ABSTRACT

NOLAN, RONNIE. First-Generation Graduates of Berea College: An examination of the association between the barriers to graduation and the motivating factors. (Under the direction of George Vaughan.)

This study suggested which of the identified motivating factors address specific barriers to success for first-generation college students. The motivating factors identified in the research include academic support/tutoring programs, faculty mentoring programs, involvement in campus life, and personal resilience. The barriers include the lack of financial support, family support, academic preparedness, personal commitment, and social support. The study will also ascertain which motivating factors each first generation college graduate experienced and how that impacted each of the specific barriers identified.

Approximately 147 Berea College graduates were surveyed about their experience while enrolled at Berea, with a total return of 35 surveys (24%). The areas of interest included their experience in tutoring/academic support services, faculty relationships, campus involvement, personal resilience, financial support, family support, academic preparation, personal commitment and social support systems developed while enrolled. Spearman Correlation Coefficient results indicate that the barriers: financial support, family support, academic preparation, personal commitment and social support) significantly (p < .001) contribute to the motivating factors: tutoring/academic support services, faculty mentoring relationships, campus involvement and personal resilience. One exception was determined, the motivating factor of faculty mentoring relationships was positively correlated to financial support, but the p-value was 0.0025. These factors
had alpha reliability scores of .72 to .91. The results seem to indicate that each of the identified motivating factors has a strong association with the identified barriers (See Table 10).

The data provided evidence of an association between all motivating factors and the barriers experienced by first-generation college graduates. These findings suggest that the more motivating factors a first-generation college student experience, the more likely he or she will be to overcome the barriers and complete college. While no specific motivating factor significantly impacted one barrier more than any of the others, this research does provide evidence that the barriers can be overcome with the assistance of involvement in the motivating factors. All of the motivating factors had significant correlations with the barriers and had strong $p$ values that suggest an association.
First-Generation Graduates of Berea College: An examination of the association between the barriers to graduation and the motivating factors.

by

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Dedication

Over the years I have enjoyed the support and encouragement of many friends and colleagues, but the love of my life, Mae Suramek, has been my rock. She is the reason I took on this project and without her support, love and gentle prodding I could not have completed this enormous task. This dissertation is dedicated to her.
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Chapter I: Introduction

College access has expanded over the years with a higher percentage of high school students deciding to attend college after completing secondary studies. With this increase in the number of students entering colleges and universities throughout the United States, the diversity of those students is increasing. The diversity encompasses not only students with varied races, genders, ethnicities, and socio-economic status but also students who are the first in their immediate families to attend college. First-generation college students, as they are known, comprise 45% of today’s college population (London, 1992). This number is expected to continue increasing as the number of students attending college increases (Jacobson, 2004). The following study will determine what barriers first generation students face and also what motivating factors may influence the success of first-generation college students.

Although college is becoming more accessible for the general population, and while all college students face barriers to their general college success, the literature has provided evidence that first-generation college students are faced with several barriers to their successful completion of college. Barriers for first-generation students affect them both prior to their enrollment and during their years at the college or university. These barriers may include financial support, family support, academic preparedness, personal commitment, and social support (York-Anderson & Bowman, 1992).

Billson and Terry (1982) defined first-generation college students as those students whose parents have had no college or university experience. When compared to
the "traditional student," first-generation college students had lower pre-college critical thinking abilities, and were more likely to come from low income families, and to have been encouraged by teachers (rather than parents) to attend college, and to be members of a minority group (Terenzini, Springer, Pascarella, & Nora, 1996). Several of the barriers identified above (critical thinking skills, personal commitment, and level of family support) have been researched with studies indicating that first-generation college students are at a disadvantage in most cases (York-Anderson & Bowman, 1992). The contemporary student is no longer upper middle class, adolescent, or male; instead the proportion of working class and minority students has increased dramatically (London, 1992). Students whose social, personal and cultural backgrounds have not adequately prepared them for college often cannot readily adjust and become active participants in the academic and social community of the campus (Buck, 1982).

First-generation college students share some common characteristics. First-generation students are less likely to complete the necessary steps to enroll in a four-year institution. Of first-generation students, 36% aspire to a bachelor's degree or higher, 45% take the SAT or ACT, and 26% apply to a four-year institution. By comparison, 78% of students for whom at least one parent has a bachelor's degree aspire to a bachelor's degree or higher, 82% take the ACT or SAT, and 71% apply to a four-year institution. Furthermore, first-generation students are more likely to delay enrollment in postsecondary education, which inhibits degree completion. Twenty-nine percent of first-generation students enroll in any postsecondary institution immediately after high school graduation, compared to 73% of students whose parents have college experience. They are more likely to enroll on a part-time basis—53%, versus 38% of students whose
parents went to college. Most of these students are enrolled in two-year institutions. In addition, 44% attain a degree within five years, compared to 56% of students whose parents have a bachelor's degree (Missed Opportunities, 1997).

First-generation college students represent a departure from the pattern established by family and friends. This may result in the family becoming non-supportive or obstructive (Hsaioi, 1992). First-generation college students are at a disadvantage in comparison to the students whose parents had significant experience with the college or university setting (Billson & Terry, 1982). It is likely that parents who have experienced the educational process are in much better positions to pass information about their college experiences on to their children, whereas parents of first-generation college students simply do not have that information to pass on to their children (York-Anderson & Bowman, 1991). First-generation students often sense displeasure on the part of acquaintances and feel an uncomfortable separation from the culture in which they grew up. Such tensions frequently require the student to "renegotiate relationships" with friends and relatives. This renegotiation is not always done easily or with a happy ending (London, 1992).

London (1992) states that one of the greatest challenges facing first-generation students in their pursuit of a college education is their position on the margin of two cultures—that of their friends and family and that of their college community. Even in the absence of resistance at home, first-generation students face numerous challenges in their attempt to move from the culture of home to the culture of higher education. In interviews with 107 minority students who had achieved baccalaureate degrees, Richardson and Skinner (1992) found that first-generation students who attended
community colleges typically attended part-time and were more likely than their classmates to have significant work and family responsibilities. They spend relatively little time on campus, rather fitting school into their other activities. The students in this study were balancing several roles, with that of a college student often not the most important (Richardson & Skinner, 1992). First-generation adult students, who typically receive more emotional support for their academic endeavors than do their younger classmates, are even more likely to have conflicting obligations (Zwerling, 1992).

In addition to dealing with the challenge of balancing two separate cultures, first-generation students are less prepared for college life than their non-first-generation college counterparts. In addition to inadequate academic backgrounds, students interviewed by Richardson and Skinner (1992) cited lack of experience with or knowledge of time-management, the economic realities of college life, and the impersonal, bureaucratic nature of institutions of higher education as obstacles to getting a degree. All of these factors come together to create huge barriers for first-generation college students.

As the research has shown, barriers do exist for first-generation college students (Bean & Metzner, 1985; Billson & Terry, 1982; Buck, 1982; Choy, 2000; Hsiao, 1992; Levine, 1996; London, 1992; Nunez, 1998; Richardson & Skinner, 1992; Terenzini, et. al., 1996; York-Anderson & Bowman, 1992; Zwerling, 1992). In response to these barriers, colleges and universities have developed motivating programs designed to help first-generation college students and other at-risk students meet the challenges they face during their college years. Institutions of higher education have many options identified by the literature that addresses the barriers faced by first-generation college students.
Padron (1992) noted that strategies implemented to recruit and retain minority students frequently work for first-generation students as well (Padron, 1992). These include special academic support programs, mentoring programs, tutoring programs, and campus outreach programs.

Astin (1985) argued in his research that student and faculty involvement was the key to retention of all students. He noted that frequent interaction with faculty members is more strongly related to satisfaction with the college experience than any other type of involvement or any other student or institutional characteristics. As a result of Astins’ research, colleges and universities have responded, with much support from the federal government, by implementing faculty and student mentoring programs. Many of these programs involve faculty and student research projects as well as faculty in residence programs.

The formal mentoring program for students was researched further by Wallace (1997). Wallace studied the effectiveness of mentoring programs for all at-risk students (members of racial minority groups, women, low-income persons, physically challenged, and first generation college students). Wallace defined the mentoring program as a deliberate matching of university or college personnel with high-risk students. Wallace (1997) says formal mentoring has evolved to promote students' emotional, environmental, and academic acculturation into the college environment. The study concluded that until we can eliminate oppressive hierarchies that result in high-risk students, formal mentoring programs should be fostered and encouraged. The study believes their research can provide the education community with powerful indices of the
positive impact that formal mentoring relationships can have on high-risk students' success and satisfaction in postsecondary education.

In addition to academic success, tutoring programs, and faculty mentoring programs, research has indicated that campus involvement is a motivating factor for overall success in the college or university. Anything we can do to increase the amount of time that new college students spend on campus—in study groups, in the library, in co-curricular activities, and especially in living and working on campus—will enhance their probability of success (Gardner, 1996). Gardner went on to say that we know that students who join groups stay in college longer and are more academically successful, and organized forms of campus involvement provide first-generation students with role models who understand and are committed to the academy (Gardner, 1996).

Other factors may also lead to the success of first-generation college students. Mueller (1997) indicated in her research that in addition to involvement as a critical factor in their success, first-generation college students’ persistence to graduate is largely due to self-motivation and self-determination. Kline (2000) also indicated in her research that first generation college graduates identified personal resilience as important to their ability to succeed.

The effort to help first-generation students succeed does not end once they are admitted to a college; indeed, that is usually where it begins. Many of the successful first-generation students interviewed by Richardson and Skinner (1992) felt they would not have been able to successfully complete college without the help of academic support programs and services provided by their institutions. The research presented paints a
portrait of barriers and programs to address those barriers. The study will identify which motivating programs work to address which barriers.

We have identified the barriers faced by first-generation college students as well as many of the motivating factors that influence their success in the college environment. Certainly, first-generation college students face barriers that other students do not, and programs have been established to help them overcome those barriers. Research has shown that certain motivating programs will help students succeed in college. However, no research thus far has indicated what motivating programs address which barrier. For example, do academic success programs help first-generation college students overcome the barrier of living in two separate cultures? If not, what motivating program addresses that issue, if any?

**Statement of the Problem**

First-generation students, students who are the first in their families to attend a postsecondary institution, are an increasingly significant force in higher education. Although few American colleges or universities keep precise statistics on the number of first-generation students enrolled, there is general agreement that those numbers are growing as a college degree becomes a prerequisite for more and more jobs (London, 1992). These "new students" to higher education often face unique challenges in their quest for a degree: conflicting obligations, false expectations, and lack of preparation or support are among the barriers that may hinder their success.

First generation college students face many barriers to their success at a college or university. The literature regarding this population suggests that they must overcome
several barriers that inhibit their success. Those barriers include financial support, family support, academic preparedness, personal commitment, and social support (Bean & Metzner, 1985; Billson & Terry, 1982; Buck, 1982; Choy, 2000; Hsiao, 1992; Levine, 1996; London, 1992; Nunez, 1998; Richardson & Skinner, 1992; Terenzini, et. al., 1996; York-Anderson & Bowman, 1992; Zwerling, 1992). In addition, the literature has provided research supporting the notion that certain motivating programs impact the success rate of general students at colleges and universities in the United States. These include academic support and tutoring programs, faculty mentoring programs, involvement in campus life and personal resilience (Astin, 1985; Gardner, 1996; Hsiao, 1992; Kline, 2000; Malitz & Ponder, 2000; Mumford, 1994; Mueller, 1997; Pelsa, 2002; Richardson & Skinner, 1992; Zwerling, 1992). However, the literature fails to provide us with a clear picture of how effective motivating factors are at minimizing the barriers.

Clearly, the research states that participation in the motivating programs has a positive impact on the students success in a post-secondary institution, but it fails to clearly make the connection or identify the relationship between specific motivating factors and specific barriers for first-generation college students. For example, which motivating program helps first generation college students overcome the barrier of living and surviving in two distinct cultures? Do academic success and tutoring programs help first generation college students overcome their lack of family support?

Further research is needed to determine what barriers each motivating program is related to for first-generation college students. This study will determine what motivating programs address which barriers. This will help institutions of higher education develop programs specifically geared towards addressing specific barriers. If it
is determined that faculty mentoring programs address several of the barriers, while academic support programs only address academic preparedness, we can quantify the need for additional faculty mentoring programs for first generation college students.

In addition, the literature, as noted above, provides ample evidence of motivating factors that have been identified for all students enrolled in post-secondary institutions. However, it fails to specifically indicate motivating factors for first-generation college students. This research will identify motivating factors for this specific population.

**Statement of Purpose**

The purpose of this study was to determine which of the identified motivating factors address specific barriers to success for first-generation college students. The motivating factors identified in the research include academic support/tutoring programs, faculty mentoring programs, involvement in campus life, and personal resilience. The barriers include the lack of financial support, family support, academic preparedness, personal commitment, and social support. The study asked each participant to identify what barriers he or she faced prior to and while enrolled in a post-secondary institution. The study also ascertained which motivating factors each first generation college graduate experienced and how that impacted each of the specific barriers identified. For example, if the survey respondent identified academic preparedness as a barrier to college enrollment and completion, the survey asked her or him to identify any of the identified motivators that helped he or she overcome said barrier. This provided a clear understanding of the breadth of impact certain motivators have on barriers faced by first-
generation college students. The following research questions were derived from the purpose.

**Research Questions**

1. What barriers do first generation college students experience?
2. What motivating factors do first generation college students experience?
3. What is the association between each motivating factor (academic support/tutoring, faculty mentoring relationships, campus involvement and personal resilience) and the barriers faced by first generation college students (financial support, family support, academic preparedness, personal commitment, and social support)?

**Definitions**

**First Generation College Student**

Billson and Terry (1982) defined first-generation college students as those students whose parents have had no college or university experience. For the purpose of this study, first-generation college student referred to those who are a member of the first generation in their family to graduate from college (i.e. mother and father had not graduated from college prior to their enrollment).

**Barrier**

Barriers to success for first generation college students have been identified by the research as financial support, family support, academic preparedness, personal

Motivating Factors

Motivating factors for first generation college student have been identified by the research as academic support or tutoring programs, faculty mentoring programs, involvement in campus life and personal resilience (Astin, 1985; Gardner, 1996; Hsiao, 1992; Kline, 2000; Malitz & Ponder, 2000; Mumford, 1994; Mueller, 1997; Pelsa, 2002; Richardson & Skinner, 1992; Zwerling, 1992). For the purpose of this study, the above stated motivating factors were used.

Financial Support Barrier

This barrier for first generation college students includes economic support from the family as well as student participation in employment, either at the school or in an outside agency (Merriam & Cafferella, 1999; Saint John, Cabrera, Nora & Asker, 2000; Tinto, 1993).

Family Support Barrier

This barrier for first generation college students includes emotional and economic support of the students’ family. For the purpose of this study, the above noted definition will was used to identify family support. This has been identified as a barrier to first-generation student success (Terenzini, 1986).
Academic Preparedness Barrier

This barrier is identified by the research as previous academic experience that prepares students for college level academic work. It also includes academic ability of the student, academic support of the student in high school, critical thinking skills, and basic knowledge of college expectations (Berkner & Chavez, 1997; Billson & Terry, 1982; Warburotn, Bugarin & Nunez, 2001; York-Anderson & Bowman, 1992).

Personal Commitment Barrier

This barrier was identified for students who are not committed to participating in the higher education system. The literature has identified these students as not having the personal drive or dedication necessary to successfully complete college (Kline, 2000; Komada, 2002; Mueller, 1997).

Social Support Barrier

This barrier was discussed in the context of the first generation college student being placed between two cultures: one with previous friends and support systems and a new one with college friends and academic support (Billson & Terry, 1982; Hsaio, 1992; London, 1992).

Academic Support/Tutoring Programs

This motivator includes programs offered by the college or university designed to provide academic assistance to students who request such service (Astin, 1993; Culross, 1996; Richardson & Skinner, 1992; Tinto, 1987).
Faculty Mentoring Programs

Wallace (1997) defined the mentoring program as a deliberate matching of university or college personnel with high-risk students. It also encompasses participation by the student in a relationship with a faculty member outside of the classroom environment, either formally or informally. For the purpose of this study, faculty mentoring relationships referred to any personal relationship the student has with a faculty member, either formally or informally.

Involvement in Campus Life

The motivator includes the participation by the student in extracurricular activities sponsored by the college as well as informal involvement in the campus community (Astin, 1984, Astin, 1993a; Astin, 1993b; Gardner, 1996; Kuh, 1995; Scott, 1971; Tinto, 1975). For this study, involvement in campus life referred to the students participation in either formal or informal social programming on campus.

Personal Resilience

The motivator is identified as an internal factor identified by each respondent. It includes the personal drive and determination of the student to succeed (Mueller, 1997; Kline, 2000; Komada, 2002). For the purpose of this study, personal resilience referred to the internal drive of the first-generation college student to want to succeed in college by completing a degree program.
Limitations of Study

The limitations of the study are addressed in the following paragraphs. Many of the limitations deal exclusively with the sample used for the survey. In completing this study, first generation college graduates were used. In order to obtain a sufficient sample of graduates who were the first in their immediate families to attend and graduate from college, the researcher used data gathered from the Berea College Alumni Association, of which he is a member. This resulted in a limited sample that may not be representative of the entire first generation college graduate population.

In addition, the use of Berea College graduates as the sample for this study resulted in other limitations. These included organizational factors that may influence the sample. Berea College, for example, provides full-tuition scholarships to all students who are accepted to the college. This may influence the samples views on economic support needed to complete college. In addition, the college is fairly selective in its admissions policies and only accepts students who demonstrate high academic ability. Again, this may impact the samples views on academic preparedness as a barrier to their successful completion of college.

Significance of Study

A study of the relationship between motivating factors and barriers to success for first generation college students is important for several reasons. First, for the purpose of this study, it was important to identify specific barriers experienced by first generation college students to either support or supplement the already established literature. This was important because it provided evidence of the barriers identified in the literature.
Second, it was also important, for the same reason as noted above for the barriers, to identify specific motivating factors for success experienced by first generation college students. This also proved to either support the current literature or provide additional supplemental material. Finally, this study may be important for the success of first generation college students throughout the country. It is possible that the results of this study may provide higher education institutions with the information necessary to design and implement programs and services aimed at eliminating specific barriers for first generation college students.

**History of Berea College**

Throughout the history of higher education, institutions have had to shape and form their missions while responding to changing times and significant events in history. Many institutions have responded to such events according to their own guiding principles. For example, Berea College was founded as a response to racial segregation. It was the first college in the South to be racially integrated for the purpose of educating all peoples together. The following will examine the history of Berea College while identifying the institutions guiding principles which have resulted in a rich heritage of service to the Appalachian region and a dedication to the success of students who have great promise and limited economic resources.

In 1855, the Reverend John G. Fee started a one-room school that eventually would become Berea College (Baskin, 1991). Fee, a native of Bracken County, Ky., was a scholar of strong moral character, dedication, determination and great faith. He believed in a school that would be an advocate of equality and excellence in education for men and
women of all races. Fee's uncompromising faith and courage in preaching against slavery attracted the attention of Cassius M. Clay, a well-to-do Kentucky landowner and prominent leader in the movement for gradual emancipation. In 1853, Clay offered Fee a 10-acre homestead on the edge of the mountains if Fee would take up permanent residence there. Fee accepted and established an anti-slavery church with 13 members on a ridge they named "Berea" after the biblical town whose populace was open-minded and receptive to the gospel (Acts 17:10) (Nelson, 1970).

In 1854, Fee built his home upon the ridge. In 1855, a one-room school, which also served as a church on Sundays, was built on a lot contributed by a neighbor. Berea's first teachers were recruited from Oberlin College, an anti-slavery stronghold in Ohio. Fee saw his humble church-school as the beginning of a sister institution which would be to Kentucky what Oberlin was to Ohio, anti-slavery, anti-caste, anti-rum, anti-sin. Fee noted, "We talked up the idea of a college in which to educate the youth of the land-educate not merely to a knowledge of sciences, but also to the principle of love in religion, and liberty and justice in government: and thus permeate the land with youthful workers and righteous sentiments" (Hall & Heckman, p 331).

Fee worked with other community leaders to develop a constitution for the new school, which he and Principal J. A. R. Rogers insisted should ensure its interracial character. It also was agreed that the school would furnish work for as many students as possible, in order to help them pay their expenses and to dignify labor at a time when manual labor and slavery tended to be synonymous in the South. Rogers wrote, "The Berea school has for its object to afford the facilities of education to the mountain people" (Quarandillo, Spring 2001, p. 1).
The first articles of incorporation for Berea College were adopted in 1859. But that also was the year Fee and the Berea teachers were driven from Madison County by Southern pro-slavery sympathizers. Fee spent the Civil War years raising funds for the school; in 1865, he and his followers returned. A year later, the articles of incorporation were recorded at the county seat, and in 1869 the college department became a reality. The first catalog, issued for 1866-67, used the corporate name "Berea College," but the title "Berea Literary Institute" was printed on the cover because it was thought to convey better "the present character of the school" (Peck & Smith, 1982, p. 13). Enrollment that academic year totaled 187—96 black students and 91 whites. For several decades following the Civil War, Berea's student body continued to be divided equally between white and black students, many of whom went on to teach in schools established solely for African-Americans. In 1886-87, the school had three divisions: Primary, Intermediate and Academic. Students could pursue a college preparatory course, a shorter course, or a teachers' course. In 1869-70, five freshmen were admitted to the College Department, and in 1873 the first bachelor's degrees were granted (Shinn, 1999).

