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Serving students from a distance: A content analysis of persistent characteristics in distance learners

Ann L. Sorensen
College of William & Mary - School of Education

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SERVING STUDENTS

**SERVING STUDENTS FROM A DISTANCE:
A CONTENT ANALYSIS OF PERSISTENT CHARACTERISTICS
IN DISTANCE LEARNERS**

A Dissertation

Presented to

The Faculty of the School of Education

The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

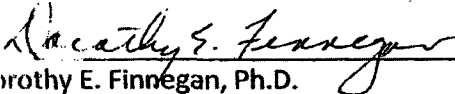
by
Ann L. Sorensen
May 2010

**SERVING STUDENTS FROM A DISTANCE:
A CONTENT ANALYSIS OF PERSISTENT CHARACTERISTICS
IN DISTANCE LEARNERS**


by

Ann L. Sorensen


Approved May 2010 by



Dorothy E. Finnegan, Ph.D.
Chairperson of Doctoral Committee



Michael F. DiPaola, Ed.D.



Martha S. Sharpe, Ed.D.

SERVING STUDENTS

Dedication

There are so many people who have had a significant impact on my progress as I have worked towards the goal of completing my doctoral degree. I never would have completed the journey without the continued support and encouragement that I have received from my husband, Mike. He has put up with less than desirable behavior on my part but has continued to stand behind my efforts and has been instrumental in the final outcome.

My committee chairperson, Dot Finnegan, has also been an influential factor in the completion of this paper. Were it not for her patience and perseverance, especially towards the end, I would still be slowly chipping away rather than pushing forward.

My assistant, Amy Mayes, has also provided a significant amount of support and assistance through the process. She has encouraged me to move forward, picked up the slack when I lost direction, and provided valuable input.

This is only the tip of the iceberg when it comes to recognizing the invaluable assistance and support that I have received throughout the process. Thank you to my friends, family, and coworkers for whom I am eternally grateful.

TABLE OF CONTENTS

| <u>Chapter</u> | <u>Page</u> |
|--|--------------------|
| DEDICATION | ii |
| ABSTRACT | iv |
| CHAPTERS | |
| CHAPTER 1 – Introduction | 2 |
| CHAPTER 2 – Review of Literature | 11 |
| CHAPTER 3 – Methodology | 32 |
| CHAPTER 4 – Previous College Experiences | 38 |
| CHAPTER 5 – Current College Experiences | 67 |
| CHAPTER 6 – Conclusions and Recommendations | 118 |
| REFERENCES | 139 |
| APPENDICIES | |
| Appendix A – Content Analysis, Step 1 | 148 |
| Appendix B – Past Experiences | 151 |
| Appendix C – Current Comparison to Peers | 160 |
| Appendix D – Attitudes about being a College Student | 167 |
| Appendix E – Causes for Departure | 173 |
| Appendix F – Outside Activities | 178 |
| Appendix G – Causes for Leaving Studies | 181 |

SERVING STUDENTS

LIST OF TABLES

| | |
|---|----|
| Table 1 – Percentage of Online Nursing and Criminal Justice Students by Age and Ethnicity .. | 39 |
| Table 2 – Percentage of Persisters and Non-persisters by Age and Ethnicity | 40 |
| Table 3 – Percentage of Criminal Justice Persister and Non-persisters by Age and Ethnicity | 41 |
| Table 4 – Percentage of Nursing Persisters and Non-persisters by Age and Ethnicity | 42 |
| Table 5 – Academic Elements from the Past: Mean Responses to Commitment to Studies | 48 |
| Table 6 - Academic Elements from the Past: Mean Responses to Mental Challenges | 52 |
| Table 7 - Academic Elements from the Past: Mean Responses to Interaction with Institution .. | 56 |
| Table 8 - Academic Elements from the Past: Mean Responses to Outside Social Activities | 58 |
| Table 9 – Personal Elements from the Past: Mean Responses to Family and Work Responsibilities | 62 |
| Table 10 – Personal Elements from the Past: Mean Responses to Emotional State | 64 |
| Table 11 – Current Comparison to Peers: Mean Responses to Academic Skills | 69 |
| Table 12 – Personal Attributes: Mean Responses to Organizational Skills | 73 |
| Table 13 – Personal Attributes: Mean Responses to Directional Issues | 75 |
| Table 14 – Personal Attributes: Mean Responses to Cognitive and Affective Issues | 77 |
| Table 15 – Personal Attributes: Mean Responses to Communication Issues | 79 |
| Table 16 – Personal Attributes: Mean Responses to Physical Issues | 80 |
| Table 17 – Positive Issues about being a College Student: Mean Responses to Commitment .. | 82 |
| Table 18 – Positive Issues about being a College Student: Mean Responses to Satisfaction ... | 87 |
| Table 19 – Negative Issues about being a College Student: Mean Responses to Disconnection | 89 |
| Table 20 – Negative Issues about being a College Student: Mean Responses to Feelings of Apathy | 93 |

