve was already a junior. He became worried that he would end up selecting a major only because he needed the degree, not because it was an area of interest for him.

Because Steve had maintained contact with his counselor/advisor in SSS beyond his second year, he came back to the Program to seek advice. The SSS counselor/advisor helped him explore various options and directed him to investigate several academic departments. This guidance, along with some of the core courses he had taken, led Steve to choose a major in sociology. The choice made, Steve scrambled to ensure that he could get his graduation requirements out of the way and still try to graduate in as close to four years as possible. One of the decisions he made

in trying to achieve this goal was to enroll in two courses simultaneously during his last term, a Winter Term (three week intensive courses). Steve described this as his most difficult academic experience, but he managed to end his college career with his single highest term GPA, and “A” average.

Steve never lived on campus, and he felt this really affected his overall social experience at UM. He made friends through AAP and met people in classes, but, during his first two years, did not get involved in any extracurricular activities. Because he lived off campus, Steve always felt “a bit detached from things and from everyone” and felt that the people on campus had a “closer community.” He saw himself as a commuter student who came to campus, took classes and then went home. His closest friends during college were ones he had met from home, some from high school, and others from his community. During junior year, though, Steve began to actively participate in extracurricular activities and, ultimately, ended up as an active member of several cultural organizations and a sports club team. He also began to build friendships with people he met in classes and in the organizations in which he participated.

At this same time, Steve also began working an off campus job, approximately fifteen hours per week. Steve ultimately found a student employee position on campus and averaged about ten hours of work per week until graduation. He had not worked prior to his junior year because he feared working would interfere with his studies. His primary means of paying for school, though, came from need based grants and loans, in addition to a modest sum that both Steve’s mother and Steve had saved toward his college education. Furthermore, Steve and his mother would return

each year to the community based education program, and the counselor there would help him complete his FAFSA in a timely manner.

Throughout his college experience, Steve maintained the support of both family and friends. While living with his extended family was difficult at times, they supported his decision to pursue a baccalaureate degree. Most of his friends, too, had gone on to college. Some of these relationships are still strong today, while others, mostly due to distance, were lost. When asked who had the greatest influence on his successfully completing his college degree, Steve identified his mother, not because she could help him with his coursework or anything like that, but because she served as his “motivator.” Steve acknowledged that, ultimately, he had the greatest influence on his own success, but he insisted his mother was the impetus behind his own drive.

Another source of support for Steve during his college experience was from faculty members. He did not recall any negative reactions with faculty and often found that they were very helpful. He specifically made connections with several faculty members who he continued meeting with after he finished their classes. He continued conversations with these faculty members during their office hours and discovered they had many of the same interests. Today, he is good friends with some of these faculty members.

While Steve never personally felt discriminated in the environment at UM, some of his experiences did increase his awareness of socio-economic status on the campus. He felt that other members of the UM community sometimes assumed shared “truths” with him and about him as universal, and these “truths” were not his reality. Steve provided an example of a discussion in a sociology class where the

professor was questioning students about the “sick role,” the concept of employee sick leave. The professor asked if any cases existed where this concept did not apply. Steve said, “Well, if you’re economically strapped and can’t just take time off work, then the sick role doesn’t really apply to you.” At the time, Steve was surprised that no one else in the class had even considered this exception.

Steve remained continuously enrolled at UM and graduated in four and a half years with a B.A. in Sociology. Today, he works in a higher education setting. When asked what one piece of advice he would give to a first generation student undertaking a college career, he said: “Seek help. You are not expected to do it on your own. Everyone seeks help. Even the people that have a lot of knowledge seek help, so find people and find places where you can get information and ask for help at every turn that you feel it necessary because that’s something I struggled with at a lot of points, applying and in school, seeking help when it was necessary.”

**Case Summary #13—Tim.** Tim is a Caucasian male who is the eldest of two children. He is the first in his family to earn a bachelor’s degree. His father had attended some post-secondary education, and his mother had earned a high school diploma.

Tim completed a performing arts track at a public magnet school in Prince George’s County, Maryland. This curriculum included coursework typical of a college preparatory curriculum, including four years of math; four years of English; three years of science, and four years of a language. During this time, he also completed an AP course and an IB course. Tim enrolled in the AP course specifically

because, as preparation for college, someone had advised him that he should take classes in his senior year that were a little more difficult.

Of all the courses he took in high school, Tim felt his theater courses provided the best preparation for college. For these courses, he wrote numerous papers that demanded complex analyses of different theater productions. Outside of the classroom, Tim was involved in school theater productions and in various activities at his church. Tim graduated from high school in the top half of his class, with a GPA between 2.5 and 3.0 and a total SAT score between 1000 and 1100.

Tim's parents always placed a high value on education, and his mother especially encouraged Tim to pursue a college degree. Tim's high school theater teachers served as another influence in his decision to go to college. Tim was passionate about theater, and he often sought out his teachers for advice on pursuing a college degree and a major/career in theater.

Tim spoke frequently with his parents about going to college, and most of their conversations centered on finances. They explored options for funding, including: applying for scholarships; taking out student loans, or Tim finding a job while in school. Tim's parents also spent a great deal of time stressing to him the importance of obtaining good grades in order to get into college. When it came time to complete college applications, Tim's mother was very involved in the process. She consistently reminded him of deadlines, helped him fill out forms and downloaded information from the internet Tim's mom also was very proactive in setting up a meeting with the financial aid office to clarify tuition payment options and researching opportunities to secure additional financial aid funds.

Tim only applied to one institution and that was University of Maryland. UM was Tim's top choice because of its academic reputation, size and cost. He was also drawn to UM because of its recently constructed performing arts center. During high school, a guest speaker had visited one of his theater classes and brought blueprints of the center. Tim was very excited to attend a school that had a state of the art performing arts facility.

Tim was conditionally accepted to UM through AAP's Summer Transitional Program. He had to successfully complete the six week bridge program before he could be admitted to the University. Tim met this challenge and was admitted to UM in the Fall as an SSS student. He began his career at UM intending to major in theater.

Tim's first year of college progressed smoothly. Because he was an SSS student, he took only twelve credits in each semester—Fall and Spring-- and participated in mandatory tutoring, English, math and study skills support in AAP. He completed the year with over a 3.0 grade point average. Tim lived at home, and his family adjusted very well to his new role as a college student. Tim switched rooms with his younger sibling, so his living space was in a more private area of the house, and his parents accepted the "all nighters" he sometimes had to pull when a paper was due or he was preparing for an exam. Sometimes, though, Tim's nocturnal habits did cause some sleeplessness for his father. Tim's father had to wake up early for work and sometimes woke up even earlier when Tim was working.

In retrospect, Tim credits STP with helping prepare him for his first year of college. His experience with trying to balance his summer classes and mandatory

academic support sessions, as well as mandatory meetings and social activities, helped prepare him for the schedule he would need to maintain during a full semester. He also remembers that he had a pre-English 101 instructor who was one of the harshest graders he had ever experienced. She also would not accept any late work. This experience shocked Tim into realizing, “Oh my gosh, I’m in college. I have to actually do work.”

Tim’s second year at UM did not go as smoothly as his freshman year. All of a sudden, Tim was enrolled in more demanding courses; was taking fifteen or sixteen credits each semester, and had started working two separate on-campus jobs. Additionally, unlike freshman year when he was required to participate in Student Support Service’s mandatory tutoring and English/math/study skills support courses, Tim was no longer required to attend these sessions. He tried coping with the additional challenges, stress and lack of support by pulling “all-nighters” to manage his various responsibilities. The strain showed in his academic performance. Tim’s Fall semester GPA fell below a 2.0. Once he realized he was in trouble academically, he took steps during Spring semester to re-arrange his schedule to reduce the number of “hard” courses he was taking. Furthermore, one of his jobs was a tutoring position. During the spring, he was able to enroll in a course that gave him credit for his work as a tutor. These steps positively impacted Tim’s academic performance, and he finished the spring with a 3.0 GPA.

During his second year, Tim also began re-thinking his choice of major. Because he had entered the University determined to pursue a major and career in theater and also because of an advising oversight, Tim declared his major after freshman year.

This decision was contrary to UM-SSS policy (students are only permitted to declare their official major after completion of their second year); however, it provided Tim the opportunity to enroll in more “major” courses during his second year than SSS students typically would take. This additional exposure to the world of theater prompted Tim to more seriously consider the practicality of life in the theater. He decided that he needed to pursue a more “dependable” career, but wanted something where he could help people. He began exploring careers in education, language and pathology. One day he attended a “major fair” at the student union and spoke to a representative from the Special Education department. After reflecting upon the information he obtained at the fair and, even though he could not really see himself as a teacher, Tim decided to pursue a major in Special Education because it was a “high need” field. He switched his major the summer following his second year.

Although Tim had overcome the ordeal of balancing his time commitments, he faced his greatest challenge during the last half of his career at UM. His mother and greatest supporter was diagnosed with cancer during his junior year at UM. At the same time, he was also struggling through a break-up with his longtime girlfriend. Because of the situation at home, Tim’s parents were no longer able to help him pay for school, so he began increasing his on campus hours from twelve to fifteen hours per week to eventually working twenty-five to thirty hours per week. These events also affected Tim’s academic work. While he had not really interacted with faculty outside the classroom much before this time, Tim found that most faculty were supportive of his situation and worked with him to extend deadlines and complete



assignments because they wanted to see him succeed. Unfortunately, he also encountered a few inflexible faculty members.

During this period and throughout his college career, Tim had additional support from other outlets. With the exception of living in the residence halls for STP, Tim lived at home during his entire college career, so he spent a great deal of time around his family. While he did not participate in many extracurricular activities on campus, he was very involved in his church at home, from helping with the youth group to teaching Sunday School. Throughout college, his tightest social network was friends from church, and they were all supportive as Tim made the transition to college and throughout his entire experience. During his senior year, Tim also began spending more time with friends from UM he had made through work.

When asked who had the greatest influence upon his successful completion of the bachelor's degree, Tim immediately said, "My mom. Definitely my mom. Even when she had gotten cancer, she, for whatever reason, always made my schooling the top priority and it kind of made me sad a little bit, but she always harped on, "You need to get your work done. You need to get your school done. Take care of it, take care of it," and at times when I was working on that degree, I felt like I couldn't go on or I couldn't do it anymore and she would always be telling me, "Keep doing it. Keep going. Keep going. Keep going." Sadly, Tim's mother was not able to see him graduate. She passed away right before his last semester.

Tim enrolled continuously throughout his college career; transferred a course from a community college, and enrolled in summer school. He graduated with his bachelor's degree in four years and, while not currently a teacher, he uses his special

education background in his current position. His advice to a first generation student starting their collegiate career included several areas: “Make sure that you have some sort of support as far as getting into college and getting through college. I think the most important part for first generation students is getting in and then once you get in, you have to keep at it and make sure that you actually complete it, because college is expensive....And also as far as getting into college, making sure that you’re networking with other people and making sure that you have that peer support where you can have people to talk to and have people that you can study with and just kind of hang out with so that it’s not all study and it’s not all play, but a nice kind of blend of the two.”

Using these case summaries, as well as detailed results from the survey, file review and individual interviews, chapter five provides a comprehensive cross-case analysis of the study’s findings. Like the individual interview guide, these findings are divided into pre-college and college experiences and organized according to factors the literature identifies as impacting successful graduation of first generation students. The one exception to this structure is the discussion of findings related to family influence. Findings related to this factor are discussed in a separate section of the chapter. Additional themes that emerged during data collection and analysis are also discussed in Chapter Five.

## Chapter 5: Results

Using the cross-case analysis method (Miles & Huberman, 1994), this chapter includes a detailed discussion of findings. These findings are organized around major themes identified in the study. One major theme that occurs across both pre-college and college experiences is the role of family influence. Pre-college themes include academic preparation, secondary school influences, and peer influence. Academic preparation and performance; choice of major; participation in academic support programs; peer influence and perceptions of campus climate surfaced as consistent themes in the college experiences of participants. These subjects emerged from a review of all archival and survey data, as well as case summaries created from interviews conducted with each participant. Findings for this study were structured around the same principles used in the design of the interview protocol for participants and address the following research questions:

1. What experiences do UM Student Support Services (SSS) first generation college graduates identify as factors that contributed to their successful completion of the baccalaureate degree?
2. What experiences are suggested by the participant cases in the current study?
3. To what extent do these experiences reflect or depart from those documented by the extant literature?

The study's findings are further separated into pre-college and college experiences and are framed by factors the literature identifies as relevant to first generation students and successful attainment of the baccalaureate degree.

The single exception to the organizational structure of this chapter is the discussion of family influence at both the pre-college and college levels. During the course of this research, family influence emerged as the most significant factor in participants' successful completion of the baccalaureate degree. Because of the importance of this finding, family influence will be discussed in its own section.

### **Family Influence**

This section will detail evidence that all participants' families critically shaped the participants' pre-college and college experiences in a variety of ways, ranging from impacting institutional choice and financial aid to affecting the participants' adjustment to college and persistence to graduation. An important finding of this study is the critical role family plays in participants' degree attainment. All of the participants' families were involved in some aspect of their graduate's pre-college and college experience, and mothers especially served as sources of emotional and inspirational support. The body of literature on family influence and degree persistence and attainment has shown that parents who finished college possess a greater amount of cultural and social capital and, therefore, are more likely to guide their children through the college process than those parents who did not (Berger, 2000; Choy, 2001, 2002; Chen, 2005; Coleman, 1988; McDonough, 1997; Perna, 2000, 2006; Terenzini, Cabrera & Bernal, 2001). Existing research also contends that families of first generation students, often from low income and under-represented backgrounds, can serve as a negative influence in their students' persistence and degree completion because family responsibilities and expectations force students to straddle two competing worlds—their lives at college and their lives at home (Engle

et al., 2006; London, 1992; Somers et al., 2004; Terenzini et al., 1994; Terenzini et al., 1996). Although the results of this study do not align with literature focusing upon the negative influence of family, they do support the notion that family encouragement and support play a significant role in student persistence, sense of belonging on the campus and degree completion (Cabrera & LaNasa, 2001; Cabrera et al., 1999; Hausmann et al., 2009; Nora & Cabrera, 1996; Perna, 2000; Rowan-Kenyon et al., 2008; Tierney & Colyar, 2005).

**Mothers.** Mothers emerged as the most influential family member in the participants' quest for a bachelor's degree. This finding supports the notion that mothers who recognize and value the importance of education, as well as demonstrate strong spiritual roots and work ethics, prove to be a formidable factor in their students' educational aspirations and degree attainment (Greif, et al., 2000; Kerpelman, Eryigit & Stephens, 2008). The results of this study overwhelmingly indicate that mothers served not only as the primary source of encouragement and motivation for most of the participants, but, also, as their role models, de facto "guidance counselors," and advocates in the college application process.

These findings reflect the literature suggesting that parents who are positively involved in the college experience of their at-risk students often serve one or more critical functions—as motivators (Cabrera et al., 2005; Cabrera & LaNasa, 2001; Cabrera et al., 1999; Hossler et al., 1999; Nora & Cabrera, 1996; Perna, 2000; Tierney & Auerbach, 2005); as advocates (Perna & Titus, 2005), and as supporters (Cabrera et al., 2005; Hossler et al., 1999; Perna, 2000; Perna & Titus, 2005; Rowan-Kenyon et al., 2008). These roles became particularly evident when participants

described the admissions and financial aid application processes, as well as the struggles they faced in adjusting to the academic and social college environment. Participants often became teary-eyed or clearly moved when they spoke of how important their mothers were in their journeys toward a degree.

Without hesitation, seven of the 13 participants enthusiastically identified their mothers as the individual who had the greatest influence on their successful completion of the bachelor's degree. The responses of Lynn, Mike and Tim all embody the spirit of the majority response. When asked why her mother exerted such influence, Lynn pointed to her mother's relentless encouragement and support, as well as her focus on the value of education:

Because she's just an inspiration....Just because she's always taught my siblings and I the value of an education. She always mentioned to us when we were growing up how important it was to pursue an education since she didn't...that wasn't an opportunity that she even had.

Similarly, Mike identified his mother as the greatest individual influence on his success because of her endless motivational encouragement:

She wanted to see me succeed and even when I struggled and I was going through my difficulties, I didn't want to let her down, so I would say she was a very motivating factor and even times when I was struggling, I would find myself going to her like, "Well, I'm really struggling with this. I don't know if I can do this; I don't know if I can do that," and she was very uplifting and motivating....

Tim also detailed the important role his mother played in earning his baccalaureate degree, acknowledging that, even though she often could not understand his college experience, she unwaveringly supported it:

Even when she had gotten cancer, she, for whatever reason, always made my schooling the top priority and it kind of made me sad a little bit, but she always harped on, “You need to get your work done. You need to get your school done. Take care of it; take care of it,” and, at times, when I was working on that degree, I felt like I couldn’t go on or I couldn’t do it anymore and she would always be telling me, “Keep doing it; keep going; keep going; keep going; keep going.” She passed away in December of my senior year, so I had one semester left when she passed away, but even then, she was still that motivation because she just kept telling me, “Keep going; keep going; keep going....”

Of those who did not identify their mothers as the most important individual influencing their successful attainment of a bachelor’s degree, some still recognized the important advocate role that “mom” played in a number of other areas, including the admissions and financial aid application processes and their social adjustment to college. Bob indicated that his parents and his mother, in particular, gave him the most help when applying to college. Bob’s mother possessed very limited social and cultural capital related to the college experience. Unlike many of his traditional peers, his mother had not attended college and was not intimately familiar with the college process, including procedures related to admissions and financial aid. However, through her job at the University, she had learned how to network and used these connections to support her son’s aspirations for a college degree. Bob explained that

his mom consistently checked with him to ensure that he completed and submitted his application in a timely fashion. Through the contacts she had made at the University, his mother then followed up to verify his admissions status. When Bob's mother discovered that UM could not locate his application, she worked with Bob to re-create his application and hand-delivered it to the admissions office herself.

Erin's mother was instrumental in advocating for her daughter during the admissions process as well. She, too, was an employee of the University and, even though she, herself, was not a college graduate, she was familiar enough with the departments and personnel at UM to use these networks to research and secure information. All of the information Erin received about applying to UM and applying for financial aid was obtained by her mother either through knowledge she had established during her tenure at the University or through networks she had established. The connections Erin's mother had made through work at UM also provided Erin with additional pre-college exposure to the campus. Erin's mother secured a UM on-campus summer job for Erin while she was a high school student and also found a pre-college preparatory program on campus in which Erin participated.

Beyond her role as an advocate, Erin's mother also served as her primary motivator and source of encouragement. Erin's daily contact with her mother became an important element of her transition to college. Erin identified living away from her family and sharing her personal space as the most challenging experience of adjusting to college. In addition to this issue, Erin also struggled with roommate problems. When asked how she specifically coped with this social transition, she discussed the



role of her mother's daily "encouragement" sessions. Erin said: "I talked to my mother at least 10 times a day. Of course she did work here [UM] and I saw her about 10 times a day so that was very helpful. Even now I talk to her about 10 times a day...."

**Other family influences.** Beyond the strong influence that mothers appear to have played in motivating/encouraging participants to finish their degrees, family members, in general, influenced some aspect of the admissions, financial aid and social adjustment process for all participants, including their initial aspirations to attend college.

Research has shown that FG students often do not come from homes where higher education is valued (Berger, 2000; Somers et al., 2004; Terenzini et al., 1994; Terenzini et al., 1996). The reasons for this vary, from parents' apprehension about how college might change their child to cultural expectations and the belief that responsibilities at home supersede lofty college dreams (Engle et al., 2006; London, 1992; Rendon, 1992; Terenzini et al., 1994, Terenzini et al., 1996; Somers et al., 2004). However, interviews with this study's subjects revealed a very different experience. Participants described how their parents pushed them to attend college, even when the students were not sure they wanted to go. As evidenced later in this discussion, their families also repeatedly demonstrated this support through consistent financial commitment to their student's college education, regardless of parents' education and household income.

**Family and educational aspirations.** Ten of the 13 participants indicated that the primary reason they went to college was because their parents wanted them to

earn a degree. Two of the participants pursued college degrees because of their career goals, and one saw college as a means of providing greater “opportunities” in the future. In his interview, Steve explained how his family influenced his educational aspirations and subsequent decision to go to college:

Well, early on I decided to pursue a Bachelor’s degree, to be perfectly honest, because I was very influenced by my family in that no one in my family had earned a college degree before and I was very much pushed into it. I did have some desire to certainly go to college, but they were, I would say, the primary influence.

The theme of parental influence in aspiring to a college education was common among participants. For example, Erin acknowledged that her pursuit of the bachelor’s degree was not originally her own design: “Initially, I didn’t know what having a bachelor’s degree would actually entail, but I think my family wanted me to have one, so I just figured just go for it.”

Like Steve, Bob recognized there was more to life than a high school diploma. However, Bob ultimately decided to go to college because it was what his parents wanted. Bob explained that both his mother and father strongly encouraged him to continue his education beyond high school. They pushed him to attend UM over other institutions because his mother’s UM employee tuition remission benefit would help pay the bill.

For John there was no other decision to make because his parents had made it clear that the next step following high school was college. There was no other alternative for him. Like John, Ann’s parents also strongly influenced her educational

aspirations, but this influence was grounded in cultural roots. When asked why she decided to pursue a bachelor's degree, Ann said: "It's a very natural thing for us to do. I come from a family that really emphasizes on good education, so back in my country...everyone goes to college...."

Participants' responses clearly indicate high parental involvement in promoting and nurturing high educational aspirations within their students. These results align with extant literature that found parental involvement in and support of educational aspirations have a positive influence on student persistence and degree attainment (Cabrera & LaNasa, 2001; Cabrera et al., 2005; Fann, Jarsky & McDonough, 2009; Kerpelman et al., 2008; Perna, 2000; Perna & Swail, 2002; Rowan-Kenyon et al., 2008; McCarron & Inkelas, 2006; Tierney & Colyar, 2005). First generation students typically have lower educational expectations than students whose parents have earned bachelor's degrees (Choy, 2001; Chen, 2005); yet, a majority of participants in this research indicated that their parents encouraged them to go to college, often instilling this goal early in life. For many participants (e.g., Bob, Jim, and Mary's parents), this encouragement was motivated by the awareness that a college degree would increase both career options and socio-economic status.

**The admissions/financial aid application process.** One reason cited in the literature for why FG parents had minimal involvement in their children's application process is their lack of social and cultural capital in relation to the higher education experience (Berger, 2000; Coleman, 1988; McDonough, 1997; Perna, 2006). However, the families of participants in this study *were* actively involved in the pre-college and college experiences of their graduates. Interestingly, in interviews,

participants indicated that their parents recognized their own weaknesses in relation to their knowledge about and understanding of college culture and its processes. These deficiencies include knowledge about how to choose a college; when and how to apply to college and for financial aid and what to expect from the college experience (Berger, 2000; McDonough, 1997; Pascarella et al., 1994; Perna, 2006; Terenzini, Cabrera & Bernal, 2001; Walpole, 2003).

Participants' parents adjusted their strategies to amass increased capital to "level the playing field" as best they could. For example, Tim's mother used her research skills to gather pertinent admissions and financial aid application materials for her son, helped complete the applications, and supervised the writing of his college essay and final submission of his application packet. Similarly, both Erin and Bob's mothers used the connections they had made working at UM to inform their children's secondary school preparatory experiences (e.g., involvement in summer academic programs offered through the University) and college admission and financial aid application processes.

In fact, all participants' parents were involved in the admissions and/or financial aid process at some level, ranging from offering encouragement to actually completing the admissions and financial aid paperwork. Parents of 12 of the 13 participants were involved in the admissions process; 10 participants' families were involved in the financial aid process; and the majority of participants' families were involved in paying for their college education. For example, Karen's dad provided the most help to her when she was applying to colleges.

He tried to keep me on track, make sure I got my things in on time, even though I'm really good with making sure I turn things in on my own, just being in high school and doing it on my own.

Her father was also very influential when it came time to complete the financial aid process and pay for college. When asked "Where or from whom did you get information about how to pay for college", Karen admitted:

I don't know. My dad just did it. I was fortunate enough that I didn't have to worry about it on my own. He just told me to make sure I checked my...once I was in college to check the stuff online because Maryland doesn't send things home...so I had to check that and just tell him what I needed. I didn't have to worry about it, thank goodness.