Berea's commitment to interracial education was overturned in 1904 by the Kentucky Legislature's passage of the Day Law, which prohibited education of black and white students together. When the U.S. Supreme Court upheld the Day Law, Berea set aside funds to assist in the establishment of Lincoln Institute, a school located near Louisville, for black students. When the Day Law was amended in 1950 to allow integration above the high school level, Berea was the first college in Kentucky to reopen its doors to black students (Quarandillo, 2001, Winter).
By 1911, the number of students seeking admission to Berea was so great that the trustees amended the College's constitution to specify the southern mountain region as Berea's special field of service. The commitment to Appalachia, however, began as early as 1858 when Rogers, after a trip through the mountains, identified the region as a "neglected part of the country" for which Berea was founded to serve (Quarandillo, 2001, Spring). Curricular offerings have varied at Berea to meet changing needs. In the early 1920s, in addition to its College Department, Berea had a high school that included ungraded classes for students who had not had educational opportunities, an elementary school, a vocational school and a Normal School for teacher training. Although the general mission of serving students with financial need continued, units and divisions were reorganized through the years. In 1968, Berea discontinued its elementary and secondary programs and now focuses entirely on undergraduate college education (Quarandillo, 2001, Spring).

The College motto is, "God has made of one blood all peoples of the earth" (Acts 17:26). This motto has guided the institution since Berea was established "in the midst of many privations and persecutions to preach and apply a gospel of impartial love..."(Baskin, 1991, p. 2).

Guided by the inclusive Christian message of impartial love, Berea's founders held fast to their radical vision of a college and a community committed to interracial education, to the Appalachian region, and to the equality of all women and men. This spiritual heritage compelled Berea College to serve all persons regardless of race, creed, color, gender, or class and led the College to draw its students from two immediate
constituencies: African-Americans freed by the American Civil War and "loyal" white mountaineers.

The College decided early in its history to develop a unique mission that is centered on eight guiding principles. Berea College continues today as an educational institution still firmly rooted in its historic purpose "to promote the cause of Christ."

Adherence to the College's scriptural foundation, "God has made of one blood all peoples of the earth," shapes the College's culture and programs so that students and staff alike can work toward both personal goals and a vision of a world shaped by Christian values, such as the power of love over hate, human dignity and equality and peace with justice. This environment frees persons to be active learners, workers and servers as members of the academic community and as citizens of the world. The Berea experience nurtures intellectual, physical, aesthetic, emotional and spiritual potentials and with those the power to make meaningful commitments and translate them into action. To achieve this purpose, Berea College commits itself to the eight commitments (Charles, 1992, p. 9):

1. To provide an educational opportunity primarily for students from Appalachia, black and white, who have great promise and limited economic resources.

2. To provide an education of high quality with a liberal arts foundation and outlook.

3. To stimulate understanding of the Christian faith and its many expressions and to emphasize the Christian ethic and the motive of service to others.
4. To provide for all students through the labor program experiences for learning and serving in community, and to demonstrate that labor, both mental and manual, has dignity as well as utility.

5. To assert the kinship of all people and to provide interracial education with a particular emphasis on understanding and equality among blacks and whites.

6. To create a democratic community dedicated to education and equality for women and men.

7. To maintain a residential campus and to encourage in all members of the community a way of life characterized by plain living, pride in labor well done, zest for learning, high personal standards, and concern for the welfare of others.

8. To serve the Appalachian region primarily through education, but also by other appropriate services.

When he was inaugurated in October, 1984, President John B. Stephenson said that Berea, because of its unique commitment to students from the large Appalachian region who cannot afford other colleges, will face its own peculiar problems in the future. "But be assured," he said, "that Berea's moral, ethical and spiritual foundations will not be eroded in our quest to solve these problems. The Great Commitments will be our guide" (Quarandillo, 2001, Spring, p. 2).

While the Commitments have remained firm, Berea has changed in order to fulfill its mission in a changing world. The College, now the only school, numbers
approximately 1,500 students. Each year there is a freshman class of about 450. The
typical Berea freshman comes from a family whose income is about $10,000 below the
national median. But 82% of them are in the top three-fifths of their high school
graduating classes and they are often the first members of their families to attend college
(www.berea.edu).

Guided by a self-help philosophy, Berea's distinctive character has long been its
commitment to seek out promising low-income people in the mountains of Central and
Southern Appalachia and provide them a tuition-free education. A significant distinction
in the Berea mission is that rather than following the typical tuition-based model, the
College early on developed a work program so that its students could take advantage of a
private liberal arts education—a tuition-free education otherwise unaffordable to them.

Today, 80% of Berea's students come from Kentucky and the Appalachian region;
the remainder come from the rest of the United States and from around the world. In
recent years, more than 12% of the College's students are African-Americans; in 2000,
international students who represent over 68 countries comprise seven percent of the
student population (www.berea.edu). Such diversity reveals Berea's openness to all
people and prepares Berea students for living in a multicultural world. Likewise,
supporting single parents in their academic and personal development echoes Berea's
history of rejecting divisions based on class and gender (Shinn, 2000). Recognizing the
College's remarkable mission, former President William J. Hutchins described Berea as a
place where students build "bridges to the stars."

Current President Larry Shinn suggested in his inaugural address that, "Berea's
motto and commitments invite... deep learning. A deep learning that fills the head and
From the beginning, the College's charter promised opportunities for manual labor as an assistance in self-support. Students can be found assisting in the computer center or maintaining the campus grounds, they integrate productive work, disciplined learning, career exploration, and personal development by working 10 to 15 hours per week in any one of 140 labor departments that range from food service, to handicrafts, to technology, and academic research (www.berea.edu). Beyond its practical goal of self-help, the College's work program is grounded in the belief that all work has dignity as well as utility and that work is service in community. In addition, Berea students really earn a portion of their education costs. Certainly, this is one of the most unique characteristics of this institution. President Frost was instrumental in the development of Berea's student Labor Program. One demand he made of the trustees before accepting the presidency was that Berea "secure better opportunity than now exists here or elsewhere for self-supporting students to assist themselves" (Quarandillo, 2001, Winter, p. 2) He stressed the need for "productive industry," which would be a source of practical training and income for the student body (Quarandillo, 2001, Winter).
As a result of this mission, the fledgling print shop was put into professional operation with one of the first Linotype machines in the region; the College farmlands were brought under cultivation; the Fireside Industries and a woodworking department were established. A brickmaking industry flourished for a number of years as student labor was used to make bricks and construct buildings.

The Labor Program has changed or expanded as needs and economics have changed. Students today work in one of the more than 140 College labor departments. They may work in one of the craft areas—Broomcraft, Woodcraft, Ceramics, Weaving or Wrought Iron. In addition, they may work in the campus cafeteria, the Laundry, the College Store, Boone Tavern Hotel, the Snack Bar, the Library, the Berea Hospital or the College Press. Many students are employed in administrative or academic offices, laboratories or the Computer Center. Some are janitors and monitors in dormitories and public buildings. Some are tutors and assistants to regular teachers in interdisciplinary courses for freshmen. And others are employed by service organizations such as SFA (Students for Appalachia), teaching people to read and write.

The Berea Labor Program has developed through many stages and is still developing. A Dean of Labor position was created in 1914 to administer the complex labor program. Since 1917, all students have been required to participate in the Labor Program at least 10 hours a week. The labor program is designed to teach and allow students to advance through a progression of skill levels, including supervisory responsibilities. An annual College Labor Day, observed since 1920 with contests and awards, emphasizes the importance of combining mental and manual labor in all-around education and stresses the discipline and responsibility to be gained through quality work.
For countless young people through the years, the Berea College Labor Program has made the difference in their attainment of a college education. By employing students in the operation of the College, Berea has afforded many their first experience in work that will lead them to a career (www.berea.edu).

The history of Berea College is one filled with commitments to providing educational opportunities to those who may not have been able to afford a college education. Certainly, this is one of the reasons Berea College was selected as an institution dedicated to helping first-generation college students. The labor program and the College’s endowment are essential in providing these educational opportunities. The eight commitments set forth by the Berea community have evolved over the years, but their mission is the same: to provide a quality education, to all people, with a focus on Appalachia, for a reasonable cost to students. As former President Willis Weatherford said, "The historic ideals of Berea are our great heritage. Their future realization is our task" (Shinn, 1998, p. 7). Berea’s continuing commitments to excellence in learning, to meaningful work, to an ethic of service to the Appalachian region and beyond, and to moral leadership strategically place the College in a unique position to prepare students for the external realities and opportunities of the information age and global economy—and form a covenant with "all peoples of the earth." “Current students carry on the legacy and values of their predecessors—a commitment to academic excellence, hard work and service to their communities” (Quarandillo, 2003, Spring, p. 1).
Chapter II: Literature Review

First-generation college students are faced with several barriers to their success in college. In addition, colleges and universities have developed programs with the purpose of helping students overcome barriers to graduation. The literature has provided us with evidence supporting the existence of such barriers and motivating factors for college students. In the following pages, we will review the literature to identify the barriers and the motivating programs for first-generation college students.

Campus Involvement

Astin (1993), in an effort to identify what makes a college or university excellent, noted that student involvement in campus life often leads to student excellence and success. According to Astin, a highly involved student is one who devotes considerable time to his or her studies, spends time on campus, actively participates in student organizations, and interacts frequently with faculty. Astin believes that student time and energy are the greatest resources a university has, and that, in the search for excellence, a college or university should maximize the time that its students spend in university related activities. In addition to college excellence, campus involvement has been found to lead significantly to the student’s ability to complete college. Astin found three tools that lead to increased student involvement: student services, assessment and feedback, and instruction. In the case of student services, involvement can be enhanced through more creative use of residential facilities, increased campus social programming and increased on-campus job opportunities. Assessment and feedback can help student involvement by creating proactive programs to get students involved in their own
assessment and feedback. Instruction was the main area affecting university involvement and was found to either excite or bore a student into involvement, creating a direct affect in their desire to be involved. Astin felt, in effect, that a university must aim its programs and institutions at student involvement in order to foster an environment in which students enjoy their experience, leading to higher performance and greater prestige.

Astin’s sentiment is also echoed in research by John Gardner, which indicates that action taken to increase the amount of time that new college students spend on campus—in study groups, in the library, in co-curricular activities, and especially in living and working on campus – will enhance their probability of success (Gardner, 1996).

The most basic principle of Astin's Theory of Involvement is that students learn more when they are more involved in both the academic and social aspects of the collegiate experience. An involved student is one who devotes considerable energy to academics, spends much time on campus, participates actively in student organizations and activities, and interacts often with faculty (Astin, 1984). Many involvement theories note that the student plays an integral role in determining his or her own degree of involvement in college classes, extracurricular activities, and social activities. Astin states that the quality and quantity of the student's involvement will influence the amount of student learning and development (Astin, 1984). True involvement, as noted by Astin, requires the investment of the students energy in academic relationships and activities related to the campus and the amount of energy invested will vary greatly depending on the student's interests and goals, as well as the student's other commitments. According to Astin (1993), the most important institutional resource, therefore, is student time: the extent to which students can be involved in the educational development is tempered by
how involved they are with family, friends, jobs, and other outside activities (Astin, 1993).

In relation to academic involvement, Astin (1993) states that the most important aspect is that instructors are encouraged to take the focus off the course content and their own technique and put it on their students (Astin, 1993). Astin states that the intended end of institutional practices is to achieve maximum student involvement and learning; to do that instructors cannot focus solely on technique but must also be aware of how motivated students are and how much time and energy they are devoting to the learning process (Astin, 1993).

Astin’s Theory of Involvement focuses on the motivation and behavior of the student. Therefore all institutional policies and practices can be judged by the degree of involvement they foster in students. Also, all faculty, from instructors to counselors, can work with the same goal in mind, unifying their energies into making the students more involved in the college environment and therefore better learners. In the end, when students are more involved in their learning, they are more likely to complete their academic coursework and ultimately succeed in college (Astin, 1993).

College involvement does lead to student success. Previous research has found a correlation between college involvement and success. College involvement can be characterized in several ways, such as living on campus, part-time campus jobs (Astin, 1984), through friendship support (Scott, 1971), from extra-curricular activities (Spady, 1971), and from college faculty interaction (Rock, 1971; Spady, 1971).

Vincent Tinto (1975) has researched campus involvement and provided the following summation: Instance of social integration occurs primarily through informal
peer group associations, semi-formal extra-curricular activities and interaction with faculty and administrative personnel within the college. Successful encounters in these areas result in various degrees of social communication, friendship support, faculty support, and college affiliation. Each of which can be viewed as important social rewards that become part of a person’s generalized evaluation of the costs and benefits of college attendance (Tinto, 1975, p. 4).

Tinto is a leading expert on student retention for college students. His model for student retention has been cited hundreds of times throughout the literature as researchers strive to understand the inner workings of retention programs for students. It is important to note that student retention is often affiliated with student success and specifically, for this study, we are examining motivating factors that will lead to graduation with graduation being our ultimate goal and measure of student success. Higher education defines student success as the successful completion of the college degree.

Campus involvement, as noted above, involves the students residential experience. Stegman (1969) conducted a study with experimental living area activities, designed to improve the retention of college freshman (Stegman, 1969). The objectives of the experiment included the identification of potential dropout students and assigning them to an empathetic graduate assistant living in the residence hall. The graduate assistant was charged with the responsibility of aiding the potential dropout group to stay in college successfully and in a self-satisfactory manner. The results of this study at Southwest Missouri State College found that the personal attention and help given to the experimental study groups may have been instrumental in accounting for a significant (beyond 95% confidence) raise in persistency of the experimental students as compared
to their control counterparts (Stegman, 1969). We know that students who join groups stay in college longer and are more academically successful, and organized forms of campus involvement provide first-generation students specifically with role models who understand and are committed to the academy (Gardner, 1996). Astin's Theory of Student Involvement indicates that the more students invest physical and psychological energy to get involved in the academic and social culture of the college, the greater the potential for student success (Astin, 1985).

Participation in extracurricular activities provides opportunities for students to apply classroom knowledge to real world settings and develops skills that will assist in the practical realities of living after graduation (Astin, 1993; Kuh, 1995). On most college campuses, college student organizations tend to fall into the following categories: governing bodies, greek letter social organizations, student government groups, academic clubs and professional societies, honor societies, publication and media groups, service groups, intramural sports clubs, religious organizations, and special interest/cultural groups (Astin, 1993; Craig & Warner, 1991). Research in extracurricular involvement has focused on the importance of enhancing academic learning with learning that occurs outside the formal classroom environment. Extracurricular activity involvement has been shown to cultivate noticeable changes in a student's behavioral traits and personality characteristics (Astin, 1993; Pascarella & Terenzini, 1991).

Increasing students' level of connection to their campus by providing numerous opportunities for peer interactions and endorsing a wide-ranging social life by way of student organizations were positively associated with students' feelings of satisfaction with the student life of their campus (Astin, 1993). Extracurricular participation in
college student organizations benefited those who were least connected to their college campuses. By using the College Student Experiences Questionnaire (CSEQ) to assess these variables, the study found that significant differences existed between the college experiences of undergraduate students who were members of organizations compared to students who were not (Abrahamowicz, 1988). Participants of college student organizations were more likely to perceive their educational experiences as having high quality compared to those of non-participants (i.e., participants were more involved in their overall college experience) (Abrahamowicz, 1988). Feelings of satisfaction and positive perceptions of relationships with faculty, administration, and students were also concluded to be significantly associated with student organization participation (Abrahamowicz, 1988). Thus, non-participants did not have the same level of connection to their campus compared to students who were members of college student organizations.

Research indicated that community colleges face even tougher challenges with their first-generation, immigrant, economically disadvantaged, non-White, or limited English ability students (Hirose-Wong, 1999). At the community college, these challenges can be even further exaggerated by a students’ failure to connect and become involved in college at the level necessary for academic and workplace success.

According to Tinto (1997), high levels of student involvement generally proved to be an independent predictor of gains in learning (Tinto, 1997). In addition to the research presented by Astin, Tinto (1997) notes that successful completion of college generally hinges on the development of educational communities in college, program, and classroom levels, which integrate students into the ongoing social and intellectual life of
the institution. He continues by redefining college involvement for the community college student as it differs from students attending four-year college and universities. He does this primarily because community college students typically do not reside on the campus and most work at least part-time and, as a consequence, find it difficult to become involved in traditional campus activities. Tinto (1997) focused his research into campus involvement for community college students as involvement in three primary areas: freshmen orientation, learning resource centers, and community college learning communities (Tinto, 1997), all of which can be critical for every college student's success, but are specifically important for community college students who are many times, as indicated previously, first-generation college students.

Many of the students the community college serves are under-prepared for college-level academics and require assistance and involvement opportunities to successfully achieve their academic goals. Since an increasing number of community college students must work full-time or can only attend classes part-time, finding the opportunity to connect and become involved in the college environment is a continuing challenge.

At the community college, effective involvement occurs when students participate in orientation programs, receive on-going academic assistance, and experience a curriculum that connects classroom requirements to workplace relevance and skills (Tinto, 1997).

Again, college student involvement in campus life is correlated with college student success. Astin and others have identified that students who are actively involved in campus life are more likely to be retained by the college or university. Retention of
students, resulting in college graduation is a huge indicator of college success. This
information has several implications for first-generation college student in particular.
First-generation college students, those who are the first in their immediate family to
attend college, often face barriers that may hinder their ability to complete college
successfully. These barriers include financial support, family support, academic
preparedness, personal commitment, and social support. Becoming involved in campus
life programs either through residence life, any of the many campus clubs and
organizations or loosely formed peer groups will provide first-generation college students
with an edge in helping them to eventually succeed in college.

In the end, for first-generation college students to successfully complete college,
they must integrate into the campus community. Certainly, the literature is not
suggesting that all students must be involved in student government or any organized
campus club or organization, but they must find a social environment where they can
connect with others who are experiencing college, maybe for the first time. The research
has shown us that students involved in campus life are more likely to succeed. In order to
promote student success, colleges and universities need to be responsive to the students
need of fulfilling, campus involvement programs.

**Academic Support Services**

As noted earlier, Richardson and Skinner (1992) interviewed successful first-
generation students and found that they felt they never could have made it without the
help of academic support programs and services provided by their institutions. Academic
support services are a vital part of the educational experience for college students. They are a foundation of support for academic success and thus college success.

Students who are integrated socially and academically into the college are happier with their experiences, tend to develop more, and have more significant learning outcomes (Astin, 1993; Tinto, 1987). Integration means feeling a sense of belonging with other people at the school, including faculty, students, and staff. Academically, it means that students feel comfortable with, and are engaged in, the learning environment, which encompasses the type of material being taught, the instructional approaches and the relationships (impersonal or personal, competitive or supportive, and same or different gender or race) with other people in the learning environment.

Many students lack the basic reading, writing, and math skills required for enrollment in some college-level courses, either because they failed to take the necessary prerequisites in high school, or because they completed such courses but need review courses to update their skills for subsequent work (Culross, 1996).

Some leaders in higher education have questioned the feasibility of offering solid remedial programs to address academic under-preparedness of new students. Moses (1999) argues that some presidents are reluctant to take a stand on remediation for the following reasons. First there is a dearth of data about the effects of remediation because institutions that offer developmental courses often do not label them as such, nor do they track the effectiveness of their programs. Second, there is no generic definition of what “remediation” means. For some institutions this is simply offering a brush-up class in Algebra, English Composition, or College Study Principles, whereas for other colleges
this means offering an entire array of courses complete with counselors, tutors and advisors.

Prather’s and Hands’ (1986) study determined indicators of persistence of nontraditional students at a large commuter state university. Their literature review covered student variables affecting retention rates, ethnic status and retention, institutional variables affecting persistence, and theoretical models that explained persistence. Prather et. al. notes in the summary and conclusions: It was found that academic integration as measured by GPA was by far the best indicator of persistence.

Prather et. al.’s findings are consistent with other research on student success. Tinto (1993) indicates that academic failure reflects a scenario in which the demands of the college or university prove to be too difficult for the student. In some select cases, academic boredom (i.e. classes not challenging) may result in student attrition. Still some academic dismissals are a result of a decision made by the individual not to invest the time and energy needed to maintain minimum academic standards.

Colleges throughout the country are seeking to establish intervention systems to address students with academic deficiencies. Academic support personnel can intervene in academic situations to steer students into the appropriate courses and counsel them to take a lighter load if necessary or encourage them to pursue academic assistance. Colleges are investing in support personnel that have the knowledge and breathe of experience necessary to assist the adult learner in his or her educational pursuit.