SERVING STUDENTS

| | |
|---|-----|
| Table 21 – Persistence: Mean Responses to Commitment | 97 |
| Table 22 – Persistence: Mean Responses to Anticipated Disconnection | 100 |
| Table 23 – Academic Progress: Mean Responses to Satisfaction | 102 |
| Table 24 – Academic Progress: Mean Responses to Dissatisfaction | 103 |
| Table 25 – Academic Progress: Mean Responses to Academic Inability | 104 |
| Table 26 – Current Comparison to Personal Challenges: Mean Responses to Family | 106 |
| Table 27 – Outside Activities: Mean Responses to Academic Activities | 108 |
| Table 28 – Outside Activities: Mean Responses to Work | 111 |
| Table 29 – Predictions about Academic Success by Degree | 113 |
| Table 30 – Predictions about Academic Success by Degree: Persisters and Non-persisters | 115 |

**SERVING STUDENTS FROM A DISTANCE:
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ABSTRACT

Distance learning has experienced a noteworthy increase in both the number of institutions offering alternatives to traditional classroom instruction, and the number of students participating in the various distant modalities. Accompanying the increase of students utilizing distance learning is the subsequent increase in students leaving their studies before completion. These two opposing increases have elevated the need to address retention in distance learning and specifically, online distance learning. This study utilizes the results of a Transfer Student Survey administered to criminal justice and nursing online students between 2006 and 2008. Survey results were used to determine if specific traits of persisters and non-persisters could be identified, in an effort to shine light on potential services that could be utilized to reverse attrition.

This quasi-qualitative study of online distance learners revealed some characteristic differences between persisters and non-persisters as well as between the majors of study. Outcomes of the survey were subdivided by nursing persisters and non-persisters, criminal justice persisters and non-persisters, and aggregate persisters and non-persisters. This data was further scrutinized by frequency of response as well as by mean and median scores. From that point, differences that might not have been evident through quantitative review were able to be brought to the forefront. Consequential conclusions were then utilized to provide recommendations to the institution regarding services that could be beneficial to overcome areas of deficiency with the ultimate goal of improving retention among distance learners.

SERVING STUDENTS

Additionally, suggestions were made pertaining to the challenges experienced by the limitations of the Transfer Student Survey.

Further study of distance learners, particularly in varying majors, is needed to ascertain whether there is a connection between field of study and attrition. Furthermore, results of this study alluded to time constraints and lack of priority being placed on studies as potential causes of departure. Additional research of distance learners should be done that supports or disputes these findings.

ANN L. SORENSEN

SCHOOL OF EDUCATION

THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA

SERVING STUDENTS

**SERVING STUDENTS FROM A DISTANCE:
A CONTENT ANALYSIS OF PERSISTENT CHARACTERISTICS
IN DISTANCE LEARNERS**

Chapter I

Introduction

Distance education, that is, education that occurs between students and faculty who are geographically separated, opens educational opportunities to those who might not otherwise be able to participate. The Southern Association of Colleges and Schools (SACS) for purposes of accreditation, utilizes the following definition, "...formal educational process in which the majority of the instruction (interaction between students and instructors and among students) in a course occurs when students and instructors are not in the same place" (2010, p. 4). The United States Distance Learning Association defines distance learning as "the acquisition of knowledge and skills through mediated information and instruction" (Flores, 2006, p. 1). It reaches individuals in remote locations, shift workers, and those with time constraints due to other work and family obligations; in other words it makes education available to those who would normally not be able to pursue their education through traditional means (Chambers, 2004; Meyers, & Ostash, 2004). Although methods of delivery may differ in distance education, the overarching theme is still the same: it offers an alternative means for degree completion and educational opportunity regardless of geographical barriers. Distance education is not new to higher education; people have studied through correspondence since the Progressive Era (Kett, 1994). However, with the introduction of television in 1934 and the introduction of internet and web browsers in 1993, it has gained greater popularity and accessibility. A 2004 report by EduVentures, Inc. states nearly one million students took online courses in the United States in 2004, which was twice the number reported two years earlier (Carnevale, 2005).

SERVING STUDENTS

Distance learning has opened doors to students who previously had not been able to attend college. These new students are coming with new needs that have yet to be fully addressed. As stated by Bothel, “faculty are moving forward, technologies are improving, and student demand is increasing... but few changes are taking place in the university structure as a whole to accommodate the special needs of the distance learning students” (2001, p. 1). This population provides a unique challenge to educators because they rarely, if ever, have the opportunity to interact face-to-face with these students. This lack of physical interaction can create an “out of sight, out of mind” atmosphere and allow students to get lost in the processes. Whereas on-campus students meet face-to-face with the person from whom they need assistance, distance learners have to e-mail or call and rely on a response from the other end.