Erin's mother obtained much of the information she needed to apply to UM and to apply for financial aid because she worked at the University, yet, according to Erin, her sister was the one who helped most with the process, especially when writing her admissions essay and studying for the SATs.

She [sister] definitely came to the U.S. at a time when she couldn't go to college, so she was pushing for me to go to school because she definitely could not at the time, so she really supported me to have a chance to go to school....

Even though Jane knew that her parents were not really in a position to help her apply to college because they did not know much about the process, they did make clear their desire that she "excel" and "do better than they did." And while they may not have contributed much in terms of choosing and applying to colleges, Jane recognized how helpful her mom was when it came time to apply for financial aid.

I will say that my mom was really helpful with the paperwork, being an open book, because my mom had to...that's just something she always had to do, so she was there with me helping me go through that process....

Jane also received encouragement and support during the application process from her aunt, uncle and cousin. She would frequently have conversations with them about the schools she was looking at and how the process was "coming along."

Because Mary's mother was unfamiliar with the college process and culture, she was unable to offer practical help in completing applications and forms, but her encouragement was just as important to Mary during the process.

Well, considering that my mom never went to college, she was always encouraging me to go to college, so...I mean, she didn't really have as much feedback on the whole process, but my mom was very encouraging as far as me pursuing my goals and my career, so we talked about where I wanted to go, what I wanted to pursue, but as far as giving me any type of advice and guidance, I didn't really get that.

Many parents relieved a great deal of stress for participants by assuring them that they would cover the expenses of college. Before enrolling at UM, Jim had frequent conversations with his parents about applying to college.

Well, my dad pretty much, he always stressed that I had to go to college because in order to get ahead in life you really should go to college and that kind of thing, and so after he said something like that, the way he came off as menacing, like, "OK, it's mandatory; I really have to go," so I decided to just focus and do it.

While Jim may not initially have felt that college was his own choice, the fact that his parents took care of the financial aspect of the process came as a great relief to him. On his survey, Jim indicated that he had no concerns about his ability to finance his education because “my dad said he would take care of it. Yeah, I thought he really had control over it, so I just let him do whatever.”

Lynn’s parents also provided encouragement and support when it came to applying for financial aid. She recounts the types of discussions she and her parents had about going to college:

So during my junior and senior years of high school, my parents and I often talked about how we would go about paying for college. You know, education for my family is very important, and so my parents always said to me, “We’ll figure out a way to pay for your college, even if we have to take out loans. Just do everything you can. Look for scholarships...”

Lynn also noted that, even though her parents were supportive of applying to college for admissions and financial aid, the whole process was new to all of them. She was the oldest of her siblings and the first in her family to attend college, so they had to learn the process together.

Steve discussed further challenges of working through the admissions/ financial aid process with his mother. When asked “Where or from whom did you get information about how to apply for school?” he said:

It was very much a feeling out process, also being a first-generation student, my mom and I pretty much tried to figure out as best we could and we did make

some mistakes along the way, but for the most part, we just tried to figure it out as best we could and tried to get information where we could.

A number of the participants recalled their mothers providing critical encouragement and support in working through the process, and some mothers even did much of the “legwork” in completing all the necessary forms/applications. In recalling conversations with his mother about going to college, Mike said:

Some of the conversations I would have with my mother was what types of things I should apply for, where should I go. I mean, my decision...I've always been very close with my mother. I would ask her if she felt any university was too far or should I stay home or just get a general overview and with talking to her, she would tell me wherever I decide to go was fine with her, was my choice, and wherever I felt comfortable.

**Institutional choice.** Findings from this study not only indicated that participant's parents and family members were actively involved in the admissions and financial aid process, but, also, that family involvement in their students' institutional selection proved significant. Of the 13 participants, 11 (85%) chose to attend UM primarily because it was close to home and/or in-state. Many participants were concerned about moving too far from their families, and others were influenced by financial reasons, also associated with family. Two participants chose UM because they had a parent that worked at the institution. When asked, “What made you decide to attend University of Maryland,” Erin said: “My mother. She worked here, so I definitely...this is my first option and my only option of a university, so it definitely was my mother.”



**Adjusting to college.** Another area where the study's findings align with the literature is the family's positive role in their students' adjustment to college. Some literature reports that families, and parents in particular, can serve as barriers to the first generation student's successful transition to college life (Engle et al., 2006; London, 1992; Somers et al., 2004; Terenzini et al., 1994, 2006); however, in this study, family's support enabled the students to adjust to college, a finding consistent with some research (Cabrera et al., 1999; Haussmann et al., 1999; Nora & Cabrera, 1996).

Many first generation students struggle to accommodate the often contradictory worlds of home and school (Engle et al., 2006; London, 1992; Somers et al., 2004). While Ann did describe the cultural struggle she faced in adjusting to life at college and away from her family, the majority of participants indicated that both parents and other family members were proud of their accomplishments and, whether they lived on campus or at home, attempted to support their student's transition as best they could. This support ranged from re-assigning bedrooms at home to ensure more privacy for their student to removing curfews to providing spending money so their child would not have to work while attending classes. All 13 participants indicated that their families, particularly parents, provided some level of support. When asked, "How did your family and friends adjust to your life as a college student?" Jane said:

I think my mom was happy for me. My dad, I think he was happy for me, too. I think my mom missed me because I'm her only child. Yeah, so she missed me, but it wasn't a type of "Oh, I want you to come home," that type of thing.

Both Jane and Erin spoke to their mothers at least once per day. Jane recognized that this practice set her apart from many of her peers:

Every single day of school, I talked to my mother. I think I was the only person who talked to my parents...some of my friends would say, "Wow, you talk to your mom every day. I talk to my mom once a month."

Jim described his parents' adjustment to his life as a college student as "pretty natural. They knew the deal when you go to college and that kind of thing." Mike described his family as very supportive. When he went home, his parents consistently asked about whether he enjoyed school and how his classes were progressing. Mike recalled his parents as very encouraging and never negative about his school commitments.

Some participants eased into the adjustment to college by continuing to go home on weekends, and they spoke of the positive influence of those visits. John's mother missed him, but he says: "I was always home on the weekends, so I never really moved away. I was always there." Mary indicated: "I did used to go home every weekend because I did used to work on the weekends and I used to see that was an opportunity to see my mom and my family, so I didn't really feel disconnected from my family." Mary received a great deal of support on these visits home. When asked if her family was supportive of her decision to go to college, Mary said:

Yeah, they were supportive. Actually they were extremely proud of me. I was the first person to actually go to a University....I used to come home with my Maryland sweaters and coming from the games and stuff, they said, "Oh, you're a real college student."

For those participants who lived at home, parents made some concessions that helped with their student's adjustment to college life. Bob's parents felt that college was a good thing for him, and he said they adjusted to his new life by:

giving me more freedom to stay out late. You know, I knew when I was in high school I'd have to be home before a certain time. In college, I would be out at night studying or partying and it was different. It was like, "Wow, they aren't actually on my back. They're giving me freedom to experience college as it should be" and I think that was a big change for me personally with the relationship we had.

Steve's mother proved very accommodating as she helped him adjust to his new life. She insisted that he make sure he focused on what he needed to be successful, even if that meant extra "space to study" or the like. Additionally, while Tim admitted that his father probably did not sleep as well at night because of his frequent "all-nighter" study sessions, his parents still instituted some practical changes at home to accommodate his new life. When Tim began college, he and his brother exchanged rooms. His brother's room was in a more remote area of the house and it afforded Tim more privacy to study.

While the majority of participants received overwhelming positive support and encouragement from parents and family members in adjusting to college, some participants' experiences were more difficult. Consistent with research that found FG families often act as stumbling blocks in their children's successful adjustment to college, these participants had trouble balancing family responsibilities and relationships with their new life (Berger, 2000; London, 1992; Somers et al., 2004;

Terenzini et al., 1994; Tinto, 1987, 1993). For example, Steve lived in a house with his mother and extended family. In his interview, Steve indicated his mother's support of his adjustment to college life was positive and consistent; however, his extended family had greater difficulty supporting this new life.

Until about my last year of school, we were living with my uncle and aunt and their family and, at some points, other people in the house as well. So with so many people it became kind of difficult and while they always supported me going to school, I don't think they understood the time commitment and the space or other things needed to go through school.

Similarly, both Ann and Karen's parents, particularly their fathers, had some difficulty with their new freedom. This difficulty created problems for them as they tried to adjust to college life. Ann's parents were both initially supportive of her life on campus; however, this level of support changed as Ann became more involved in campus activities. Ann said, after the first couple of years:

They sometimes will complain that I don't go home that often. I spend too much time for my own business. They don't even know if I study or not or just try not to go...like I try to have fun, you know, or not going home, avoiding them or ignoring them, so I have to give them my progress, like knowing that I had to do research this weekend or I have exam next week....

In her interview, Karen indicated that she was not sure if her father ever adjusted to her life as a college student. She explained:

I think my dad had issues because he didn't know what was going on, and he is the kind of person who has to know exactly what I'm doing and he wants to

make sure that I'm safe and I'm happy, and because you're at college...he didn't know what work I had to do.

### **Pre-College Experiences**

While family influence, support and encouragement emerged in this study as the most persistent theme in participants' successful attainment of the baccalaureate degree, other factors, including pre-college experiences, also proved significant in participant success. Existing literature indicates that, in addition to parents' education levels and income, the first generation student's pre-college academic experience serves as a major factor in predicting degree attainment (Chen, 2005; Ishitani, 2006). In particular, first generation students: tend to complete a less rigorous high school curriculum than that of their non first generation counterparts; often enter college with deficiencies in the areas of English and math and are less likely to participate in advanced placement testing (Adelman, 1999, 2006; Horn and Kojaku, 2001; Warburton et al., 2001).

Results of the present study indicate that the majority of its participants do not fit this profile. Instead, all participants successfully completed a high school curriculum that met Adelman's (1999, 2006) standards of "rigor" and academic intensity (e.g. at least 3.75 units of English). Along with Adelman's work (1999, 2006), other research has also demonstrated that students who have completed a rigorous high school curriculum are more likely to complete college degrees (Chen, 2005; Horn & Kojaku, 2001). Additionally, all participants completed Algebra II or above, yet another threshold established by the literature as a factor in successful persistence and degree attainment for first generation students (Adelman, 1999, 2006). The one exception in

this area is advanced placement testing. Of the six participants (46%) who completed AP courses while in high school, three completed advanced placement testing and only two earned college credit through AP testing.

One explanation for this discrepancy may route back to the concept of first generation families and their limited social/cultural resources in relation to navigating the higher education system (Berger, 2000; Coleman, 1988; McDonough, 1997; Perna, 2006). A number of participants understood that they were placed in AP or honors courses because they were “smarter” than their peers, but they did not indicate that they enrolled in these courses with an aim to gaining college credit in the process. A prime example of this discrepancy is Mary, who chose not to participate in the AP curriculum because she was scared. She also did not want the commitment to interfere with work or her extracurricular activities.

**Academic preparation.** A review of high school transcripts revealed consistent course-taking patterns among participants. All participants completed the minimum requirements for a college preparatory curriculum, even though Lynn was technically enrolled in her school’s “business track” curriculum. Appendix D details participants’ course-taking patterns including the number of years completed in four academic areas identified as critical to first generation students’ academic success in college: English, math, science and language (Adelman, 1999, 2006; Horn & Kojaku, 2001). Because specific levels of high school math performance have been tied to college academic performance (Cabrera et al., 2005; Horn & Kojaku, 2001; Warburton, et al., 2001), the highest level math successfully completed by each participant is also included in Appendix D.

Of the 13 participants, 12 (92%) completed four years of English; 12 (92%) completed four years of math; 13 (100%) completed three or more years of science, and 7 (54%) completed three or more years of a foreign language. Only one participant did not complete any foreign language courses while in high school. Furthermore, 11 of 13 (85%) participants completed advanced math courses beyond Algebra II.

The literature suggests that first generation students completing a more rigorous college preparatory curriculum, including advanced placement courses, are better prepared to meet the academic demands of college (Adelman, 1999, 2006; Horn & Kojaku, 2001). Adelman (2006) argued that academic rigor in high school still “counts more than anything” in terms of predicting degree persistence and attainment (p. xviii). Even though multiple factors were identified in the current study as critical to first generation degree attainment, the results do align with Adelman’s (2006) finding that a rigorous high school curriculum is significant. Not only did participants meet the “rigor” standards for curriculum and highest math levels (Adelman, 2006; Chen, 2005; Horn & Kojaku, 2001), a majority of participants also identified the significant role their upper level English, AP and honors courses played in preparing them for the academic challenges of college. Of the 13 participants, 10 (77%) cited either their English courses/instructors (in most cases, upper level courses) or their honors and AP courses/instructors as major factors in preparing them for college. Additionally, as shown in Appendix E, a total of six participants (46%) completed AP courses while in high school, while seven (54%) completed honors courses. One participant had completed an IB course. Information about whether any of the other

participants' high schools participated in the IB program was unavailable to the researcher.

Another factor research has identified as significant in first generation students' successful attainment of the baccalaureate degree is high school academic performance (Chen, 2005; Ishitani, 2006). As indicated in Appendix F, study findings include the cumulative high school GPA and SAT scores for each participant. The median cumulative high school GPA for participants was 2.81, and the median SAT score was 913.

While a review of participants' transcripts showed them to have participated, at least on paper, in curricula approximating that of their non first generation, higher SES peers; overall, participants' cumulative high school G.P.A.s and standardized test scores more closely reflect the prototypical "first generation student" (Chen, 2005; Choy, 2001, 2002; Ishitani, 2006; Engle et al., 2006; Nunez & Cuccaro-Alamin, 1998). This student is less likely to appear in the highest class rank quartile (Ishitani, 2006). Choy's (2001) study results indicate that only 14.5% of students whose parents had earned a HS diploma or less and 16.1% of students whose parents had attended some college were in the highest quartile of beginning postsecondary students (p. 20). In line with this research, the academic profiles of FG participants in this study placed them in the lowest quartile of entering first time UM students for their respective cohort years (Academic Achievement Programs, 2007; Office of Institutional Research, Planning & Assessment, 2005).

High school academic performance, including cumulative grade point average, standardized test scores, and high school class rank, factor significantly into the first



generation student's successful degree attainment (Chen, 2005; Ishitani, 2006; Warburton et al., 2001). The literature consistently shows that the lower the academic performance (i.e., standardized test scores, high school class rank, cumulative grade point average), the less likely a first generation student will persist and attain a degree within six years (Chen, 2005; Ishitani, 2006; Warburton et al., 2001). The results of this study do not support these findings. Instead, as Table 2 and Appendix F indicate, the individual and aggregate high school G.P.A. and standardized test score profiles for participants are significantly lower than the mean cohort profiles for all admitted students to UM in 2001-2004. Logically, then, one might argue that the odds of successfully graduating from college, and especially from UM, were against these students; however, each of them attained the baccalaureate degree, some even in four years.

**Secondary school influences.** Contrary to the literature, the influence of secondary school counselors (Holcomb-McCoy, 2007; McDonough, 1997; Perna, 2006) did not emerge in this study as a pre-college factor affecting first generation degree attainment. While McDonough (1997) found that high school counselors often served as valuable resources for first generation students who aspired to attend college, the participants in this study indicated that their high school counselors were not helpful in nurturing their educational aspirations and application to college. In fact, in some cases, high school counselors discouraged participants, like Jim, from applying to UM. However, participants singled out teachers and the courses they taught as relevant in their preparation for college. In particular, AP coursework in English and experiences with secondary English teachers were singled out by most

participants in facilitating their successful transition to and performance in college. An important reason students may have identified these particular courses is their traditional focus upon critical thinking, analytical and writing skills.

Eight of the 13 participants (62%) identified English classes as the high school courses that most specifically prepared them for college. Two participants identified their honors/AP courses as most effective in preparing them for college; two generally identified the workload for all courses as preparation for college, and one indicated that the rigor of his high school academic experience did not sufficiently prepare him for college. When asked about his experiences with high school classes, Mike explained:

I would say they didn't help me too much. The classes were very general. I would say once I came to Maryland and just dealing with the classes that I was dealing with, I had to learn that...I would say actually being in college was my learning experience.

Mike attended an urban, public high school. Jane, who attended an exclusive, private high school, had a very different experience, both from Mike and most of the other participants. Jane actually felt that her college experience was easier than high school because she had to focus on fewer courses and had less work to do each evening. In explaining her high school academic experience, Jane stressed:

It was a lot of work; it was a lot of writing. The standards were really high. Certain things that I went over in high school, they didn't even touch in college...or if they did, it wasn't to the extent that it was in high school.

While not all participants agreed that their high school experiences were as rigorous as Jane's, a majority pointed to their English courses as providing the most preparation for their more intensive college courses. Mary recalled her twelfth grade English teacher:

She actually taught an AP course, so her structure, her syllabus was kind of still around it. She was very strict. She made sure that we took writing workshops and I think she prepared me as...well I actually struggled through that class a little bit, but she prepared me with the grammar and everything that we needed.

Tim also discussed how his English course preparation, particularly his AP literature and theater courses, readied him for college. He explained that these two courses required consistent, rigorous critical writing and research activities. Similarly, Betty pointed to her honors classes as particular preparation for the rigors of college. She spoke specifically of the "challenging level" of the five honors courses she took and how they readied her for college academics.

**Peer influence.** While participants did discuss their experiences with high school friends in relation to their goal of earning a college degree, pre-college peer influence did not emerge in this study as a significant factor affecting degree completion. For many first generation students, peers serve as a deterrent in the pursuit of a college degree, often because college is not part of their cultural expectations or habitus (London, 1992; Pascarella & Terenzini, 2005; Somers et al., 2004; Terenzini et al., 1994; Terenzini et al., 1996). Participants in this study agreed that some of their friends did not understand or support their decision to attend college; however, they also indicated that negative feedback from peers was not a factor in their degree

attainment. Instead, participants disregarded peer feedback or discontinued relationships and turned their focus within or to their families for support.

When interviewed, eight of the 13 participants (62%) indicated that no one had discouraged them from going to college. Five of the participants (38%) identified peers that tried to discourage them from going to college; however, they were unsuccessful. These discouraging forces ranged from a high school counselor to a co-worker to peers. John described how one of his co-workers tried to encourage him to go to a community college over UM: “the AAP [Academic Achievement Programs] wanted me to go to the summer program, so she [co-worker] felt as though I could go to a community college, get the same education, and still work my government job.”

While Mike was not discouraged by teachers or co-workers, many of his friends tried to discourage him from going to college because they did not have the same educational goals:

You know, coming from an inner city environment, just having peers that wasn't necessarily doing the same things that I was doing as far as academics, sometimes they would try to be a persuading force and tell me, “Oh, you don't need to go to college. You don't really need it. You just go ahead and just get a regular job and be OK....”

During the college application process, Mary also discovered that several of her friends had different priorities than she did. These friends had set their goals at the community college level, which did not sit well with Mary. She expected more from herself and from her peers:

I have high expectations of myself, and I felt like when it came to the time of the workshops [college prep] and they just weren't as involved as I was, so I kind of drifted off and my friendships started to build more with my friends that were on my dance team because we were more focused on getting into college and making sure that we were getting the best education. So in a way...in a sense, they didn't discourage me by saying, "You shouldn't go to college," but the fact that they were just not applying themselves, I guess, kind of was a discouragement....

This theme of self-motivation and surrounding oneself with friends who will encourage an individual to "reach higher levels" was a common one among participants, although, in some cases, it created additional stress. At his urban high school, John was used to everyone from coaches to teachers to parents telling him how smart he was. Because everyone thought he was so smart and had high expectations for him, when asked about where he was going to college, John told them what he thought they wanted to hear. John said:

People would ask me [about going to college] and I would just tell people what they wanted to hear because I was considered very smart at my high school so I told a lot of people I was going to Stanford. A lot of people believed me, and so it just kind of just...I didn't want people asking me questions because I truly didn't know what I was going to do either.

John also felt additional stress to succeed because one of his sisters attended an Ivy League, and another attended a well-known state flagship research institution.

Ultimately, when the University of Maryland accepted John, he told everyone he had just decided to go to UM instead of Stanford.

### **College Experiences**

The findings from this study revealed that families influenced both pre-college and college experiences of participants. Data analysis also revealed additional significant themes related specifically to participants' college experiences. These themes were drawn from data collected on participants' academic and non-academic experiences once enrolled at UM.

#### **Academic experiences.**

*Continuous enrollment.* Consistent with the literature (Adelman, 1999; 2006; Cabrera et al., 2005; Chen, 2005; Ishitani, 2006), continuous enrollment surfaced as a significant factor in degree attainment for study participants. Transcript analysis revealed that, of the 13 participants, 13 (100%) enrolled at UM immediately following high school, and 12 (92%) remained continuously enrolled for their tenure at UM. Only one participant, (8%) "stopped out," and he (John) returned to full-time study within six months of stopping-out.

Of the factors that Ishitani (2006) identified as impacting degree attainment for first generation students, he found that continuous enrollment had the most positive significant influence. While this study's findings point to family influence as the most significant positive influence in degree attainment for first generation students, continuous enrollment emerged as a very strong indicator of success, particularly when considered within the context of participants' summer/winter term enrollment

patterns. All 13 participants (100%) enrolled in summer/winter term courses, in addition to the traditional academic year (fall/spring) (see Appendix G). Appendix G indicates the number of summer/winter terms in which each participant enrolled. For example, in her six years at UM, Ann enrolled and completed courses during 10 summer and/or winter terms. Every calendar year, two summer terms and one winter term are available to all students.

Engle and associates (2006) asserted that first generation students often have difficulties adjusting to the academic environment in college. While this adjustment may be attributed to a variety of issues, several factors in this struggle included lower grades during the first year and enrollment in fewer credit hours (Adelman, 1999; 2006; Pascarella et al., 2003; Pascarella et al., 2004; Terenzini et al., 1996). The current study's findings indicate that these factors may be mediated by consistent and continuous enrollment in summer/winter terms. Data analysis revealed that 6 of the 10 (60%) participants that failed a course used the summer/winter term to compensate for this academic struggle, and all 13 participants earned additional credit hours during summer/winter terms, thus closing the gap in credit hours earned versus their non first generation counterparts. These results are in line with Adelman's (2006) findings that (1) "continuous enrollment increased the probability of degree completion by 43%," and (2) completion of more than four credits during summer terms led to a "consistent positive relationship to degree completion," particularly for African-American students (p. xxi).

Of the 13 participants, three earned their baccalaureate degree in four years (23%); seven earned their degree in five years (54%), and three (23%) took six years

to finish. Ten of the 13 participants (77%) failed one or more courses during their college careers and, of these 10 participants, six (60%) enrolled in summer/winter term to re-take at least one failed course. Two of the 13 participants (15%) were placed on academic probation at some point in their time at UM, and one of them (John) was academically dismissed. After being academically dismissed after his second year, John took a semester off to work full-time and then enrolled in classes at his local community college. He spent a year there before successfully applying for re-admission to UM.

***Academic performance.*** Unlike the current study's results regarding continuous enrollment trends, findings on participants' academic performance contradict the widely supported contention that first year academic performance, namely grade point average and hours enrolled, serves as a strong indicator of degree attainment (Adelman, 1999, 2006; Cabrera et al., 2005; Chen, 2005; Ishitani, 2006; Metzner & Bean, 1987; Pascarella et al., 2003; Pascarella et al., 2004; Terenzini et al., 1996). Metzner and Bean (1987) identified the background variables of first year GPA and number of hours enrolled as two of the most significant direct factors for persistence to graduation, so this component of the participants' academic experience was an important element of the present study. The findings related to these factors are displayed in Appendix H.

Terenzini and associates (1996) and Adelman (1999, 2006) found that FG students earned fewer hours than their non-first generation counterparts the first year. Chen (2005) purported that first generation students who earned *at least* a 3.0 GPA and a *minimum* of 30 credit hours in their first year were more likely to earn a degree.



The majority of study participants did not meet the minimum first year GPA and credit hour standards Chen (2005) established for increasing their chances of earning a degree. The mean first year GPA and hours successfully completed for study participants were 2.83 and 28 semester hours respectively. Of the 13 participants, seven (54%) earned a GPA less than 3.0, and 11 (85%) earned less than 30 credit hours during the first year. None of the participants was enrolled in remedial coursework during this period; therefore, enrollment in non-credit bearing courses did not affect GPA calculation or credit. The results of this study clearly indicate that participants attributed their degree attainment to a variety of factors; therefore, the role of first year academic performance should not be considered in isolation.