Academic ability is a leading indicator of student success. First-generation college students are often under-prepared for college academics. Services offered by the college or university are leading factors in the success of first-generation college
students. The National Center for Educational Statistics supported this finding in a recent study on first-generation college students. They confirmed previous research that indicated clear differences between first-generation and non-first-generation students on such dimensions as academic preparation, enrollment behavior, and field of study (Nunez & Cuccaro-Alamin, 1998).

Faculty Support/Mentoring

In the book, *Beating the Odds: How the Poor Get to College*, authors Arthur Levine, president of Columbia Teachers College, and Jana Nidiffer, an assistant professor at the University of Massachusetts, describe the impact that having a mentor can make on a student’s chance of success. In interviews with 24 college students identified as being members of economically challenged families, Levine and Nidiffer found that nearly every one was able to identify a person or persons who served as a mentor—a teacher, a family member, a counselor or other person close to them (Levine & Nidiffer, 1996).

Astin (1977) reported that students who interact more frequently with faculty report significantly greater satisfaction with the college environment. Pascarella, Terenzini, and Wolfe (1986) emphasize the influence of faculty involvement on student retention and satisfaction with education. Kramer and Spencer (1989, p. 105) state: “Overall, faculty-student contact is an important factor in student achievement, persistence, academic-skill development, personal development, and general satisfaction with the college experience.”

They go on to urge faculty to get involved in the advising process, along with professional and/or peer advisors. They note that, “there is evidence that when freshmen
and faculty become acquainted and interact, they form a foundation upon which future contacts can be established” (Kramer and Spencer, 1989, p. 105).

Faculty advising is essential to the process of retaining students. Academic advising can be the link between the college and the student, especially during the critical first year when many first-generation college students make important decisions about their future at the college or university. Kramer et al. (1989) indicate that academic advising can reduce alienation and enhance learning. If the advisors are available and well informed, they can contribute to a student’s sense of belonging to the campus community which will ultimately increase their chances of success at the institution. Quality advising supports student learning and fosters student involvement in the institution, both keys to the persistence of students.

Mentoring is another form of faculty interaction. Johnson (1989) says that mentoring involves dealing with the total personality of an individual in order to advise, counsel, and provide him or her with guidance. For first-generation college students, mentors fill many roles such as friend, advisor, activities coordinator and personal counselor. Their roles differ from student to student but their impact is significant in the lives of each. Mentors are the day-to-day teachers who provide their protégés with much needed advice and guidance. Research data indicate that mentoring ranges from peer mentoring in secondary education to studies of graduate education in doctoral programs (Queen, 1994; Wilde and Schau, 1991). The mentoring relationship itself can take on various faces. This form of faculty interaction is worthwhile and critical to student success.
Family Support

First-generation college students do not have the luxury of having a parent who attended college and who can therefore provide valuable information about the college process. Terenzini (1986) advocates "bridge" programs that smooth the transition to college and provide sustained support through the first years, as well as enhanced advising and academic support services. Students are not the only ones who can benefit from a comprehensive orientation program. Parents of first-generation college students are also greatly helped by programs that share what will be required of their son or daughter as well as explain the higher education process. As noted above, this is essential for parents who cannot provide direct experiential advice for their children.

Based on his research findings, Terenzini (1986) found it necessary for schools to include spouses and even children in the orientation process, recognizing that many students are returning to or beginning school after working or raising children. These family members have unique issues to deal with, he said, including changing interpersonal relations as a wife or husband, adjusting to new time constraints which make the male or female head of the family less available to contribute to the running of the household and recognizing the need for a quiet time in which the student can study. Unless the family can understand the benefits of higher education and appreciate the process, they may not give the student the support he or she needs. This support is essential for the student to reach his/her full potential and ultimate success in college.
Academic Preparedness

Access to higher education in America has been steadily increasing throughout the twentieth century and is anticipated to continue in that manner for decades to come. The increase in access to higher education has produced a more diverse student population including many first generation college students. While the access to higher education has provided first generation students with new opportunities for an education, the literature has identified several barriers first generation college students face in their pursuit of that education. These barriers include academic preparedness.

Billson and Terry (1982) defined first-generation college students as those students whose parents have had no college or university experience (Billson & Terry, 1982). When compared to the traditional student, first-generation college students had lower pre-college critical thinking abilities, and were more likely to come from low income families, and to have been encouraged by teachers (rather than parents) to attend college, and to be members of a minority group (Terenzini, Springer, Pascarella, & Nora, 1996). Several of the barriers identified above (critical thinking skills, personal commitment, and level of family support) have been researched with studies indicating that first-generation college students are at a disadvantage in most cases (York-Anderson & Bowman, 1992).

In terms of academic preparedness (including critical thinking skills and basic knowledge of college), Berkner and Chavez (1997) identified five somewhat sequential steps on the path to college enrollment. First, students must decide that they want to pursue postsecondary education and what type of education they wish to pursue. Second, they must prepare academically for college-level work. Third, if they want to attend a 4-
year institution, they must usually take the SAT or ACT examinations. Fourth, they must choose one or more institutions and file applications. Finally, they must gain acceptance and make the financial and other arrangements necessary to enroll. For first generation college students, the second step is one of utmost importance and one that takes the largest amount of time to complete. Indeed, it is an ongoing process throughout the entire high school experience, and arguably may begin even earlier. Certainly, it is necessary to take the appropriate courses in high school in order to be fully prepared for college level courses. While taking the courses does not ensure college success, not taking the courses does provide a disadvantaged position from which to begin a student’s college career.

Academic preparedness is a pivotal issue in higher education for first-generation students who are working to be successful in college. The National Center for Educational Statistics recently issued a report entitled, *Bridging the Gap: Academic Preparation and Postsecondary Success of First-Generation College Students* (Warburton, Bugarin, & Nunez, 2001). The purpose of the study was to examine whether first generation college students who were otherwise equally prepared for college were comparable to students who have had parents with college degrees. In the course of the study they documented research indicating that first generation college students were less likely to have completed mathematics requirements during their high school years. This information supports the notion that first generation college students are less prepared academically for college than those students who are not first generation college students.

In addition, research in the field of academic preparedness indicates that first generation college students are less likely than their non-first-generation counterparts to
enroll in post-secondary institutions. This provides us with information indicating that academic preparedness is closely connected to the academic achievements of first-generation college student parents. Choy (2001) notes that high school graduates whose parents did not go to college are less likely than those whose parents earned bachelor’s or advanced degrees to be academically prepared for admission to a 4-year college (Choy, 2001). In her study she discovered that low academic qualifications as well as lower expectations contributed to lower enrollment rates for 1992 high school graduates whose parents had no postsecondary education. About half of those who did not enroll in college were only marginally or not qualified for admission to a 4-year college. Choy also discovered in her research that considerably smaller proportions of those with more educated parents lacked qualifications (33% of those whose parents had some college experience and 15% of those whose parents had at least bachelor’s degrees). At the other end of the preparation scale, those whose parents had no postsecondary education were less likely than others to be in the highly qualified category. This information speaks to the idea that first generation college students are more likely to be less qualified for college than those whose parents attended college or have a college degree.

One of the many factors that comes into play for academic preparedness is the relationship between high school mathematics coursetaking and eventual enrollment in a college or university. Research indicated that there is a relationship between postsecondary access, persistence, and attainment (Warburton, et. al., 2001). According to their study, the “relationship between mathematics coursetaking and enrollment in a 4-year institution is striking” (Warburton, et. al., 2001, p.9).
The study found that 76% of 1992 high school graduates who took advanced academic mathematics in high school had enrolled in a 4-year institution by 1994. The enrollment rate declined to 44% for those at the Middle Academic II level (did not go beyond algebra II), to 16% for those at the Middle Academic I level (only algebra and geometry), and to six percent for those with no mathematics or low-level or nonacademic mathematics.

Mathematics coursetaking is strongly related to parents’ education, even when considering only students with comparatively high mathematics skills. Among high school graduates who had achieved the highest level of mathematics proficiency in the eighth grade, those whose parents did not attend college were much less likely than those whose parents had bachelor’s degrees or higher to take algebra in eighth grade (34% versus 55%). They were also much less likely to complete any advanced mathematics in high school (63% versus 83%). However, if they took algebra in eighth grade, the percentage taking advanced mathematics in high school rose to 83%, narrowing the gap with those students whose parents had bachelor’s degrees. Taking advanced mathematics in high school, in turn, is associated with a higher rate of enrollment in a four-year institution (Choy, 2001). Among graduates whose parents had no postsecondary education, the enrollment rate of those who took advanced mathematics (64%) greatly exceeded the enrollment rates of their peers who did not take advanced mathematics (4% to 34%, depending on the level completed). First-generation status still mattered, however, because even if they took advanced mathematics in high school, graduates whose parents had no postsecondary education were considerably less likely than those whose parents had at least bachelor’s degrees to enroll in four-year institutions (64%
versus 85%). The Department of Education study provides research that explicitly indicates a relationship between academic preparedness and first-generation college student status. The study noted that students whose parents did not go to college remained at a disadvantage in terms of access to postsecondary education, even when taking into account academic ability and mathematics coursetaking. However, if they took advanced mathematics in high school, and particularly if they started with algebra in eighth grade, they greatly increased their chances of enrolling in a four-year institution.

Academic preparedness continues to be linked with the educational achievement level of the parents. Other researchers have discovered this relationship. Horn and Nunez (2000) found that when you consider only students with comparatively high mathematics skills in eighth grade (those who scored at the highest level tested), the frequency with which students reported that their parents had encouraged them to take algebra in eighth grade increased with parents’ education—from 52% of those whose parents had no postsecondary education, to 59% of those whose parents had some college experience, to 70% of those whose parents had bachelor’s degrees or higher (Horn & Nunez, 2000). Whether students received help in choosing a high school program was also related to their parents’ education. High school graduates whose parents had no postsecondary education were less likely than those whose parents had bachelor’s degrees or higher to report in 12th grade that they chose their high school program with their parents’ help (34% versus 48%), and more likely to report that they chose it by themselves (28% versus 22%) (Horn & Nunez, 2000). According to their research, teachers and counselors do not appear to serve as surrogates for parents who are not involved in their students’ curricular choices. Once again, this information adds to the
notion that academic preparedness for first generation college students is closely related to the academic accomplishments of their parents.

Following course taking in high school, the next steps in applying to a four-year college include taking educational exams (SAT or ACT) if required, selecting specific colleges, and preparing applications for admission. These steps include many small parts consisting of forms, applications, financial deposits and fees, among many other details. For example, if financial aid is needed (and for first-generation college students it usually is), relevant information must be gathered and the appropriate applications completed. Students sometimes receive help from parents, teachers, counselors, or others as they go through these steps. According to Horn and Nunez (2000), among 1992 high school graduates who were “college qualified,” the likelihood of receiving assistance in applying to college increased with their parents’ education (Horn & Nunez, 2000). When the graduates were seniors, those whose parents did not attend college were considerably less likely than their peers whose parents had bachelor’s degrees or higher to report that they often discussed SAT or ACT preparation (16% versus 27%) or postsecondary plans (42% versus 61%) with their parents. In addition, the percentage of students whose parents reported that they had participated in various planning activities—such as attending programs on educational opportunities, seeking information on financial aid, and accompanying their child on a school visit to decide about application or enrollment—was notably higher if the parents had bachelor’s or advanced degrees than when they had no postsecondary education.

Some students do receive help with the college application process from their schools. In the same study, Horn and Nunez (2000) discovered that among college-
qualified 1992 high school graduates, 52% reported receiving help with completing their college applications, 33% with preparing an admissions essay, and 46% with arranging days off to visit colleges (Horn & Nunez, 2000). Although one might expect students whose parents had no postsecondary education to receive help more often in these areas, there were no significant differences by parents’ education. Students whose parents had no postsecondary education or some college were more likely to report that they received help with a financial aid application (51% and 47%, respectively) than were those whose parents had bachelor’s degrees (34%); however, they were probably also more likely to be applying for aid. Parental involvement in curricular decisions and college planning activities was associated with higher enrollment rates even after controlling for parents’ income and education and for students’ mathematics curriculum and level of college qualification (Horn & Nunez, 2000). Although all students must make decisions about how to finance their postsecondary education and many need financial aid, students and their parents are not well informed about the price of attending which often leads to another barrier for first-generation college students: financial support. Among students approaching college age (i.e., 11th- and 12th-graders) and planning to attend some form of postsecondary education, 37% of the students and 28% of their parents could not estimate what the price of tuition and fees might be. For both students and their parents, the likelihood of such uncertainty declined as family income and parents’ education increased.

Certainly, the research has indicated that first generation college students are at a significant disadvantage in attending college with the same academic preparedness as their non-first-generation college student peers. Graduates whose parents did not go to
college were much less likely than their peers with more educated parents to complete
each step in the college preparation guide. Compared with graduates whose parents had
earned bachelor’s degrees, they were about half as likely to aspire to a bachelor’s degree
in 10th grade (46% versus 86%), and, having completed all the other steps in the pipeline,
about a third as likely to enroll in a 4-year institution (21% versus 65%) (Horn & Nunez,
2000).

As the research has indicated, high school graduates whose parents did not go to
college tended to report lower educational expectations, be less prepared academically,
and receive less support from their families in planning and preparing for college than
their peers whose parents attended college.

**Financial Support**

Unfortunately financial aid continues to be a major factor in the lack of student
persistence. Saint John, Cabrera, Nora and Asker (2000) note that national studies show
finance-related factors (student aid, tuition, and other costs, including living) explained
about half the total variance in the student persistence process. According to Merriam and
Caffarella (1999), lack of money is one of the two most cited reasons for adult
nonparticipation in adult education, including higher education. Tinto (1993) cites the
effect of finances upon student attrition can be indirect and long–term as well as short-
term in character. Family finances affect persistence through their influence of
educational goals. Finances also affect decisions on whether to attend college in the first
place, how much education to seek, and where one chooses to attend college.
Financial concerns can induce persons to enter institutions in ways that may increase the likelihood of departure prior to degree completion. For instance, a person may choose to attend an inexpensive 2–year college rather than seek the four–year degree she or he desire. He might choose to attend a lower caliber institution because of lack of resources. Because of personal family resources, or lack thereof, many students must work part or full–time just to meet their expenses. In one study, 33.4% of adults gave cost as a barrier for job-related education, while 25.4% reported cost as a barrier to non–work–related education (Valentine, 1997). No doubt this statistic says a lot about working adults in college. While students are already operating on a tight budget, any significant family event (illness of parent, marriage of child) can prompt them to withdraw from college.

The federal government has shifted from offering grants and scholarships to providing student loans. Many students are reluctant to take on huge debt without the promise of a high paying job. The burden has shifted to states to provide financial assistance for needy individuals. However, this money is reserved for full–time students only. Thus, older part-time students are left out in the cold. State legislatures would do well to address this barrier by providing financial assistance to part-time college students as well.

First-generation college students are often associated with low-income students as noted previously. In the following pages the research will examine the financial needs of first-generation college students. According to a report by the U.S. Department of Education (2000), most low-income students attending full time, full year (86%) received some financial aid, and the average amount received by low-income students (calculated including those with no aid) was about $6,100. Loans were an important source of aid
for low-income students, with 51% borrowing. The average loan for those who borrowed was $4,700. Most borrowers (66%) did not reach the maximum permitted under the Stafford loan program. However, most students (81%) received grants, which averaged $3,900 for those who received them. The study determined that as financial need varied depending on type of institution and status, so did the aid patterns for those low-income, first-generation college students. Aided low-income students attending full time, full year had about 60% of their budgets covered by aid. About 60% of their aid was in the form of grants and 32% was in the form of loans; the rest came from work-study and “other” types of aid (U.S. Department of Education, 2000).

Financial need is identified as the difference between the price of attending a postsecondary institution and what the student is expected to pay based on the family’s financial circumstances. Compared with the average prices of attending the different types of institutions, the average expected family contributions (EFCs) for low-income students were relatively small (Table 1). Consequently, virtually all low-income undergraduates attending full time, full year had financial need (that is, the student budget minus EFC was greater than zero). The amounts of financial need were substantial at all types of institutions, ranging from about $5,800 to $16,700, varying with dependency status and type of institution (table A), (U.S. Department of Education, 1996).
Financial need includes numerous items ranging from the cost of books to transportation to and from the college during breaks and weekends. The amount is preset for each educational institution by their individual office of financial aid. Financial aid officers at each institution estimate the price of attending by developing student budgets for various categories of students (for example, students who depend on parents for support and students who do not have parental support). In addition to determining the total cost of attendance with those variables included, they also use the Expected Family Contribution figure as determined by the Free Application for Federal Student Aid (FAFSA). The expected family contribution (EFC) is determined by a formula that
takes into account family income and assets, family size, and the number of other college
students in the family. To determine financial need for a student, a financial aid officer
takes the appropriate budget and subtracts the student’s EFC. This strategy is used no
matter the size or cost of each particular institution. However, if a student decides to
attend a high—rather than low-priced institution—the student will have a higher budget,
and consequently there will be a greater difference between the budget and the EFC (that
is, greater financial need). There is no guarantee that this need will be fully met,
however. While the price of attending college can be estimated in a relatively objective
manner, developing the formulas to specify the appropriate amount for a family to pay
has been more subjective.

The actual amount of need a particular student has is determined by subtracting
the student’s expected family contribution from the total cost of attendance. This
represents the amount of financial aid for which the student is eligible, although there is
no guarantee that this amount will be made available. Among low-income students
attending full time, full year, virtually all had financial need, regardless of type of
institution attended or dependency status (U.S. Department of Education, 1996). The
average amounts these students needed were substantial and varied with the type of
institution attended and dependency status. They are identified in the figure
The literature has provided a clear picture of the financial needs of first-generation college students. Certainly, the needs are substantial but do vary according to the status of the student. The figures sited in the National Postsecondary Student Aid Aid Study identify the financial need of low-income college students, often identified as first-generation students.

Financial Aid for First-Generation College Students

Considering that many low-income and first-generation college students have significant financial need, one would assume they would apply for both institutional and federal student aid. However, according to the National Postsecondary Student Aid Study (NPSAS), many did not. Table 4 below from the NPSAS study shows the percentage of students in each type of institution who were eligible for financial aid as well as the type of aid applied for. Among those attending full time, full year, 89%
applied for aid. In the study, students who did not apply for financial aid were asked to state the reasons they did not apply. Twenty-two percent reported that they did not apply because they believed their family income was too high to qualify for financial aid; 33% reported that they could pay without aid; 9% indicated that they did not want to incur debt to finance their education, and 7% missed the application deadline. The study does not indicate why those who are considered low-income did not recognize that they would qualify for financial aid.

The types and amounts of aid low-income and first-generation students receive varies by institution type based on the price of attendance, the state and institutional financial aid available. The types and amounts also varied by dependency status, reflecting differences in students’ financial circumstances and in their EFC’s. Among low-income students who attended full time, full year, 86% received some type of financial aid. At public 4-year institutions, 85 to 94% received financial aid, varying with their dependency status. The range at private, not-for-profit institutions was 88 to 94%, and at public 2-year institutions, 78 to 89%.
Table 2: Percentage of low-income undergraduate enrolled full time, full year who applied for and received financial aid, by type of aid, type of institution, and dependency status.

<table>
<thead>
<tr>
<th>Type of institution and dependency status</th>
<th>Type of aid</th>
<th>Applied for aid</th>
<th>Any aid</th>
<th>Pell grant</th>
<th>Loans</th>
<th>Work study</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td>88.8</td>
<td>86.2</td>
<td>80.9</td>
<td>71.5</td>
<td>50.9</td>
<td>14.8</td>
</tr>
<tr>
<td>Public 4-year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependents</td>
<td></td>
<td>89.7</td>
<td>86.9</td>
<td>81.7</td>
<td>72.9</td>
<td>58.6</td>
<td>13.6</td>
</tr>
<tr>
<td>Independents without dependents</td>
<td></td>
<td>87.0</td>
<td>84.7</td>
<td>80.1</td>
<td>67.3</td>
<td>47.7</td>
<td>14.8</td>
</tr>
<tr>
<td>Independents with dependents</td>
<td></td>
<td>85.6</td>
<td>86.9</td>
<td>76.6</td>
<td>72.7</td>
<td>69.2</td>
<td>10.9</td>
</tr>
<tr>
<td>Private, not-for-profit 4-year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependents</td>
<td></td>
<td>93.9</td>
<td>89.7</td>
<td>85.6</td>
<td>70.3</td>
<td>64.1</td>
<td>29.7</td>
</tr>
<tr>
<td>Independents without dependents</td>
<td></td>
<td>93.6</td>
<td>87.9</td>
<td>84.1</td>
<td>67.7</td>
<td>61.8</td>
<td>34.9</td>
</tr>
<tr>
<td>Independents with dependents</td>
<td></td>
<td>95.5</td>
<td>93.7</td>
<td>88.9</td>
<td>71.1</td>
<td>70.8</td>
<td>24.0</td>
</tr>
<tr>
<td>Public 2-year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dependents</td>
<td></td>
<td>84.1</td>
<td>83.9</td>
<td>77.8</td>
<td>69.7</td>
<td>20.2</td>
<td>12.9</td>
</tr>
<tr>
<td>Independents without dependents</td>
<td></td>
<td>82.0</td>
<td>79.8</td>
<td>75.3</td>
<td>67.4</td>
<td>16.5</td>
<td>11.6</td>
</tr>
<tr>
<td>Independents with dependents</td>
<td></td>
<td>77.9</td>
<td>77.7</td>
<td>65.3</td>
<td>55.0</td>
<td>23.5</td>
<td>9.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>90.0</td>
<td>89.4</td>
<td>87.0</td>
<td>80.8</td>
<td>25.9</td>
<td>17.0</td>
</tr>
</tbody>
</table>

1 Included in grants.
2 All other types of aid, such as assistantships, veterans benefits and military tuition aid, vocational rehabilitation, and JTPA.