Persistence

The number of students pursuing higher education through distance learning has continued to increase as have the number of institutions offering educational opportunities through distance learning. A report by the National Center of Educational Statistics indicated that from 2004-2005, 88% of public, two-year institutions and 86% of four-year institutions offered some form of distance education courses (U.S. Dept. of Ed., NCES, 2006-005). This continued interest warrants enhanced studies to insure that the academic and support needs of the students are being addressed to guarantee that the students persist in their educational endeavors. Persistence in distance learning is important both to the success of the students as well as the successful continuation of program offerings for the institution. Yet, dropout rates in distance learning are higher than those for on-campus students (Willging & Johnson, 2004). Online students are twice as likely to dropout as on-campus students (Willging & Johnson, 2004).

SERVING STUDENTS

The decision of a student not to persist creates a multitude of problems and challenges for the student, the institution, and society as a whole. Leaving higher education before completing educational goals can significantly impact a person's employment opportunities and future potential. From an institutional standpoint, attrition negatively impacts revenue and creates challenges for institutions in establishing accurate budget predictions based on student enrollments (Parker, 2003). The ability to enhance student persistence becomes the responsibility of the institution for the fulfillment of student needs as well as for the stability of the institution. "If rate of completion could be enhanced, through better placement and counseling of distance education students, subsequent fiscal budgets could become more predictable" (Parker, 2003, p. 55).

From the National Center for Educational Statistics' (U.S. Department of Education) *The Condition of Education 2002*, we know that "Moderately and highly nontraditional students are more likely to participate in distance education" (2002, p. 10). According to the NCES definition, nontraditional students are those who have a least one of the following characteristics:

- Delay enrollment by not entering higher education in the same calendar year in which they finish high school
- Work full-time
- Attend school part-time for at least part of the academic year
- Have a GED or some other high school completion certificate other than a high school diploma
- Have dependents other than spouse
- Considered financially independent as established by financial aid guidelines
- Are a single parent. (U.S. Dept. of Ed., NCES, 2002-012, pp 2-3.)

Nontraditional students require different means of support in aiding their pursuit of higher education due to the varying challenges and outside obstacles with which they are confronted (Davis & Henry, 1997; Ryan & Dowling, 2003; LaPadula, 2003).

SERVING STUDENTS

The increased number of students entering higher education through distance learning coupled with the fact that many of these students are nontraditional creates a multitude of retention challenges that need to be addressed. One avenue to address these retention issues is to utilize current students who have persisted in distance learning programs and determine characteristics and skills that have allowed them to be successful.

The ability to retain students once they have entered higher education through distance learning continues to be a challenge. Providing support services and resources are one means of enhancing these students' potential but these resources are more of a bandage than a solution to the issue of retention. The best means of support can only be provided when the tools for success have been established. The tools for success can only be established when the common characteristics of persistent students have been identified.

Defining persistence has been a challenge as it has a variety of implications depending on the situation observed. A student who enters a course to enhance their skills or knowledge for employment or personal reasons may consider course completion as their definition of persistence whereas an institution may define persistence as graduation from a program of study. For purposes of this study, persistence is defined as continuous enrollment over two consecutive semesters. Enrollment can be full-time or part-time. Semesters are defined as fall and spring terms of 14 weeks.

Statement of the Problem

Distance learning programs continue to be an area of growing interest with increased numbers of institutions offering programs and students enrolling. However, studies show that retention rates in these programs tend to be lower than their on campus counterparts (Carr, 2000; Dietz-Uhler, Fisher, & Han, 2007; Frydenberg, 2007; Park, Bowman, Care, Edwards, & Perry,

SERVING STUDENTS

2008). The retention of students is important for the students, the institution, and society.

Utilizing resources to better understand and improve retention rates can only serve to benefit all of these groups.

The problem of this study is to discover and analyze any differences in the academic, social, and personal characteristics of persisters versus non-persisters in two distance learning majors to determine if additional support systems are warranted that might reduce the rate of attrition in distance learning. A qualitative analysis of the data from three years of an Old Dominion University survey of distance learners will ascertain the students' strengths and challenges that have driven their persistence decisions.

Research Questions

Based on the review of the literature, not much is known about common and consistent characteristics of students who persist in distance learning. In order to address the problem statement of this study, several research questions will guide this research:

1. What are the characteristics associated with both persisters and non-persisters?

Many researchers have attempted to determine the reasons why students leave education and specifically for the purpose of this study, distance education. However, these studies do not disaggregate the differences in characteristics between the persisters and non-persisters. The ability to distinguish characteristics that exist in persisters but not in non-persisters will provide insight into potential resources that can be provided to promote continuance in the non-persisters.