***Choice of major.*** In an analysis of major enrollment trends, Chen (2005) identified choice of major as a significant influence in persistence to graduation; however, very little else has been written regarding challenges faced by first generation students in choosing a major. Similar to Chen (2005), the results of this study suggest that the *process* of choosing a major posed a significant challenge in participants' degree completion. One explanation for this difficulty may be attributed to the limited social and cultural capital many first generation students bring to their college experience.

In line with the research on social/cultural capital and its impact on first generation students (Berger, 2000; Coleman, 1988; Lin, 2001; Perna, 2000, 2006; Somers et al., 2004; Terenzini, Cabrera & Bernal, 2001; Pascarella et al., 2004, Perna, 2006; Walpole, 2003), participants described their lack of knowledge about the expectations of particular majors and the challenges encountered as a result of their

limited knowledge of both the range of majors/career paths available and how one selects a major. A representative example of this is Betty, who, in her second year, struggled academically because she was taking courses in a major for which she was not suited. Only after she reached out to various resources on campus, such as AAP, the career center and peers, did she collect sufficient information to choose a major appropriate for her personality, academic strengths and vocational orientation.

A review of participant transcripts and admissions applications, supplemented by specific questions asked of participants in individual interviews, revealed that 12 of the 13 participants (92%) changed their major at least once during college (see Appendix D). Appendix I details each participant's expected college major when they applied to UM; the major in which their degree was awarded, and the number of times they changed their major after enrolling at UM. The most popular major among participants was Criminal Justice. Four of the 13 participants (31%) ultimately earned B.S. degrees in Criminal Justice and Criminology.

A number of participants admitted that they initially chose their majors based upon what they had read in the media or heard from friends/relatives about financially lucrative careers. Ann initially thought she would pursue a pre-pharmacy track because "everyone told me to study pharmacy." Mary came to UM intending to major in Business because she wanted to go to law school and practice corporate law. Mike began his college career intending to major in Computer Science because people told him "That's where all the money is."

Choice of major for others was somewhat incidental and did not appear motivated by long-term career aspirations. Jim chose Kinesiology because he liked

sports; Tim loved his theater classes in high school, and Steve initially wanted to major in Psychology because his high school AP psychology class was interesting, and his teacher told him he performed better than most in the course. Erin, who ultimately changed her major four times, acknowledged that she had no idea what to major in because she only went to college to please her family.

Ironically, it was Erin who, perhaps, had the most life-altering experience related to her choice of major. After struggling both academically and with the question of, “What am I doing here?” Erin took a course that changed her life. Always an avid reader, she had never considered a career as a writer until a professor complimented her on a paper she wrote and encouraged her to further pursue her writing talent. Erin enrolled in her first creative writing course the following semester and made her final major change. She graduated from UM with a bachelor’s degree in English and went on to pursue a graduate degree in writing.

Like Betty, other participants also settled on their final choice of major after establishing networks and connections that exposed them to previously unknown or unexplored opportunities. John chose to pursue a major in Criminal Justice based upon social capital he had amassed through relationships forged at the University. When asked how he decided on his major, John explained that, growing up, he had always wanted to be a Secret Service agent. Ultimately, though, he was motivated to choose Criminal Justice because he had heard through peers on campus that it was a popular major. He also discovered through his network of peers that a large number of athletes pursued a major in Criminal Justice because it was a “very easy major” and really only required “common sense.” Mike also chose Criminal Justice through

social connections he had made at the University. Mike described his decision to make the drastic change of major from Computer Science to Criminal Justice in this way:

I had a fellow classmate who had a class in my major [criminal justice] and I had free time at the time. I didn't have any classes, and he was telling me, "Why don't you come sit in on my class? It's very interesting and the professor, he's funny and everything," and I was like, "OK," so I went on and sat in the class and just...you know, just the way he presented the material and the different topics that were in the major, it really interested me like, "OK, I can maybe see myself pursuing this major."

***Academic support programs.*** Study results further indicated that participation in an academic support program significantly and positively affected participants' degree completion. More specifically, this experience influenced participants' transition to college, both academically and socially. All subjects of this study participated in the Student Support Services (SSS) program during their tenure at UM. The study's results indicated that all 13 participants were able to draw upon varying aspects of this experience to help them address deficiencies in their incoming academic profiles and/or build upon their limited knowledge of how college works (social capital). Participants specifically focused upon how their experiences with Academic Achievement Programs' (AAP) staff and services, involvement in the Summer Transitional Program (STP) and interaction with peers helped them adjust to college, develop resources and complete their degrees.

Results from the current research suggest that academic support programs not only expand first generation students' network of academic resources, but also serve to close the gap in social capital between the "haves" (non first generation students) and "have nots" (first generation students). This finding is in line with research that suggests academic support programs can help first generation and other less privileged students "bridge the achievement gap" during their first year (Engle et al., 2006; Engle & Tinto, 2009; Pascarella & Terenzini, 1991, 2005; Saunders & Serna, 2004). The literature indicates that first generation students' lack of familiarity with academic bureaucracy and post-secondary social networks negatively influences graduation outcomes (Berger, 2000; Coleman, 1988; Engle et al., 2006; Pascarella et al., 2004; Perna, 2006). Accordingly, the present study's results demonstrate that participation in an academic support program can successfully mediate these challenges for the first generation population.

Data analysis revealed that a number of participants identified their involvement in the SSS program as a significant factor in establishing valuable academic/social networks and connections of which they previously were unaware and unequipped to navigate. For example, when asked, "Who helped you figure out what resources to use," Jane contended:

I would say the program [SSS], being in the program. They told us, I want to say, almost everything....if it wasn't for the program, I probably would have been one of those people who showed up on campus, "Oh my goodness, this place is so big. What am I going to do?"

Interviews with participants revealed numerous academic and social networks created as a direct result of their involvement in the SSS program. New contacts/networks ranged from peer groups to academic, personal counseling, financial aid and career resources. Often, participants, such as Jim and Jane, described how making a connection to these resources proved critical in overcoming major challenges in their pursuit of the bachelor's degree. For example, both of these participants identified the rigorous STP academic curriculum and support of tutors/staff as major factors in their successful transition to the academic culture at UM. Karen, also, agreed that her involvement with AAP and STP helped boost her confidence to succeed because of the extra academic support she received. She described how participation in SSS during the first two years of college helped her stay focused on her academic goals and supported her increased performance on quizzes and tests because the experience provided additional study time and a venue to work out questions she might have about specific concepts. Jim, too, discussed how influential AAP and the Summer Transitional Program were upon his undergraduate success:

Definitely the course load helped me with getting ready for college. The beginning part of it...you had to do the summer program and the summer program is very intensive, so that definitely, definitely prepared me because it's actually harder than doing the actual semester when I started.

Others, like Betty and Mike, credited AAP with helping them understand and navigate critical academic experiences, such as choosing a major or applying for financial aid. Betty's AAP counselor proved integral in helping Betty work through

her struggle of choosing a major, and it was this same counselor who connected her to the career center.

Furthermore, like the majority of study participants, Mike received most of his information about financial aid through AAP. He participated in two separate academic support programs at UM [both dedicated to serving primarily low income and first generation students] and, in his interview, discussed how this benefitted him in accessing financial aid resources. Both programs shared a dedicated financial aid counselor, and Mike's relationship with this counselor began prior to the start of STP and continued throughout his enrollment at UM:

As far as doing my FAFSA and doing this and doing that, she was the one who would contact me, "OK, Mike, it's time for you to renew this. You need to go ahead and renew this or if you need to take a loan this is the kind of loan that's best for you to take. You need to go ahead and do that," so it was one person that I would go to as far as financial aid and that was the person that I would talk to. That person specialized and worked for [the] programs. It was a definite advantage.

*Summer Transitional Program (STP).* The current findings also align with first generation persistence literature that has identified participation in summer bridge programs as positively impacting the student's adjustment to academic life in college (Engle et al., 2006; Engle & Tinto, 2009; Pascarella & Terenzini, 1991, 2005). Pascarella and Terenzini (2005) particularly mention the impact of supplemental instruction and learning communities upon the persistence of first generation

students. The positive impact of these specific experiences in the STP clearly emerged in this study.

While interviews revealed that participants initially were not all that thrilled either to be attending a six week summer bridge program or participating in extra tutoring or supplemental instruction sessions for general education courses their first and second years, most of them pointed to these experiences as influential factors in their successful adjustment to college and persistence to the degree; however, Bob pointed to his STP experience as a positive that helped establish a sense of belonging for him within the University community. He said:

Actually coming in and starting school before the normal semester started. I think that was very beneficial and actually gave us a head start in order to start our college career...and having met the same cohort of students that came in that same time, you know...to this very day, I actually still have friends that I met from AAP that went through the same journey that I did and graduated and went through the same...had to jump through the same hoops, so in that retrospect, it not only made great connections, long-term connections, but it actually helped me finish my...get to the goal that I wanted to do, which was graduate from college.

Like Bob, Tim credited STP with preparing him for the rigor of college courses and providing the resources for him to develop his time management skills. He described how the “pre-English 101” course he took during the summer bridge program prepared him for the demanding schedule of coursework at UM that so differed from his high school experience.



Others begrudgingly acknowledged the positive impact STP had upon their college success. Several talked about struggling with balancing the numerous mandatory requirements of the program with their other commitments; others felt there was too much “hand holding” and longed to be treated like “real” college students. For example, Bob expressed initial frustration at the Program’s time intensive mandatory requirements:

At first I had a negative impression about it [STP] because...I know AAP was here to help, but just that they would mandate that you have to go to these classes; it’s mandatory. That in itself ...gave me a negative impression about the program because I felt like you were being spoon-fed all the time....

Bob also did not appreciate the fact that non-compliance with these requirements meant that you would not be admitted to the University; however, in retrospect, he attributed this frustration to his just being “rebellious.” Like Bob, John did not appreciate the mandatory, intrusive nature of the STP program because he felt that students learned at variable rates and he was of the opinion that aspects of the Program should have been optional for those students who did not feel they needed the additional support.

Overwhelmingly, though, the majority of participants discussed how critical their participation in AAP, especially the Summer Transitional Program, was to their successful adjustment to college and ultimate graduation from UM. Participants focused upon how STP helped them adjust to the campus layout, to campus life and provided guidance on locating specific resources and time management skills. Jim explained:

I thought it really prepared me to get ready for college. I think this is probably the biggest influence that I had on education because without it... I think the scenario would be a lot different for me if I just came straight into Maryland. It really prepared me as far as academics and just getting accustomed to the school in general I think.

*The concept of family.* The importance of “family” also prevailed in participants’ discussions of their involvement in AAP. Graduates frequently referred to AAP as a “family,” and spoke of the Program as their “home away from home.” Mary characterized AAP as “a family away from my family” and explained:

I felt like if I didn’t have that program, I probably would have been lost freshman year and just both, literally lost on campus as well because they helped us with just finding places. This is a huge campus, just helping you get around, giving you the best advice for just anything and knowing that you can just come to them, even if it’s on a personal level, even if it’s on an academic level, just knowing that you are able to come to someone and talk to them and they don’t judge you.

Mary felt so strongly about how much AAP had done for her that she made a point to “give back” to the program by working and tutoring for the Program.

In addition to the safe environment the AAP family appeared to provide, another clear factor that emerged in discussions with participants included the positive impact friends made through AAP had on their adjustment to college. These relationships further reinforced the idea of “family” and, in line with the greater body of research,

suggest the critical role social relationships play in the first generation student's successful persistence through and graduation from college.

**Social experiences.** Research suggests that social networking factors play a strong role in a first generation student's ability to complete a baccalaureate degree (Lin, 2001; Pascarella et al. 2004). More specifically, Saunders and Serna (2004) found that participants who created new social networks tended to earn higher grades and assimilate more effectively in their new environment. Present results support this notion. While the mean first year GPA for this study's sample did not follow Chen's (2005) minimum indicator for graduation success, one may argue that, relative to the discrepancy in entering high school cumulative GPA and standardized test scores between study participants and non-participants entering UM as first time freshmen (2.80/913 and 3.83/1254 respectively), the cohort did perform and persist at a level higher than anticipated. These participants were admitted to UM through AAP because they did not meet minimum standards for admission, yet only 1 of 13 participants ended the first year with a cumulative GPA below 2.0.

A specific goal of this study was to explore participants' perceptions of the role of college social experiences in regard to their degree completion path. In interviews and on the survey, participants were questioned not only about their academic experiences while in college, but also about their social experiences. Using the literature as a framework (e.g., Pascarella & Terenzini, 2005), participants were asked to discuss social experiences, including interactions with faculty and peers, participation in academic/social support programs, involvement in extracurricular activities on or off campus, and perceptions of the racial/ethnic climate on campus.

This section of the chapter focuses on critical findings related to participants' experiences in these areas.

*Peer influence.* Despite the relatively few studies in the area of peer influence and college adjustment, Murguia and colleagues (1991) made a strong case for the role of enclaves in the college persistence of underrepresented students. Present findings extend this notion to include a first generation student population and establish this peer network as a significant factor in degree completion. Considered within the context of cultural capital, peer relationships can factor heavily into the first generation student's adjustment to and subsequent success within the college environment (Berger, 2000; Tinto 1987, 1993; Walpole, 2003).

Murguia and associates (1991) found that college students were drawn to others who shared the same ethnicity because these individuals provided a sense of "constancy" for the subjects and eliminated the need for them to consistently explain how their experiences might differ from those of the majority. This concept repeatedly emerged in interviews with current study participants. Participants consistently identified peers as a significant factor in their academic and social adjustment to UM, and specifically pointed to the value of their AAP peers in easing their adjustment to college life.

When Karen discussed the support she received from AAP, she talked about how she had a core group of peers who were going through the same experiences that encountered. She explained that this was important to her because she was not just "thrown off into the wild on my own." Karen explained:

I mean, I could talk to the higher officials. I could talk to the teachers we had, but because these kids were going through the same thing as me, I had somebody to talk to and they usually always had the better answer, and we could do our work together, study together. It's just a support group.

This idea of friends, particularly friends made through AAP, as a “support group” also surfaced in interviews with other participants. When she was frustrated or facing a particular hurdle in progressing toward her degree, Lynn would chat with classmates—friends from the dorm, roommates and friends that she made through AAP.

When he started college, Mike's relationships with friends from high school started growing apart, primarily because they had all chosen different paths in life. Fortunately, though, Mike forged a very strong connection with his peers in AAP and his other support program:

I'd say socially I spent the most time with my fellow classmates in the AAP program and the [other support program]. I felt that those were my core group of friends. I always hung out with everybody in the program, in both programs.

We always hung out.

When asked what drew him to this group, Mike explained the reason for the strong bond he established with his new network of friends:

Even though I had other friends who are different races and different ethnicities and nationalities, but at the same time, I felt as far as my core, these people, these guys, they knew what I was going through. They knew what I was trying to do,

so they could more sympathize and understand what I was going through when I was going to college.

Even John, who admitted that he was somewhat of a “loner,” said the best friend he made from school was the roommate he had in AAP because the two of them had similar backgrounds and were experiencing the same types of struggles at UM.

In addition to their social value, peer networks also served as valuable academic resources for participants. Study groups formed with peers helped a number of participants successfully complete difficult courses. Friends also provided fresh insights into course material and valuable information regarding choice of major and course enrollment. For example, Mary credited peer networking with providing critical academic support toward the completion of her degree. When asked where she got the most help academically she recognized students in her classes. She said:

One thing I learned and I appreciate going to Maryland is that everyone is so diverse and everyone is always willing to help. So just making sure you speak up, networking, and just talking to someone. You never know, they might have the same problem or you might be able to help them with something and they might be able to help you. So just getting in student work groups and I feel like actually within the class, the students actually helped me the most because we're able to kind of work on the same...work on our homework assignments together or just go over some things.

Ann's network of friends also proved valuable in uncovering academic resources and choosing her major. When asked who helped guide her through the process of choosing a major, Ann explained that one of her peers, along with Ann's boyfriend,

helped her navigate this experience. Ann was unhappy with her major and unsure what avenue to pursue, but frequent discussions with her friend helped Ann realize that majoring in nutrition would serve as a foundation for a number of career/study paths in the sciences. After her friends helped her explore other options in various departments and colleges on campus, Ann ultimately chose nutrition as a major.

While these individuals and their groups of friends may not all have been from the same ethnic background, they all came to the University as first generation students. They faced, as a group, the same cultural and social capital challenges consistently outlined in the literature (Cabrera et al., 2005; Chen, 2005; Choy, 2001; 2002; Engle et al., 2006; Ishitani, 2006; Pascarella et al., 2004; Pascarella & Terenzini, 1991, 2005). Interview results repeatedly demonstrated participants' awareness that their peers helped them adjust to college, as well as persist to their degrees. In some cases, though, it was the absence of one's peers that positively affected participants' degree completion.

The peer relationships Mary made in college were so important that she credited her best friend, who she met through AAP, with having the greatest influence on her successful completion of the bachelor's degree:

She was the only person that was there for me, went through my good times, went through my bad times. When she was having bad times I would encourage her, and that was on academic levels. When I was having bad times emotionally with my family, she was always there to encourage me....

On the completely opposite end of the spectrum, Bob credits the absence of AAP peers from his daily academic life with finally motivating him to "hurry up" and

finish school. When asked about some of the greatest challenges in finishing his degree, Bob remembered the struggle to finish his final few classes:

a lot of the people that I actually did start AAP with had already graduated within that four year time period and I was a few years...like a year and a couple of semesters behind where I felt...when I would go to class there were all new faces and I felt twice times removed. You know, number one, I don't want to be here; number two, I don't see anybody I recognize, so that social aspect of school was gone and I just felt old. I felt like, "Whoa, what's going on here?" So I actually turned that negative into a positive to be like, "I need to get out of here, so I'm passing all my classes. I don't want to be here."

***Interactions with faculty.*** Research indicates that constructive interactions with faculty can positively impact the college persistence of at-risk students (Cabrera et al., 2005; Hahs-Vaughn, 2004; Lohfink & Paulsen, 2005). For first generation students, connections with faculty, both in and out of the classroom, can serve as validating experiences in their transition to college (Lohfink & Paulsen, 2005; Pike & Kuh, 2005; Terenzini et al., 1994; Tinto, 1993). Interestingly, an important discovery in this study was the relative insignificance participants placed upon their interactions with faculty as related to their college experience and persistence to the degree. All participants identified themselves as actively attending and regularly participating in classes; however, a majority perceived their interactions with faculty as non-significant in relation to their degree completion.

An analysis of interview data indicates a consistent pattern of responses from participants. Most of the individuals only occasionally met with faculty members or



teaching assistants and, primarily, when they were having difficulty with a particular class. Betty's response represents the majority's perception of their interactions with faculty at large at UM. She explained her interaction with professors and instructors as "Not very much, only if I had a question. I'd go to class and go home." Steve did have more interaction with his instructors than some of the other participants. He established a congenial repertoire with several faculty members outside of class; however, he did not identify these relationships as particularly critical to his success in earning a college degree. In fact, he specifically avoided conversations about school with his professors because he was embarrassed of his struggles.

An exception to this pattern was the relationship Erin established with a specific English professor. Erin characterized this relationship as "life-changing," and it resulted in her decision to pursue a career in writing. Erin's interaction with her English professor supports the literature that has found positive interactions with faculty can help validate the student's perception of whether they belong in a college classroom (Terenzini et al., 1994). In the midst of her academic struggles, Erin enrolled in a course in the English department that she really enjoyed. She began spending more time in the Department, both in the advisors' and professors' offices. The faculty, and one professor in particular, spent time outside of class working with Erin to improve her writing. For example, they would provide additional readings outside the syllabus for her to read and discuss during office hours. The faculty also would provide additional feedback on her writing. This experience helped Erin build confidence in her writing talent and, ultimately, led to her decision to major in English and pursue a graduate degree in writing.

While most participants were not afraid to approach a faculty member or TA if they did not understand course material, most were still intimidated by the student-faculty role. Ann indicated that she limited her interactions with faculty to a minimum because “I was intimidated when I first got into college, so I didn’t really have any contact with professors, TAs minimum.” Even when she began working on a professor’s research project for her undergraduate research program and switched her major to nutrition, which was a smaller, more intimate department than biochemistry, Ann still limited her interactions to graduate students and TAs:

And so for all my classes, like lectures, I don’t really know the professors in personal...on a personal level. I don’t talk to them after class. I sometimes email them questions, but I was not that thrilled about talking to them or chatting with them after class like other people do....

Bob was comfortable approaching TAs, but was selective about when he talked to them. He felt comfortable asking questions if he did not understand the course material, but, otherwise, would not seek out their help because he knew their time was “valuable to them.” Like Bob and Ann, Jane’s relationships with faculty members also did not go beyond the occasional question asked during office hours. Her interactions with faculty were limited to asking questions about class work, not for anything else.”

Several participants attributed their limited interaction with faculty to their impressions that faculty were disinterested in their students. Bob explained:

I remember coming from a small high school and having no more than 30 students per class, that the attention you would get was very different. You’d get

more individualized attention to make sure you actually grasped the topics that a subject would teach, whereas coming to Maryland and you were assigned a GA who probably didn't even know your name, you just show up to class once a week. It was very hard adjusting to that type of environment.

Jane had the same type of transitional experience. She came from a small, private high school that offered intimate classes and a great deal of one-on-one attention. The adjustment to the size of UM was one of her greatest challenges as a new college student. Jane characterized UM as a place where “if you want to be known, you have to make yourself known.”

It is possible that the influence of UM faculty at large upon participants' persistence and degree completion may have been tempered by the students' participation in AAP and the majority's increased dependence upon faculty/staff in the program for validation. During the first two years at UM, many of the participants turned to staff and instructors in AAP when they faced difficulties in their courses or had questions about changing their major or enrolling in courses, where, in the same situation, non AAP participants may have sought out professors or TAs to validate their knowledge/skill levels or decisions. Furthermore, as evidenced in the frequent references to AAP as a “family” or “home away from home,” participants had already established a “safe” environment within which to seek validation, even before they began their first semester at the University. These findings align with research on family involvement; in particular, they support the assertion that students who participate in outreach programs often consider the staff/contacts in these programs as

a “surrogate” family, providing the support and/or resources that may not be available at home (Tierney & Colyar, 2005).

As evidence of this, a number of participants, including Bob and Jane, distinguished their experiences with AAP faculty from faculty/TAs at large in the University. When asked where he received most of his help academically, Bob spoke about a positive experience with a TA who once spent three hours reviewing course material with him during his last semester at UM and also about his experience with faculty/staff in his AAP supplemental classes:

Those classes were similar to what I had in high school where they were smaller classes and you would get one-on-one attention with an instructor who would help you with your specific questions you had about a subject and that was very helpful in understanding the material....

While Lynn did not hesitate to approach her professors during office hours if she had questions about her courses, she discussed the difference between working with faculty and staff affiliated with AAP versus interacting with other faculty members at UM:

With AAP, I felt like, you know, it was more of like a family. Your faculty and staff, they’re more open to their students coming to office hours, just coming up to them and saying, “Hey, I need help with this,” or “Can we sit down and chat about an assignment, a goal or something.”

John explained how important the personal connection to faculty and staff at AAP was compared to his relationship with UM faculty at large. He noted that, for the most part, his limited experiences with TAs were positive, although he did

encounter instructors who gave the impression they were too busy to help him. Rather than build relationships with at large faculty at UM, John “gravitated” toward the AAP faculty/staff. He established particularly close relationships with his counselor and the Associate Director of the Student Support Services program. In characterizing the relationships he built with these individuals, he explained that the Associate Director was like a “mother” to his counselor and a “grandmother to me.” Like John, his counselor was an African-American male from an urban city and the two shared a number of similar life experiences.

*Involvement in extracurricular activities.* Overall, the results of this study align with those of the extant literature that recognize extracurricular participation as, primarily, a positive, but minor factor in student persistence and degree attainment (Lohfink & Paulsen, 2005; Pascarella et al., 2003, 2004). Current findings indicate that most participants were slow to become involved in on campus activities because they (1) lived off campus and had a difficult time feeling they were “part” of the social life at UM or (2) their primary extracurricular focus was either work or religious activities outside of the campus. These conclusions are consistent with those of Cabrera et al., (2005), Pike and Kuh (2005), Lohfink and Paulsen (2005) and Pascarella et al., (2004), all of whom discovered that first generation students delayed involvement in non-academic activities on campus until after their first year, if they got involved at all, and work/family obligations often impeded their ability to make sizeable extracurricular commitments on campus.