At public institutions (both 2- and 4-year), for each dependency status, low-income students who attended part time, full year were less likely than those who attended full time, full year to receive financial aid, reflecting the lower prices of attendance faced by part-time students. At private, not-for-profit 4-year institutions, among low-income dependents and independents with dependents who attended for the full year, there was no statistically significant difference between the percentages of full- and part-time students who received aid. In addition, most low-income students attending full time, full year (81%) received grants (table 4). The average grant for students who received grants ranged from $2,200 for independents without dependents at
public 2-year institutions to $7,900 for dependent students at private, not-for-profit 4-year institutions.

Loans were also an important source of financial aid for low-income undergraduates as well, especially at 4-year institutions. Among those attending full time, full year, 59% borrowed at public 4-year institutions, 64% at private, not-for-profit 4-year institutions, and 20% at public 2-year institutions (table 4). For each dependency status, considerably smaller percentages borrowed at public 2-year institutions than at either type of 4-year institution. The amounts students borrow reflect not only their financial need but also the borrowing limits established by the Stafford loan program (which is used by most borrowers) and students’ willingness to assume debt. The total limits for subsidized and unsubsidized loans in 1995–96 were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Dependents</th>
<th>Independents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td>$2,625</td>
<td>$6,625</td>
</tr>
<tr>
<td>2nd year</td>
<td>$3,500</td>
<td>$7,500</td>
</tr>
<tr>
<td>3rd to 5th years</td>
<td>$5,500</td>
<td>$10,500</td>
</tr>
</tbody>
</table>

Reflecting the higher limits they were permitted, independent borrowers at both types of 4-year institutions who attended full time, full year borrowed larger amounts, on average, than their dependent counterparts.

Low-income, first-generation college students who attended full time, full year were not taking full advantage of the loan system. Only 14% borrowed the maximum subsidized Stafford loan allowed for their dependency status and year in school (U.S. Department of Education, 1996). Among dependent students, those most likely to borrow the maximum were those at private, not-for-profit 4-year institutions (37%). Considering all low-income students attending full time, full year, who took out Stafford loans, the average amount borrowed was about $4,500.
Work-study was used more often by dependent students at private, not-for-profit 4-year institutions (35%) than by just about any other group of low-income students who attended full time, full year. Relatively few low-income students received “other” types of aid such as assistantships, veterans’ benefits and military tuition aid, and vocational rehabilitation or JTPA funds (10%). Among those who did, however, the average amounts received were often substantial. For example, at private, not-for-profit 4-year institutions, the average total “other” aid was $5,500 for dependents and $5,000 for independents without dependents who attended full time, full year.

Federal, state, and institutional sources of aid were all important to first-generation undergraduates attending full time, full year, with 70% to 92% receiving federal aid (depending on type of institution attended and their dependency status), 17% to 43% receiving state aid, and 17% to 55% receiving institutional aid. Institutional aid was particularly important at private, not-for-profit 4-year institutions, where 55% of dependents received institutional aid, as did 52% of independents without dependents and 40% of independents with dependents.

**Personal Resilience**

Mueller (1997) indicated in her research that in addition to involvement as a critical factor in the success of first-generation college students, their persistence to graduate is largely due to self-motivation and self-determination. Kline (2000) also indicated in her research that first-generation college graduates identified personal resilience as important to their ability to succeed. This desire to succeed, this continued effort to make it through college is often noted as a critical factor in every students
success at college or in other everyday events. Both Mueller and Kline indicate that students who have successfully completed college or other goals have noted that personal desire to succeed was a leading factor.

Komada (2002) also notes in her dissertation on first generation college students and resiliency that a difference between first generation college students and other students does exist. This difference comes into play when examining why first generation college students excel and eventually graduate college. Komada interviewed 16 subjects for her study and determined that while family income was lower for first generation college students and most, in her study, were African-American students, several differences were also evident. The students had statistically significant differences in self-esteem, spirituality, expectations of self and were more likely to report a negative early educational experience. Her research adds to the notion that first generation college students are highly self motivated and intrinsically motivated to succeed at the college level as well as in life.

Conclusion

First-generation college students certainly face many additional barriers to their success than other students in college and universities across the country. In order to help our first-generation college students, it is important for colleges and universities to develop programs that will address the barriers. In the previous pages we have identified the barriers faced by first-generation college students as well as many of the motivating factors that influence their success in the college environment. The research in this area has shown that certain motivating programs offered by colleges and universities can help
students succeed in college. These include the students involvement in campus life, academic support services, faculty support and mentoring, family support, financial support and personal resilience.
Chapter III: Methodology

Research Design

This study used a cross sectional correlational design to examine the relationship between identified motivating factors and specific barriers to success for first-generation college students at Berea College. A cross sectional design utilizes a sample selected from the larger population. The variables representing the motivating factors were academic support, tutoring programs, faculty mentoring programs, involvement in campus life, and personal resilience. The variables representing the barriers were financial support, family support, academic preparedness, and personal commitment.

Population and Sample

The population of first-generation college graduates at Berea College is estimated at 10,000. However, for the purpose of this study, the data will be collected from members of the population who have graduated between 1997 and 2003. The total sample population is estimated at approximately 147 graduates. Members of the sample population are all active members of the Berea College Alumni Association. We anticipate a 25% return rate from the study’s population.

Instrumentation

Cooperative Institutional Research Program (CIRP)

The Cooperative Institutional Research Program (CIRP) is a national longitudinal study of the American higher education system. Established in 1966 at the American Council
on Education, the CIRP is now administered by the Higher Education Research Institute under the direction of Linda Sax. The CIRP is the nation's largest and oldest empirical study of higher education, involving data on some 1,800 institutions and over 11 million students. It is regarded as the most comprehensive source of information on college students. The annual report of the CIRP Freshman Survey provides normative data on each year's entering college students. Specifically, for the purpose of this research, a modified version of the College Student Survey Instrument was used. Developed by the Higher Education Research Institute (HERI), the College Student Survey (CSS) is administered through the Cooperative Institutional Research Program (CIRP), which has conducted national surveys of college students and faculty since 1966. While the survey may be used as a stand-alone instrument, it was designed as a follow-up to the CIRP Freshman Survey. When used in conjunction with the CIRP Freshman Survey, the CSS generates valuable longitudinal data on students’ cognitive and affective growth during college. To date, more than 270,000 students have participated in the CSS at nearly 800 institutions that have benefited from the institutional, comparative, and longitudinal data provided by this instrument. The survey instrument is a pre-coded form that is available as a paper or on-line. The survey covers a variety of areas, including:

- Academic achievement and engagement
- Satisfaction with the college experience
- Student involvement
- Cognitive and affective development
- Student values, attitudes and goals
- Degree aspirations and career plans
- Internet, electronic mail, and other uses of technology

The CIRP was modified specifically for this research. The CSS consists of seventy-two questions related to the variables identified in the research design section of this chapter. We have identified four motivating factors in the literature that are associated with overall college student success. Each factor will be analyzed using eight questions related to the particular variable. For example, academic support, a motivating factor, will be assessed by asking eight questions related to the graduates’ experiences with academic support services while enrolled at Berea College. In addition, the literature has provided support for five barriers that first-generation college students often face. Each variable will be analyzed using eight questions related to that particular variable. These questions will establish if the participants experienced the barriers.

Validity of CSS

The College Student Survey has been used by more than 270,000 students at over 800 institutions across the country. The modified instrument, which included only questions related to the variables identified in this research, was first tested for content or face validity to determine if it measured what it was intended to measure. Content and face validity was determined by an initial review by two doctoral students and two faculty members. They were asked to update terms, to clarify confusing items, and to comment on the apparent validity of each item. After examination by these individuals, the instrument was updated as needed.
Construct Validity

A search for underlying themes was conducted using a factor analysis technique. This procedure also determined if a simple method for summing all of the items under each variable resulted in a total score for that specific variable.

Reliability of CSS

Reliability of each item in relationship to the total score was carried out using the alpha correlation analysis depending upon the results of the factor analysis. This procedure would be accomplished if the factor analysis indicated that either a simple regression equation for determining a total score could be utilized or if the individual items could be summed for a total score.

Data Collection

A total of 147 web based questionnaires was distributed via email to first-generation college graduates enrolled in the Berea College Alumni Association. The web-based survey included a cover letter and the web survey. The researcher used a web-based survey instrument that identifies each respondent by an email address provided by the Berea College Office of Institutional Research. A 25% response rate is expected.

Data Analysis

The research questions were the following:

1. What barriers do first-generation college students experience?
Question one was answered using descriptive analysis. The information was obtained by asking if first-generation college graduates experienced the identified barriers while enrolled at Berea College. These barriers include financial support, family support, academic preparedness, and personal commitment.

2. What motivating factors do first generation college students experience?

Question two was answered using descriptive analysis. The information was obtained by asking if first-generation college graduates experienced the identified motivators while enrolled at Berea College. The motivating factors include academic support and tutoring, faculty mentoring relationships, campus involvement and personal resilience.

3. What is the relationship between each motivating factor (academic support and tutoring, faculty mentoring relationships, campus involvement and personal resilience) and the barriers faced by first generation college students (financial support, family support, academic preparedness, personal commitment, and other social support)?

Question three was answered using the Spearman Correlation Coefficient Model with the independent (barriers) and dependent (motivators) variables. For the purpose of this study, the barriers are identified as independent and the motivators are identified as dependent variables.
Chapter IV: Results

Introduction

The findings outlined below proceed through a consideration of the sampling statistics, an analysis of validity for the study including face and content validity as well as construct validity. In addition, descriptive statistics are detailed as is the calculation process for each item on the survey instrument (Appendix A). Following these items, the descriptive results are analyzed and include information on the number of first-generation college graduates included in the study and their various responses to multiple questions related to their personal experiences at Berea College. A collective descriptive analysis is included as to outline the overall rating for each of the variables used in this research study.

The research question regarding the relationship between the motivating factors and the barriers to graduation are explored in the correlation section of this chapter. Each variable is examined and descriptive analysis is included to detail the specific relationship between each motivating factor and each barrier for graduation.

The survey instrument included an open ended question section that allowed for participants to respond to a question regarding their personal belief as to why they successfully completed college. The open ended question has been analyzed for content and the results are included in this chapter. Similar themes were identified in the open ended responses which provide a qualitative examination of the independent participants’ belief system.

Finally, the threats to validity and a summary of the findings are included in this chapter.
Sampling Statistics

The survey was distributed to members of the graduating classes at Berea College during the years of 1997-2004. The members who registered with the alumni association and included email contact information were selected to participate in this study. The sample pool included 147 Berea College graduates. There were a total of 35 completed surveys for a response rate of 24%.

Analysis of Validity

The following discusses the various aspects of validity and reliability as they relate to this study. Statistical analyses of the data were done at various levels beginning with descriptive statistics, and proceeding to a ranking of mean responses used in the individual survey responses from graduates. Following this level, was a correlation matrix across all items and factors, a factor analysis to examine constructs validity, an alpha test against each factor for tests of reliability, and a content analysis of survey comments as a further test of validity. A factor analysis and alpha tests were used to establish the levels of construct validity and reliability from the survey data. Unless the factors are valid and reliable, tests of significance for hypotheses have no practical value. This analysis used principal component method with an oblique rotation. In addition, a factor analysis of the categorization from the survey comments was done to establish the levels of construct validity from that data. Descriptive statistics were done to obtain a profile of the respondents. Spearman correlations were used to determine if there was a statistical relationship between the input variables (motivating factors) and the output variables of barriers. This test helped identify any significant and substantial
relationships across the motivating variables and the barriers. The research included a content analysis of the comments from respondents. It used an inductive content analysis software program for establishing the categories. The processes and procedures used within this software helped address the various issues of validity in qualitative research. The process of using transcripts and not simple field notes helped speak to the issue of descriptive validity and factual accuracy. The transparency of steps and categorization provided a clear trail for review and to address interpretive validity from the participants’ viewpoints. In other words, the paper trail showed that the categories represent the participants’ perspectives and not those of the principal investigator.

Text categorization software does not search after deeper understandings; those must be derived by the principle investigator. These categories do supply useful information about texts; but it remains up to the researchers, not the computer, to create sophisticated knowledge and insight from this mapped or categorized information, usually situating it in the context of additional information about the texts' origins. Neither text categorization nor artificial intelligence should be expected to generate deeper understandings or upper levels of the mapping code in either the sense of an expert’s comprehension from listening or that of a specialist, such as a linguist, psychoanalyst, or cultural anthropologist. That acknowledged, researchers might want to consider what different insights text categorization and artificial intelligence programs offer. In this study, one open-ended question was asked in the survey because such questions frequently provide a source of varied and textured information about what respondents think, believe, or know about a subject area, presented in their own words. Also, the open-ended question was asked because when a researcher relies exclusively on
closed-ended questions, they are frequently forced to frame not only the question but also the alternative responses. Thus, a researcher might end-up constructing and interpreting the respondents’ reality. A researcher cannot assume he or she gets the main idea or construct right, did not miss significant alternatives, or did not bias or skew respondents’ perceptions.

The inductive software used in this study (TextSmart®) contains a group of tools, and categorization procedures to assist a researcher in creating closed-coded categorical variables distilled from the unstructured and voluminous information contained in typical verbatim responses. While it does not fully automate the classification of verbatim responses into categorical variables, it provides a custom desktop and an associated tool kit to assist researchers. Automatic categorization in the software program is a four-step process. First, the text is matched against a dictionary of words to delete and a dictionary of words that are synonyms or aliases. Second, the program creates a matrix of similarities from the terms (words, aliases, and stems) in the included terms' list. It pairs each term with every other term in the list and a check to see how often each pair occurs in a response. The program then constructs a 2 X 2 contingency table for each pair of terms. In turn, the program uses this information to compute a binary measure, the Jaccard similarity measure, for each pair of terms. The measure consists of the number of co-occurrences between the terms divided by the sum of co-occurrence plus non-co-occurrences. Next, the program hierarchically clusters the matrix of similarities and places the clusters into a specified maximum number of categories. The algorithm used for creating categories is a variant of hierarchical clustering with maximum distance
amalgamation. This algorithm attempts to produce clusters whose largest distance between any two members is as small as possible; it tends to produce compact clusters.

In a final set of procedures, the program uses multidimensional scaling in two dimensions to scale the matrix of similarities. This is independent of the clustering process. This process is useful but must relate to the overall investigation.

**Face and Content Validity**

In order to achieve stronger face validity, a committee of faculty and doctoral students reviewed the draft survey and made minor changes to the wording of a few questions. In addition, the director of institutional research at Berea College reviewed the survey tool and provided feedback for improvement in both content and wording. These modifications also contributed to a greater readability for the survey. An alpha test of reliability, discussed later, showed a high degree of consistency for each of the factors and therefore supports strong face validity in the instrument.

Content validity was established through the extensive literature review and explicitly linking the concepts, antecedents, and items in the survey. Further, the analysis of the survey comments supported the content validity (see content analysis below). In addition, the College Student Survey has been used by more than 270,000 students at over 800 institutions across the country. The modified instrument included only questions related to the variables identified in this research.
Construct Validity

Surveys are the preferred approach for collecting data from large numbers of students about their college experiences. Many instruments are locally developed, used a few times and discarded. Others, such as the Cooperative Institutional Research Program (CIRP) instruments (Astin & Sax, 1999), are nationally normed and administered annually. It is not unusual for items used on nationally normed instruments to be adapted for use on local surveys because researchers perceive them to be “good” and “reliable.”

The survey instrument used in this study is a variation of the College Student Survey administered by the Higher Education Research Institute at UCLA. As discussed earlier, the CIRP is a national longitudinal study of the American higher education system. Established in 1966 at the American Council on Education, the CIRP is now administered by the Higher Education Research Institute under the direction of Linda Sax. The CIRP is the nation's largest and oldest empirical study of higher education, involving data on some 1,800 institutions and over 11 million students. It is regarded as the most comprehensive source of information on college students. The annual report of the CIRP Freshman Survey provides normative data on each year's entering college students. Specifically, for the purpose of this research, a modified version of the College Student Survey Instrument was used. Developed by the Higher Education Research Institute (HERI), the College Student Survey (CSS) is administered through the Cooperative Institutional Research Program (CIRP), which has conducted national surveys of college students and faculty since 1966. While the survey may be used as a stand-alone instrument, it was designed as a follow-up to the CIRP Freshman Survey. When used in conjunction with the CIRP Freshman Survey, the CSS generates valuable
longitudinal data on students’ cognitive and affective growth during college. To date, more than 270,000 students have participated in the CSS at nearly 800 institutions that have benefited from the institutional, comparative, and longitudinal data provided by this instrument.

**Table 3: Factor Analysis of Survey Data**

Rotated Factor Matrix

<table>
<thead>
<tr>
<th>Question and Label</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q15 discuss course</td>
<td>.741</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q24 tutor another</td>
<td>.765</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q25 study with others</td>
<td>.795</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q27 use tutoring services</td>
<td>.842</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q07 research with faculty</td>
<td></td>
<td>.684</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q14 independent study</td>
<td></td>
<td>.594</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q18 meet with faculty office</td>
<td></td>
<td>.765</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q21 guest in faculty home</td>
<td></td>
<td>.731</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q23 meet faculty outside office</td>
<td></td>
<td>.746</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q02 live on campus</td>
<td></td>
<td></td>
<td>.854</td>
<td></td>
</tr>
<tr>
<td>Q06 community service</td>
<td></td>
<td></td>
<td>.795</td>
<td></td>
</tr>
<tr>
<td>Q16 intramural sports</td>
<td></td>
<td></td>
<td>.543</td>
<td></td>
</tr>
<tr>
<td>Q22 vote in student elections</td>
<td></td>
<td></td>
<td>.642</td>
<td></td>
</tr>
<tr>
<td>Q28 new student orientation</td>
<td></td>
<td></td>
<td>.893</td>
<td></td>
</tr>
<tr>
<td>Q29 socially engaged</td>
<td></td>
<td></td>
<td>.756</td>
<td></td>
</tr>
<tr>
<td>Q9-5 general education</td>
<td></td>
<td></td>
<td></td>
<td>.685</td>
</tr>
<tr>
<td>Q9-7 make more money</td>
<td></td>
<td></td>
<td></td>
<td>.702</td>
</tr>
<tr>
<td>Q9-9 graduate school</td>
<td></td>
<td></td>
<td></td>
<td>.714</td>
</tr>
<tr>
<td>Q9-10 specialized career</td>
<td></td>
<td></td>
<td></td>
<td>.725</td>
</tr>
<tr>
<td>Q10-8 drive to achieve</td>
<td></td>
<td></td>
<td></td>
<td>.842</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question and Label</th>
<th>Factor 5</th>
<th>Factor 6</th>
<th>Factor 7</th>
<th>Factor 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q11 financial concern</td>
<td>.785</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q20 job responsibilities</td>
<td>.568</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q31 finances limited success</td>
<td>.548</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q9-1 parents wanted you to</td>
<td></td>
<td>.758</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q9-3 get away from home</td>
<td></td>
<td>.521</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q19 family responsibilities</td>
<td></td>
<td>.598</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3 choice of college</td>
<td></td>
<td></td>
<td>.648</td>
<td></td>
</tr>
<tr>
<td>Q4-2 math courses taken</td>
<td></td>
<td></td>
<td>.842</td>
<td></td>
</tr>
<tr>
<td>Q4-3 foreign language taken</td>
<td></td>
<td></td>
<td>.821</td>
<td></td>
</tr>
<tr>
<td>Q4-5 history taken</td>
<td></td>
<td></td>
<td>.795</td>
<td></td>
</tr>
<tr>
<td>Q4-6 computer science</td>
<td></td>
<td></td>
<td>.678</td>
<td></td>
</tr>
<tr>
<td>Q4-7 art/music</td>
<td></td>
<td></td>
<td>.568</td>
<td></td>
</tr>
<tr>
<td>Q9-8 learn about interests</td>
<td></td>
<td></td>
<td>.654</td>
<td></td>
</tr>
<tr>
<td>Q10-1 academic ability</td>
<td></td>
<td></td>
<td>.784</td>
<td></td>
</tr>
</tbody>
</table>
Table 3, continued

<table>
<thead>
<tr>
<th>Question</th>
<th>Factor 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q10-18 self-confidence (soc)</td>
<td>.741</td>
</tr>
<tr>
<td>Q30 social support</td>
<td>.798</td>
</tr>
</tbody>
</table>

Table 3, Factor Analysis of Survey Data, shows the results of the confirmatory factor analysis and assists in establishing the construct validity. Overall the input survey questions (Q1-Q31) provided an 80.2% explanation of total variance. This level of explanation for total variance is strong and supports the construct validity of the survey instrument.