Throughout their time at the University, 12 of the 13 participants (92%) took part in some form of extracurricular activity on campus, ranging from religious

organizations to fraternities/sororities to intramural athletic teams. While participants' involvement in extracurricular activities ran the spectrum from "no participation" to "high involvement", the individuals who fell at the lower range of this continuum often were participants who lived off campus. In interviews, these persons detailed the lack of connection they felt to the UM community because they were not as involved as their on-campus peers. For example, Steve did not become involved in activities until his junior and senior years. He explained his sense of feeling like an "outsider":

I guess living off campus I had always felt a little bit detached from things and from everyone. I felt like the people on campus had a closer community and I guess I just always had that feeling of being a commuter student and just coming here to take classes and then going back home.

Interestingly, many of the participants interviewed became more involved in campus activities during their junior year and beyond. Steve did end up becoming active in both social and athletic organizations at the end of his college career and met friends through these activities, but he clarified that, for him, these activities always remained "a secondary concern after my academics."

Betty did not become involved in extracurricular activities until her junior year. At that point, as part of an environmental science course, she began participating in a community service organization. Of participating in extracurricular activities, she said: "I lived at home all four years, so I was committed. After class I went home. I worked 20 hours a week." Betty expressed regret for this lack of participation and recognized the important role extracurricular activities might have played in her

college experience when she offered this advice to first time first generation college students:

To ask a lot of questions and to really get involved. I regret I didn't want to get involved with student things on campus. I think that really helps in opening doors when you're out of college. I think that was kind of a mistake.

In his interview, Jim indicated that he had difficulty with the social adjustment to life at UM because the size of the institution was so much larger than his high school. He also lived off campus during his entire time as a student. Because of this, Jim found it difficult to meet people. He explained how he tried to adjust by joining extracurricular activities: "I tried to get into groups. I always tried to tell myself, "OK, I gotta do something, just so I can get accustomed to somebody, something." Jim participated in intramural sports each fall; joined a cultural organization and participated in several other groups before finding his niche in a religious group he joined during his last several years at UM. Ultimately, Jim ended up spending most of his social time at the University with a close friend he met in this group, as well as with other group members.

John lived on campus for the first five semesters, but was the sole participant who did not involve himself in extracurricular activities. In fact, when asked about it he said: "No, I refused." He explained:

I felt Maryland had maybe, what, 18% black people and that same 18% black people went to all the parties and they had...they acted...you have to put on that act, to act a certain way. That wasn't me. I wasn't going to try to be something I wasn't.

Instead, John spent most of his time on weekends going home to hang out with his “pre-UM” friends. Sometimes he would bring his friends to campus to attend parties, but only at their request because John did not care for a lot of people he met on campus. He thought most people he met were “phony.” John also was the only participant who was academically dismissed from the institution. When he returned to UM after attending community college, he lived off-campus, worked full-time and still chose not to participate in extracurricular activities.

Present findings further support research that suggests those students who live on campus integrate more quickly and are more involved in extracurricular activities (Pike & Kuh, 2005; Somers et al., 2004). Participants who fell into this category, like Karen and Jane, identified extracurricular participation as an important factor in their collegiate experience. Furthermore, both of these participants not only lived on campus throughout their entire time at UM, but, also, became involved in extracurricular activities during their first year on campus and consistently participated in various activities until graduation.

While a student, Karen actively participated in a club sport, where she practiced three times a week and represented UM traveling to tournaments on weekends; in a sorority and in a community group. Of her extracurricular participation, Karen said: “I just think that I was always on campus, always.” In particular, Karen described her community group participation as “a changing experience” and referred to the group members as “family,” similar to the characterization that many participants made toward their participation in AAP. Karen joined this on-campus community group her junior year, and their weekly meetings became an important part of her life. In



these meetings, group members discussed world issues and their personal views on these issues. Through these discussions, Karen established a sense of “closeness” with friends in this group, and she was motivated to reflect on her own experiences and what she wanted to accomplish in life.

Like Karen, Jane also lived in University housing throughout her enrollment at UM. She became very involved in a sorority and in panhellenic life on campus. She further participated in numerous community service projects. In fact, Jane became so involved in sorority life that she faced one of her greatest challenges while at UM. Her academic performance began to suffer. She admitted that her graduating GPA was not as high as it could have been because her grades began to suffer when she joined the sorority. In hindsight, Jane said, “I can’t say it was the sorority’s fault, but I think that had a lot to do with it [her decline in academic performance] and I look back on it and I’m like, I was so involved, I just wish I could have managed a little bit better.”

Two types of extracurricular activities that were particularly prevalent among participants were community service groups/projects and religious groups, which also includes participants’ “home” churches. Ten of the 13 participants (77%) indicated in their survey responses that they participated in volunteer or community service work. Responses, like those provided by Karen and Jim, demonstrated how important their participation in on-campus community service and religious groups was to them.

Other participants shared the importance of staying connected to their “home” churches. Ann explored different extracurricular experiences her first several years, but the one activity that remained constant was her involvement at church. Even

though Ann lived on campus, she spent many of her weekends at home attending service and social activities at church. Many of her friends from church also attended UM, so, for Ann, it was “natural for me to just hang out with them.”

For financial reasons, Tim never lived on campus and, as a result, most of the time he spent outside of class on campus was spent at work, yet it was not until his last few years at UM that he began spending more time socially with friends from there. Like Ann, most of Tim’s extracurricular time was spent at his “home church.” He had been involved with his church since middle school and continued to remain connected to friends there while at UM. Tim explained:

Ever since middle and high school, I guess, I was very, very involved with my church’s youth group and even through at least my junior, maybe senior year of college, I was still helping out with that youth group...I would chaperone for events. I also had become a Sunday School teacher during that time, so I was also doing that at my church.

Overall, the relatively small number of participants that identified extracurricular participation as an important part of their collegiate experience supports Bean and Metzner’s (1985) assertion that non-traditional students, and, in this case, first generation students, primarily attend college for academic reasons versus traditional students who enroll in college for both social and academic reasons (Tinto, 1987, 1993). However, all of the participants, at some point in their interviews, discussed the concept of social integration (Tinto, 1987, 1993) and how difficult it was, at times, to feel part of the UM community. Bean and Metzner (1985) argued that social integration variables are of minimal importance for most non-traditional

students because, typically, they do not get involved in college “life”; instead, environmental background variables more directly affect the academic aspirations of these students. While this pattern may also be true for first generation students, the current research shows that participants longed for a sense of “belonging to the campus” and participation in an academic support program, membership in peer enclaves and involvement in extracurricular activities (however minimal it might have been) provided opportunities for them not only to integrate more fully into campus life, but, also, to build the social and cultural capital necessary to compete with their non first generation and often higher SES peers upon graduation (Walpole, 2003) . One may extend these findings to suggest that, in many cases, the additional social capital gained through positive social experiences on campus also helped remediate external environmental variables that may, otherwise, have negatively affected degree completion.

**Perception of campus climate.** While participants’ levels of extracurricular involvement on campus did not appear to significantly impact degree completion, perceptions of the UM campus climate did factor heavily into their collegiate experiences. Cabrera and associates (1999), found that, regardless of race/ethnicity, students exposed to a campus climate of prejudice and intolerance are less likely to persist to the degree and feel alienated from the institution. Participants in this study described both positive and negative encounters as they attempted to assimilate in a campus nationally recognized for its diverse population (University of Maryland, 2008b).

While the study's small sample size did not allow for a demographic analysis of the impact of individual race/ethnicity upon degree completion, study results suggest that, regardless of racial/ethnic background, adjusting to the diverse environment at UM factored into the collegiate experiences of the sample majority. In survey responses, 12 of 13 respondents (92%) revealed that they socialized with someone of another racial/ethnic group during college. Additionally, while the majority of participants stated that they did not feel discriminated against during their time at UM, the institution's nationally recognized reputation for diversity did play a role, both positive and negative, in their academic and social adjustment to college.

A majority of participants described how UM's diverse culture positively affected their adjustment to college life and expanded their cultural knowledge. Mary described how her experiences on campus helped her feel more comfortable with her multi-cultural heritage, and both Lynn and Mike recounted how their increased exposure to people from other cultures and walks of life helped them learn how to interact with people from different backgrounds, a social skill that neither of them had felt very comfortable using prior to college.

When asked to reflect on their most challenging experiences adjusting to college, Lynn and Mike discussed the experience of getting accustomed to the diverse community at UM. Both participants identified this challenge as a very positive opportunity in their growth as individuals and as part of the UM community. Lynn explained that adjusting to the diverse population at UM was difficult because it was very new for her. Prior to attending UM, she was not used to interacting with people from such varied backgrounds. Mike also had the same experience and explained:

I'd say the most challenging experience was...I'd say just the social environment. You know, coming from an area where the general population was one color or one nationality and then coming to a place like Maryland, where it was multicultural, had different races, ethnicities, just coming down and interacting with those different people of different nationalities, races and ethnicities.

While not all participants identified their adjustment to the diverse community at UM as one of their greatest challenges in completing their bachelor's degree, a number of them did express the "shock" or "surprise" they felt at first. Steve admitted that he did not expect to encounter such a diverse range of people in the UM community. He explained that he had grown up and attended high school in a "homogenous" area in terms of socioeconomic status and race/ethnicity. UM became one of the first places Steve met and interacted with individuals who were both from more affluent socioeconomic groups and also from other racial/ethnic groups. In addition to this experience, Steve also was shocked to find that a number of people specifically chose to attend UM because of its reputation as a "diverse" campus.

Tim had a surprising experience adjusting to the diverse environment at UM as well, but not for the reasons that most persons might expect. As one of only several Caucasian students in all of his classes throughout elementary, middle and high school, Tim had spent his entire youth as the racial/ethnic "minority" at school. Of the community at UM, Tim said:

Coming here and not being the minority anymore was kind of a little bit of a shocker to me to say the least, but as far as dealing with other races or ethnicities, I actually really, really enjoyed that part of it here....

Several of the study's participants shared negative experiences/impressions they had as members of UM's "diverse" population. While Jim said he never personally experienced discrimination at UM, he thought little of the University's reputation as a diverse institution. When asked how he would characterize his experiences at UM within the context of UM's increased national recognition for its commitment to diversity while he was a student, Jim said: "I thought it was...to be honest, I thought it was partially false...I mean, they said that, but I really didn't feel it was that way. I felt it was more...I don't know, I felt it was harder to actually find people, I guess, my race here...."

First generation students are more likely to report instances of racial discrimination in describing their attempts to integrate into the college environment (Terenzini et al., 1996), and several participants in this study, such as Betty and John, recounted episodes that support this view. Betty had a particularly bad experience in one of her academic courses where she and another Latino student in the class were told they had no chance to earn an "A" or "B" in the class, even though Betty, at least, was performing well and she still had a final paper to submit. The incident was serious enough to end up in the Dean's office. In her interview, Betty said she was not sure whether the incident was racially motivated, but it was particularly disturbing for her because she and the other student targeted were the only Latino students in the class.

John specifically chose to attend UM over an HBCU because “the world is not black.” He felt that he would be more prepared for the reality of the workforce by attending UM because “the school with the most white kids is going to prepare you for the world because, I guarantee you, the people I go against in the work field are not always going to be minorities.” However, at UM, John did experience discrimination from other students due to his physical appearance. Many students thought he was a football player and assumed that was the only reason he’d gotten into UM. This sometimes frustrated John. Beyond this incident, John further thought teachers frequently discriminated against different groups of students because they assumed all students had the same level of cultural knowledge. The experience was very frustrating for him:

I just don’t understand how a lot of Caucasian kids were able to just pick up stuff. It just seemed so natural when I first got there and it was just like, I’m in the same class and I’m there every day and a student shows up every once in awhile and gets a “B” and what am I doing?

Mike and Steve also observed experiences they had, not of racial discrimination, but of marked socio-economic diversity. Mike said:

I felt maybe like on a social level...sometimes I felt that because my mother wasn’t making a certain kind of income and we wasn’t part of a certain class that sometimes I maybe felt that maybe I was less or maybe a little inferior....

While Steve never personally felt discriminated against, he became frustrated with people making assumptions based on facts they thought were “universally recognized

truths” across race/ethnicity and socio-economic groups. Steve detailed an incident that made an impression upon him:

I remember being in one class and we were discussing... a thing called the “sick role” and there being the idea that if someone is sick, society pretty much allows them to take time off, get well, that that’s universally recognized like that’s OK. And then the professor said, “Well is there any case where that doesn’t apply? Can anyone think of anything? And there was something in the book that said this, but I hadn’t read ahead in the chapter; this was just from my experience from people and different things that I said, “Well, if you’re economically strapped and can’t just take time off work, then the sick role doesn’t really apply to you,” and I was actually surprised that no one else in the class at that time had even considered that.

When participants’ perceptions of the campus racial climate were considered together with their extracurricular involvement an interesting theme emerged. Even though participants reported that the diverse campus climate, for the most part, factored positively into their collegiate experiences, a review of specific extracurricular involvement of participants on campus reinforced Murguia and associates’ (1991) theory that, in striving to adjust to the college environment, students are drawn to groups on campus that represent their culture. Some of the participants in this study, at least initially, gravitated toward social/cultural groups, such as the Black Student Union, Caribbean Student Association or specific religious organizations, where they interacted with large groups of students who came from



backgrounds similar to their own, thus, serving as a “buffer” to complete immersion in a foreign culture.

**Financial aid/employment.** While nine of the study’s 13 participants (69%) were considered “low-income” students when they entered the University, survey responses indicated only two of the 13 (15%) had major concerns about their ability to finance their education. Three of the 13 participants (23%) responded that they were confident they would have sufficient funds to finance their education. The majority (8/62%) indicated they had “some” concerns about financing their baccalaureate degree.

The findings from this study support the connection between a student’s perceived ability to pay and successful persistence to the bachelor’s degree as established in the larger body of persistence literature (e.g., Cabrera et al., 1990; Choy, 1998, 2001; Cuccaro-Alamin, 1997; Pascarella & Terenzini, 1991, 2005; St. John et al., 2005; Terenzini, Cabrera & Bernal, 2001). A majority of participants did not have major concerns about financing their education. Family support appeared to be a significant contributor to this reduced stress regarding how to pay for college.

As established earlier in this discussion, parental and family involvement emerged as a positive factor in degree completion, and participants’ positive perceptions of ability to pay surfaced as an indirect result of active parental participation in their collegiate experience. Specifically, parents’ constant and consistent involvement in funding their students’ education led to a decrease in the number of participants forced to work full-time to pay for college. Additionally, while some of the participants did, at times, have isolated concerns about their ability to

pay, none of them stopped out or withdrew from college, at any time, due to financial reasons.

A majority of participants (10 of 13 /77%) were assured by their parents that they would find “some way” to pay the costs associated with attending UM, even though only one participant was sure that his parent had saved money toward college. Two of the 13 participants (15%) took no loans/grants at all to pay for college. Their parents paid the entire bill. One of these participant’s parents refused even to fill out the FAFSA (Free Application for Federal Student Aid) because they were convinced it was a waste of time and they would receive no aid. An additional two participants (15%) had a parent who was employed by the University and, as a result, they received tuition remission for the majority of their careers at UM. These individuals supplemented the tuition remission benefit with scholarships and traditional grants/loans. In fact, of the 11 participants who applied for and received some type of financial aid to help pay the cost of attending college, none took any type of loan outside traditional loans, and none used a credit card to help pay their bills.

Interestingly, an area where current findings were inconsistent with the larger body of literature was the effect of employment upon persistence and the added benefit of on campus or work study employment. Pascarella et al. (2003) found that first generation students are more likely to work than their non-first generation counterparts and, in general, the extant literature has indicated a negative correlation between students who work full time and participation in extracurricular activities, as well as completion of their degrees (Cabrera et al., 1992; Choy, 1998, 2001; Cuccaro-Alamin, 1997; Engle et al., 2006; Terenzini, Cabrera & Bernal, 2001).

A majority of participants in this study indicated that their parents paid the balance on their tuition bill and, in a number of cases, discouraged their students from working full time or working at all. For all 13 participants in this study, part-time or full-time jobs were a part of their college experience; however, the purpose of employment and amount of hours worked varied significantly within the sample. Some participants worked only in summers; others worked year round. Some worked to contribute toward their college tuition payments, others for pocket money. Mary was the sole participant who worked primarily to pay her tuition bill.

Five of the 13 participants worked on campus (38.5%); five worked off campus (38.5%), and three worked both on and off campus (23%). Additionally, the range of hours worked varied from five hours per week to more than 36 hours per week. For example, Steve and Karen did not work until junior year, and Mike did not take a job until senior year. Jane did not start working until later in her college career, and then, only for money to buy clothes and to “go out.” Jane said: “my mom was anti-work study because she wanted me to just go to school and not worry about having to work when I’m trying to go to school. She gave me an allowance....I had an allowance all the way until I graduated.”

On the opposite end of the spectrum, even though she began her time at UM with full funding, Mary’s employment was critical to her ability to pay for college during her last several years at the institution. At times, she held multiple jobs:

As far as just taking care of myself because I’d been working since high school, I worked on the weekends my freshman and sophomore year, I worked the

weekends, and I probably did...probably I would say three days out of the week and then junior and senior year, I started to work full-time.

A further aspect of financial aid/employment that did not emerge as a significant factor in this study was the role of on campus employment and work study in increasing persistence and building social capital (Adelman, 2006; Cabrera et al., 1990; Ishitani, 2006; St. John et al., 2000; Stampen & Cabrera, 1986, 1988). Several participants did not work until later in college; the range of hours worked ran a full spectrum, and only one participant indicated that he/she held a work study position. While eight (62%) of the participants held an on campus job at some point in their college career, none of the participants identified their work experiences as a factor in their successful completion of the baccalaureate degree.

## **Conclusion**

The findings from this research suggest that a number of significant factors, ranging from family/peer influence to continuous enrollment and participation in academic/counseling services intersect to provide support for first generation students to successfully complete their degrees. However, it is important to recognize that, within these identified factors, family/peer influence and support emerge in this study as the most persistent factors influencing both pre-college and college experiences of successful college graduates. The following chapter includes a summary and detailed discussion of these findings. Chapter Six further explores the broader implications of these findings for policy and practice and incorporates suggestions for future research.

## **Chapter 6: Summary and Conclusions**

Using the case study method, this research was designed to increase our understanding of first generation students who successfully complete the baccalaureate degree and issues these students identify as critical to their degree attainment. Data were collected on a sample of University of Maryland, College Park graduates who also participated in the UM Student Support Services (UM-SSS) program.

Student Support Services and Intensive Educational Development are programs that work together to increase the retention and graduation rates of first generation and low income students. The UM Student Support Services program is a federally funded TRIO program that primarily provides counseling and academic advising services for Program participants. The state funded Intensive Educational Development program provides the academic support arm of this initiative. Students enter the UM-SSS program after successfully completing a six week summer bridge program, the Summer Transitional Program (STP).

Participants in this study entered the University of Maryland during the fall semester between the years 2001-2004. Data collected for each participant included a completed online survey, UM admissions and academic records (i.e., high school transcript, application for enrollment, UM transcript, UM-SSS records) and transcripts from in-depth one-on-one interviews. Participants were recruited for this study, data was collected and interviews were conducted during the fall and winter of 2008-2009. Data collected were used to answer the following research questions:

1. What experiences do Student Support Services first generation college graduates identify as factors that contributed to their successful completion of the baccalaureate degree?
2. What experiences are suggested by the participant cases in the current study?
3. To what extent do these experiences reflect or depart from those documented by the extant literature?

This chapter begins with a summary of the study's findings, followed by a discussion of critical conclusions drawn from a review of the findings. The chapter concludes with a treatment of the findings' implications for policy and practice and suggestions for future research.

### **Summary of Findings**

The results of this study, discussed in detail in chapters four and five, are briefly summarized in this section.

*Research Question #1: What experiences do Student Support Services first generation college graduates identify as factors that contributed to their successful completion of the baccalaureate degree?*

Participants consistently identified family influence as a significant factor in their successful completion of the baccalaureate degree. Many participants recognized their mothers as their greatest “cheerleader” or motivator as they struggled to overcome numerous and varied challenges in their college experiences. Additionally, mothers and other family members, most often including fathers or siblings, influenced almost every stage of the participants' pre-college and college experience, from educational aspirations to college choice and the application process to financial aid and their

adjustment to college. In a majority of cases, these influences were positive and fit one of three categories—motivator, supporter or advocate.

Networking and academic/social support resources also proved critical to participants' success in earning their degrees. Respondents frequently referenced the resources/connections made through the Student Support Services program and Academic Achievement Programs' department as key in helping them overcome their greatest challenges in adjusting to and persisting through college. More specifically, a majority of participants identified the "family atmosphere," academic support classes and Summer Transitional Program (bridge program) experience as elements that contributed to their degree completion.

Peer influence emerged as a factor in participants' successful matriculation and graduation from college. This influence surfaced in several venues. First, a number of participants spoke not only to the importance of identifying with a peer group that was "just like them," but, also to the value of this network in the college application process and adjusting to college life. Secondly, the majority of participants built upon their peer support networks through participation in extracurricular activities at UM. These activities took many forms (e.g. intramural athletics, student government, religious organizations, community activities, fraternities/sororities and work), but a consistent theme that emerged was a strong connection to community service and religious organizations.

Several pre-college and college academic factors proved significant in participants' graduation from UM. These factors include high school academic preparation and continuous enrollment at UM. All participants had completed a

standard college preparatory curriculum, and a number of subjects stated that their English courses and/or advanced placement courses, as well as specific teachers of these courses, had been critical in preparing them for the rigors of academic life at UM.

A final factor that influenced participants' experiences at UM; contributed to their integration into the UM community and college life, and, ultimately, factored into their journey toward degree completion was the diverse nature of the student body and community at large. A significant number of participants pointed to cross-cultural interactions with peers and others across campus, through classroom and extracurricular activities, as positively impacting their degree progress.

*Research Question #2: To what extent do these experiences reflect or depart from those documented by the extant literature?*

A number of elements identified in this study as contributing to successful degree attainment support findings currently suggested by the literature. Some of these factors include: participation in a rigorous high school curriculum; continuous enrollment; choice of major; peer influence and extracurricular participation. However, several themes that emerged in this study do not support the majority literature and deserve further exploration. Areas of discontinuity that emerged are: pre-college and college parental influence and support; high school GPA and standardized test scores as indicators of success; first year college academic performance and credit progression as an indicator of degree achievement, the role of work-study and finances in adjusting to college and the role of faculty interactions. The next section of this chapter will detail how these areas of discontinuity departed



from the literature. This section will further explore the implications of these differences for future policy, practice and research.

### **Discussion of Findings**

Based upon the rich data provided through surveys, document analysis, and in-depth interviews, several critical conclusions can be drawn from this study. These conclusions build upon and contribute to the body of research on factors affecting the first generation student's successful persistence through college and completion of the baccalaureate degree. Particular areas of contribution are: family involvement; significance of academic profiles; the role of enclaves/support programs; priorities and the perceived ability to pay, and the influence of a diverse campus community.

**Family involvement.** The persistence and degree completion literature presents two opposing perspectives on the role of family in degree attainment. The first perspective considers family, especially the families of first generation and low income students, a hindrance to degree completion (Berger, 2000; Chen, 2005; Choy, 2001, 2002; Coleman, 1988; Horn & Nunez, 2000; McDonough, 1997; Terenzini et al., 1994; Terenzini et al., 1996). This view contends that first generation parents' lack of experience in navigating the college experience (Berger, 2000; Chen, 2005; Choy, 2001, 2002; Engle et al., 2006; Engle & Tinto, 2009; Horn & Nunez, 2000; Pascarella et al., 2004; Pike & Kuh, 2005; Terenzini, Cabrera & Bernal, 2001; Terenzini et al., 1994; Terenzini et al., 1996), their lack of involvement in their students' educational experiences from middle school forward (Choy, 2001; Engle et al., 2006; Horn & Nunez, 2000; McCarron & Inkelas, 2006; Rowan-Kenyon et al., 2008), and their cultural expectations (Engle et al., 2006; London, 1992; Rendon,

1992; Somers et al., 2004; Terenzini et al., 1994; Terenzini et al., 1996; Tinto, 1987, 1993) all work together to obstruct the degree attainment of their children.