Based on the factor analysis and the research on the antecedents discussed in the literature review, the following results are reported and inferences made. Factor 1 measures the dimension of tutoring and academic support. Four questions (Q27, 15, 25, and 24) were designed to measure tutoring and academic support. Factor 2 measures the dimension of faculty mentoring relationships. Five questions (Q7, 14, 18, 21, and 23) were designed to measure faculty mentoring relationships. Factor 3 measures the
dimension of campus involvement. Six questions (Q2, 6, 16, 22, 28, and 29) were designed to address this factor. Factor 4 measures the dimension of personal resilience. Six questions (Q9-5, 10-8, 9-7, 9-10, and 9-9) were designed to measure this factor. Factor 5 measures the dimension of financial support. Three questions (Q11, 20, and 31) were designed to measure financial support. Factor 6 measures the dimension of family support. Three questions (Q9-1, 9-3, and 19) were designed to measure this factor. Factor 7 measures the dimension of academic preparation. Thirteen questions (Q3, 4-2, 4-3, 4-5, 4-6, 4-7, 9-8, 10-1, 10-4, 10-14, 10-17, and 10-23) measure this dimension. Factor 8 measures the dimension of personal commitment. There are seven questions (Q5, 9-4, 9-5, 9-6, 9-7, 9-10, and 10-8) used to measure this dimension. The final factor, 9, measures the dimension of social support. Two questions (Q10-18 and 30) were designed to measure social support. All questions related to this section are listed in Table 7.

**Reliability**

When examining each of the variables used in this study for reliability all had coefficient alpha reliability estimates that exceed 0.70 which is the widely used rule of thumb for reliability (Hatcher, 1994). Further, Hatcher noted that reliability coefficients of less than 0.70 are generally seen as inadequate.

Coefficient alpha reliability estimates all exceed 0.70, and are reported on the diagonal of Table 4.
Table 4: Means and Coefficient Alpha Reliability Estimates for Study’s Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutoring/Academic Support</td>
<td>1.786</td>
<td>.72</td>
</tr>
<tr>
<td>Faculty Mentoring</td>
<td>1.245</td>
<td>.81</td>
</tr>
<tr>
<td>Campus Involvement</td>
<td>1.546</td>
<td>.76</td>
</tr>
<tr>
<td>Personal Resilience</td>
<td>1.457</td>
<td>.78</td>
</tr>
<tr>
<td>Financial Support</td>
<td>1.234</td>
<td>.91</td>
</tr>
<tr>
<td>Family Support</td>
<td>1.567</td>
<td>.89</td>
</tr>
<tr>
<td>Academic Preparation</td>
<td>1.354</td>
<td>.82</td>
</tr>
<tr>
<td>Personal Commitment</td>
<td>1.687</td>
<td>.78</td>
</tr>
<tr>
<td>Social Support</td>
<td>1.867</td>
<td>.89</td>
</tr>
</tbody>
</table>

Descriptive Statistics

The data collected were verified and the data set was cleaned prior to running statistics. The survey tool included multiple questions related to each variable. The multiple questions were combined to produce a composite score for each of the variables. For example, the motivating factor involvement in college life consisted of ten questions. The scores from each of those questions for each student were collected and averaged to give an overall score for that variable. In doing this, a data set was designed that reflected composite scores for each of the motivating factors and the barriers. All questions on the survey tool (Appendix A) are positively phrased thus requiring no transposition.

Item Ratings

Table 5, Descriptive Statistics by Question, reports the count, mean and standard deviation for responses to all input rating questions. Each question had at least 35 responses. The scale for each question varies and is included in Table 5. The total possible range is also included in that table. Question one for example has a possible
range of 0 to 2. The question is a yes or no type, therefore only resulting in two possible answers. Other questions have a range of 1-4 or 1-6 depending on the particular type of question. All questions that relate to a particular variable have the same range of responses. The mean for responses ranges from 1.029 to 5.943. However, as noted, these means must be compared to the total possible for that particular question.

The standard deviations for each question range from 0.169 to 1.837. Using a fourpoint scale, a standard deviation over .975 represents a larger than normal variance (Churchill, 1988), and may reflect a bimodal distribution or polar viewpoints. Twenty-five of the 73 items have standard deviations larger than .975; therefore, it shows some disagreement in these responses across the sample pool.

It is important to note that not all questions have a standard deviation or mean. This occurred because some questions had multiple responses, but not a range of responses. For example, participants were asked in Q12, “While enrolled in College, did you (mark all that apply).” The possible answers are not on a scale, but rather give many possible options. The tables below include the question but not a mean score or a standard deviation. In addition, the means for question four are reversed from the other scores. The means for this question should be higher to represent strength and lower means represent a weakness. This particular question varies from the others in the study.

<table>
<thead>
<tr>
<th>Item</th>
<th>Count</th>
<th>Mean</th>
<th>Std. Dev. (Total Possible-4 unless otherwise noted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q01-First in family to graduate</td>
<td>35</td>
<td>1.2</td>
<td>0.406 (1)</td>
</tr>
<tr>
<td>Q02-Living Arrangement</td>
<td>35</td>
<td>3.0</td>
<td>0.420</td>
</tr>
<tr>
<td>Q03-Choice of College</td>
<td>35</td>
<td>1.286</td>
<td>0.667</td>
</tr>
<tr>
<td>Q04-Years of Study</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q04-01-English</td>
<td>35</td>
<td>5.943</td>
<td>0.416</td>
</tr>
</tbody>
</table>
Table 5, continued

<table>
<thead>
<tr>
<th>Question Description</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q04-02-Math</td>
<td>4.8</td>
<td>0.632</td>
</tr>
<tr>
<td>Q04-03-Foreign Language</td>
<td>3.571</td>
<td>1.243</td>
</tr>
<tr>
<td>Q04-04-Physical Science</td>
<td>4.343</td>
<td>1.187</td>
</tr>
<tr>
<td>Q04-05-History/American Gov’t</td>
<td>3.943</td>
<td>1.211</td>
</tr>
<tr>
<td>Q04-06-Computer Science</td>
<td>2.971</td>
<td>1.465</td>
</tr>
<tr>
<td>Q04-07-Art/Music</td>
<td>3.514</td>
<td>1.837</td>
</tr>
<tr>
<td>Q05-Highest Degree Obtained</td>
<td>2.171</td>
<td>0.382</td>
</tr>
<tr>
<td>Q06-Community Service</td>
<td>1.286</td>
<td>0.458</td>
</tr>
<tr>
<td>Q07-Research with Faculty</td>
<td>1.857</td>
<td>0.355</td>
</tr>
<tr>
<td>Q08-Level of Edu for Parents</td>
<td>2.6</td>
<td>0.812</td>
</tr>
<tr>
<td>Q09-Importance of Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q09-01-PARENTS WANTED ME TO</td>
<td>2.4</td>
<td>1.063</td>
</tr>
<tr>
<td>Q09-02-COULD NOT FIND JOB</td>
<td>4.058</td>
<td>1.148</td>
</tr>
<tr>
<td>Q09-03-GET AWAY FROM HOME</td>
<td>3.057</td>
<td>1.327</td>
</tr>
<tr>
<td>Q09-04-BETTER JOB OPTIONS</td>
<td>1.4</td>
<td>0.604</td>
</tr>
<tr>
<td>Q09-05-GENERAL EDUCATION</td>
<td>1.429</td>
<td>0.558</td>
</tr>
<tr>
<td>Q09-06-NOTHING BETTER TO DO</td>
<td>4.057</td>
<td>1.162</td>
</tr>
<tr>
<td>Q09-07-MAKE MORE MONEY</td>
<td>1.971</td>
<td>0.985</td>
</tr>
<tr>
<td>Q09-08-LEARN MORE ABOUT INTEREST</td>
<td>1.457</td>
<td>0.561</td>
</tr>
<tr>
<td>Q09-09-PREPARE FOR GRAD SCHOOL</td>
<td>2.171</td>
<td>0.954</td>
</tr>
<tr>
<td>Q09-10-SPECIALIZED CAREER</td>
<td>2.086</td>
<td>0.919</td>
</tr>
<tr>
<td>Q09-11- FIND PURPOSE</td>
<td>2.086</td>
<td>0.742</td>
</tr>
<tr>
<td>Q10-Rate of Traits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q10-01-ACADEMIC ABILITY</td>
<td>2.2</td>
<td>0.584</td>
</tr>
<tr>
<td>Q10-02-ARTISTIC ABILITY</td>
<td>3.029</td>
<td>0.857</td>
</tr>
<tr>
<td>Q10-03-COMPASSION</td>
<td>2.029</td>
<td>0.785</td>
</tr>
<tr>
<td>Q10-04-COMPUTER SKILLS</td>
<td>2.371</td>
<td>0.731</td>
</tr>
<tr>
<td>Q10-05-COOPERATIVENESS</td>
<td>2.057</td>
<td>0.725</td>
</tr>
<tr>
<td>Q10-06-COURAGE</td>
<td>2.171</td>
<td>0.822</td>
</tr>
<tr>
<td>Q10-07-CREATIVITY</td>
<td>2.2</td>
<td>0.833</td>
</tr>
<tr>
<td>Q10-08-DRIVE TO ACHIEVER</td>
<td>1.943</td>
<td>0.968</td>
</tr>
<tr>
<td>Q10-09-EMOTIONAL HEALTH</td>
<td>2.543</td>
<td>1.067</td>
</tr>
<tr>
<td>Q10-10-FORGIVENESS</td>
<td>2.029</td>
<td>0.707</td>
</tr>
<tr>
<td>Q10-11-GENEROSITY</td>
<td>1.914</td>
<td>0.781</td>
</tr>
<tr>
<td>Q10-12-KINDNESS</td>
<td>1.771</td>
<td>0.598</td>
</tr>
<tr>
<td>Q10-13-LEADERSHIP ABILITY</td>
<td>2.343</td>
<td>1.056</td>
</tr>
<tr>
<td>Q10-14-MATH ABILITY</td>
<td>2.943</td>
<td>1.259</td>
</tr>
<tr>
<td>Q10-15-PHYSICAL HEALTH</td>
<td>2.6</td>
<td>0.946</td>
</tr>
<tr>
<td>Q10-16-PUBLIC SPEAKING ABILITY</td>
<td>2.629</td>
<td>1.114</td>
</tr>
<tr>
<td>Q10-17-Self-Confidence (intellectual)</td>
<td>2.086</td>
<td>0.742</td>
</tr>
<tr>
<td>Q10-18-Self-Confidence (Social)</td>
<td>2.486</td>
<td>1.121</td>
</tr>
<tr>
<td>Q10-19-Self-Understanding</td>
<td>2.457</td>
<td>0.980</td>
</tr>
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<td>Q10-20-Spirituality</td>
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Table 6. Ranking of Questions by Mean Scores is similar to Table 5 but ranks the means of the responses from the most favorable to the least favorable response, as well as giving the standard deviation. Those items at the top of the table represent relative perceived strengths, while those items at the bottom of the table represent relative perceived weaknesses. While all the items reflect a mean, the means for questions related to question four are reversed, with the higher the mean, the stronger the value. The other questions strengths are represented with a lower mean.
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Table 7, Ranking of Questions and Factors by Means is similar to Table 6, but also lists the ranking of items with a labeling of the factors (see validity for analysis of factors). This was done in order to examine any clustering of responses by factors (either at the top or the bottom of the range). It shows there are no clusters of factor items at either the top of the range (strength) or the bottom of the range (weakness). This seems
to indicate there are no dominant motivating factors or barriers. Also, a dimension of other and composite have been added in addition to the identified barriers and motivators. The other category consists of data not used in this study, but collected for future research. Topics include emotional well-being, health, artistic skills, etc. These topics can be reviewed in the full survey (Appendix A). In addition, the composite dimension simply notes that those questions were lead in questions to other categories. For example, question Q09 is the opening statement for the remaining sub-questions that follow (Q09-01-Q09-11).

**Table 7: All Responses Descriptive Statistics of Questions and Factors by Means**

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<td>Q10-15-Physical Health</td>
<td>35</td>
<td>2.6</td>
<td>Other</td>
</tr>
<tr>
<td>Q22-Vote in Student Election</td>
<td>35</td>
<td>2.6</td>
<td>Campus Life</td>
</tr>
<tr>
<td>Q10-16-Public Speaking Ability</td>
<td>35</td>
<td>2.629</td>
<td>Other</td>
</tr>
<tr>
<td>Q18-Meet with faculty office hours</td>
<td>35</td>
<td>2.914</td>
<td>Faculty Mentoring</td>
</tr>
<tr>
<td>Q10-14-Math Ability</td>
<td>35</td>
<td>2.943</td>
<td>Academic Preparation</td>
</tr>
<tr>
<td>Q04-06-Computer Science</td>
<td>35</td>
<td>2.971</td>
<td>Academic Preparation</td>
</tr>
<tr>
<td>Q02-Living Arrangement</td>
<td>35</td>
<td>3</td>
<td>Campus Life</td>
</tr>
<tr>
<td>Q10-02-Artistic Ability</td>
<td>35</td>
<td>3.029</td>
<td>Other</td>
</tr>
<tr>
<td>Q09-03-Get away from home</td>
<td>35</td>
<td>3.057</td>
<td>Family Support</td>
</tr>
<tr>
<td>Q23-Meet Faculty outside class</td>
<td>35</td>
<td>3.257</td>
<td>Faculty Mentoring</td>
</tr>
<tr>
<td>Q04-07-Art/Music</td>
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<td>3.514</td>
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</tr>
<tr>
<td>Q04-03-Foreign Language</td>
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</tr>
<tr>
<td>Q14-Independent Study</td>
<td>35</td>
<td>3.657</td>
<td>Faculty Mentoring</td>
</tr>
<tr>
<td>Q24-Tutor Another student</td>
<td>35</td>
<td>3.657</td>
<td>Tutoring/Academic Support</td>
</tr>
<tr>
<td>Q16-Intramural Sports</td>
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<td>3.857</td>
<td>Campus Life</td>
</tr>
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<td>Q17-Fail to complete on time</td>
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<td>3.886</td>
<td>Academic Preparation</td>
</tr>
<tr>
<td>Q04-05-History/American Gov’t</td>
<td>35</td>
<td>3.943</td>
<td>Academic Preparation</td>
</tr>
<tr>
<td>Q21-Guest at Prof Home</td>
<td>35</td>
<td>3.943</td>
<td>Faculty Mentoring</td>
</tr>
<tr>
<td>Q09-06-Nothing better to do</td>
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<td>4.057</td>
<td>Personal Commitment</td>
</tr>
<tr>
<td>Q09-02-Could not find job</td>
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<td>4.058</td>
<td>Other</td>
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<td>Q20-Job Responsibilities</td>
<td>35</td>
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<td>Financial Support</td>
</tr>
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<td>Q04-04-Physical Science</td>
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<td>4.343</td>
<td>Other</td>
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Table 7, continued

<table>
<thead>
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<th>Count</th>
<th>Score</th>
<th>Category</th>
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</thead>
<tbody>
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<td>4.4</td>
<td>Family Support</td>
</tr>
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<td>Q04-02-Math</td>
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<td>4.8</td>
<td>Academic Preparation</td>
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<td>Q04-01-English</td>
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<td>Q04-Years of Study</td>
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<td></td>
<td>Composite</td>
</tr>
<tr>
<td>Q09-Importance of Variables</td>
<td></td>
<td></td>
<td>Composite</td>
</tr>
<tr>
<td>Q10-Rate of Traits</td>
<td></td>
<td></td>
<td>Composite</td>
</tr>
<tr>
<td>Q12-While Enrolled Did You</td>
<td>35</td>
<td></td>
<td>Composite</td>
</tr>
<tr>
<td>Q13-While Enrolled (continued)</td>
<td>35</td>
<td></td>
<td>Composite</td>
</tr>
<tr>
<td>Q26-Prof provided following:</td>
<td>35</td>
<td></td>
<td>Composite</td>
</tr>
</tbody>
</table>

**Descriptive Results**

In the following pages, results for each of the questions included in the survey will be reviewed in order to provide a complete picture of the results from his research. Many of the questions have sub-sets that need further explanation and examination. Those questions are clearly outlined below. They have been categorized by dimension (area of barrier or motivating factor) for review. Questions discussed earlier in the “Other” and “Composite” sections are not detailed here as they do not relate to this particular study.

In addition to the information presented in the Items Rating section of this chapter, several other results are important to note. For example, Q01 in the survey asks the graduate if he or she is the first person in his/her immediate family to graduate from College. The results of that question indicate that only 28 of the graduates are the first in their families to graduate. However, a follow-up question to verify that information (Q08) produced contradicting results. In that question, graduates were asked about the highest level of education obtained by their parents prior to the participant’s graduation from college. According to the results in this question, the graduates indicated that neither of their parents had graduated from a postsecondary institution. The results from
this question are more accurate in part because the possible responses available for selection clearly indicate a level of accomplishment (see Table 8). For the purposes of this study, and based on responses in Table 4, all participants who responded to the survey are qualified as first-generation college graduates.

Table 8: What is the highest level of formal education obtained by your parents prior to your graduation from Berea College?

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Graduates who selected this answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School or less</td>
<td>4 (11.4%)</td>
</tr>
<tr>
<td>Some High School</td>
<td>8 (22.9%)</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>22 (62.9%)</td>
</tr>
<tr>
<td>Postsecondary School other than College</td>
<td>0</td>
</tr>
<tr>
<td>Some College</td>
<td>1 (2.9%)</td>
</tr>
<tr>
<td>College Degree</td>
<td>0</td>
</tr>
<tr>
<td>Some Graduate School</td>
<td>0</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>0</td>
</tr>
</tbody>
</table>

The survey tool included several questions that are purely descriptive in nature. They were included on the survey to provide information about the respondents. For example, Q01 and Q08 detailed above were necessary in order to identify each of the participants as first-generation college graduates.

Campus Involvement

Astin (1993), in an effort to identify what makes a college or university excellent, noted that student involvement in campus life often leads to student excellence and
success. According to Astin, a highly involved student is one who devotes considerable
time to his or her studies, spends time on campus, actively participates in student
organizations, and interacts frequently with faculty. Astin believes that student time and
energy are the greatest resources a university has, and that, in the search for excellence, a
college or university should maximize the time that its students spend in university
related activities. In addition to college excellence, campus involvement has been found
to lead significantly to the student’s ability to complete college. Astin felt, in effect, that
a university must aim its programs and institutions at student involvement in order to
foster an environment in which students enjoy their experience, leading to higher
performance and greater prestige. Astin’s sentiment is also echoed in research by John
Gardner, which indicates that action taken to increase the amount of time that new
college students spend on campus—in study groups, in the library, in co-curricular
activities, and especially in living and working on campus – will enhance their
probability of success (Gardner, 1996).

The survey tool used for this study has six questions related to campus
involvement. Each question is outlined below in Figures 2-7. For the purposes of factor
analysis and correlation, the results from the six individual questions on campus
involvement were combined to give a composite score for this variable.
Figure 2: Where did you live while enrolled at Berea College?

![Bar chart showing different living arrangements.]

Figure 3: Did you participate in community service events at Berea College while enrolled?

![Bar chart showing participation in community service events.]

Figure 4: While in college, how often did you vote in student elections?

![Bar chart showing voting frequency.]

Figure 5: Did you attend the new student orientation program when you first enrolled?

Figure 6: While in College, how often did you participate in intramural sports?

Figure 7: Did you consider yourself socially engaged in the life of the college? (i.e. where you active in campus activities, social programming, etc.)

**Faculty Mentoring Relationships**

Astin (1977) reported that students who interact more frequently with faculty report significantly greater satisfaction with the college environment. Pascarella, Terenzini, and Wolfe (1986) emphasize the influence of faculty involvement on student
retention and satisfaction with education. Kramer and Spencer (1989, p. 105) state: “Overall, faculty-student contact is an important factor in student achievement, persistence, academic-skill development, personal development, and general satisfaction with the college experience.” The survey tool used for this study has five questions related to faculty mentoring relationships. Each question is outlined below in Figures 8-12. For the purposes of factor analysis and correlation, the results from the five individual questions on faculty mentoring relationships were combined to give a composite score for this variable.

**Figure 8:** Did you participate in a research project with a faculty member while enrolled?

![Figure 8](image)

**Figure 9:** While in college, how often did you work on independent study projects?

![Figure 9](image)
**Figure 10:** While in college, how often did you meet with faculty during office hours?

![Bar chart showing frequency of meeting with faculty during office hours.](chart10)

**Figure 11:** While in college, how often were you a guest in a professor’s home?

![Bar chart showing frequency of being a guest in a professor’s home.](chart11)

**Figure 12:** While in college, how often did you meet with faculty outside of class or office hours?

![Bar chart showing frequency of meeting with faculty outside of class or office hours.](chart12)

**Tutoring and Academic Success Programs**

As noted earlier, Richardson and Skinner (1992) interviewed successful first-generation students and found that they felt they never could have made it without the help of academic support programs and services provided by their institutions. Academic
support services are a vital part of the educational experience for college students. They are a foundation of support for academic success and thus college success. Students who are integrated socially and academically into the college are happier with their experiences, tend to develop more, and have more significant learning outcomes (Astin, 1993; Tinto, 1987).