The results of this study do not support this perspective. Instead, my research findings overwhelmingly concur with the minority literature's view on family involvement in college persistence and degree attainment. Family, particularly parents, may serve as the most significant, positive factor in facilitating their child's success in earning a college degree (Cabrera & LaNasa, 2001; Cabrera et al., 1999; Haussmann et al., 2009; Nora & Cabrera, 1996; Perna, 2000; Rowan-Kenyon et al., 2008; Tierney & Colyar, 2005). To this literature, the current research also adds the first generation students' experience; provides examples of how family involvement can substitute for prior knowledge of the higher education system and introduces the concept that maternal involvement may be particularly critical in the first generation student's baccalaureate degree attainment.

Contrary to the majority literature, this study demonstrates, both quantitatively (academic performance and graduation rates) and qualitatively (detailed examples provided in interviews), that parents' prior knowledge of the higher education system does not pre-determine their students' success in college. From Steve's story about how he and his mother fumbled their way through the college application process to Jane's disclosure that her parents knew nothing about choosing colleges, participants consistently recognized that their parents were not familiar with the college choice process and the college experience, itself. However, their parents, and especially their mothers, made up for this challenge by filling other key support roles in their child's journey to a college degree.

Evidence that participants' parental involvement was vital to their degree attainment repeatedly emerged in interviews with study participants. Participants' parents enabled their students' successful college graduation by fulfilling at least one of several functions in relation to their child's educational goals. First, some parents served as the student's motivator or motivation for success (Cabrera et al., 2005; Cabrera et al., 1999; Cabrera & LaNasa, 2001; Hossler et al., 1999; Nora & Cabrera, 1996; Perna, 2000; Tierney & Auerbach, 2005). Even though these parents often did not understand the intricacies and inter-workings of college, they were their students' greatest cheerleaders throughout the entire pre-college and college experience. Mary's description of her mother's consistent, un-daunting encouragement exemplifies this role.

Secondly, parents served as advocates for their children's success (Perna & Titus, 2005). Study participants provided frequent accounts of parents' attempts to act on behalf of their students in the admissions or financial aid process, even though the parents, themselves, had limited knowledge of the process. Karen and Erin both described in detail how their respective parents (Karen's father and Erin's mother) were relentless in ensuring that they completed their admissions and financial aid paperwork in a timely fashion.

Finally, parents served as supporters in the persistence and degree completion of their children. Distinct from the concept of "encouragement," parental support entailed providing physical resources necessary to the participants' success in accessing and graduating from college (Cabrera et al., 2005; Hossler et al., 1999; Perna, 2000; Perna & Titus, 2005; Rowan-Kenyon et al., 2008). These resources

ranged from the financial support provided by both Karen and Lynn's parents to Bob's parents' decision to lift his curfew as a means of encouraging him to embrace the college social experience.

Another major conclusion of this study is that first generation students whose mothers are actively involved in their college experience in the above-listed roles are more likely to be successful in earning their college degrees. This finding is singular in that the persistence and degree attainment literature does not identify mothers as a critical factor in their student's degree completion. Instead, only a small pool of research has focused on maternal influence in higher education (Bean, Bush & McKenry, 2003; Greif et al., 2000; Kerpelman et al., 2008; Nurmi, 1987) and much of this literature focuses upon mothers of African-American youth (Bean et al., 2003; Greif, Hrabowski & Maton, 2000; Kerpelman et al., 2008). A majority of participants in this study not only identified their mothers as the person having the greatest influence upon their success in earning a college degree, but, also, consistently provided examples of their mothers fulfilling the roles of motivator, advocate and supporter throughout the college choice process and their college experience.

Tim's mother is a prime example of this concept in practice. While she had no previous experience with college, Tim's mother was determined to support her son's goal of earning a baccalaureate degree and drew on this determination to study the higher education system through the internet, phone calls and other research tools (*advocate*). In doing so, she was able to assist her son in his pre-college application and choice process, as well as help him find ways to fund his education once he was enrolled. Tim's mother further encouraged him to stay true to his goal of graduating

from college, even as she fought for her own life (*motivator*). Finally, Tim's mother and father re-structured their living arrangements to ensure that Tim had the physical resources available to complete his academic work at home. They also provided important financial support as Tim pursued his studies (*supporters*). As the detailed findings of this study indicated, a majority of participants recounted experiences with their mothers that echoed the behavior of Tim's mother.

**Significance of academic profiles.** Another important conclusion that emerged in this study is the discovery that high school GPA, college entrance test scores and first year college performance do not necessarily pre-determine dropout/stopout/"failout" for first generation students. This finding directly contradicts the literature on this subject. Prior degree attainment and persistence literature indicated that high school GPA and performance on college entrance tests were inextricably linked to college success (Chen, 2005; Ishitani, 2006; Warburton et al., 2001), as was first year GPA and credits earned (Chen, 2005). Specifically, Chen (2005) found that students who earned a minimum of a 3.0 grade point average and successfully completed 30 credit hours in their first year of college were more likely to earn a degree. Conversely, the majority of graduates in this study possessed an entering academic profile significantly lower than their peers and also earned a lower first year cumulative GPA and number of credit hours than the minimum threshold Chen (2005) established for degree attainment success. However, all participants successfully earned a bachelor's degree within six years.

The findings from this study also provide guidance on factors that may have compensated for the academic challenges FG participants faced in their adjustment to

college. Unlike the research of Chen (2005), Ishitani (2006) and Warburton et al., (2001), the current research focused on both academic and social experiences of the first generation student. Because of this, an important contribution to the literature is the finding that participants often turned to peer networks and their institutional academic support program to mediate the challenges posed by their academic profiles. Like Pascarella et al. (2004), the current research suggests that academic performance and persistence cannot be evaluated in isolation. To understand the difficulties faced by first generation students and the experiences that, ultimately, factor into their graduation success, we must examine their whole college experience. Even Ishitani (2006) acknowledged this limitation in his study on first generation students and factors influencing degree attainment. He clarified that his research solely examined pre-college factors that affected first generation students' persistence and degree completion (Ishitani, 2006). In explaining this limitation, Ishitani (2006) recognized: "The greatest benefits for explaining college success of first generation students result from thorough examination of both precollege attributes of students and the quality of their interactions with institutions of higher education" (p.865).

The current inquiry provides a number of findings that are transferable to other settings and situations (Merriam, 1998). As such, this research provides some provoking insights into factors first generation students might rely on to mediate their academically challenged profiles. In addition to family involvement, these experiences included: enrolling continuously, establishing strong peer networks, participating in academic support and summer-bridge programs, minimizing concerns about their ability to pay for college, and participating in diverse campus experiences.

The literature consistently asserts that students who enroll continuously increase their probability of successfully completing a college degree (Adelman 1999; 2006; Cabrera et al., 2005; Chen, 2005; Ishitani, 2006). Additionally, Adelman (2006) suggested that summer term enrollment can positively impact successful persistence and degree completion. The findings from this study overwhelmingly support this hypothesis and suggest that “off-term” enrollment (summer and winter terms) is an area that may bear further consideration in higher education academic planning. Sixty percent (6/10) of the current study’s participants who failed or withdrew from classes during their tenure at the University successfully utilized winter and summer term sessions to re-enroll in these courses, resulting in a positive impact upon their grade point averages. Furthermore, 100% of participants (13/13) earned additional credit hours during summer/winter terms as a way to maintain consistent and competitive credit progress toward the degree.

These findings suggest that the traditional academic year enrollment (fall/spring) may not benefit FG students who enter college with academic deficiencies because this structure may impede advancement toward the degree, both in terms of maintaining academic eligibility and satisfactory progress. As a result, then, these conclusions have even greater implications for practice, especially in the areas of academic advising and financial aid. At a minimum, institutions should be tracking winter/summer term enrollment to determine student enrollment trends. Further, academic advisors, administrators or programs serving FG and other students entering with academic deficiencies should be trained to counsel these students to focus on year-round enrollment as one means of mediating their academic challenges. For

example, students may take a reduced load in the fall/spring semesters, but make up the credit deficiencies through summer/winter term enrollment. This type of arrangement can provide room in students' schedules for the additional study time or academic support necessary to succeed in their classes. However, enrollment in additional sessions translates to increased costs. To address these issues, institutions must also have tools in place to counsel FG students and their families about financing extra terms of study and understanding the rationale behind this decision.

It is important to recognize that continuous enrollment, alone, did not mediate participants' academic difficulties. Participants' involvement in peer networks and academic support programs, their participation in diverse campus experiences and their parents' assurances that tuition bills would be covered also helped reconcile academic challenges. However, study results revealed that these specific elements also impacted other areas of FG participants' college adjustment, so each factor is addressed individually in the sections that follow.

**The role of enclaves and support programs.** In addition to family support and encouragement, participants repeatedly pointed to peers and their academic support program when asked about experiences/persons that influenced their successful attainment of the baccalaureate degree. Throughout their interviews, participants provided examples of how these interactions helped them amass the social capital necessary to navigate the degree process at UM. These resources helped students establish networks and relationships necessary to succeed more quickly than they may have if left on their own to maneuver through a big research university and its many functions. These findings not only reflect prior research that has established the



effectiveness of support programs in assisting students in adjusting to college (Engle et al., 2006; Engle & Tinto, 2009; Pascarella & Terenzini, 1991, 2005; Saunders & Serna, 2004), but, also, add a new dimension to this research by expanding upon Murguia and associates' (1991) notion of enclaves and how this social function factors into the first generation student's successful navigation of the college experience.

***Enclaves.*** For participants in this study, peer relationships served two primary functions—(1) as a mediating factor in overcoming their academic disadvantage upon entry to the institution and (2) as a means of validating their presence at the University. Study conclusions support research that has found college peers often provide critical connections to academic resources and also provide academic support for their friends (Dennis et al., 2005; Richardson & Skinner, 1992; Rodriguez et al., 2003). In interviews, participants talked about how the study groups they formed with peers were helpful to them in successfully completing homework assignments, working through difficult concepts or preparing for exams. Others, like Ann, John and Mike, recounted how valuable their peers' advice about which courses to take or what to expect from different majors helped shape some of their academic decisions, from course enrollment to choice of major. Rather than wavering on their own when faced with daunting course concepts or studying for tests, participants utilized peers and the resources they offered to help fill in the gap left by their own academic needs, from study and test-taking skills to specific course content knowledge.

Another critical outcome of this study was the discovery that participants overwhelmingly identified peers as a significant factor in their adjustment to college.

Neither Ishitani (2006) nor Chen (2005) addressed the college social experience, including relationships with peers, in their research on factors that affect successful FG degree completion. As such, this research expands upon their work in the field and builds upon the findings of both Pascarella et al. (2004) who recognized the importance of peers and Murguia et al. (1991) who introduced the role of enclaves in the student's adjustment to college. The motivational support and encouragement of friends and, more specifically, the types of friends participants included in their inner circles critically factored into the students' successful adjustment to the University.

Murguia and colleagues (1991) theorized that college students of the same ethnicity were drawn to each other based upon common experiences. Students took comfort in surrounding themselves with peers who they believed "understood them" (Murguia et al., 1991). This group of peers formed an enclave or support group that provided consistency and motivational support throughout their educational experience (Murguia et al., 1991).

Current results support this concept of enclaves as an important factor in student adjustment. Furthermore, this study's conclusions expand upon Murguia et al.'s (1991) findings to include enclaves based upon socio-economic backgrounds. The literature consistently shows that many FG students also come from low-income families (Chen, 2005; Choy, 2001; Nunez & Cuccaro-Alamin, 1998), and the participants in this study were no exception. A majority of participants qualified for the SSS program because their parents' reported income was less than the U.S. Department of Education's published standards for poverty levels.

In discussing their transition to college, participants repeatedly referred to the friends they made in AAP, through the Summer Transitional and SSS programs, as an important factor in their adjustment to college. Participants were especially drawn to their AAP peers because they faced the same types of struggles as FG and low income students, from academic challenges to financial issues to adjusting to a new culture at college. Many of the study's participants also talked about how they remained friends with peers from their AAP enclave throughout their college career and beyond graduation. For these FG students, the friends made through their AAP cohort served the same function as Murguia and colleagues' (1991) ethnic enclaves. They provided a sense of comfort, constancy and motivational support in a foreign environment (Murguia et al., 1991). In their AAP enclave, participants found friends who listened and sympathized when classes or personal issues were going badly; who provided study group support when preparing for exams, and who became an integral part of their social lives at the University. While participants in this study did not spend all of their time with their AAP enclave; for most, these contacts represented their primary group of friends at UM. Mike's feedback summarizes the sentiment expressed by a majority of participants. Mike acknowledged that he had friends across the University from diverse racial and ethnic backgrounds; however, he identified his AAP friends as his "core" because "They knew what I was trying to do, so they could more sympathize and understand what I was going through when I was going to college."

***Support Programs.*** Beyond the role of peer enclaves, results of this research suggest the importance of establishing a larger environment for FG students that can

serve as a “proxy” family for this population when they are on campus (Tierney & Colyar, 2005). While academic support programs may not be the only way to establish this bond, participants’ experiences with AAP appeared to tie into the importance they placed upon family involvement in the educational process. Participants repeatedly spoke of AAP as a “home away from home” or referred to the “AAP family.” These references, combined with participant descriptions of the comfortable, trusting relationships often established with staff/faculty associated with the Program, reinforce the importance of creating a “niche” for students where they can feel “safe” while negotiating the unfamiliar college experience. This finding is consistent with literature that suggests the positive impact of academic support and summer bridge programs for at-risk students (Engle et al., 2006; Engle & Tinto, 2009; Pascarella & Terenzini, 1991; 2005; Saunders & Serna, 2004).

The conclusions of this study also align with research that established the positive impact of participation in federal TRIO, and more specifically, Student Support Services programs for FG students (Chaney et al., 1998; Engle et al., 2006; Engle & Tinto, 2009; Muraskin, 1997). The study’s results indicate that both the SSS program and the Summer Transitional Program provided participants with the same type of support on-campus that their parents supplied long-distance from home. Here, again, evidence emerged to support the conclusion that the philosophy of “in loco parentis” does not work for the FG college student. Repeatedly, the findings from this study have demonstrated that parental involvement during the college experience or a proxy for this type of involvement, in the form of consistent, engaged

support and encouragement, was critical to participants' successful degree completion.

In interviews, participants detailed the many different ways their participation in SSS and the Summer Transitional Program impacted their pursuit of a college degree. Interestingly, the results of this data suggested a pattern similar to the one found in feedback regarding the role of family in participants' successful degree completion. As discussed earlier in this chapter, the literature on family involvement indicate three major roles parents play in the successful graduation of their students—motivators (Cabrera et al., 2005; Cabrera & LaNasa, 2001; Cabrera et al., 1999; Hossler et al., 1999; Nora & Cabrera, 1996; Tierney & Auerbach, 2005), advocates (Hossler et al., 1999; Perna & Titus, 2005) and supporters (Cabrera et al., 2005; Hossler et al., 1999; Perna, 2000; Rowan-Kenyon et al., 2008). These roles are mirrored in the current study's results regarding academic support programs.

Participants discussed in detail the critical encouragement they received from faculty, staff and peers in their AAP "family," on anything ranging from academic issues to personal advice (*motivation*). Further, the staff and faculty of the SSS, IED and Summer Transitional programs consistently acted as *advocates* for their students. Service in this area ranged from helping students resolve academic and enrollment issues to fostering relationships on campus to further students' engagement and success (e.g., career center, counseling center, and other academic/non-academic activities and initiatives, like the Honors and McNair programs). Finally, these Programs provided participants with individualized academic and counseling *support*. This support was delivered in the form of study skills, math and English instruction at

varying levels from remedial to advanced; supplemental instruction and/or tutoring for core academic courses, and one credit courses specifically designed for Program participants. The one credit courses included “Orientation to the University” (EDCP 108E); “Leadership” (EDCP 288E) and “Career Development” (EDCP 108D).

Considered within the context of research on the positive impact of academic support programs on at-risk students’ freshman GPAs, credits earned and retention (Chaney et al., 1998; Engle & Tinto, 2009; Muraskin, 1997), this study’s results also suggest that academic support programs may help mediate challenges, particularly academic deficiencies, FG students bring with them to college. For example, a number of participants pointed to the UM-SSS program’s intensive tutoring and supplemental instruction support during their first and second years at the University as critical in helping them transition to the rigors of college academics and overcome academic obstacles. While limited by the scope of the study and its restriction to one public, research University, this finding begs further research on mediating factors in FG degree completion success, evaluation of the success of academic support programs on at risk students’ paths to the degree and further consideration of access and persistence strategies for at risk students across the University. Areas of consideration must span a wide range of institutional functions, from admissions policies to advising and academic support strategies to financial aid assistance. Detailed implications for practice and research in this area are discussed in the “Institutional Persistence Strategies” and “Evaluating Program Effectiveness” sections of this chapter.

**Priorities and the perceived ability to pay.** Contrary to the research on students' perceived ability to pay and especially research on "low income" students (Cabrera et al., 1990; Choy, 1998, 2001; Cuccaro-Alamin, 1997; Pascarella & Terenzini, 1991, 2005; St. John et al., 2005; Terenzini, Cabrera & Bernal, 2001), the majority of participants in this study did not have major concerns about how they would pay for college. This finding is particularly interesting because it reinforces and supports the value participants' placed upon family support and encouragement in their degree attainment. Even though a majority of these students were considered "low income;" in most cases, their parents made critical commitments to paying the bulk, if not all, of their students' educational costs, often at great personal sacrifice.

Results of this study suggest that increased family involvement in the first generation student's actual ability to pay can contribute to successful persistence and graduation in two ways: decreasing students' stress/concern regarding how their tuition may be covered, thus enabling them to re-prioritize responsibilities and focus more on their academics and increasing the time students may be able to dedicate to their studies and other activities on campus because less time is spent working. This conclusion supports research that has made critical connections between ability to pay and student persistence (Cabrera et al., 1990; Cabrera et al., 1992). These studies proposed a positive link between a student's satisfaction with their ability to cover college costs and their adjustment to college (Cabrera et al., 1990; Cabrera et al., 1992). A rationale for this hypothesis included the idea that students' decreased focus on finding money to pay for college increased opportunities for academic and social engagement on campus (Cabrera et al., 1990; Cabrera et al., 1992).

St. John and colleagues (2000) expanded upon this research and connected the concept of “ability to pay” with Maslow’s (1954) theory. If students have satisfied their concern about ability to pay (basic need) through financial aid, support from parents etc., they are then able to focus more intently upon fulfilling higher level, more relational needs, such as adjusting to campus life or more academic needs, such as re-mediating academic challenges (St. John et al., 2000). This theory is reflected in the current study’s findings. Because of the major financial commitment families made to their students’ education, a majority of participants did not have to work to pay tuition. Instead, many chose to work to support their social expenses or to pay for material, non-essential items they desired, both actions associated with social integration and creating a sense of belonging. Furthermore, a number of participants did not consistently work more than twenty hours per week and did not start working until after their first or second year at the University. These factors also created additional opportunities to re-direct the time many FG, low income students use working during this critical adjustment period to, instead, focus on the academic and social activities available to them through their academic support program and across campus.

This finding suggests the necessity of further research exploring the connection between FG and other at-risk students’ perceived ability to pay and campus involvement. Specific variables to consider in this type of study may include: financial aid received; specific family financial commitments to college costs; time spent engaged in extracurricular and academic support activities; time spent working, and students’ perceptions of a sense of belonging on campus. A mixed methods study



that spans various institutional types and includes an analysis of results by parents' education level; socioeconomic status and race/ethnicity may provide even further information to inform both K-12 and post-secondary institutions' approaches to financial aid outreach and parental involvement. Specific implications of the current finding upon institutional persistence strategies and policy are detailed later in this chapter.

**Diversity on campus.** The college environment can affect student persistence and degree attainment (Cabrera et al., 1999), and an unexpected result of this study was the critical role racial, ethnic, and socioeconomic experiences on campus played in the development and success of participants during their college experience. Bean and Metzner's (1985) research suggests that non-traditional students, including first generation students, are generally more interested in the academic benefit of attending college rather than the social environment in which their college education is received. However, data collected in this study overwhelmingly demonstrate that participants' exposure to other cultures/experiences factored significantly into their adjustment to college. The majority of this cohort (1) came from both racial/ethnic and socioeconomically under-represented groups and (2) was raised in primarily homogenous environments. For these participants, interaction with individuals who often did not look or think like them, provided the opportunity or encouragement to move outside their "comfort zone" and develop skills that, ultimately, helped them build networks, adjust and adapt to college life.

Overall, the study's findings support the theory that a diverse campus culture, both in and out of the classroom, can positively influence educational outcomes, a

student's sense of belonging on campus and students' satisfaction with the institution (Astin 1993b; Cabrera et al., 2002; Chang, 2000; Saenz et al., 2007). Mary's description of how her interactions within a diverse community helped her come to terms with her own multi-cultural heritage and other participants' accounts of how they learned to interact and feel more comfortable in situations that include individuals from all walks of life exemplify the strong role this aspect of their college experience played. However, it is important to note that, while most participants in this study valued their diverse experiences, they still returned to their enclaves for consistent support throughout their college experience. This duality, consistent with research on FG and under-represented students, suggests that FG students may first need to find establish a sense of belonging on a micro level on campus before they are willing to engage on a macro level with people and experiences varied and different from their own (Engle et al., 2006; Murguia et al., 1991).

### **Study Implications**

From the findings of this study, several strong implications for theory, practice and future research emerged. When I first undertook this research project, I had no idea how complex the first generation student's journey to a college degree truly was. Consequently, the ultimate scope of this study was large. My analysis expanded beyond factors involved in the college experience to also encompass environmental and pre-college factors affecting degree completion. In the current context, the size of the study became a limitation because so many different factors needed to be considered across a large body of literature and a considerable amount of data. However, a lesson should be learned from the numerous factors that emerged as

significant and the relatively small body of literature that specifically addresses first generation students and their experiences with these issues. Within the realms of both research and practice, much work still needs to be done in regard to understanding the needs of the first generation population; developing initiatives that will increase their success in earning a college degree, and closing the achievement gap between first generation and non-first generation students. This section details specific recommendations for theory and practice and provides suggestions for future research.

**Theoretical implications.** Several theories of college choice and persistence were discussed in the literature review and considered in the design of this study. These theories include Perna's (2006) college choice model; Tinto's (1987) theory of student retention; Astin's (1993) theory of student involvement; and Bean and Metzner's (1985) model of non-traditional student attrition. Overall, a number of parallels existed between the study's findings and various aspects of these theories. Study results reinforced the important part family plays in college choice (Perna, 2006) and persistence (Bean & Metzner, 1985). Also, the findings of this study supported the idea that social integration into campus life is an important component of the FG student's successful transition to college (Astin, 1993a; Tinto, 1987; 1993).

However, the outcomes of this study also illuminated potential gaps in current theory as it relates to the FG population. One example of an area to further consider through a FG lens is the role of the mother. The positive and negative effects of family influence are crucial components of various theories (e.g. Perna (2006); Tinto (1987), and Bean and Metzner (1985)), but the mother's specific function is not

delineated. The results of this study suggest that maternal influence may need to be considered as its own variable in these models, versus “lumping” both paternal and maternal influences together under one category.

Further, the concept of support services as remediation for external variables such as high school academic performance, remedial academic skills and credits completed in the first year of college does not factor prominently into all of these theories. For example, Astin (1993) did not find any positive outcomes resulting from student participation in remedial coursework or reading/study skill courses as related to academic involvement and specific learning experiences. This study’s findings suggest that participation in a support program providing intrusive counseling and remedial or developmental academic support services factored significantly into the participants’ successful navigation of the University’s academic degree requirements.

Finally the idea of a “middle ground” for the role of social integration during the FG student’s transition to college may bear some consideration. Tinto (1987) and Astin (1993) argue that at risk students must divorce themselves from their former lives to achieve successful integration into the campus community. Bean and Metzner (1985) did not recognize social integration factors as direct effects on attrition. The results of this study suggest that the role of social integration cannot simply be relegated to polar ends of the spectrum, but is a more complicated element of the persistence model for FG students.

**Implications for policy and practice.** The results of this study indicate that student success in earning a bachelor’s degree cannot be attributed to any one significant factor. Instead, the findings suggest that both academic and non-academic

factors must be considered when creating policy and/or strategies to encourage college access and degree completion for FG students. A further implication that emerged from this study is that these strategies must begin at least in the eighth grade, if not earlier, and must be consistently delivered throughout both the secondary and post-secondary experiences.

***Family programming.*** Family involvement emerged as an influential factor in the degree completion of the current study's participants. This finding builds upon and contributes to the literature suggesting the importance of family programming across pre-college and college experiences (Fann et al., 2009; McCarron & Inkelas, 2006; Perna & Swail, 2002; Rowan Kenyon et al., 2008). Consistent involvement of parents throughout the pre-college and college experience is also key to first generation students' success in earning a college degree (Cabrera et al., 2005; Cabrera & LaNasa, 2001; Perna, 2000; McCarron & Inkelas, 2006; Rowan-Kenyon et al., 2008; Terenzini, Cabrera, Deil-Amen, & Lambert, 2005; Tierney & Colyar, 2005). Additionally, an increase in both college costs and non-traditional student populations (Anderson, 2003; Carnevale & Fry, 2002) has led to college becoming more of a family affair (Keller, 2001). As such, the K-12 sector and higher education institutions must reconfigure the tools and services used to promote college access and degree completion among first generation students to incorporate family involvement. Institutions must also find money to support these new and/or revised initiatives.

To effectively support first generation students, family outreach must be initiated early in a student's academic experience and extend across all college functions, from

admissions to financial aid to student life and academics. Involving parents in a few college preparatory seminars during their students' senior year of high school or one orientation session prior to the start of their first semester at college will not work for the new generation of college students, particularly those who are from first generation backgrounds. Furthermore, college and universities' historical dependence upon the "in loco parentis" model to manage the student college experience is past its prime. As a whole, colleges and universities still are not consistently recognizing the role of family in degree achievement. Instead, many institutions continue to operate within the paradigm of "in loco parentis." In higher education, "in loco parentis" occurs when institutions "stand in place of the natural parent" and, in legal terms, are "made liable, either by delegation or by assumption of some of the privileges, rights, duties and responsibilities of the parent" (Harms, 1970, p.1). This idea of colleges and universities assuming the parental role for first generation students does not work, especially when considered within the constructs of social and cultural educational capital.

Berger (2000) and Coleman (1988) both found that education systems are not user-friendly to those populations (e.g., first generation; socio-economically disadvantaged; under-represented) who do not share the same worldview as the majority population. As further evidence, the results of this study demonstrated that first generation students often did not understand the college application and financial aid processes, the choice of major process or even how to remedy failed classes. For these students, a system where the institution alone stood in for their parents would not have worked. Participants in this study consistently testified they did not receive

guidance from the university at large on these issues. Rather, they received support from their peers; from the Student Support Services program, and from their parents, even though their parents often had to work especially hard, sometimes without success, to find the answers to their questions.

The emerging phenomenon known as “helicopter parents” exemplifies how the role of the parent is changing in the college experience (Cutright, 2008). “Helicopter parents” are those who swoop in to involve themselves in a variety of venues for their college student, from negotiating failed courses to resolving roommate issues (Cutright, 2008). Given this trend, failure to involve and educate those parents who do not possess familiarity with the college experience may result in an even greater disparity in the achievement gap between first generation and non- first generation students.

The results of this study suggest that families, particularly mothers, play a significant role in all aspects of the college choice and degree completion experiences for successful first generation students; however, institutional practice and retention strategies do not consistently reflect this focus. Evidence has emerged indicating that the role of families/parents is a growing area receiving more attention in both the K-12 and higher education arenas (e.g. newest CAS standards on Parent and Family Programs (Council for the Advancement of Standards in Higher Education, (2009); emerging parent/family programs and services); yet, recognition of the role of parents/families is not consistent across sectors. Given this discrepancy, this finding has critical implications for practice. To effectively integrate families into the college experience, the K-12 sector and institutions of higher education must re-prioritize

current practices or generate new ways to expand funding for initiatives that will incorporate parents, and especially mothers, into the educational decisions and experiences of their children. This commitment to family may assume different forms across the K-12 and higher education sectors. Further, as evidenced in the literature (Cabrera et al., 2005; Choy, 2001; Hossler et al., 1999) and in this study, starting these initiatives during the senior year of high school or during the college admissions process is too late. Instead, aggressive means of involving parents must begin at least as early as eighth grade and be tailored to the specific roles that parents can play in the college choice process and the college experience—motivator, advocate and supporter.

A model already incorporating parental involvement in the college access and completion success of first generation, low income students exists in the federal TRIO programs. In particular, all of the pre-college TRIO programs (Talent Search, Upward Bound and Upward Bound Math/Science) include mandatory parental participation components (Code of Federal Regulations, Section 34CFR642, 2009; Code of Federal Regulations, Section 34CFR645, 2009).

Additionally, TRIO student service programs consist of seven programs that start as early as the sixth grade and are designed to act as a “pipeline” to promote degree persistence through graduate school. These programs include: Talent Search (middle school); Upward Bound and Upward Bound Math/Science (high school); Student Support Services (college); Ronald E. McNair Post-Baccalaureate Achievement Program (college); Educational Opportunity Center (adults nineteen and older) and Veterans Upward Bound (military veterans) (Council for Opportunity in Education,



2010b). Unfortunately, TRIO programs serve only 830,000 students across the United States because the funding for these initiatives is limited (Council for Opportunity in Education, 2010a). The financial support for TRIO has been level-funded for several years and, even in the midst of increasing need for support to this population, continues to remain level-funded (Council for Opportunity in Education, 2010a).

Another program that currently serves as a model for parental involvement in the pre-college experience is Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), a program also funded by the U.S. Department of Education. GEAR UP is an initiative that includes collaboration between student, parent, community, and schools. Projects are administered through state agencies or through collaborative entities, including educational institutions, agencies and community groups. The primary goal of this program is college access and successful graduation for at-risk students, and strategies to increase parental involvement are an important aspect of service delivery (National Council for Community and Educational Partnerships, 2010). GEAR UP has also been level funded for fiscal year 2011 (U.S. Department of Education, 2010b).

In addition to federal initiatives, other institutions and organizations have seen success in making the college experience a family affair. For example, Fann and colleagues (2009) describe the results of a collaborative project between the education department of a higher education institution and a group of K-12 schools (elementary, middle and secondary) to involve parents of a group of Latino first generation students in all aspects of their students' college planning process. While creating and sustaining an ongoing relationship with parents can be challenging, the

targeted cohort in this study found the information they received through consistent workshop delivery enlightening and empowering (Fann et al., 2009).

All of these programs have been shown to have a positive impact upon the persistence of first generation students, and a common factor among them is that they all begin the college choice process in eighth grade or earlier. However, none of these initiatives includes specific services for mothers, and they all still can benefit by ensuring they include training that fosters the development of parents, and particularly mothers, as motivators, advocates and supporters. In addition to the typical financial aid workshops that help parents understand the different types of financial aid and how to apply for financial aid (supporter), why not begin with “financial planning for college” initiatives as early as middle school or even elementary school? The results of this study indicated that most parents had not saved money for college. Like my own parents, perhaps participants’ parents did not realize that saving for college must begin early in their child’s life. Both TRIO pre-college programs and GEAR UP could easily incorporate this type of initiative into their service to parents and expand their service delivery to include a larger population, but this cannot be accomplished without the funds to support the personnel and physical costs (e.g. space, instructional and marketing materials) associated with the initiative’s design and delivery.

Further, GEAR UP’s design is structured to increase maternal involvement in programming. To help parents of future FG college students fulfill the critical roles of motivator, advocate, and supporter, school counselors, pre-college programs and colleges/universities must provide access to information about the entire college

experience, not only information about admissions and financial aid. This information also must be provided in a consistent and accessible manner. For example, is it reasonable to assume that low income parents of a FG student have access to a computer and the internet when, instead, they might be more concerned with paying the gas bill? For this population, online catalogs, college and FAFSA applications or email correspondence are not often assumed methods of communication. Recognizing this limitation, programs such as GEAR UP can act as a model for schools, organizations and communities to develop initiatives that include mandatory parental participation, available in a variety of venues at a variety of times (e.g., evenings and weekends). These initiatives may be a series of short courses or seminars delivered each year of a student's academic experience, starting in the sixth grade and offered through the senior year of high school. Each year might focus on a different aspect of the college choice and college experience, from a series on financial management (supporter) to an exploration of college majors, career choices and the role of college preparatory courses (e.g., math, science, language) in preparing their children for these paths (advocate) to providing opportunities for parents, themselves, to go back to school and lead by example (motivator). Finally, because of the critical role mothers appear to play in their children's educational achievement, finances and additional resources must be invested in recruiting and maintaining the participation of mothers in these initiatives.

Finally, programs providing support for parents once their children are enrolled in college are rare, if existent at all. In his justification of why parents feel they need to "helicopter" in to ensure the successful college experiences of their students,

Cutright (2008) suggested several options for including parents in the college experience, including the development of a parent handbook and re-envisioning freshman orientation. Cutright (2008) argued that orientation for parents should be a process, not an event. This theory is particularly pertinent for the first generation student's parents. An effective way to de-mystify college for parents who never experienced it is by providing a comprehensive view into the life of a college student. This cannot be accomplished successfully in a half day orientation session. Instead, colleges and universities must commit the time, personnel, physical resources and funding to the orientation "process." This process may take many forms, but one option is to offer a College 101 course for parents, similar to the freshman year experience course that, in recent years, has become so popular at colleges and universities across the country.

This type of course may be particularly effective for parents of FG students. Like the pre-college initiatives, the College 101 course would focus on developing parents' roles as motivators, advocates and supporters. Topics for the course might include expanded coverage of financial aid (e.g. what to expect year to year/how to find and apply for scholarship money/what happens when your child withdraws/drops a class); choosing/changing your major; career expectations (e.g. why is it important for students to pursue internships, even if that sometimes means they are unpaid?); understanding the role of extracurricular activities in the college experience, and exposure to a typical classroom experience.

In conjunction with this information and to further work toward leveling the playing field in regard to college network and resource access, all parents of first year

students should receive a comprehensive parent handbook aimed specifically at outlining and explaining the structure of the institution, resources available to both parents and students regarding financial, academic and social issues related to the college experience and contacts for “trouble-shooting” issues across institutional functions and departments. This document should be available in both hard copy and electronic format and should be sent to parents of every incoming first year student under the age of twenty four (dependent students).

*Institutional degree completion strategies.* With increasing college costs, limited institutional resources and students taking a longer time to earn their degrees, implementing effective institution-wide degree completion strategies is a priority for many campuses (Roksa, 2010). In the past several years, University of Maryland has implemented aggressive “four year plans” across disciplines and colleges in order to expedite time to degree for all undergraduate students (University of Maryland, 2004). Other campuses have put into action additional initiatives such as freshmen orientation programs, summer bridge programs and learning communities (Andrade, 2007; Patton, Morelon, Whitehead & Hossler, 2006). This research suggests a comprehensive approach to FG degree completion across campus operations is most effective in increasing the number of students who earn their baccalaureate degree. Campus operations that play a critical role in student success include admissions, advising and transitional support, financial aid and provision of diverse student experiences. As detailed in the previous section, family involvement should also be considered across all campus experiences. Establishing academic and/or transitional support programs or centers for at-risk students can serve as a conduit or “one stop

shop” for students to access all of these distinct campus functions. With this model in mind, the remainder of this section details institutional degree completion strategies within the context of a comprehensive academic support program or center for at risk students. Many of these strategies can also be transferable to the department or college level.

This study’s findings suggest that academic support programs for first generation students, especially during the first and second year of enrollment, factor significantly into successful degree completion. This information may be useful to institutions on a number of levels when determining where best to spend budget dollars in relation to retention strategies. Given the growing number of college students who are (1) first generation, (2) from under-represented racial/ethnic groups, (3) working full-time while attending school or (4) transfer students (Anderson, 2003; Keller, 2001), institutions must consider that the status quo may not translate to successful graduation for these populations. Delivering first and second year support programs tailored to the needs of specific populations or implementing successful elements of these programs across all undergraduate populations at the institution may contribute to increased student persistence and degree completion (Andrade, 2007; Santovec, 2006; Swail, 2003; Thayer, 2000).

*Admissions policies.* An emergent theme in this study was the conclusion that high school academic performance and college entrance test scores do not necessarily predict graduation success for FG students. However, these elements still factor heavily into admissions decisions for many institutions (National Association for College Admission Counseling, 2008). If institutions are truly committed to

increasing access to higher education, re-evaluating these limited admissions standards is recommended.

Some institutions have recognized that this reliance on high school G.P.A. and test score thresholds to determine eligibility for admission does not accurately assess degree completion potential. In response to this concern, these schools have adjusted their policies by providing applicants opportunities to showcase their strengths through venues other than standardized test scores (Hoover, 2009; Keller & Hoover, 2009). Wake Forest University, a research institution similar in size and scope to UM, recently revised its admissions procedure to provide applicants the option to apply without submitting standardized test scores. Instead, the institution used interviews and writing prompts to obtain a multi-dimensional perspective of prospective students' potential to succeed in college (Hoover, 2009).

At the state level, the entire University of California system recently eliminated its requirement that prospective applicants take the SAT Subject tests (Keller & Hoover, 2009). This decision was a calculated move to move toward a more equitable and "holistic" admissions approach and to increase the racial and socioeconomic diversity of the System's student population (Keller & Hoover, 2009). Still, more progress is needed to achieve more equitable admissions standards across higher education institutions. The results of this study support the contention that colleges and universities using standardized test score and GPA cutoffs as predictors of degree completion potential and determining factors for admission are not equitably serving all populations of students.

*Advising and transitional support.* The results of this study suggest that four critical advising/transitional support areas be considered by institutions when evaluating degree completion strategies for FG and at risk students. These areas are: enrollment patterns and strategies; advising approaches and procedures, academic support services and opportunities for diverse student experiences.

While the limited sample size of this study precludes one from making sweeping generalizations regarding institutional policy, the finding regarding summer enrollment and credits earned is one that begs further consideration at both the departmental and institutional level. Re-thinking enrollment patterns and strategies may help institutions increase retention and graduation rates for FG and at-risk students. To stay on track for graduation, participants in this study used summer/winter term enrollment to offset their failed courses and/or semesters with lower credit hours. This strategy not only helped participants improve their grade point averages, but it also ensured that they maintained timely and consistent progress toward degree completion. Institutional review of this pattern among various populations, from first generation to low income to racial/ethnic groups and transfer students, might prove useful to institutions when designing “four year plans” or retention strategies and when allocating budgets for summer and winter sessions and reviewing financial aid packages for this group of students.

Advisors can play a key role in encouraging students to “think outside the box” and pursue a non-traditional enrollment pattern. In fact, as the results of this study suggest, undergraduate advising and counseling can play a key role in retaining at risk students. As discussed earlier in this section, SSS counselor/advisors often stood in



for parents in regard to providing encouragement and serving as guides to resources and opportunities within the University. It is important to note, here, that the SSS program counselor/advisors were not trained as “discipline specific” advisors, but, instead, were trained across disciplines and most had a counseling background (Academic Achievement Programs, 2007). As such, establishing a comprehensive and intrusive advising system for FG and other at risk populations may increase institutional persistence and graduation rates. This hybrid advising/counseling structure entails more than meeting with students one time per semester to register for classes. Instead an increased number of advisors would manage a smaller number of select at risk students. Advisors/counselors would meet with students both individually and in small groups throughout the semester and be equipped to deal with issues beyond choosing a major and enrolling in courses. This aggressive form of communication with students provides increased opportunities to: establish mentoring relationships; expose students to additional resources and networking opportunities in other departments/areas of the University and foster dialogue regarding career planning and choosing a major.

Sound institutional persistence strategies must include a consistent, accessible academic support system to accompany the aggressive advising at risk students might receive. As the literature (e.g., Dennis et al., 2005; Murguia et al., 1991; Richardson & Skinner, 1992) and the results of this research have demonstrated, it is important for at risk students to feel they have a consistent community or group on campus upon which they can depend for support, whether it is academic or otherwise. As a result, a decentralized system of providing sporadic tutoring services across

departments or divisions is unlikely to positively impact degree completion for at risk groups. Instead, resources must be invested to develop a centrally recognized center or program for FG or at risk students (e.g. probation) to turn to when they need academic support throughout their experience at the institution. The proven success of TRIO Student Support Services and other transitional programs suggests that the greatest resources be invested in developing a strong academic support network for first and second year coursework, primarily core courses and college identified “high risk” major courses.

Finally, when developing strategies for degree completion, institutions must recognize the importance of delivering these services through diverse campus experiences. Results of this study suggest that participants’ college experiences were impacted by their perceptions of campus climate. A number of participants had come from homogenous backgrounds, and a challenging component of their transition included learning how to interact with individuals from different walks of life.

In many cases, establishing mandatory core “diversity” course requirements or relying upon demographic statistics that include enrollment figures that exceed national averages for minority groups are insufficient means of ensuring successful FG student adjustment. Hall (2009) found that students more inclined to engage in diverse experiences throughout college were those pre-disposed to this type of engagement through pre-college learned experiences and exposure. To successfully facilitate FG students’ transition to college, institutions cannot assume this pre-disposition or assume that student composition or course offerings alone can address

students' anxiety in creating a "sense of belonging" on campus (Smedley et al., 1993).

In developing models of success for degree completion, diverse community experiences must be included as a factor. These experiences may include: increasing and promoting extracurricular programming for diverse student groups; promoting collaborative learning across all courses and disciplines and providing campus-wide opportunities outside the classroom to engage in open dialogue regarding campus climate issues. Also, this is an area where intrusive advising/counseling for FG students might serve as an additional resource or outlet for those who might be struggling with perceptions of how they are perceived/received within their new environment.

### **Directions for Future Research**

First, and most broadly, this study could serve as a platform for further research on factors affecting degree completion of first generation students. In their work, Engle et al. (2006) cite the difficulty of tracking the first generation population as a limiting factor in collecting data on college graduates. Sample size was also a limitation in the current study. A larger sample size collected across multiple cohorts and compared to a similar cohort of non-first generation students is recommended for future study. This larger sample size could provide the opportunity for researchers to further break down and evaluate results through various demographic factors such as participant race/ethnicity, gender and high school attended (type and location).

**Family involvement.** Beyond the practical, this study's conclusions about parental involvement and degree completion have significant implications for current

theory and future research. The results of this study support the role of parental involvement and support in theories of student college choice and adjustment to college (Bean & Metzner, 1985; Cabrera & Nora, 1994; Cabrera et al., 1993; Metzner & Bean, 1987; Nora, 2001; Nora & Cabrera, 1996). However, these theories do not separate out the roles of individual parents in both of these processes, nor do they tease out the distinct functions that parents, especially mothers, may serve in their students' success. This study opens up the possibility that mothers must be considered as a factor in student adjustment theory, distinct from other family/external support. Additionally, the emergence of parents' and especially mothers' specific functions as motivators, advocates, and supporters in their students' access and adjustment to college suggests that further research exploring these roles might influence and expand upon current theory.

Within the context of these theoretical implications, a recommended area of future research is a longitudinal mixed methods study exploring the role of the individual parent's role in FG students' educational aspirations and degree completion, beginning as early as sixth grade with the pre-college experience and continuing through college graduation. This research would include two cohorts, FG and non-FG parents. Some literature on first generation students and their perceptions of parental involvement exists (e.g., Dennis et al., 2005), but research on their parents' perceptions is primarily limited to the K-12 level (e.g., Fann et al., 2009).

A longitudinal, mixed methods study would be most effective in providing valuable insight on the specific functions parents play in their FG student's educational attainment because significant milestones are reached at varying stages of

a student's educational experience. The student's progression from educational aspirations to degree attainment include middle school, where research shows that higher education aspirations can be molded (Adelman, 1999; Cabrera et al., 2005; Cabrera & LaNasa, 2001) to high school, where academic curricular choices and social capital regarding the college application and selection process are critical (Adelman, 1999, 2006; Cabrera et al., 2005; Cabrera & LaNasa, 2001; Chen, 2005; Horn & Kojaku, 2001; Perna, 2006; Terenzini, Cabrera & Bernal, 2001; Warburton et al., 2001) to the post-secondary experience. Beyond distinguishing the specific functions and contributions of individual parental units, this research design might further illuminate social/cultural capital discrepancies between parents of first generation college students and parents of non-first generation students. Additionally, the results of studies involving parents across racial/ethnic, socioeconomic and geographic lines can inform K-12 systems, higher education institutions, state and federal agencies regarding high impact areas to address with students and their parents in the ongoing mission to provide equity in college access and degree completion for all members of society.

**Intersection of Gender and Ethnicity.** Yet another area that may closely relate to the FG student's interactions with family, peers on campus and their academic decision-making is the role of gender and ethnicity in these communications. While none of the participants in this study specifically mentioned gender as a factor in degree completion, some of the dialogue that emerged in interviews suggests that additional analysis of the role of gender and/or ethnicity in the decisions made by undergraduate female students may shed further light upon particular degree

completion challenges faced by this group. For example, John mentioned choosing UM as preparation for competition with Caucasian men later in his career, yet Betty, a Latina student, chose UM primarily because the institution was close to home and she was concerned about conflicts with her family commitments.

To further explore the influence of both gender and ethnicity upon FG degree completion, obtaining a larger, more heterogeneous sample across gender and ethnic lines may provide more insight in this area. One approach to such an inquiry might include a mixed methods study combining survey methodology with in-depth interviews to tease out the specific influences of gender and race upon distinct degree completion factors.

**Institutional persistence strategies.** Higher education institutions are commonly faulted for being too bureaucratic and slow to change. In the age of increasingly diversified college populations (e.g., socioeconomic levels, race/ethnicity, adult learners), static and traditional institutional persistence strategies will not work. Suggestions for future studies to further explore the viability and effectiveness of diverse institutional retention strategies include quantitative research examining year to year credit and GPA progression, not only across racial/ethnic lines, but also across gender/socioeconomic and student status (e.g. first time freshmen; transfer; stopout). An additional layer of this type of study would examine winter/summer term enrollment patterns and course selection. Data could be collected and evaluated by major/college or by institution in a cross case analysis. This type of multi-layered analysis might provide further information across populations, disciplines and institutions regarding the role of winter/summer term enrollment in successful

mediation of failed courses and/or satisfactory progress toward the degree. Results may not only guide institutional planning for these terms, but also be used to better inform academic advisors regarding challenges faced by specific populations or majors.

Along these lines, institutions and researchers at large must continue to explore the impact of “diversity” in the college experience. So often, college graduates generically explain, “College opened up my eyes to new experiences” or “College broadened my horizons,” but what, specifically, does this mean? What does “diversity” look like for individuals across racial/ethnic, socioeconomic, gender and other specialized groups? While the answers to these questions lay outside the scope of the current study, consistent feedback from participants regarding their experiences with “diversity” on UM’s campus suggests there is further research opportunity in this area as related to degree attainment for all students. While current efforts to evaluate student perceptions of diversity and its value are evidenced in tools such as freshmen surveys and graduate exit interviews (Higher Education Research Institute, 2010), future research initiatives in this area could also be linked with program evaluations or institutional assessments of their degree completion strategies.

Finally, the role of major choice and the institution’s strategies related to this process and FG degree completion also deserve further consideration. A number of participants came to UM with specific career aspirations, but, ultimately, were not sufficiently prepared academically or did not receive encouragement to pursue the requisite major to degree completion. Future studies might build upon the work of both Cabrera and associates (2005) and Schlossberg’s transition theory (Evans,

Forney, Guido, Patton & Renn, 2010) to examine the specific function K-12 and higher education institutions play in transitioning and “steering” FG and at risk students to particular majors; providing academic and career preparation to students who enter college with academic profiles that do not “fit” their career aspirations, and preparing FG students for the reality of specific career choices. Further, a longitudinal study examining FG career aspirations upon entering higher education, major pursued and career placement might also provide critical data regarding the long-term career implications of FG degree completion.