The survey tool used for this study has four questions related to tutoring and academic support services. Each question is outlined below in Figures 13-16. For the purposes of factor analysis and correlation, the results from the four individual questions on tutoring and academic support services were combined to give a composite score for this variable.

**Figure 13:** While in college, how often did you discuss course concepts with students outside of the classroom?

![Figure 13: While in college, how often did you discuss course concepts with students outside of the classroom?](image)

**Figure 14:** While in college, how often did you tutor another college student?

![Figure 14: While in college, how often did you tutor another college student?](image)
Figure 15: While in college, did you use services at the Tutoring Center or Academic Support Services?

![Bar graph showing Yes vs No for Tutoring Center or Academic Support Services usage in 1st Qtr]

Figure 16: While in college, how often did you study with other students?

![Bar graph showing frequency of studying with other students in 1st Qtr]

Personal Resilience

Kline (2000) indicated in her research that first-generation college graduates identified personal resilience as important to their ability to succeed. This desire to succeed, this continued effort to make it through college is often noted as a critical factor in every student's success at college or in other everyday events.

The survey tool used for this study has six questions related to personal resilience. Each question is outlined below in Figures 17-22. For the purposes of factor analysis and correlation, the results from the six individual questions on personal resilience were combined to give a composite score for this variable.
**Figure 17:** What is the highest academic degree you have obtained?

![Bar chart showing academic degrees](image)

**Figure 18:** In deciding to go to college, how important was it to gain a general education?

![Bar chart showing importance levels](image)

**Figure 19:** In deciding to go to college, how important was it to make more money?

![Bar chart showing importance levels](image)
**Figure 20:** In deciding to go to college, how important was it to prepare for graduate or professional school?

![Bar chart showing responses to the importance of preparing for graduate or professional school.]

**Figure 21:** In deciding to go to college, how important was it to get training for a specialized career?

![Bar chart showing responses to the importance of getting training for a specialized career.]

**Figure 22:** Rate yourself on the following trait in comparison with the average person in college: drive to achieve.

![Bar chart showing responses to the trait of drive to achieve.]


Financial Support

Unfortunately financial aid continues to be a major factor in the lack of student persistence. Saint John, Cabrera, Nora and Asker (2000) note that national studies show finance-related factors (student aid, tuition, and other costs, including living) explained about half the total variance in the student persistence process. According to Merriam and Caffarella (1999), lack of money is one of the two most cited reasons for adult nonparticipation in adult education, including higher education. Tinto (1993) cites the effect of finances upon student attrition can be indirect and long–term as well as short-term in character. Family finances affect persistence through their influence of educational goals. Finances also affect decisions on whether to attend college in the first place, how much education to seek, and where one chooses to attend college.

The survey tool used for this study has three questions related to financial support. Each question is outlined below in Figures 23-25. For the purposes of factor analysis and correlation, the results from the three individual questions on financial support were combined to give a composite score for this variable.

Figure 23: Were you concerned about your ability to finance your college education?
Figure 24: While in college, how often did you feel you didn’t have time to study due to job responsibilities?

![Bar chart showing frequency of feeling time constraints due to job responsibilities.]

Figure 25: Do you feel your financial situation limited your ability to succeed in college?

![Bar chart showing response to financial situation limitation.]

Family Support

First-generation college students do not have the luxury of having a parent who attended college and who can therefore provide valuable information about the college process. Terenzini (1986) advocates "bridge" programs that smooth the transition to college and provide sustained support through the first years, as well as enhanced advising and academic support services. Students are not the only ones who can benefit
from a comprehensive orientation program. Parents of first-generation college students are also greatly helped by programs that share what will be required of their son or daughter as well as explain the higher education process. As noted above, this is essential for parents who cannot provide direct experiential advice for their children.

The survey tool used for this study has three questions related to family support. Each question is outlined below in Figures 26-28. For the purposes of factor analysis and correlation, the results from the three individual questions on family support were combined to give a composite score for this variable.

Figure 26: In deciding to go to college, how important was the following reason: parents wanted me to go?

![Figure 26](image)

Figure 27: In deciding to go to college, how important was the following reason: wanted to get away from home?

![Figure 27](image)
Figure 28: While in college, how often did you feel you didn’t have time to study due to family responsibilities?

Academic Preparation

Billson and Terry (1982) defined first-generation college students as those students whose parents have had no college or university experience (Billson & Terry, 1982). When compared to the traditional student, first-generation college students had lower pre-college critical thinking abilities, and were more likely to come from low income families, and to have been encouraged by teachers (rather than parents) to attend college, and to be members of a minority group (Terenzini, Springer, Pascarella, & Nora, 1996). Several of the barriers identified above (critical thinking skills, personal commitment, and level of family support) have been researched with studies indicating that first-generation college students are at a disadvantage in most cases (York-Anderson & Bowman, 1992).

The survey tool used for this study has fourteen questions related to academic preparation. Each question is outlined below in Figures 29-42. For the purposes of factor analysis and correlation, the results from the fourteen individual questions on academic preparation were combined to give a composite score for this variable.
Figure 29: Was Berea College your:

Figure 30: During high school how many years of English did you study?

Figure 31: During high school how many years of Mathematics did you study?
**Figure 32:** During high school how many years of foreign language did you study?

**Figure 33:** During high school how many years of physical science did you study?

**Figure 34:** During high school how many years of history/American government did you study?
Figure 35: During high school how many years of computer science did you study?

Figure 36: During high school how many years of art/music did you study?

Figure 37: In deciding to go to college how important was the following: to learn about things that interest me?
Figure 38: Rate yourself on the following trait in comparison with the average person in college: academic ability.

![Bar chart showing academic ability comparison]

Figure 39: Rate yourself on the following trait in comparison with the average person in college: computer skills.

![Bar chart showing computer skills comparison]

Figure 40: Rate yourself on the following trait in comparison to the average person in college: Mathematic ability.

![Bar chart showing mathematic ability comparison]
Figure 41: Rate yourself on the following trait in comparison to the average person in college: writing ability.

![Bar chart](chart1.png)

Figure 42: While in college, how often did you fail to complete homework on time?

![Bar chart](chart2.png)

**Personal Commitment**

Mueller (1997) indicated in her research that in addition to involvement as a critical factor in the success of first-generation college students, their persistence to graduate is largely due to self-motivation and self-determination. Mueller indicates that students who have successfully completed college or other goals have noted that personal desire to succeed was a leading factor.

The survey tool used for this study has six questions related to personal commitment. Each question is outlined below in Figures 43-48. For the purposes of factor analysis and correlation, the results from the six individual questions on personal commitment were combined to give a composite score for this variable.
**Figure 43:** In deciding to go to college, how important was it to be able to get a better job upon graduation?

**Figure 44:** In deciding to go to college, how important was it to gain a general education?

**Figure 45:** In deciding to go to college, how important was it to you that you had nothing better to do?
**Figure 46:** In deciding to go to college, how important was it to prepare for graduate or professional school?

![Bar chart showing the importance of preparing for graduate or professional school](chart1.png)

**Figure 47:** In deciding to go to college, how important was it to get training for a specialized career?

![Bar chart showing the importance of getting specialized training](chart2.png)

**Figure 48:** Rate yourself on the following trait in comparison with the average person in college: drive to achieve.

![Bar chart showing self-rating of drive to achieve](chart3.png)

**Social Support**

The barrier identified as social support relates to the first-generation college students' ability to form relationships with peers in order to develop a system of support.
while at college. Many times first-generation college students are working to fulfill the requirements of a college degree, while working either part or full-time. Often there is little time for social support systems to be established. However, they are imperative in providing encouragement and support for success at the college level.

The survey tool used for this study has two questions related to social support. Each question is outlined below in Figures 49-50. For the purposes of factor analysis and correlation, the results from the two individual questions on personal commitment were combined to give a composite score for this variable.

**Figure 49:** Rate yourself on the following trait in comparison to the average person in college: self-confidence (social).

**Figure 50:** Did you establish a social support system in college?
Item Calculation for Open Ended Question

All comments were copied verbatim into a word processor and then all references to individuals, specific personal experiences, proper names, or any other personal identifiers were removed for confidentiality. In addition, spelling was corrected, but no changes were made to the grammar. The text was then coded and analyzed using TextSmart® for establishing categories. TextSmart® is an inductive content analysis software program that processes text through a series of three algorithms. TextSmart® evaluated the text and discovered five categories that related to this study. Four of the categories were already identified as motivating factors by the literature. One of the categories that emerged was specific to this sample population. Each category was given a label, which summarized those comments determined to be in that category. The categories included (in order of most occurring): personal resilience, family support, social support, faculty support and religion/spirituality. Ninety-one percent of the respondents provided comments on the survey (32 of the 35 total). The number and length of the comments showed the depth of involvement in the survey topic on the part of the participants. The categorization resulted in more than 99% of all comments being categorized. That is a high percentage of categorization and shows a consistency in topics of the respondents.

Table 9 contains statistics on the resulting five categories. The table begins with the label or topic of the category and then the count of comments contained in that category. Since one response typically contains comments on more than a single category, the count of comments exceeds the 32 comment responses and exceeds 100%. For example, the first category is “personal resilience.” There were 19 comments in that
category, and of the 32 total responses, 60% had a comment in that category. Selected
direct quotes from responses are given below to illustrate the category and its label or
topic (for a complete list of all quotes, see Appendix C).

Table 9: Comment Categorization

<table>
<thead>
<tr>
<th>Category</th>
<th>Count of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Resilience</td>
<td>19</td>
</tr>
<tr>
<td>Family Support</td>
<td>10</td>
</tr>
<tr>
<td>Social Support</td>
<td>6</td>
</tr>
<tr>
<td>Faculty Support</td>
<td>5</td>
</tr>
<tr>
<td>Religion/Spirituality</td>
<td>3</td>
</tr>
</tbody>
</table>

Content Analysis of Survey Comments

**Personal Resilience**

“A drive to succeed and do better in life”

“My own motivation”

“Desire, hard work, and motivation. A strong desire to attend graduate school…”

“Motivation to have a different life for myself”

“I knew this was something I had to do for myself”

“Willpower to overcome all odds and trials to succeed in life and in college.”

**Family Support**

“I didn’t want to fail in my parent’s eyes.”

“I wanted to make my family proud, and also myself.”

“I had a strong family support system along with a love for Berea College and the
couragement of many professors…”
“My parents encouragement.”

_Social Support_

“…I surrounded myself with a close circle of great friends that supported me emotionally through all my trials both personal and school related.”

“Great network of friends, family, professors and coaches…”

“My friends and family encouraged me tremendously.”

_Faculty Support_

“I successfully completed college because of the faculty at Berea College.”

“the excellence of my instructors…”

“…the teachers who listened and encouraged me to follow my dreams despite my circumstances.”

_Religion/Spirituality_

“God’s grace…”

“Recognition that I was ‘blessed’ to get a chance to be educated.”

“my spirituality helped me succeed.”

“God and the church I attended while I was at Berea.”

_Correlation_

After categorizing the data for each of the variables, a univariate procedure was used to determine if the data was normally distributed. Initial review of the univariate information revealed that the data for many of the variables was not normally distributed. When working with data that is not normally distributed, a Spearman Correlation Procedure is recommended. In order to complete these procedures, SAS software was
used. SAS software assesses the data set for each factor. According to Hatcher (152), “The Spearman correlation is less useful than a Pearson correlation when both variables are truly normal, but it is more useful when one or both of the variables are non-normal.” Table 10 provides an overview of the Spearman correlation matrix that compares the motivating factors (tutoring/academic support, faculty mentoring relationships, campus involvement, and personal resilience) with the barriers (financial support, family support, academic preparation, personal commitment and social support).

Table 10 - Spearman Correlation Matrix for Motivating Factors and Barriers

<table>
<thead>
<tr>
<th></th>
<th>TUT</th>
<th>FAC</th>
<th>CAM</th>
<th>RES</th>
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</thead>
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<td>0.74098</td>
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<tr>
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<td>&lt;0.0001</td>
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<tr>
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<tr>
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<td>35</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

The correlation illustrates the association between the variables. The correlation is located on the top line of each cell. Just below the correlation is the *p*-value associated with the correlation. This is the *p*-value obtained from a test of the null hypothesis that the correlation between the motivating factor and the barrier is zero in the population.
Specifically, the \textit{p-value} gives us the probability that you would obtain a sample correlation this large if the correlation between the motivating factor and the barrier was really zero in the population. For example, the motivating factor tutoring/academic support (TUT) has a correlation of 0.73567 with the barrier of social support, the corresponding \textit{p-value} is <0.0001. This means that, given the sample size, there is only one chance in 10,000 of obtaining a correlation of 0.73567 or larger if the population correlation was actually zero. Based on this information, you may therefore reject the null hypothesis and tentatively conclude that the motivator tutoring/academic support is related to the barrier of social support in the population.

**Threats to Validity**

The primary threat to the validity of this study is from the low response rate. The study netted a 24% return rate with 35 surveys completed. Originally, 147 surveys were distributed. Fink (2003) noted that the response rate is the number of actual responses divided by the number of eligible respondents. He went on to say that no single response rate is considered standard. However, a higher response rate is preferred in order to more accurately draw conclusions about the population. Fink further notes that a “20% response is not uncommon (43).” While a response rate as low as twenty percent is acceptable (Sinicka), a higher response rate may provide a more accurate reflection of the experiences of the college graduates in the sample.

Another threat to validity is the non-response bias. There was an adequate margin of error and power, and the content analysis support the original constructs. Still, approximately three-fourths of the participants did not respond to the survey. Because of
the lack of responses from those participants it is not possible to determine what
motivating factors impacted their ability to successfully complete their studies at Berea
College. However, the high rate of agreement in the responses received does indicate a
general theme in the experiences of those participating and completing college. In
addition, the verbatim comments provided in the open ended question related to their
personal view on why they succeeded in college does provide additional information
supporting these shared themes.

Summary of Findings

Approximately 147 Berea College graduates were surveyed about their
experience while enrolled at Berea. The areas of interest included their experience in
tutoring and academic support services, faculty relationships, campus involvement,
personal resilience, financial support, family support, academic preparation, personal
commitment and social support systems developed while enrolled. Confirmatory factor
and regression analyses show five antecedents (barriers: financial support, family
support, academic preparation, personal commitment and social support) significantly (p
< .001) contribute to the motivating factors (tutoring/academic support services, faculty
mentoring relationships, campus involvement and personal resilience). These factors had
alpha reliability scores of .72 to .91. The results seem to indicate that each of the
identified motivating factors has a strong association with the identified barriers (See
Table 10).
Chapter V: Conclusion and Recommendations

Summary

This chapter summarizes the relationship between the identified motivating factors that apply to all students and the barrier faced specifically by first-generation college students. In addition, the purpose of the study, the foundational concepts from the literature, and the methods used in this research are summarized. This is followed by any major findings and provides conclusions, recommendations for action and for additional research in this area.

This author attempted to conduct a research study to examine and explain the relationship between the identified motivating factors for college students and the barriers faced by first-generation college students. This researcher was motivated to gain a better understanding of the resources available to students at colleges and universities and the impact those services have on a student's ability to successfully complete college. Specifically, this researcher was interested in determining if the motivating factors identified by the literature for all college students would have a significant impact or relationship to the barriers experienced by first-generation college students. In addition, it was the goal of this study to determine if the graduates of Berea College had experienced the barriers to their education identified in the literature or the motivating factors that were similarly identified in the literature for all college students.

The essential purpose of this study was to determine which of the identified motivating factors address specific barriers to success for first-generation college students. The motivating factors identified in the research include academic
support/tutoring programs, faculty mentoring programs, involvement in campus life, and personal resilience. The barriers include the lack of financial support, family support, academic preparedness, personal commitment, and social support. The study asked each participant to identify what barriers he or she faced prior to and while enrolled in a post-secondary institution, specifically Berea College. The study was also developed to ascertain which motivating factors each first generation college graduate experienced and how that impacted each of the specific barriers identified.

The literature review presented the scope and depth of the motivating factors that influence the success of the general college student (i.e. factors that will benefit any student who is enrolled in a postsecondary institution). These factors included participation in tutoring or academic support services, developing faculty mentoring relationships, getting involved in campus life and personal resilience. The literature provides detailed information related to each of the motivating factors. However, specific application to first-generation college students was lacking in the literature review. It is assumed that the implication is that all motivating factors positively impact all college students. This study was intended to determine if the motivating factors detailed in the literature did, in fact, apply to first-generation college students.

In addition, the literature also identified several barriers that are specific to first-generation college students. These factors included financial support for their education, family support, academic preparation, personal commitment to their studies and the development of social support systems. While the motivating factors identified above are applicable to all college students, the literature has identified the barriers that are specific
to first-generation college students. While the literature specifically discussed first-generation status, the barriers may be applicable to all students.

Approximately 147 Berea College graduates were surveyed about their experience while enrolled at Berea, with a total return of 35 surveys (24%). The areas of interest included their experience in tutoring/academic support services, faculty relationships, campus involvement, personal resilience, financial support, family support, academic preparation, personal commitment and social support systems developed while enrolled. Confirmatory factor and regression analyses show five antecedents (barriers: financial support, family support, academic preparation, personal commitment and social support) significantly (p < .001) contribute to the motivating factors (tutoring/academic support services, faculty mentoring relationships, campus involvement and personal resilience). These factors had alpha reliability scores of .72 to .91. The results seem to indicate that each of the identified motivating factors has a strong association with the identified barriers (See Table 10).

The data provided evidence of an association between all motivating factors and the barriers experienced by first-generation college graduates. These findings suggest that the more motivating factors a first-generation college student experience, the more likely he or she will be to overcome the barriers and complete college. While no specific motivating factor significantly impacted one barrier more than any of the others, this research does provide evidence that the barriers can be overcome with the assistance of involvement in the motivating factors. All of the motivating factors had significant correlations with the barriers and had strong p-values that suggest an association.
Finally, the survey comments section directly supports the identified motivating factors. Participants were asked one open-ended question related to why they believe they successfully completed college. The responses analyzed by TextSmart® indicated consistent support for the identified motivators. However, the comments also point to an additional motivating factor that is not identified in the literature. Religion or spirituality emerged as a theme in the comment section with several respondents identified a belief in a higher being as influential in their ability to successfully complete college.
Conclusions

The association between the motivating factors experienced by first-generation college students and the barriers is the basis for this study. An attempt to understand the relationship while providing a formative assessment of the experiences of first-generation college graduates from Berea College was a primary focus of this research study. By identifying the motivating factors that influence the barriers, colleges and universities can develop targeted programming aimed at assisting first-generation college student’s successfully complete college.

What is the association between each motivating factor (academic support and tutoring, faculty mentoring relationships, campus involvement and personal resilience) and the barriers faced by first generation college students (financial support, family support, academic preparedness, personal commitment, and other social support)?

As noted in the previous section, after completing the Spearman Correlation Coefficient Procedure, each barrier showed a significant association with each motivating factor. In effect, this illustrates that students who participate in the motivating factors, even when faced with barriers, can successfully complete college. The clear contribution this study provides is the evidence to support colleges and universities in their efforts to provide quality, ongoing support to first-generation college students.

In effect, the results from the Spearman Correlation Coefficient Procedure suggests that the motivating factor of developing faculty mentoring programs and relationships is positively related to the students ability to overcome the barriers of financial support, family support, academic preparation, personal resilience and social
support. In addition, the results suggest a similar positive association between each motivating factor and each barrier for first-generation college students.

In addition, this study adds to the growing body of literature while helping to fill the gap in the area of application for the motivating factors to a specific population of students: first-generation college students. As noted in the literature review, the motivating factors were identified as beneficial to the general student population and were successful in helping the general student population successfully complete college. However, the literature failed to provide a direct link between the motivating factors and the barriers faced by first-generation college students. This study provides that link and provides evidence of the association between each motivating factor and the identified barriers.

**Recommendations**

The following recommendations address two areas of importance: (1) strategies for colleges and universities for serving first-generation college students and (2) directions for future research in determining the association between motivating factors and barriers for first-generation college students.

**Strategies**

Results of the research suggest an association between the motivating factors and the barriers to success in college for first-generation college students. The following are suggested strategies that colleges and universities may follow in order to assist first-generation college students succeed at their institutions and ultimately graduate. This
research suggests serious implications for developing and promoting the motivating factors outlined in this study.

Colleges and universities that are concerned with the retention of students should implement and support tutoring and academic support services. Students who are integrated socially and academically into the college are happier with their experiences, tend to develop more, and have more significant learning outcomes (Astin, 1993; Tinto, 1987). Integration means feeling a sense of belonging with other people at the school, including faculty, students, and staff. Academically, it means that students feel comfortable with, and are engaged in, the learning environment, which encompasses the type of material being taught, the instructional approaches and the relationships (impersonal or personal, competitive or supportive, and same or different gender or race) with other people in the learning environment.