**Evaluating program effectiveness.** The findings of this study suggest that participation in Academic Achievement Programs benefitted first generation participants in various ways, ranging from social capital “building” opportunities to critical peer and faculty/staff encouragement; however, all support programs are not created equally. In TRIO programs, alone, the federal government invested 848 million dollars in fiscal year 2009 (Council for Opportunity in Education, 2010a), yet service delivery and institutional support varies among programs (Perna & Swail, 2002; Thayer, 2000). Furthermore, the research demonstrating the effectiveness of these programs, while primarily positive, is also scarce and limited in scope (Garcia and Paz, 2009; Patton et al., 2006; Perna & Swail, 2002). Given this investment at the federal level and the investments made every year at the state and institutional level for special initiatives (Breneman & Merisotis, 2002; Perna & Swail, 2002), consistent and rigorous evaluation of the services provided by these programs is critical to determining their effectiveness in supporting students in their pursuit of a college degree. The Council for the Advancement of Standards in Higher Education



(2009) has developed a rubric for specifically assessing various functions of TRIO and other educational opportunity programs. This rubric may serve as both a valuable tool in developing program-specific assessments and in designing further studies to evaluate program effectiveness.

The need for rigorous program evaluation suggests yet another avenue for future research. Another mixed methods study could be employed not only to evaluate the needs of specialized program populations and their families, at both the K-12 and post-secondary level, but, also, to evaluate service delivery of specific initiatives for these groups. For example, the U.S. Department of Education currently utilizes Annual Performance Reports as a way of measuring individual TRIO program's successes in meeting standardized program objectives (U.S. Department of Education, 2010a); however, this report does not provide a means for evaluating specific services offered. The Report also does not provide the opportunity to explore participants' individual perceptions of program experiences and the impact of these experiences on their educational goals. To fill this void, the Department may consider re-assessing the data collected on each TRIO program's Annual Performance Report to include expanded questions on specific services provided. Collection of this data would not only enable evaluators to track an individual program's modes of service delivery, but also to analyze services offered in relation to each program's historically reported graduation and retention rates.

Additionally, regularly scheduled program site visits, similar to those conducted by national and regional accreditation agencies, would provide the Department an opportunity to collect further quantitative (e.g. review of program service data and

student files) and qualitative (e.g. focus groups with parents, students, alumni) data on a consistent basis. This process would help evaluators form a clearer “snapshot” of each program, thus enabling them to more effectively evaluate and validate program services and outcomes against assurances included in each program’s grant proposal. Currently, the Department depends solely upon Annual Performance Report data, particularly standardized objective performance, to determine a specific program’s effectiveness in meeting its mission and goals.

### **Study Limitations**

An obvious limitation of the current study was sample size and scope. While the study’s sample does closely reflect the gender and racial/ethnic breakdown of the 2001-2004 UM SSS cohorts, the sample size is small and limited to graduates from a flagship, research public university. To further explore the viability of these results across various institutional types, future studies might include similar populations across private and public institutions, as well as across various sized institutions.

Another potential limitation of the study was the researcher’s status as a FG student and involvement as an administrator with the AAP program. To address potential issues of researcher bias, multiple drafts of the data analysis and written document underwent rigorous peer review. Furthermore, every effort was made to ensure participants’ anonymity, from employing pseudonyms and refraining from including identifiable information in each case summary to providing meeting place options for subjects outside of the researcher’s place of employment. If a subject was uncomfortable meeting on campus, a public, off-campus space was agreed upon as a means of increasing the subject’s comfort level and protecting anonymity.

A final limitation of the study was the scope of the study itself. This limitation is mentioned earlier in this chapter, but bears repeating. My initial vision of the study included an exploration of factors affecting FG degree completion and was limited to college experiences. However, as the project developed, it became clear that the picture of a FG student's journey to the college degree is incomplete without considering his/her pre-college and college experiences together. This realization, combined with the good fortune of being able to collect an inordinate amount of both quantitative and qualitative data on each participant, from survey responses to in-depth interviews to high school and college transcripts and program participation records led to a final project that covered a number of ambitious areas. The final project provides some clear, intriguing areas for future exploration; however, I would recommend that each of these factors be tackled on a smaller scale.

### **Final Thoughts**

My grandmother's proudest academic moment was serving as valedictorian of her small high school graduating class; my father's proudest academic moment was the "C" he earned in the one community college course he took. A college degree was never an option for either of them. I am the first person in generations of my extended family to ever complete a college degree.

My journey was a struggle; I often felt alone, confused and unworthy. My family was completely unfamiliar with the college choice process. When I began the process of selecting a college, my father tried to convince me to attend community college in order to stay closer to home. After being accepted to a major research

institution, I discovered that I had to pay for every penny of my college experience by myself because my family had not saved money for college.

When I arrived at college, and even through my first graduate degree, I hardly ever spoke in class because I did not feel that I was as smart as my peers. I also was terrified of my how my professors would respond to my input. I was unaware of resources on campus that I might depend upon to help me transition. Instead, it was my peers who I depended upon during the college choice and degree completion process. They helped me sift through college catalogs and decide what I needed for my dorm room. They listened to me talk about my career and whether I should go to law school or graduate school. They were my core support throughout my pre-college and college experiences.

It was not until I was at the end of my journey to a master's degree that I began to understand the challenges I had encountered as a FG student. A faculty member had taken me under her wing, mentored me and was insistent about my potential as a scholar of English literature. She did not know I was a FG student, but I will always be grateful for her insistence that I "belonged."

Even today, with many years of graduate study and a twenty year career as a higher education administrator under my belt, I am still reminded of the challenges and responsibilities I face as a FG student. While my immediate family now understands the process; two of my three younger siblings have earned college degrees and the third one is undertaking the journey mid-career, my extended family, none of whom ever went to college, still do not appreciate the choices I have made.

When I went to college, much of the research on first generation students had not even begun. Today, researchers and administrators, alike, recognize and are working toward initiatives that provide pre-college and college support for first generation students; however, there is still much work to be done.

Building upon the work of a number of scholars (e.g., Chen, 2005; Ishitani, 2006; Pascarella et al., 2004), the present research contributes to the further understanding of first generation students' degree attainment experiences. While the federal government has made a commitment to increasing college access and degree completion for all Americans (The Secretary of Education's Commission, 2006), underrepresented groups remain underserved (Lumina Foundation, 2009). As such, it is critical that future researchers continue to explore factors that contribute to successful degree attainment for these groups, including the first generation population.

## Appendix A

### Correspondence to Participants

#### *Invitation e-mail to Potential Project Participants*

DATE

Dear \_\_\_\_\_:

We write today to ask for your assistance in improving the services to first generation students in Academic Achievement Programs (AAP), at University of Maryland and across the country. Because you are a first generation student who successfully graduated from college, you are part of a select group invited to participate in a doctoral dissertation study focusing on the experiences of first generation students who successfully earned their bachelor's degrees. This study will be conducted by Ph.D. candidate, Christine Mahan.

As you know, the goal of AAP is to provide support for primarily low income and first generation students to successfully earn their bachelor's degrees. Your participation in this study can directly benefit AAP students and other first generation students at University of Maryland and across the country because: (1) it will help us better understand the specific needs/experiences of successful first generation graduates like yourself as they worked toward the bachelor's degree, and (2) it will also specifically help AAP evaluate its service to students in light of the research findings.

Participation in this study consists of two parts: a brief online survey and a 90 minute interview at a time and location convenient to you. Only 15 individuals will be selected for this study. Those chosen who complete both the survey and interview, will receive a \$25 gift certificate to Borders or Starbucks.

Ms. Mahan is currently an administrator in AAP and is also a first generation student. If you are interested in participating in this project, please contact Christine Mahan at 301.405.4738 or [cmahan@umd.edu](mailto:cmahan@umd.edu).

Thank you for your support of student success.

Sincerely,

Dr. Jerry L. Lewis  
Executive Director, AAP

Christine Mahan  
Ph.D. Candidate

*Follow-Up e-mail to Confirmed Participants*

Hi \_\_\_\_\_:

Thank you so much for agreeing to participate in my study. I am looking forward to your valuable contribution.

The steps to completing your participation are listed below:

1. To complete my records, can I get your updated phone number and address?
2. To ensure the anonymity of participants' responses, each participant will be assigned a pseudonym to be used throughout the process. You will need this pseudonym to complete the survey. For the duration of the study, your pseudonym will be \_\_\_\_\_.
3. The first step is to complete brief survey that will take approximately 15 minutes. You can access this survey through the following link:  
<http://cgi.umd.edu/survey/display?mahan/First08>.
4. I will automatically receive notification once the survey is completed. Once I receive this notification, I will contact you to set up an interview, at a time and place that's convenient for you.

Thanks again for agreeing to participate in this study. Please do not hesitate to contact me at [cmahan@umd.edu](mailto:cmahan@umd.edu) or 301.405.4738 with any questions you might have.

*Follow Up e-mail #2 to Participants-Scheduling an Interview*

NAME—

Thanks so much for successfully completing the survey part of my research project. The next step is to schedule an interview at a time/location that is convenient for you. My schedule is flexible, so we can schedule one 60-90 minute time slot during any day of the week or most evenings, with the exception of Wednesday nights.

Because we will be taping the interview, the meeting place should be somewhere where the background noise is minimal. You are welcome to come to my office on the UMD campus for our interview or we could meet somewhere that is better for you.

Is there a specific time/location that works best for you during the week of September 15<sup>th</sup>?

Again, thanks so much for your contribution to this important research. I look forward to speaking to you soon.



## Appendix B

### Participant Online Demographic Survey

1. At the time you first enrolled in college, what was the highest level of formal education obtained by your father?

Grammar school  
Some high school  
High school graduate  
Postsecondary school other than college  
Some college  
College degree  
Some graduate school  
Graduate degree

2. At the time you first enrolled in college, what was the highest level of formal education obtained by your father?

Grammar school  
Some high school  
High school graduate  
Postsecondary school other than college  
Some college  
College degree  
Some graduate school  
Graduate degree

3. How many siblings do you have? \_\_\_\_\_

4. Were any of your siblings in college at the same time you were attending college?

Yes/No

How many of your siblings were in college at the same time?

What school did they attend?

What was/were their major/s?

5. At the time you first enrolled in college, had any of your siblings already earned a bachelor's degree?

Yes/No

How many of your siblings had earned a bachelor's degree?

What school did they attend?

What was/were their major/s?

6. At the time you first enrolled in college, had any of your siblings earned a graduate or professional degree?

Yes/No

How many of your siblings had earned a graduate degree?

What type/s of degrees?

What school did they attend?

7. To how many other colleges other than University of Maryland (UMD) did you apply for admission?

1

2

3

4

5

6

7-10

11 or more

8. Were you accepted to your first choice college?

Yes/No

9. Was UMD your: (Mark one)

First choice?

Second choice?

Third choice?

Less than third choice?

10. If you could make your college choice over, would you still choose to have enrolled at UMD?

- Definitely yes
- Probably yes
- Probably not
- Definitely not
- Not sure

**Below are some reasons that may have influenced your decision to attend UMD. How important was each reason in your decision to attend this institution? (Mark one answer for each possible reason). Scale: *Very Important-Somewhat Important-Not Important***

- 11. My parents wanted me to attend UMD.
- 12. My relatives wanted me to attend UMD.
- 13. My teacher advised me.
- 14. UMD had a very good academic reputation.
- 15. I was offered financial assistance.
- 16. The cost of attending UMD.
- 17. High school counselor advised me.
- 18. I wanted to live near home.
- 19. Not offered aid by my first choice.
- 20. Could not afford first choice.
- 21. UMD's college graduates gain admission to top graduate/professional schools.
- 22. UMD's college graduates get good jobs.
- 23. I wanted to go to a school about the size of UMD.
- 24. Rankings in national magazines.
- 25. Information from a website.
- 26. I was admitted through a special program.
- 27. The athletic department recruited me.
- 28. A visit to the campus.

29. When you started college, what was the highest academic degree you intended to obtain?

- None
- Vocational certificate
- Associate (A.A. or equivalent)
- Bachelor's degree (B.A., B.S., etc.)
- Master's degree (M.A., M.S., etc.)
- Ph.D. or Ed.D.
- M.D., D.O., D.D.S., or D.V.M.
- J.D. (Law)
- B.D. or M.Div. (Divinity)
- Other

30. How often did you talk to your parents about going to college?

- Frequently
- Occasionally
- Not at all

31. Did you have any concern about your ability to finance your college education?

- None (I was confident that I would have sufficient funds)
- Some
- Major (I was not sure I would have enough funds to complete college)

**Once you entered college, how often did you interact with the following people (e.g., by phone, email, Instant Messenger, or in person). *Scale: Frequently-Occasionally-Not at all***

- 32. Faculty during office hours
- 33. Faculty outside of class or office hours
- 34. Academic advisors/counselors
- 35. Other college personnel
- 36. Close friends at the institution
- 37. Close friends not at the institution
- 38. Your family
- 39. Graduate students/teaching assistants
- 40. Close friends from your high school

41. Where did you live while attending college (please mark all that apply):

**On campus**

- Regular college housing
- Residence Hall
- Apartment
- Fraternity or sorority housing
- Other residential housing
- Special interest housing
- Special academic program
- Other special interest housing

**Off campus**

- At home with family
- Fraternity or sorority
- Rented apartment or house
- Other

**During college did you: (Mark one answer for each) Scale: *Yes-No***

- 42. Decide to pursue a different major
- 43. Remain undecided about a major
- 44. Change your career choice
- 45. Participate in student government
- 46. Need extra time to complete your degree requirements
- 47. Socialize with someone of another racial/ethnic group
- 48. Work while attending school
- 49. Join a social fraternity or sorority
- 50. Play varsity/intercollegiate athletics
- 51. Participate in volunteer or community service work
- 52. Participate in student clubs/groups
- 53. Seek personal counseling
- 54. Strengthen your religious beliefs/convictions
- 55. Fail one or more courses
- 56. Participate in leadership training
- 57. Communicate regularly with your professors
- 58. Take a course or first year seminar designed to help first year students adjust to college
- 59. Participate in an academic support program

60. If you worked while attending school, approximately how many hours per week did you work?

0-5

6-10

11-15

16-20

21-25

26-30

31-35

36+

Not applicable. I did not work while attending school.

61. If you worked while attending school, what type of employment did you have?

On campus

Off campus

Both

## Appendix C

### Interview Protocol

#### Introduction

Thank you for agreeing to participate in this interview. I am interested in finding out more about experiences that helped contribute to you successfully earning your baccalaureate degree. During the next 90 minutes, I will be asking specific questions about your experiences. Your answers will be kept confidential and no identifiable names or references will be used in any publications that might result from this study. Participation in this study is voluntary, and you are free to ask questions or withdraw from participation at any time and without penalty.

#### Pre-College Questions

##### *Aspirations and Institutional Choice*

1. Why did you decide to pursue a bachelor's degree?
2. What made you decide to attend University of Maryland? Describe the process of how you made this decision.
  - a. Who gave you the most help when applying to college? How did they help you?
  - b. Where or from whom did you get information about how to apply to college?
  - c. Where or from whom did you get information about how to pay for college?
3. On your survey, you indicated that you talked to your parents (frequently, occasionally, not at all) about going to college. Can you describe the types of conversations you had with your parents about going to college?
4. How often did you talk to people other than your parents about going to college? Probing: Who did you talk to? Can you describe the types of conversations you had with these individuals?
5. Did anyone ever discourage you from going to college? Explain.

##### *Academic Preparation*

6. When and how did you learn about which courses you needed to take to prepare for/get into college?
7. Did you talk to parents or family members about which courses to take to prepare for college?  
Teachers or counselors?  
Friends?  
Other?

8. Did you participate in any special pre-college programs (e.g. TRIO, GEAR UP)?  
Probing: When did you get involved? How, if at all, did these programs help you prepare academically for college?
9. How, if at all, did your high school courses prepare you for college?  
In terms of content?  
In terms of study skills?

***Financial Aid***

10. On your survey answers, you indicated that, before you started college, you had (none, some, major) concerns about your ability to finance your education. Can you express what your specific concerns were?  
Probing:  
Can you share some of the discussions you had about paying for college? With your parents? Friends? Others?



### **Collegiate Experience Questions**

At this point, I would like to make the transition from talking about your experiences before you started college to discuss your experiences while you were attending UMD.

#### ***Academic Experiences***

11. How would you describe your academic experiences at UMD?  
Probes:  
What were your most challenging academic experiences? How did you overcome these challenges?
12. Describe how you decided on your academic major.
13. Where did you receive most of your help academically? Can you describe 1 or 2 of your most critical encounters?
14. Your survey responses indicated that you participated in an academic support program. Can you talk about your experiences with this program?  
Probing: What types of support did this program provide? Academic? Social? Other?

#### ***Social Experiences***

15. I noticed on your survey that you indicated you had been involved in extracurricular activities/programs on or off campus (e.g. social fraternity/sorority, student clubs/groups, leadership training etc.). Can you talk a little more your involvement in these activities?  
Probes:  
Approximately how much time did you spend on campus each week?  
Approximately how much time did you spend in each of these activities?  
  
If no, can you discuss why you were not involved in extracurricular activities/programs on or off campus?

#### ***Interaction with Faculty***

16. Can you discuss your experiences in and out of the classroom?  
Probing: What types of experiences did you have with faculty members?  
Did you regularly participate in and attend class?

#### ***Social/Cultural Capital and Adjusting to College***

17. Describe your most challenging experiences adjusting to college.  
Probing: How did you cope with the social transition to college?

### Family and Peers

18. How did your family and friends adjust to your life as a college student?  
Probing:  
Were your parents/family members supportive of your decision to attend college? Were friends?  
Did most of your closest friends go to college?  
Probes: If so, where? If not, what did they do?  
Did going to college change/strain your relationship with family or friends back home? How did you cope?
19. Socially, who did you spend the most time with when you were in college? How did you meet/become involved with this person/group/activity?

### Financial Aid/Employment

20. Describe how you managed to pay for college.  
Probes:  
Did you rely on any other means of financial resources outside the traditional loans, grants, FWS offered through the institutional financial aid package (e.g. credit cards, parent loans)?  
Had you or your parents/family members saved money for college?

### *Critical Experiences*

21. Who had the greatest influence on your successful completion of the bachelor's degree? (social/cultural capital)  
Probing: How?
22. When you reflect on your entire collegiate career, can you elaborate on 1 or 2 of the most challenging encounters/experiences you had as you worked toward your baccalaureate degree?  
Probing: Did you overcome these challenges? How?
23. While you were in school, how did you gain information about the financial aid process/your award each year etc.?
24. You indicated on your survey response that you worked while in school. Can you describe the types of jobs you held?

### *Race/Ethnicity*

25. At the time you attended UMD, the institution was gaining increased national recognition for its commitment to diversity and was nationally ranked for the number of minority students it graduated. How would you characterize your experiences at the institution within this context?  
Probes: As a student at the institution, did you ever feel discriminated against because of race/ethnicity, social class, experience etc.?

*Closing*

26. If you could give one piece of advice to a first generation student who was beginning his/her journey toward a baccalaureate degree, what would it be?

27. Is there anything else you would like to share?

Thank you for your time. Your answers have been very helpful. If you think of anything else later, please contact me.

## Appendix D

### Participants' Secondary School Course-Taking Patterns

Participant	English	Math	Science	Language	Highest Level Math
Ann	4	4	4	2	AP Calculus
Betty	4	4	4	4	Pre-Calculus
Bob	4	4	3	4	Pre-Calculus
Erin	3	4	3	3	Trigonometry
Jane	4	4	3.5	2	Algebra II
Jim	4	4	4	3	Statistics
John	4	4	4	2	Pre-Calculus
Karen	4	4	4	4	Pre-Calculus
Lynn	4	4	3	3	Alg.II/Trig.
Mary	4	4	4	2	Statistics
Mike	4	4	3	0	Honors Calculus
Steve	4	3.5	4	2	Trigonometry
Tim	4	4	3	4	Pre-Calculus

## Appendix E

### Participants' Advanced Placement/Honors/IB Course Patterns (# of courses)

Participant	AP	Honors	IB
Ann	4	3	0
Betty	0	5	0
Bob	0	4	0
Erin	1	0	0
Jane	0	0	0
Jim	0	2	0
John	1	0	0
Karen	3	12	0
Lynn	0	0	0
Mary	0	4	0
Mike	0	1	0
Steve	2	0	0
Tim	1	0	1

## Appendix F

### Participants' Cumulative High School GPA and Total SAT Scores

Participant	Cumulative H.S. GPA	SAT Score (Math/Verbal Combined)
1	3.58	930
2	3.36	820
3	3.3	820
4	2.22	670
5	2.81	930
6	2.7	1140
7	2.4	990
8	2.81	1020
9	3.34	940
10	1.79	980
11	2.3	600
12	3.00	1030
13	2.86	1000

*Note.* To maintain participant confidentiality, identifying information (i.e., name and gender) has been omitted from this table and data appear in random order.

## Appendix G

### Participants' Enrollment Patterns and Academic Performance

Participant	Enrolled	Years	Failed	Probation	Stopout	Summer/Winter
Ann	Y	6	2	N	N	Y/10
Betty	Y	5	2	N	N	Y/4
Bob	Y	6	2	N	N	Y/9
Erin	Y	5	4	Y	N	Y/5
Jane	Y	5	1	N	N	Y/7
Jim	Y	5	0	N	N	Y/3
John	Y	6	7	Y	Y	Y/6
Karen	Y	4	0	N	N	Y/4
Lynn	Y	5	5	N	N	Y/5
Mary	Y	4	1	N	N	Y/6
Mike	Y	5	1	N	N	Y/4
Steve	Y	5	2	N	N	Y/2
Tim	Y	4	0	N	N	Y/6

*Note:* Enrolled: enrolled immediately following HS; Years: number of years to graduation; Failed: number of courses failed; Summer/Winter: enrolled in summer/winter terms (number).

## Appendix H

### Participants' First Year Academic Performance at UM

Participant	First Year GPA	First Year Credits Completed
Ann	3.32	34
Betty	3.14	28
Bob	2.90	29
Erin	2.52	25
Jane	2.93	25
Jim	2.32	28
John	1.70	22
Karen	3.67	30
Lynn	3.03	28
Mary	3.36	28
Mike	2.18	25
Steve	2.54	28
Tim	3.21	28



## Appendix I

### Participants' Choice of Major Trends

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Participant	Expected Major	Completed Major	Major Changes
Ann	Biochemistry	Biochemistry/Dietetics	1
Betty	Pre-Nursing	Criminal Justice	2
Bob	Spanish Lang./Lit	Finance	1
Erin	Art Studio	English Lang/Lit.	4
Jane	Gov't/Politics	Criminal Justice	1
Jim	Kinesiology	Family Studies	1
John	Business	Criminal Justice	1

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Karen	Education	Elem. Education	0
Lynn	Accounting	Communications	1
Mary	Pre-Law	Communications	1
Mike	Comp.Science	Criminal Justice	1
Steve	Undecided	Sociology	1
Tim	Theatre	Spec. Education	1

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## References

- Academic Achievement Programs. (2007). *AAP Internal Assessment*. College Park, MD: University of Maryland.
- Adelman, C. (1999). *Answers in the tool box. Academic intensity, attendance patterns, and bachelor's degree attainment*. Washington DC: U.S. Department of Education, National Institute on Postsecondary Education, Libraries and Lifelong Learning.
- Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school through college*. Washington, DC: U.S. Department of Education, Office of Vocational and Adult Education (ED).
- Anderson, E. (2003). Changing U.S. demographics and American higher education. *New Directions for Higher Education*, 121, 3-12.
- Andrade, M. (2007-08). Learning communities: Examining positive outcomes. *Journal of College Student Retention*, 9(1), 1-20.
- Astin, A. (1993a). Diversity and multiculturalism on campus: How are students affected? *Change*, 25(2), 44-49.
- Astin, A. (1993b). *What matters in college? Four critical years revisited*. San Francisco: John Wiley & Sons.
- Astin, A.W. & Oseguera, L. (2004). The declining "equity" of American higher education. *The Review of Higher Education*, 27(3), 321-341.
- Attinasi, L.C., Jr. (1986). *Getting in: Chicano students' perceptions of their college going behavior with implications for their freshman year persistence*. (Unpublished doctoral dissertation). Arizona State University, Tempe.