Many students lack the basic reading, writing, and math skills required for enrollment in some college-level courses, either because they failed to take the necessary prerequisites in high school, or because they completed such courses but need review courses to update their skills for subsequent work (Culross, 1996). This study shows that graduates who participated in tutoring program and academic support services had a successful experience in college ultimately resulting in their graduation from Berea College.

Faculty mentoring relationships between students and members of the faculty is related to the successful completion of college for the students. Astin (1977) reported that students who interact more frequently with faculty report significantly greater satisfaction with the college environment. Pascarella, Terenzini, and Wolfe (1986)
emphasize the influence of faculty involvement on student retention and satisfaction with education. Kramer and Spencer (1989, p. 105) state: “Overall, faculty-student contact is an important factor in student achievement, persistence, academic-skill development, personal development, and general satisfaction with the college experience.” The results from this study support the idea that these relationship positively impact the students ability to succeed in college. College and universities should implement faculty mentoring programs on their campuses, integrate faculty into the advising system and encourage faculty to develop relationships with students outside of the classroom environment.

Campus involvement has continued to be of importance for students at colleges and universities. Astin (1993), in an effort to identify what makes a college or university excellent, noted that student involvement in campus life often leads to student excellence and success. According to Astin, a highly involved student is one who devotes considerable time to his or her studies, spends time on campus, actively participates in student organizations, and interacts frequently with faculty. True involvement, as noted by Astin, requires the investment of the students energy in academic relationships and activities related to the campus and the amount of energy invested will vary greatly depending on the student's interests and goals, as well as the student's other commitments. Research has shown, and the results of this study further suggest, that campus involvement leads to student success at the college or university. Those institutions who are working to promote student retention and graduate of their students should develop and support co-curricular programs that address students social needs.
The final motivating factor that was positively correlated to the barriers is personal resilience. Personal resilience is identified as the personal drive and determination of the student to succeed (Mueller, 1997; Kline, 2000; Komada, 2002). College and universities may choose to include a review of this trait in the admission process. By determining the students personal resilience during the admission process, a college or university can develop a plan of intervention to meet the needs of each particular student.

**Future Research**

The survey instrument used in this study provided much additional information not used for this particular research. The data has already been collected and could be analyzed to provide a clearer picture of the experiences shared by the college graduates participating in this study. For example, participants identified their personal emotional health, their level of forgiveness, their creativity, generosity, kindness, leadership ability, and public speaking ability among other items. This data could provide insight into additional characteristics shared by those who have successfully completed college.

For the purposes of this study identifying descriptive information was not necessary. However, future study could examine the responses of the participants based on several demographic fields. For example, further examination of the race of the respondents, the distance the college was from their home, and their age at entry and graduation all could have significant impacts on the outcome of the study. This information is readily available in the Office of Institutional Research at Berea College.
The instrument used was a variation of the College Student Survey (CSS). This survey is administered in its entirety to over 180,000 students each year. For the purposes of this study, only selected items related to the study were used. For future study, the entire survey tool could be administered to gather additional data as well as to secure the validity and reliability of the instrument. Currently, the survey tool is only used with college students, but as seen here, can easily be administered to college graduates to gather a profile of their shared experiences that helped them successfully complete a college degree.

Finally, it is recommended that a study of the non-respondents be conducted. This may provide insight into characteristics of those who did not respond to this study. Information such as age, race, location and other demographic information is available in the Office of Institutional Research at Berea College. An analysis of this information may provide details about the population within the sample who did not respond.
References


student organizations and campus activities. *Campus Activities Programming*, 23(9), 42-46.


Appendix A
Survey Instrument

Thank you for taking the time to complete this online survey form. Your answers to the following questions will be used in research to help determine factors that led to your successful completion of a college degree. Your individual answers to the questions will not be used and you will not be identified individually at any point in this research.

Please indicate your e-mail address (this email address will not be used for any future contact).

Are you the first person in your immediate family (i.e. mother, father) to graduate from College?

Yes
No

Where did you live while enrolled at Berea College?

With family or relatives
Other private home, apartment or room
College residence hall
Other campus student housing
Other

Was Berea College your (select only one)

First Choice of Colleges
Second Choice of Colleges
Third Choice of Colleges
During high school (grades 9-12) how many years did you study each of the following:

**English**
- None
- 1/2 year
- 1 year
- 2 years
- 3 years
- 4 years
- 5 or more years

**Mathematics**
- 1/2 year
- 1 year
- 2 years
- 3 years
- 4 years
- 5 or more years
- None

**Foreign Language**
- 1/2 year
- 1 year
- 2 years
- 3 years
- 4 years
5 or more years
None

Physical Science
1/2 year
1 year
2 years
3 years
4 years
5 or more years
None

History/American Government
1/2 year
1 year
2 years
3 years
4 years
5 or more years
None

Computer Science
None
1/2 year
1 year
2 years
3 years
4 years
☐ 5 or more years

**Arts/Music**

☐ None
☐ 1/2 year
☐ 1 year
☐ 2 years
☐ 3 years
☐ 4 years
☐ 5 or more years

**What is the highest academic degree you have obtained?**

☐ Associate Degree
☐ Bachelor's Degree
☐ Master's Degree
☐ 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

**Did you participate in community service events at Berea College while enrolled?**

☐ Yes
☐ No

**Did you participate in a research project with a faculty member while enrolled?**

☐ Yes
☐ No
What is the highest level of formal education obtained by your parents prior to your graduation from Berea College?  

- Elementary School or less
- Some high school
- High School graduate
- Postsecondary School other than college
- Some College
- College Degree
- Some graduate school
- Graduate Degree

In deciding to go to college, how important to you was each of the following reasons?

Parents wanted me to go  

- Highly Important
- Important
- Neutral
- Unimportant
- Highly Unimportant

I could not find a job  

- Highly Important
- Important
- Neutral
- Unimportant
- Highly Unimportant

Wanted to get away from home  

- Highly Important
Important
Neutral
Unimportant
Highly Unimportant

To be able to get a better job upon graduation
Highly Important
Important
Neutral
Unimportant
Highly Unimportant

Gain a general education
Highly Important
Important
Neutral
Unimportant
Highly Unimportant

Nothing better to do
Highly Important
Important
Neutral
Unimportant
Highly Unimportant

Make more money
Highly Important
- Important
- Neutral
- Unimportant
- Highly Unimportant

Learn more about things that interest me
- Highly Important
- Important
- Neutral
- Unimportant
- Highly Unimportant

Prepare for graduate or professional school
- Highly Important
- Important
- Neutral
- Unimportant
- Highly Unimportant

Get training for a specialized career
- Highly Important
- Important
- Neutral
- Unimportant
- Highly Unimportant

Find purpose in life
- Highly Important
Rate yourself on each of the following traits in comparison with the average person in college.

**Academic Ability**
- Superior
- Somewhat Superior
- Neutral
- Somewhat Inferior
- Inferior

**Artistic Ability**
- Superior
- Somewhat Superior
- Neutral
- Somewhat Inferior
- Inferior

**Compassion**
- Superior
- Somewhat Superior
- Neutral
- Somewhat Inferior
- Inferior

**Computer Skills**
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Cooperativeness
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Courage
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Creativity
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Drive to Achieve
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Emotional Health
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Forgiveness
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Generosity
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Kindness
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Leadership Ability
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Mathematical Ability
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Physical Health
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Public Speaking Ability
Self-Confidence (Intellectual) 
- Superior
- Somewhat Superior
- Neutral
- Somewhat Inferior
- Inferior

Self-Confidence (Social) 
- Superior
- Somewhat Superior
- Neutral
- Somewhat Inferior
- Inferior

Self-understanding
- Superior
- Somewhat Superior
- Neutral
- Somewhat Inferior
- Inferior

Spirituality
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Time Management
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Understanding of Others
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Writing Ability
Superior
Somewhat Superior
Neutral
Somewhat Inferior
Inferior

Were you concerned about your ability to finance your college education?
While enrolled in college did you (mark all that apply): 

- join a club or organization (excluding student government)
- fail one or more courses
- work full-time (at least 35 hours per week)
- participate in student government
- take a remedial course
- take an ethnic studies course
- take a women's studies course
- attend a racial/cultural awareness workshop
- play intercollegiate athletics
- take a leave of absence from school

While enrolled in college did you (mark all that apply): 

- withdraw from school
- enroll in a honors course or advanced courses
- participate in leadership training
- participate in a study-abroad program
- develop a friendship with a peer
- engage in dialog with a professor outside of class regularly

While in college, how often did you work on independent study projects?

- Very Often
- Regularly
- Sometimes
Infrequently
Rarely

While in college, how often did you discuss course concepts with students outside of the classroom? 
Very Often
Regularly
Sometimes
Infrequently
Rarely

While in college, how often did you participate in intramural sports? 
Very Often
Regularly
Sometimes
Infrequently
Rarely

While in college, how often did you fail to complete homework on time? 
Very Often
Regularly
Sometimes
Infrequently
Rarely

While in college, how often did you meet with faculty during office hours? 
Very Often
Regularly
Sometimes
While in college, how often did you feel that you didn't have time to study due to family responsibilities?  
- Very Often
- Regularly
- Sometimes
- Infrequently
- Rarely

While in college, how often did you feel you didn't have time to study due to job responsibilities?  
- Very Often
- Regularly
- Sometimes
- Infrequently
- Rarely

While in college, how often were you a guest in a professor's home?  
- Very Often
- Regularly
- Sometimes
- Infrequently
- Rarely

While in college, how often did you vote in student elections?  
- Very Often
- Regularly
- Sometimes
- Infrequently
- Rarely

**While in college, how often did you meet with faculty outside of class or office hours?**
- Very Often
- Regularly
- Sometimes
- Infrequently
- Rarely

**While in college, how often did you tutor another college student?**
- Very Often
- Regularly
- Sometimes
- Infrequently
- Rarely

**While in college, how often did you study with other students?**
- Very Often
- Regularly
- Sometimes
- Infrequently
- Rarely

**While in college, which of the following did your professors provide you with? (check all that apply) **
- encouragement to pursue graduate or professional study
- opportunity to work on a research project with a faculty member
advice or guidance about your college program
respect (treated you like a colleague or peer)
emotional support and encouragement
a letter of recommendation
assistance to improve your study skills
negative feedback about your academic work
intellectual challenge and stimulation
an opportunity to discuss coursework outside of class

While in college, did you use services at the Tutoring Center or Academic Support Services?

☐ Yes
☐ No

Did you attend the new student orientation program when you first enrolled?

☐ Yes
☐ No

Did you consider yourself socially engaged in the life of the college? (i.e. where you active in campus activities, social programming, etc.)

☐ Yes
☐ No

Did you establish a social support system in college?

☐ Yes
☐ No

Do you feel your financial situation limited your ability to succeed in college?

☐ Yes
☐ No
Please list the top reasons you believe you successfully completed college:

Thank you for taking the time to complete this survey. Your participation is greatly appreciated as we work to determine the most influential factors in your successful completion of a college degree.

College Student Survey, Higher Education Research Institute, University of California, Los Angeles, California 90095, http://www.geis.ucla.edu/HERI/css_survey.html
Appendix B
Survey Cover Letter

Dear Berea College Graduate,

Thank you for taking the time to complete this quick online survey. My name is Ronnie Nolan and I am a Berea College graduate from the class of 1995. I am a doctoral student at North Carolina State University and am completing my studies for a doctor of education degree in higher education administration. The attached survey will provide information about first-generation college graduates and the motivating factors and barriers they face in completing a college degree. Your answers are strictly confidential and will not be used to identify you personally. They will only be used as a collective sample to identify factors that led to your successful completion of a college degree. Your decision whether or not to participate will not influence your present or future relations with Berea College. If you decide not to participate, please disregard this email and discontinue participation any time without prejudice.

As the first in my family to attend college, I know firsthand what challenges we often face as we pursue higher education. Please take just a few minutes to complete the survey below by clicking on the web site link. The link will take you to an online survey with a series of questions related to your experience while a student at Berea College. Please answer as accurately as possible, as the information we collect may be used to help other first-generation college students succeed in college. If you have any questions, please do not hesitate to contact me. You can reach me at 859-358-8434 or by e-mail at granolan517@yahoo.com. If you have any additional questions or concerns you can contact my Dissertation Chair, George Vaughan, Ph.D. at george_vaughan@ncsu.edu.

YOU ARE MAKING A DECISION WHETHER OR NOT TO PARTICIPATE. YOUR ACCEPTANCE INDICATES THAT YOU HAVE DECIDED TO PARTICIPATE HAVING READ THE INFORMATION PROVIDED ABOVE.

Thank you for your time.

Ronnie Nolan, ‘95
Appendix C

Ronnie Nolan Curriculum Vitae

RONNIE NOLAN
131 McDowell Road Apt. 1
Lexington, KY 40502

(859)358-8434-Cellular (859) 622-6551-Office
ronnie.nolan@eku.edu

OBJECTIVE:

To obtain a challenging position in higher education which utilizes my personal and organizational skills along with my previous leadership, education and planning experience to positively impact the lives of college students.

EDUCATION:

NORTH CAROLINA STATE UNIVERSITY Defense Date: July 22, 2005
Raleigh, North Carolina
Doctor of Education in Higher Education Administration

UNIVERSITY OF KENTUCKY December 1997
Lexington, Kentucky
Master of Science in Educational Policy Studies and Evaluation

BEREA COLLEGE May 1995
Berea, Kentucky
Bachelor of Arts in Political Science Minor: Black Studies

CAREER SUMMARY

Ten years of diverse and progressive experience in private four-year institutions, ranging in size from 500-1600 students. Extensive background in student involvement, leadership development, retention, counseling, student development and residence life. Experience and knowledge in several areas of student services: financial aid, admissions, student activities, residence life, orientation, leadership development, community service, arts and lecture series and college level teaching experience in leadership and general studies.
PROFESSIONAL EXPERIENCE

**Associate Director of Kentucky Educational Collaborative for State Agency Children (KECSAC)**
Eastern Kentucky University  October 2004-Present
Assist in the compliance, consultative services, technical budget management and implementation of the annual plan and supervise office operations. Ensure compliance with all appropriate state regulations, provide consultation to school districts, programs, and other agencies and coordinate the annual program of professional development activities. Provide management of a state-wide budget totaling more than $10 million to ensure the effective operation of the program. Serve in the absence of the KECSAC Director.

**Academic Advisor**
University of Kentucky  July 2004-October 2004
Temporary Contractual position to provide academic advising services to new students in the College of Arts & Sciences. Served as lead retention consultant for the College and worked with team members to begin the development of a student retention plan.

**Dean of Students-Interim**
Peace College, Raleigh, NC  April 2003-June 2003
Served as Interim Dean of Students and Chief Student Services Officer reporting to the President of the College. Responsible for budgeting, planning, evaluation and supervision of student services division comprised of student development, residence life, judicial affairs, athletics, spiritual life, counseling, and health services.

**Director of Student Development**
Peace College, Raleigh, NC  May 1999-May 2004
Responsible for the direction of the following areas in the division of student services: orientation programs for new students and families, student activities, leadership development programs, community service, special event weekends and clubs and organizations. Also serve as advisor to the student government association and yearbook. Supervise professional programming specialists in student activities and community service.

**Director of Student Activities and Orientation Programs**
Midway College, Midway, KY  January 1998-May 1999
Responsible for developing and implementing social, educational and cultural programs which facilitate a co-curricular education. Also, responsible for advising all campus clubs and organization while initiating leadership development and budgeting workshops. Further duties include developing a comprehensive orientation program for first year students that is inclusive of all student populations. Also served as editor and advisor for the Midway College “Pathways” Yearbook. Officially designated as the college’s representative in all
matters relating to international students attending the college. Duties include establishing and promoting a relationship with the Immigration and Naturalization Service. Also, serve as the contact person and advisor for all international students on campus.

**Arts & Lecture Series Coordinator**  
Midway College, Midway, KY  
January 1998-May 1999  
Responsible for all aspects as related to planning, organizing and implementing a series of Arts & Lecture events on campus for the college community. Further duties include taking attendance, grade calculation and grade reporting to College Registrar. Develop, publish and post all public relations materials for Series. Assign alternative assignments when needed and grade reports. Supervise an Assistant Arts & Lecture Coordinator.

**Financial Aid Officer**  
Midway College, Midway, KY  
June 1997-March 1998  
Responsibilities include administering Federal, State and institutional financial aid to students in the Day Program. Also, work with students to resolve crisis situations revolving around financial aid while awarding aid based on definitive institutional parameters.

**Youth Counselor**  
Metro Alternative Shelter Housing (M.A.S.H.), Lexington, Kentucky  
July 1996-June 1998  
Responsible for supervising the general operation of the program while demonstrating the ability to understand and communicate with adolescents experiencing emotional and behavioral problems. Also, develop and implement weekly programs dealing with alcohol/drug abuse, date rape, HIV/AIDS and other related issues.

**Caseworker**  
September 1995-July 1996  
AmeriCorps Appalachian Self-Sufficiency Program  
Served as a mentor to 30 welfare dependent families while identifying and eliminating barriers to self-sufficiency through career development, job readiness training, and assistance is setting and obtaining educational goals.

**Residence Hall Assistant Director**  
June 1993-May 1995  
Office of Student Life, Berea College, Berea, Kentucky  
Duties included supervising and counseling 100 first year students while implementing training and life-skill sessions. Further responsibilities included programming social, cultural and educational events, as well as recruiting and supervising a student staff.

**TEACHING EXPERIENCE**
Foundations of Leadership (LEA 101): Serves as the foundation course for the leadership studies major at Peace College. Course is designed to help students understand and develop their own individual leadership style.

Adventures for Women in Learning (SDV 101): Required for all first-year students at Peace College. Students meet other first-year students and explore academic, social, and spiritual issues important in their lives. Topics include: Personal Transition, Academic Transition, Wellness and Personal Responsibility, Relationships, and Career Planning.

COMPUTER SKILLS

Windows/PowerPoint/Excel/Adobe PageMaker/YearTech/JenzebarEX R8 Student Life Module/Microsoft Outlook/SAS

AWARDS

Recipient, Student Life & Labor Award, Berea College
Recipient, Mortar Board Honor Society Outstanding Leadership Award
Recipient, Brushy Fork Leadership Institute
Recipient, AmeriCorps National Service Program Award

ACTIVITIES

Member, Berea College Student Government Association
Member, AmeriCorps National Service Program
Advisor, Midway College SGA
Advisor, Midway College Pathways Yearbook
Advisor, Midway College Eagles View newspaper
Advisor, Peace College Student Recreation Association
Advisor, Peace College Student Government Association
Advisor, Peace College Lotus Yearbook
Advisor, Peace College Rotaract Service Organization
Member, North Carolina State University Graduate Student Association
Member, North Carolina Campus Compact Service Organization
Member, North Carolina Leadership Consortium

INSTITUTIONAL SERVICE

Chair, Peace College New Student Orientation Committee
Chair, Peace College Programming Team
Chair, Peace College Housing Exemption Review Committee
Chair, Peace College Martin Luther King, Jr. Committee
Member, Peace College International Studies Committee
Member, Peace College External Relations Team Committee
Member, Peace College Leadership Major Development Team
Member, Peace College Mission Planning Team
Member, Peace College Strategic Planning Team
Member, Peace College SACS Reaccreditation Team
Member, Peace College Facilities Planning Team
Member, Peace College Student Retention Team
Chair, Midway College Arts & Lecture Committee
Chair, Midway College Orientation Committee
Member, Midway College Retention Committee

GRANT SUPPORT

Recipient, North Carolina Martin Luther King, Jr. Commission Grant ($2,000)
Grant to support programming that incorporates Dr. King’s mission of impartial love and service regardless of race, ethnicity or creed. Researched and wrote entire grant application on behalf of the student services division.

Recipient, Wake County Solid Waste Recycling Grant ($10,000)
Grant provided to support the implementation of a campus wide recycling program and waste composting project. Was a member of the student services committee who researched and wrote the grant application.

Recipient, North Carolina Campus Compact AmeriCorps/VISTA ($18,000-25,000 Estimate for Market Value)
Grant provided to support one full-time AmeriCorps/VISTA professional position to coordinate service opportunities for our students.

ORGANIZATIONAL MEMBERSHIP

National Orientation Directors Association
North Carolina College Personnel Association
NCCPA Leadership Consortium
National Association for Campus Activities
College Personnel Association of Kentucky
America Educational Research Association
National Association of Student Personnel Administration
American College Personnel Association

PRESENTATIONS

“Just Your Style: A Leadership Style Inventory” Peace College Student Government Association, Raleigh, NC –2003


“Why Can’t We Just Get Along? A Look at Organizational Effectiveness” North Carolina LEAD Conference, Raleigh, NC –2002

“Servant Leadership” Women in Leadership Development Conference, Raleigh, NC -2002

“Why Doesn’t Anyone Come to My Event?: Effective Program Planning and Implementation” Resident Assistant Training, Peace College, Raleigh, NC -2002


“Down The Drain: Effective and Creative Publicity” Resident Assistant and Student Government Training, Peace College, Raleigh, NC -2001


REFERENCES AVAILABLE UPON REQUEST
Appendix D

Results of Survey
Thank you for taking the time to complete this online survey form. Your answers to the following questions will be used in research to help determine factors that led to your successful completion of a college degree. Your individual answers to the questions will not be used and you will not be identified individually at any point in this research.