- Bean, R. A., Bush, K. R., McKenry, P. C., & Wilson, S. M. (2003). The impact of parental support, behavioral control, and psychological control on the academic achievement and self-esteem of African American and European American adolescents. *Journal of Adolescent Research, 18*(5), 523-541.
- Bean, J.P. & Metzner, B.S. (1985). A conceptual model of nontraditional student attrition. *Review of Educational Research, 55*(4), 485-540.
- Berger, J.B. (2000). Optimizing capital, social reproduction, and undergraduate persistence: A sociological perspective. In J.M. Braxton (Ed.). *Reworking the student departure puzzle*, Nashville: Vanderbilt University Press.
- Billson, J. & Terry, B. (1982). In search of the silken purse: Factors in attrition among first generation students. *College and University, 58*, 57-75.
- Bourdieu, P. (1986). The forms of capital. In J.G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). New York: Greenwood Press.
- Breneman, D.W. & Merisotis, J.P. (2002). Beyond money: Support strategies for disadvantaged students. In D. E. Heller (Ed.) *Condition of access: Higher education for low income students* (pp. 113-133). Westport, CT: Praeger Publishers.
- Bryan, J., Holcomb-McCoy, C., Moore-Thomas, C. & Day-Vines, N. (2009). Who sees the school counselor for college information? A national study. *Professional School Counseling, 12*(4), 280-291.

- Cabrera, A.F., Burkum, K.R. & LaNasa, S.M. (2005). Pathways to a four year degree: Determinants of transfer and degree completion. In A. Seidman (Ed.), *College student retention: A formula for student success* (pp.155-209). Westport, CT: Praeger Publishers.
- Cabrera, A.F., Crissman, J.L., Bernal, E.M., Nora, A., Terenzini, P.T., Pascarella, E.T. (2002). Collaborative learning: Its impact on college students' development and diversity. *Journal of College Student Development*, 4(1), 20-34.
- Cabrera, A.F. & LaNasa, S.M. (2001). On the path to college: Three critical tasks facing America's disadvantaged. *Research in Higher Education*, 42(2), 119-150.
- Cabrera, A.F. and Nora,A. (1994). College students' perceptions of prejudice and discrimination and their feelings of alienation: A construct validation approach. *The Review of Education/Pedagogy/Cultural Studies*, 16(3-4), 387-409.
- Cabrera, A.F., Nora, A. & Castenada, M. (1992).The role of finances in the persistence process: A structural model. *Research in Higher Education*, 33(5), 571-593.
- Cabrera, A.F., Nora, A., & Castenada, M. (1993). College persistence: Structural equations modeling test of an integrated model of student retention. *The Journal of Higher Education*, 64(2), 123-139.
- Cabrera, A.F., Nora, A., Terenzini, P.T., Pascarella, E. Hagedorn L. (1999). Campus racial climate and the adjustment of students to college: A comparison between White students and African-American students. *The Journal of Higher Education*, 70 (2), 134-160.

- Cabrera, A.F., Stampen, J.O., & Hansen, W.L. (1990). Exploring the effects of ability to pay on persistence in college. *The Review of Higher Education*, 13(3), 303-336.
- Carnevale A.P. & Fry, R.A. (2002). The demographic window of opportunity: College access and diversity in the new century. In D. E. Heller (Ed.), *Condition of access: Higher education for low income students*. Westport, CT: Praeger Publishers.
- Chaney, B., Muraskin, L., Cahalan, M., & Goodwin, D. (1998). Helping the progress of disadvantaged students in higher education: The federal Student Support Services program. *Educational Evaluation and Policy Analysis*, 20(3), 197-215.
- Chang, M. (2000). The positive educational effects of racial diversity on campus. In G. Orfield (Ed.), *Diversity challenged: Evidence on the impact of Affirmative Action* (pp. 175-186). Cambridge, MA: Harvard Education Publishing Group.
- Chen, X. (2005). *First-generation students in post-secondary education: A look at their college transcripts*. Washington DC: National Center for Education Statistics.
- Choy, S. (1998). *First generation students: Undergraduates whose parents never enrolled in postsecondary education*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- Choy, S. (2001). *Students whose parents did not go to college: Postsecondary access, persistence, and attainment*. Washington, DC: U.S. Department of Education, National Center for Educational Statistics.

- Choy, S. (2002). *Access and persistence: Findings from 10 years of longitudinal research studies*. Washington D.C.: American Council on Education.
- Choy, S., Horn, L., Nunez, A., Chen, X. (2000). Transition to college: What helps at risk students and students whose parents did not attend college. *New Directions for Institutional Research*, 107, 45-63.
- Coleman, J.S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94, S95-S120.
- College Board. (2007). *The CollegeKeys compact: Getting ready, getting in and getting through college: Expanding options for low-income students*. Washington DC: Author.
- Council for the Advancement of Standards in Higher Education. (2009). *CAS professional standards for higher education* (7<sup>th</sup> ed.) Washington DC: Author.
- Council for Opportunity in Education. (2010a). *TRIO funding history*. Retrieved January 12, 2010 from [http://www.coenetus/ecm/AM/Template.cfm?section=TRIO\\_Funding\\_History&Template=/CM](http://www.coenetus/ecm/AM/Template.cfm?section=TRIO_Funding_History&Template=/CM).
- Council for Opportunity in Education. (2010b). *What is TRIO?* Retrieved January 12, 2010 from [http://www.coenetus/ecm/AM/Template.cfm?Section=What\\_is\\_TRIO&Template=/CM](http://www.coenetus/ecm/AM/Template.cfm?Section=What_is_TRIO&Template=/CM).
- Creswell, J.W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.

- Cuccaro-Alamin, S. (1997). Postsecondary persistence and attainment. *Findings from the Condition of Education 1997*. Washington DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.
- Cutright, M. (2008). From helicopter parent to valued partner: Shaping the parental relationships for student success. *New Directions for Higher Education*, 144, 39-48.
- Dennis, Phinney & Chuateco. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first generation college students. *Journal of College Student Development*, 46(3), 223-236.
- DesJardins, S. L., McCall, B. P., Ahlburg, D. A., & Moye, M. J. (2002). Adding a timing light to the "tool box". *Research in Higher Education*, 43, 83-114.
- Engle, J., Bermeo, A., & O'Brien, C. (2006). *Straight from the source*. Washington D.C.: The Pell Institute for the Study of Opportunity in Higher Education.
- Engle, J. & Tinto, V. (2009). *Moving beyond access: College success for low-income, first generation students*. Washington D.C.: The Pell Institute for the Study of Opportunity in Higher Education.
- Evans, N., Forney, D.S., Guido, F.M., Patton, L.D., & Renn, K.A. (2010). *Student development in college: Theory, research and practice*. (2<sup>nd</sup> ed.). San Francisco: Jossey Bass.

- Fann, A., Jarsky, K.M. & McDonough, P.M. (2009). Parental involvement in the college planning process: A case study of P-20 collaboration. *Journal of Hispanic Higher Education*, 8(4), 374-393.
- Frye, R. (2002). *Latinos in higher education: Many enroll, too few graduate*. Washington, DC: Pew Hispanic Center.
- Garcia, L. & Paz.C. (2009). Bottom line: Evaluation of summer bridge programs. *About Campus*, 14(4), 30.
- Greif, G. L., Hrabowski, F. A., & Maton, K. I. (2000). African American mothers of academically successful sons: Familial influences and implications for social work. *Children & Schools*, 22(4), 232.
- Hahs-Vaughn, D. (2004). The impact of parents' education level on college students: An analysis using the beginning post-secondary students' longitudinal study 1990 -92/94. *Journal of College Student Development*, 45(5), 483-500.
- Hall, Wendell. (2009). *A tale of two groups: Differences between minority students in their pre-disposition to and engagement with diverse peers at a predominantly white institution*. (Unpublished doctoral dissertation). University of Maryland, College Park, MD.
- Harms, H.E. (1970). *The concept of in loco parentis in higher education*. Gainesville, FL: University of Florida Institute of Higher Education.
- Harvey, W.B. (2003). *Minorities in higher education: Twentieth annual status report, 2002-2003*. Washington, DC: American Council on Education.



- Hausmann, L, Ye, F., Schofield, J.W., & Woods, R. (2009). Sense of belonging and persistence in white and African American first-year students. *Research in Higher Education* 50, 649-669.
- Higher Education Research Institute (UCLA). 2010. *CIRP Surveys*. Retrieved January 16, 2010 from [www.heri.ucla.edu/herisurveys.php](http://www.heri.ucla.edu/herisurveys.php).
- Holcomb-McCoy, C. (2007). *School counseling to close the achievement gap: A social justice framework for success*. Thousand Oaks, CA: Corwin Press.
- Hoover, E. (May, 2009). At Wake Forest U. admissions has become “more art than science.” *Chronicle of Higher Education*, 55(34), A20.
- Horn, L., and Kojaku, L.K. (2001). *High school academic curriculum and the persistence path through college: Persistence and transfer behavior of undergraduates 3 years after entering 4 year institutions*. Washington D.C.: National Center for Education Statistics.
- Horn, L. and Nunez, A.M. (2000). *Mapping the road to college: First generation students' math track, planning strategies and context of support*. Washington DC: National Center for Education Statistics.
- Hossler, D., Schmit, J. & Vesper, N. (1999). *Going to college: How social, economic, and educational factors influence the decisions students make*. Baltimore: The Johns Hopkins Press.
- Hurtado, S., Carter, D.F. & Spuler, A. (1996). Latino student transition to college: Assessing difficulties and factors in successful college adjustment. *Research in Higher Education*, 37 (2), 135-157.

- Hurtado S. & Carter, D.F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education*, 70 (4), 324-345.
- Ishitani, T.T. (2006). Studying attrition and degree completion behavior among first generation college students in the United States. *The Journal of Higher Education*, 77(5), 861-885.
- Keller, G. (2001). The new demographics of higher education. *The Review of Higher Education*, 24(3), 219-235.
- Keller, J. & Hoover, E. (2009, February). University of California adopts sweeping changes in admissions policy. *Chronicle of Higher Education*, 55(23), A33.
- Kerpelman, J., Eryigit, S., & Stephens, C. (2008). African American adolescents' future orientation: Associations with self-efficacy, ethnic identity and perceived parental support. *Journal of Youth and Adolescence*, 37, 997-1008.
- Kulik, C., Kulik, J.& Shwalk, B. (1983). College programs for high-risk and disadvantaged students: A meta-analysis of findings. *Review of Educational Research*, 53(3), 397-414.
- Kvale, Steinar. (1996). *InterViews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage Publications.
- Lin, N. (2001). *Social capital*. Cambridge: Cambridge University Press.
- Lohfink, M.M. & Paulsen, M.B. (2005). Comparing the determinants of persistence for first generation and continuing-generation students. *Journal of College Student Development*, 46(4), 409-428.

- London, H.B. (1992). Transformations: Cultural challenges faced by first-generation students. In L.S. Zwerling & H.B. London (Ed.), *First-generation students: Confronting the cultural issues*, 5-11. New Directions for Community Colleges, No.80. San Francisco: Jossey-Bass.
- Lumina Foundation for Education. (2009). *A stronger nation through higher education: How and why Americans must meet a "big goal" for college attainment*. Washington, D.C.:Author.
- Matthay, E. (1989). A critical study of the college selection process. *The School Counselor*, 36, 359-370.
- McCarron, G.P. and Inkelas, K.K. (2006). The gap between educational aspirations and attainment for first generation college students and the role of parental involvement. *Journal of College Student Development*, 47(5): 534-549.
- McDonough, P.M. (1997). *Choosing colleges: How social class and schools structure opportunity*. Albany, NY: State University of New York Press.
- McDonough, P.M. (2005). Counseling matters: Knowledge, assistance and organizational commitment in college preparation. In W.G. Tierney, Z.B. Corwin & J.E. Colyar (Eds.), *Preparing for college: Nine elements of effective outreach*, 69-87.
- Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass Publishers.
- Metzner, B.S. & Bean, J.P. (1987). The estimation of a conceptual model of nontraditional undergraduate student attrition. *Research in Higher Education*, 27(1), 15-38.

- Miles, M. & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook*. (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Muraskin, L. (1997). "Best practices" in student support services: A study of five exemplary sites. Washington D.C.: U.S. Department of Education, Office of Educational Research and Improvement.
- Murguia, E., Padilla, R.V., & Pavel, D.M. (1991). Ethnicity and the concept of social integration in Tinto's model of institutional departure. *Journal of College Student Development*, 32(5), 433-439.
- National Association for College Admission Counseling. (2008). *Report of the commission on the use of standardized tests in undergraduate admission*. Arlington, VA: NACAC.
- National Council for Community and Educational Partnerships. (2010). *About GEAR UP*. Retrieved January 13, 2010 from <http://www.gearupdata.org/GEARUP.cfm>.
- National Commission on Excellence in Education. (1983). *A Nation at risk: The imperative for educational reform*. Washington D.C.: Author.
- Nora, A. (2001). The depiction of significant others in Tinto's 'rites of passage': A re-conceptualization of the influence of family and community in the persistence process. *Journal of College Student Retention*, 3(1), 41-56.
- Nora, A. & Cabrera, A.F. (1996). The role of perceptions of prejudice and discrimination on the adjustment of minority students to college. *The Journal of Higher Education*, 67, 119-148.

- Nunez, A.M. & Cuccaro-Alamin, S. (1998). *First-generation students: Undergraduates whose parent never enrolled in postsecondary education* (NCES 1999-082). Washington D.C.:U.S.Government Printing Office.
- Nurmi, J.E. (1987). Age, sex, social class and quality of family interaction as determinants of adolescents' future orientation: A developmental task interpretation. *Adolescence*, 22, 977-991.
- Office of Institutional Research, Planning & Assessment. (2005). *Profiles*. Retrieved April 30,2005 from <http://www.irpa.umd.edu>, College Park, Maryland: University of Maryland.
- Office of Institutional Research, Planning & Assessment. (2007). [AAP Retention and Graduation Rates]. Unpublished raw data. College Park, MD: University of Maryland.
- Office of Institutional Research, Planning & Assessment. (2008). *Profiles*. Retrieved March 30, 2008 from <http://www.irpa.umd.edu/menus.cfm?action=wocnfresh>. College Park, Maryland: University of Maryland.
- Pascarella, E. T. (1980). Student-faculty informal contact and college outcomes. *Review of Educational Research*, 50(4), 545-595.
- Pascarella, E., Pierson, C., Wolniak, G., & Terenzini, P. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education*, 75, 249-284.
- Pascarella, E.T. & Terenzini, P.T. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey-Bass.

- Pascarella, E.T. & Terenzini, P.T. (2005). *How college affects students: A third decade of research*. San Francisco: Jossey-Bass.
- Pascarella, E., Wolniak, G., Pierson, C. & Terenzini, P. (2003). Experiences and outcomes of first-generation students in community colleges. *Journal of College Student Development*, 44(3), 420-429.
- Patton, L., Morelon C., Whitehead D. & Hossler, D. (2006). Campus based retention initiatives: Does the emperor have clothes? *New Directions for Institutional Research*, 130, 9-24.
- Patton, M.Q. (2002). *Qualitative Research & Evaluation Methods* (3<sup>rd</sup> ed.). Thousand Oaks: Sage Publications.
- Paulsen, M.B. & St. John, E.P. (2002). Social class and college costs: Examining the financial nexus between college choice and persistence. *Journal of Higher Education*, 73(2), 189-236.
- Perna, L.W. (2000). Racial/ethnic group differences in college enrollment decisions. In A.F. Cabrera and S.M. LaNasa (Eds). *Understanding the college choice of disadvantaged students. New Directions for Institutional Research*. San Francisco: Jossey-Bass.
- Perna, L.W. (2006). Studying college access and choice: A proposed conceptual model. In J.C.Smart (Ed.). *Higher Education: Handbook of Theory and Research*, Vol. XXI (pp. 99-157). Netherlands: Springer.
- Perna, L.W. & Swail W.S. (2002). Pre-college outreach and early intervention programs. In Donald E. Heller (Ed.) *Condition of Access: Higher Education for Lower Income Students* (pp. 97-112). Westport, CT: Praeger Publishers.

- Perna, L.W. & Titus, M. (2005). The relationship between parental involvement as social capital and college enrollment: An examination of racial/ethnic group differences. *The Journal of Higher Education*, 76(5), 485-518.
- Pike, G.R., & Kuh, G.D. (2005). First-and second-generation college students: A comparison of their engagement and intellectual development. *Journal of Higher Education*, 76(3), 276-300.
- Rendon, L.I. (1992). From the barrio to the academy: Revelations of a Mexican American scholarship girl. In L.S. Swerling and H.B. London (Eds.), *First generation students: Confronting the cultural issues* (pp. 55-64). New Directions for Community Colleges, No.80. San Francisco: Jossey-Bass.
- Rendon, L.I. & Hope, R.O. & Associates. (1996). *Educating a new majority: Transforming America's educational system for diversity*. New York: Jossey Bass.
- Richardson, R.C. & Skinner, E.F. (1992). Helping first generation minority students achieve degrees. In L.S. Zwerling & H.B. London (Eds.), *First-generation students: Confronting the cultural issues*, (pp. 29-43). New Directions for Community Colleges, (80). San Francisco: Jossey-Bass.
- Ritchie, J. & Lewis, J. (2003). *Qualitative research practice: A guide for social science students and researchers*. London: SAGE Publications.
- Rodriguez, N., Mira, C.B., Myers, H., Morris, J. & Cardoza, D. (2003). Family or friends: Who plays a greater supportive role for Latino college students? *Cultural Diversity and Ethnic Minority Psychology*, 9(3), 236-250.

- Roksa, J. (2010). Bachelor's degree completion across state contexts: Does the distribution of enrollments make a difference? *Research in Higher Education* 51(1), 1-20.
- Rowan-Kenyon, H., Bell, A.D. & Perna, L.W. (2008). *Contextual influences on parental involvement in college going*. *Journal of Higher Education*, 79(5), 564-586.
- Saenz, V., Ngai, H.N., & Hurtado, S. (2007). Factors influencing positive interactions across race for African American, Asian American, Latino and White college students. *Research in Higher Education*, 48(1), 1-38.
- Santovec, M.L. (2006). Award winning retention program's comprehensive nature transforms results. *Recruitment and Retention in Higher Education*, 20(8), 3.
- Saunders, M. & Serna, I. (2004). Making college happen: The college experiences of first generation Latino students. *Journal of Hispanic Higher Education*, 3(2), 146-163.
- Smedley, B.D., Myers, H.F. & Harrell, S.P. (1993). Minority-status stresses and the college adjustment of ethnic minority freshmen. *Journal of Higher Education*, 64(4), 434-451.
- Somers, P., Woodhouse, S. & Cofer, J. (2004). Pushing the boulder uphill: The persistence of first-generation college students. *NASPA Journal*, 41(3), 418-435.



- St. John, E.P., Cabrera, A.F., Nora, A., & Asker, E.H. (2000). Economic influences on persistence reconsidered: How can finance research inform the reconceptualization of persistence models? In John M. Braxton, (Ed.), *Reworking the student departure puzzle* (pp.29-47). Nashville, TN: Vanderbilt University Press.
- St. John, E.P., Paulsen, M.B., & Carter, D.F. (2005). Diversity, college costs and postsecondary opportunity: An examination of the financial nexus between college choice and persistence for African Americans and Whites. *Journal of Higher Education*, 76(5), 545-569.
- Stage, F. K., & Hossler, D. (1989). Differences in family influences on college attendance plans for male and female ninth graders. *Research in Higher Education*, 30(3), 301-315.
- Stampen, J.O. & Cabrera, A.F. (1986). Exploring the effects of student aid on attrition. *Journal of Student Financial Aid*, 16, 28-40.
- Stampen, J.O. & Cabrera, A.F. (1988). Is the student aid system achieving its objectives? Evidence on targeting and attrition. *Economics of Education Review*, 7, 29-46.
- Student Support Services Program, 34 C.F.R. § 646 (2009).
- Swail, W.S. (2003). *Retaining minority students in higher education: A framework for success*. Washington DC: Office of Educational Research and Improvement.
- Talent Search Program, 34 C.F.R. § 643 (2009).

- Terenzini, P., Cabrera, A., Bernal, E. (2001). *Swimming against the tide: The poor in American higher education*. New York: College Entrance Examination Board.
- Terenzini, P., Cabrera, A., Colbeck, C., Bjorklund, S., Parente, J. (2001). Racial and ethnic diversity in the classroom: Does it promote student learning? *Journal of Higher Education*, 72(5), 509-31.
- Terenzini, P., Cabrera, A.F., Deil-Amen, R., and Lambert, A. (2005). *The Dream deferred: Increasing the college preparedness of at-risk students*. Washington D.C.: U.S. Department of Education.
- Terenzini, P., Rendon, L., Upcraft, M., Millar, J., Allison, K., Gregg, P. et al. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education*, 30, 301-315.
- Terenzini, P., Springer, L., Yaeger, P., Pascarella, E., & Nora, A. (1996). First generation college students: Characteristics, experiences, and cognitive development. *Research in Higher Education*, 37, 1-22.
- Thayer, P. (2000). Retention of students from first generation and low income backgrounds. *Opportunity Outlook*, 3-9.
- The Secretary of Education's Commission on the Future of Higher Education. (2006). *A test of leadership: Charting the future of U.S. higher education*. Washington D.C.: U.S. Department of Education.

- Tierney, W. & Auerbach, S. (2005). Toward developing an untapped resource: The role of families in college preparation. In W.G. Tierney, Z.B. Corwin & J.E. Colyar (Eds.), *Preparing for college: Nine elements of effective outreach* (pp. 29-48). Albany, NY: SUNY Press.
- Tierney, W. & Colyar, J. (2005). The role of peer groups in college preparation programs. In W.G. Tierney, Z.B. Corwin & J.E. Colyar (Eds.), *Preparing for college: Nine elements of effective outreach* (pp. 49-68). Albany, NY: SUNY Press.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. (2<sup>nd</sup> ed.). Chicago: University of Chicago Press.
- University of Maryland. (2004). *Student academic success-degree completion policy*. Retrieved December 28, 2009, from <http://www.ugst.umd.edu/academicsuccess.html>.
- University of Maryland. (2006). *Mission and goals statement: University of Maryland CollegePark*. Retrieved March 30, 2008 from [http://www.provost.umd.edu/Strategic\\_Planning/MissionandGoals2006.pdf](http://www.provost.umd.edu/Strategic_Planning/MissionandGoals2006.pdf).
- University of Maryland. (2008a). *Facts and figures*. Retrieved March 30, 2008 from <http://www.newsdesk.umd.edu/facts/2008rank.cfm>.
- University of Maryland. (2008b). *Facts and figures: 2007 university rankings*. Retrieved April 21, 2008 from <http://www.newsdesk.umd.edu/facts/2007rank.cfu>.

- Upward Bound Program, 34 C.F.R. § 645 (2009).
- U.S. Census Bureau. (1993).
- U.S. Census Bureau. (2005).
- U.S. Department of Education (2009). *Annual low-income levels*. Retrieved May 10, 2009 from <http://www.ed.gov/about/offices/list/ope/trio/incomelevels.html>.
- U.S. Department of Education. (2010a). *Student Support Services Program Performance*. Retrieved January 10, 2010 from <http://www.ed.gov/programs/triostudsupp/performance.html>.
- U.S. Department of Education. (2010b). *Fiscal Year 2011 Budget Summary*. Retrieved April 20, 2010, from <http://ww2ed.gov/about/overview/budget/budget11/Summary/index.html>.
- U.S. News & World Report. (2008). *University of Maryland-College Park: At a glance*. In U.S.News.com:America's best colleges 2008. Retrieved April 21, 2008 from [http://colleges.usnews.rankingsandreviews.com/usnews/edu/college/directory/brief/drglance\\_210.brief.php](http://colleges.usnews.rankingsandreviews.com/usnews/edu/college/directory/brief/drglance_210.brief.php).
- Walpole, M. (2003). Socioeconomic status and college: How SES affects college experiences and outcomes. *Review of Higher Education*, 27,(1), 45-73.
- Warburton, E.C., Bugarin, R., Nunez, A.. (2001). *Bridging the gap: Academic preparation and post-secondary success of first-generation students* (Statistical Analysis Report No.NCES 2001-153). Washington DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.

Weidman, J. (1989). Undergraduate socialization: A conceptual approach. In J. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 5, pp. 289-322).

New York: Agathon.

York-Anderson, D. & Bowman, S. (1991). Assessing the college knowledge of first generation and second generation students. *Journal of College Student Development*, 32, 116-122.