COUNT: 0 of 35 (0.0%)

No Responses To Chart...

Please indicate your e-mail address (this email address will not be used for any future contact).

COUNT: 35 of 35 (100.0%) MEAN: 0 (No Numerical Responses) STDEV: 0

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Are you the first person in your immediate family (i.e. mother, father) to graduate from College?
COUNT: 35 of 35 (100.0%) MEAN: 1.200 (Scale: 1 - Yes to 2 - No) STDEV: 0.408

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<thead>
<tr>
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<td>No</td>
<td>7 (20%)</td>
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Where did you live while enrolled at Berea College?
COUNT: 35 of 35 (100.0%) MEAN: 3.000 (Scale: 1 - With family or relatives to 5 - Other) STDEV: 0.420

Survey Report: First-Generation College Graduate Survey

With family or relatives: 1 (2.9%)
Other private home, apartment or room: 0 (0%)
College residence hall: 32 (91.4%)
Other campus housing: 2 (5.7%)

Was Berea College your (select only one)
COUNT: 35 of 35 (100.0%) MEAN: 1.295 (Scale: 1 - First Choice of Colleges to 4 - Less than third choice) STDEV: 0.867

First Choice of Colleges: 26 (90%)
Second Choice of Colleges: 5 (14.3%)
Third Choice of Colleges: 1 (2.9%)
Less than third choice: 1 (2.9%)

During high school (grades 9-12) how many years did you study each of the following:
COUNT: 0 of 35 (0.0%)
No Responses To Chart...

English
COUNT: 35 of 35 (100.0%) MEAN: 5.943 (Scale: 1 - None to 7 - 5 or more years) STDEV: 0.416

None: 0 (0%)
1/2 year: 0 (0%)
1 year: 0 (0%)
2 years: 1 (2.9%)
3 years: 1 (2.9%)
4 years: 32 (91.4%)
5 or more years: 1 (2.9%)

Mathematics
COUNT: 35 of 35 (100.0%) MEAN: 4.800 (Scale: 1 - 1/2 year to 7 - None) STDEV: 0.632

1/2 year: 0 (0%)
1 year: 0 (0%)
2 years: 2 (5.7%)
3 years: 5 (14.3%)
4 years: 26 (74.3%)
5 or more years: 2 (5.7%)
None: 0 (0%)

Foreign Language
COUNT: 35 of 35 (100.0%) MEAN: 3.571 (Scale: 1 - 1/2 year to 7 - None) STDEV: 1.243

- 1/2 year: 1 (2.9%)
- 1 year: 3 (8.6%)
- 2 years: 18 (51.4%)
- 3 years: 4 (11.4%)
- 4 years: 7 (20%)
- 5 or more years: 1 (2.9%)
- None: 1 (2.9%)

Physical Science
COUNT: 35 of 35 (100.0%) MEAN: 4.343 (Scale: 1 - 1/2 year to 7 - None) STDEV: 1.187

- 1/2 year: 1 (2.9%)
- 1 year: 2 (5.7%)
- 2 years: 8 (22.9%)
- 3 years: 18 (51.4%)
- 4 years: 8 (22.9%)
- 5 or more years: 1 (2.9%)
- None: 1 (2.9%)

History/American Government
COUNT: 35 of 35 (100.0%) MEAN: 3.943 (Scale: 1 - 1/2 year to 7 - None) STDEV: 1.211

- 1 year: 0 (0%)
- 2 years: 10 (28.6%)
- 3 years: 8 (22.9%)
- 4 years: 11 (31.4%)
- 5 or more years: 1 (2.9%)
- None: 1 (2.9%)

Computer Science
COUNT: 35 of 35 (100.0%) MEAN: 2.971 (Scale: 1 - None to 7 - 5 or more years) STDEV: 1.485

Survey Report: First-Generation College Graduate Survey

Arts/Music
COUNT: 35 of 35 (100.0%) MEAN: 3.514 (Scale: 1 - None to 7 - 5 or more years) STDEV: 1.837

What is the highest academic degree you have obtained?
COUNT: 35 of 35 (100.0%) MEAN: 2.171 (Scale: 1 - Associate Degree to 6 - Other) STDEV: 0.362

Did you participate in community service events at Berea College while enrolled?
COUNT: 35 of 35 (100.0%) MEAN: 1.286 (Scale: 1 - Yes to 2 - No) STDEV: 0.438

Did you participate in a research project with a faculty member while enrolled?
COUNT: 35 of 35 (100.0%) MEAN: 1.857 (Scale: 1 - Yes to 2 - No) STDEV: 0.355

What is the highest level of formal education obtained by your parents prior to your graduation from Berea College?
COUNT: 35 of 35 (100.0%) MEAN: 2.500 (Scale: 1 - Elementary School or less to 8 - Graduate Degree) STDEV: 0.812

- Elementary School or less: 4 (11.4%)
- Some high school: 8 (22.9%)
- High school graduate: 22 (62.9%)
- Postsecondary School other than college: 0 (0%)
- Some College: 1 (2.9%)
- College Degree: 0 (0%)
- Some graduate school: 0 (0%)
- Graduate Degree: 0 (0%)

In deciding to go to college, how important to you was each of the following reasons?
COUNT: 0 of 35 (0.0%)
No Responses To Chart...

Parents wanted me to go
COUNT: 35 of 35 (100.0%) MEAN: 2.400 (Scale: 1 - Highly Important to 5 - Highly Unimportant) STDEV: 1.053

- Highly Important: 7 (20%)
- Important: 13 (37.1%)
- Neutral: 11 (31.4%)
- Unimportant: 2 (5.7%)
- Highly Unimportant: 2 (5.7%)

I could not find a job
COUNT: 35 of 35 (100.0%)

- Highly Important: 3 (8.6%)
- Important: 2 (5.7%)
- Neutral: 8 (22.9%)
- Unimportant: 13 (37.1%)
- Highly Unimportant: 9 (25.7%)

Wanted to get away from home
COUNT: 35 of 35 (100.0%) MEAN: 3.057 (Scale: 1 - Highly Important to 5 - Highly Unimportant) STDEV: 1.327

To be able to get a better job upon graduation
COUNT: 35 of 35 (100.0%) MEAN: 1.400 (Scale: 1 - Highly Important to 5 - Highly Unimportant) STDEV: 0.604

Gain a general education
COUNT: 35 of 35 (100.0%) MEAN: 1.429 (Scale: 1 - Highly Important to 5 - Highly Unimportant) STDEV: 0.556

Nothing better to do
COUNT: 35 of 35 (100.0%) MEAN: 4.057 (Scale: 1 - Highly Important to 5 - Highly Unimportant) STDEV: 1.182

Make more money
COUNT: 35 of 35 (100.0%) MEAN: 1.971 (Scale: 1 - Highly Important to 5 - Highly Unimportant) STDEV: 0.965

Learn more about things that interest me
COUNT: 35 of 35 (100.0%) MEAN: 1.457 (Scale: 1 - Highly Important to 5 - Highly Unimportant) STDEV: 0.561

Prepare for graduate or professional school
COUNT: 35 of 35 (100.0%) MEAN: 2.171 (Scale: 1 - Highly Important to 5 - Highly Unimportant) STDEV: 0.954

Get training for a specialized career
COUNT: 35 of 35 (100.0%) MEAN: 2.668 (Scale: 1 - Highly Important to 5 - Highly Unimportant) STDEV: 0.519

Find purpose in life
COUNT: 35 of 35 (100.0%) MEAN: 2.088 (Scale: 1 - Highly Important to 5 - Highly Unimportant) STDEV: 0.742

Rate yourself on each of the following traits in comparison with the average person in college.
COUNT: 0 of 35 (0.0%)
No Responses To Chart...

Academic Ability
COUNT: 35 of 35 (100.0%) MEAN: 2.200 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.594

Artistic Ability
COUNT: 35 of 35 (100.0%) MEAN: 3.029 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.887

Survey Report: First-Generation College Graduate Survey

Compassion
COUNT: 35 of 35 (100.0%) MEAN: 2.029 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.785

- Superior: 8 (22.9%)
- Somewhat Superior: 20 (57.1%)
- Neutral: 5 (14.3%)
- Somewhat Inferior: 2 (5.7%)
- Inferior: 0 (0%)

Computer Skills
COUNT: 35 of 35 (100.0%) MEAN: 2.371 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.731

- Superior: 2 (5.7%)
- Somewhat Superior: 21 (60%)
- Neutral: 9 (25.7%)
- Somewhat Inferior: 3 (8.6%)
- Inferior: 0 (0%)

Cooperativeness
COUNT: 35 of 35 (100.0%) MEAN: 2.057 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.725

- Superior: 6 (17.1%)
- Somewhat Superior: 23 (65.7%)
- Neutral: 4 (11.4%)
- Somewhat Inferior: 2 (5.7%)
- Inferior: 0 (0%)

Courage
COUNT: 35 of 35 (100.0%) MEAN: 2.171 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.822

Survey Report: First-Generation College Graduate Survey

Creativity
COUNT: 35 of 35 (100.0%) MEAN: 2.200 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.833

Drive to Achieve
COUNT: 35 of 35 (100.0%) MEAN: 1.943 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.988

Emotional Health
COUNT: 35 of 35 (100.0%) MEAN: 2.543 (Scale: 1 - Superior to 5 - Inferior) STDEV: 1.057

Forgiveness
COUNT: 35 of 35 (100.0%) MEAN: 2.029 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.707

Survey Report: First-Generation College Graduate Survey

Generosity
COUNT: 35 of 35 (100.0%) MEAN: 1.914 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.781

Kindness
COUNT: 35 of 35 (100.0%) MEAN: 1.771 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.596

Leadership Ability
COUNT: 35 of 35 (100.0%) MEAN: 2.343 (Scale: 1 - Superior to 5 - Inferior) STDEV: 1.056

Mathematical Ability
COUNT: 35 of 35 (100.0%) MEAN: 2.943 (Scale: 1 - Superior to 5 - Inferior) STDEV: 1.269

Physical Health
COUNT: 35 of 35 (100.0%) MEAN: 2.800 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.948

Public Speaking Ability
COUNT: 35 of 35 (100.0%) MEAN: 2.629 (Scale: 1 - Superior to 5 - Inferior) STDEV: 1.114

Self-Confidence (Intellectual)
COUNT: 35 of 35 (100.0%) MEAN: 2.086 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.742

Self-Confidence (Social)
COUNT: 35 of 35 (100.0%) MEAN: 2.486 (Scale: 1 - Superior to 5 - Inferior) STDEV: 1.121

Survey Report: First-Generation College Graduate Survey

Self-understanding
COUNT: 35 of 35 (100.0%) MEAN: 2.457 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.980

Spirituality
COUNT: 35 of 35 (100.0%) MEAN: 2.543 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.886

Time Management
COUNT: 35 of 35 (100.0%) MEAN: 2.614 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.951

Understanding of Others
COUNT: 35 of 35 (100.0%) MEAN: 2.143 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.733

Writing Ability
COUNT: 35 of 35 (100.0%) MEAN: 2.343 (Scale: 1 - Superior to 5 - Inferior) STDEV: 0.998

Were you concerned about your ability to finance your college education?
COUNT: 35 of 35 (100.0%) MEAN: 2.143 (Scale: 1 - No (Confident that you had sufficient funds) to 3 - Major (Didn't think you could finance your education)) STDEV: 0.733

While enrolled in college did you (mark all that apply):
COUNT: 35 of 35 (100.0%)
Survey Report: First-Generation College Graduate Survey

While enrolled in college did you (mark all that apply):

COUNT: 35 of 35 (100.0%)

- withdraw from school 0 (0%)
- enroll in a honors course or advanced courses 3 (8.6%)
- participate in leadership training 15 (42.9%)
- participate in a study-abroad program 13 (37.1%)
- develop a friendship with a peer 32 (91.4%)
- engage in dialog with a professor outside of class regularly 24 (68.6%)

While in college, how often did you work on independent study projects?
COUNT: 35 of 35 (100.0%) MEAN: 3.657 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 1.083

- Very Often 0 (0%)
- Regularly 13 (37.1%)
- Sometimes 5 (14.3%)
- Infrequently 6 (17.1%)
- Rarely 11 (31.4%)

While in college, how often did you discuss course concepts with students outside of the classroom?
COUNT: 35 of 35 (100.0%) MEAN: 2.200 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 0.901

- Very Often 9 (25.7%)
- Regularly 12 (34.3%)
- Sometimes 12 (34.3%)
- Infrequently 2 (5.7%)
- Rarely 0 (0%)

While in college, how often did you participate in intramural sports?
COUNT: 35 of 35 (100.0%) MEAN: 3.857 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 1.478

- Very Often 4 (11.4%)
- Regularly 4 (11.4%)

While in college, how often did you fail to complete homework on time?
COUNT: 35 of 35 (100.0%) MEAN: 3.888 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 1.278

Percent

While in college, how often did you meet with faculty during office hours?
COUNT: 35 of 35 (100.0%) MEAN: 2.914 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 1.040

Percent

While in college, how often did you feel that you didn’t have time to study due to family responsibilities?
COUNT: 35 of 35 (100.0%) MEAN: 4.400 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 0.812

Percent

While in college, how often did you feel you didn’t have time to study due to job responsibilities?
COUNT: 35 of 35 (100.0%) MEAN: 4.171 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 1.014

Percent

While in college, how often were you a guest in a professor's home?
COUNT: 35 of 35 (100.0%) MEAN: 3.943 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 0.838

While in college, how often did you vote in student elections?
COUNT: 35 of 35 (100.0%) MEAN: 2.600 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 1.376

While in college, how often did you meet with faculty outside of class or office hours?
COUNT: 35 of 35 (100.0%) MEAN: 3.257 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 1.039

While in college, how often did you tutor another college student?
COUNT: 35 of 35 (100.0%) MEAN: 3.687 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 1.187

Survey Report: First-Generation College Graduate Survey

While in college, how often did you study with other students?
COUNT: 35 of 35 (100.0%) MEAN: 2.400 (Scale: 1 - Very Often to 5 - Rarely) STDEV: 0.976

While in college, which of the following did your professors provide you with? (check all that apply)
COUNT: 35 of 35 (100.0%)

While in college, did you use services at the Tutoring Center or Academic Support Services?
COUNT: 34 of 35 (97.1%) MEAN: 1.559 (Scale: 1 - Yes to 2 - No) STDEV: 0.504

Did you attend the new student orientation program when you first enrolled?
COUNT: 35 of 35 (100.0%) MEAN: 1.029 (Scale: 1 - Yes to 2 - No) STDEV: 0.189

Did you consider yourself socially engaged in the life of the college? (i.e. where you active in campus activities, social programming, etc.)
COUNT: 35 of 35 (100.0%) MEAN: 1.228 (Scale: 1 - Yes to 2 - No) STDEV: 0.428

Did you establish a social support system in college?
COUNT: 35 of 35 (100.0%) MEAN: 1.171 (Scale: 1 - Yes to 2 - No) STDEV: 0.382

Do you feel your financial situation limited your ability to succeed in college?
COUNT: 35 of 35 (100.0%) MEAN: 1.971 (Scale: 1 - Yes to 2 - No) STDEV: 0.169

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<td>I didn’t want to fail in my parent’s eyes. More money earned with a degree than without one. I had the drive to complete college.</td>
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<td>1) The excellence of my instructors 2) The tremendous support of friends and family 3) My own ambition and passion for learning</td>
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<td>1. Set Personal Goals. 2. Excellent outside encouragement and support (family &amp; friends) 3. Offered an outstanding opportunity through the college I attended.</td>
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<td>1. I worked hard and was determined not to give up like some members of my family said I would. 2. I wanted to make my family proud, and also myself. 3. I wanted to be able to take care of myself without being dependant on someone else.</td>
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<td>Willpower to overcome all odds and trials to succeed in life and in college.</td>
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<td>1. I didn’t give my self any other option. 2 - 10. Study, Study, Study.</td>
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<td>I had a strong family support system along with a love of Berea College and the encouragement of many professors and labor supervisors. I was determined to attain a prestigious degree from Berea College and with the support of my family, professors, and friends, I was able to do so.</td>
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<td>Support from family, friends, and peers Hard work and determination</td>
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<td>God and the church I attended while I was at Berea, My friends who supported me and the teachers who fanned and encouraged me to follow my dreams despite my circumstances.</td>
</tr>
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<td>01:43:00</td>
<td>E1B3-41E3</td>
<td></td>
</tr>
<tr>
<td>2005-04-13</td>
<td>US26650D-B0DD</td>
<td>Pity, luck, and the thought of having me there anymore probably scared people</td>
</tr>
<tr>
<td>02:03:00</td>
<td>E1B3-4181</td>
<td></td>
</tr>
<tr>
<td>2005-04-13</td>
<td>US8A144CA-B0DD</td>
<td>A drive to succeed and do better in life.</td>
</tr>
<tr>
<td>07:57:00</td>
<td>E1B3-41B4</td>
<td></td>
</tr>
<tr>
<td>2005-04-13</td>
<td>US833309-B0DD</td>
<td>1) The Faculty at Berea College 2) The Atmosphere of the Campus 3) The Atmosphere of the City of Berea 4) The support systems and groups that were in place 5) My Friends 6) Spiritually 7) The Encouragement from College Administration/Other Staff 8) The Berea College Labor Program 9) Family encouragement 10) Hometown encouragement</td>
</tr>
<tr>
<td>08:25:00</td>
<td>E1B3-4171</td>
<td></td>
</tr>
<tr>
<td>2005-04-13</td>
<td>US3C9028-B0DD</td>
<td>Support from friends, family, professors and work supervisors. Also, a strong sense of determination helped me to keep going.</td>
</tr>
<tr>
<td>09:34:00</td>
<td>E1B3-41C4</td>
<td></td>
</tr>
<tr>
<td>2005-04-13</td>
<td>U8B5B8F3-B0DD</td>
<td>Because I never forgot that my main objective for being at college was to get an education, I changed my major when I realized it was not fulfilling and chose one that made me happy and I found enjoyable, and I</td>
</tr>
<tr>
<td>09:42:00</td>
<td>E1B3-4174</td>
<td></td>
</tr>
</tbody>
</table>

Please list the top reasons you believe you successfully completed college:
COUNT: 32 of 35 (91.4%) MEAN:0 (No Numerical Responses) STDDEV:0

surrounded myself with a close circle of great friends that supported me emotionally through all my trials both personal and school related.

2005-04-13  U8BCC0424-B0D0-09:44:00.0  E1B3-4152
I never thought about doing anything else but completing school...there were no other options for me personally. I wanted a good job. My family supported me through school

2005-04-13  U8BDB9331-B0D0-09:59:00.0  E1B3-41D7
1. Intellectual capability 2. Self-motivation 3. Promise of a better future 4. Recognition that I was blessed to get a chance to be educated 5. Poverty in family—desired to help out

2005-04-13  U8BD98F390-80D0-10:01:00.0  E1B3-41B6
Great network of friends, family, professors, and coaches I have drive and motivation to succeed I am now pursuing graduate study

2005-04-13  USC28F04A-B0D0-11:28:00.0  E1B3-41B1
My friends and family encouraged me tremendously. My desire to be a teacher also was a major inspiration.

2005-04-13  USD45DF07-B0D0-16:37:00.0  E1B3-41A3
Desire, hard work, and motivation. Strong desire to attend graduate school. Desire to get graduate degree. Love of learning and intellectual stimulation. Berea dedication to students created impetus to learn.

2005-04-13  USE54F59-B0D0-21:38:00.0  E1B3-41C4
Determination, family support, drive to succeed and support from my labor position supervisors and staff.

2005-04-15  U44E5D51A-B0D0-01:49:00.0  E1B3-4149
Support of family, friends, co-workers and professors. Drive within myself to complete my degree.

2005-04-15  U4784FED0-B0D0-16:22:00.0  E1B3-41F5
Motivation to have a different life for myself.

2005-04-15  U48970B20-B0D0-21:21:00.0  E1B3-41D2
My parents encouragement. Wanted to have the satisfaction. Wanted to fulfill my life as a student and go to graduate school. Good job.

2005-04-15  U4908388-B0D0-23:20:00.0  E1B3-4194
Determination to be the first in my family to get a college education and succeed.

2005-04-16  U4D72A936-B0D0-20:00:00.0  E1B3-41B9
Personal Drive to Achieve

2005-04-17  U4D72A936-B0D0-21:19:00.0  E1B3-41BB
Positive attitude, self assurance, personal fulfillment, and drive to achieve

2005-04-18  U550DFC4-B0D0-07:26:00.0  E1B3-4144
I knew that this was something that I had to do for myself.

2005-05-07  US84C789A-B0D0-18:38:00.0  E1B3-414E
"It was important to me, so I did it. "I was more than capable. "I had the support of my parents and grandparents.

Thank you for taking the time to complete this survey. Your participation is greatly appreciated as we work to determine the most influential factors in your successful completion of a college degree.

COUNT: 0 of 35 (0.0%)