2. What are the motives, incentives, goals, and personal support systems of the persisters?

Bird and Morgan (2003) found the key theme of student persistence to be motivation. Rosemarie Menager-Beeley (2001), investigating student motivation and demographics as determinants of

SERVING STUDENTS

student persistence in two-year college students, determined that high task choice was a significant factor in a student's persistence in a course. However, as her study measured retention for a course completion of community college students, it has limited comparative value for four-year institutions, continuation in a program, and distance learning.

3. What types of academic factors inhibit non-persisters from continuing their education?

As students involved in the distance learning programs studied must have already completed a minimum of 24 credits, the decision to persist may be impacted more by the fact that the courses are distance courses than by the challenge of higher education coursework. Determining characteristics of non-persisters will provide insight into students who are challenged by this pedagogical delivery method.

4. Are support systems absent that could enable online students to continue with their education?

Determining areas that have challenged students can enlighten faculty and administration as to problems that can be reduced by the establishment of appropriate support mechanisms.

Purpose of the Study

It is important for institutions of higher education to be able to retain students in all programs of study. Distance learning is a growing area of educational delivery (Allen, I., & Seaman, J., 2003; Carnevale, D., 2005; Meyers, P. & Ostash, H., 2004; U.S. Dept. of Ed, NCES 2006), yet the retention rates for these students is lower than campus-based courses. Additional studies need to be conducted that address challenges faced by students in the continuation of their distance studies so that tools to retain these students can be developed. By reviewing the

SERVING STUDENTS

characteristics that differentiate persistent distance learners from non-persistent learners, recommendations for the development of resources to assist retention can be made.

The ability to retain students and meet students' needs develops stronger programs and encourages student success. The information gleaned from this study will benefit other institutions in identifying areas of challenge for online student persistence and enable conclusions to be drawn about distance learners in regards to the probability of continuance.

Limitations and Delimitations

Persisters are students who continue in their program of study until completion and non-persisters are those who withdraw from their studies. This study will qualitatively analyze the data gathered in the completion of surveys conducted with distance learning students from Old Dominion University between 2006 and 2008 to determine common themes and concerns between persisters and non-persisters. The qualitative analysis of the answers will provide detail on student experiences and challenges.

This study is delimited to the data derived from distance learning students who participated in a Transfer Student Survey at Old Dominion University (ODU). The survey was administered through the institution to students at the end of their first semester of attendance at the university between 2006 and 2008.

ODU provides several pedagogies of distance learning including online, televised, and video streamed offerings. In an effort to insure that all students under study were participating only in online modality, they will be selected from programs that provided this offering for the entire degree program. For this reason, students in this study were further delimited to criminal justice majors and registered nursing majors in a degree completion program. Nursing students who are involved in the online program are typically working at least part-time while attending

SERVING STUDENTS

which increases external distractions that may not exist in other programs. Additionally, criminal justice majors are just beginning study of the discipline where as the nursing students are Registered Nurses who are already tethered to the field and are expanding their knowledge of the field.

Thus, of the distance learning students who participated in the survey, the data from those who were enrolled in the online undergraduate nursing program or online undergraduate criminal justice program were disaggregated from the entire population. Their current status in the program was attained by the Office of Institutional Research and Assessment (OIRA) to determine whether they continued their studies (persisters) or whether they dropped out (non-persisters) before completing their degree.

One limitation of this data set is that some students will have left the institution to pursue their education at another institution. This means that although they appear to be a non-persister at the institution of study, they are still persisting in their educational endeavors. Additionally, some students may have stopped out for unforeseen reasons but intend to return to education at a later date. These two instances continue to be a problem in the study of persistence; the definition of persistence often remains ambiguous. For clarification and purposes of this study, students who continue to take courses with the institution or who complete the degree requirements of the institution during the period of time under review will be considered persisters. Students who withdraw from classes before completing the degree program they registered to follow will be considered non-persisters. This sample will enable conclusions to be drawn about students with the greatest similarity to other distance learners outside of ODU.

Required participation, that is, taking the survey, did not occur until after 2006. Therefore, the respondents in 2006 were self-motivated to participate. This difference could

SERVING STUDENTS

result in a greater number of persisters versus non-persisters contributing to the study as opposed to the numbers in the actual population. Additionally, the placement of a hold on a student account to insure participation may not be a motivator for a student who is planning to dropout of their studies limiting the number of non-persisters who participate.

Another limitation is that the decision of the student to persist or not may have been influenced by outside variables that have nothing to do with the study. For example, a student who would persist under normal circumstances may have to drop from the program because of illness. This student could well possess the characteristics of a persister when in fact they would be classified as a non-persister.

A further limitation of the study is that of the survey questions utilized for review. This survey was developed in 2002 and was based on the Freshman Student Survey used by the institution for over 10 years (Duggan, 2002). Questions were developed for transfer students to Old Dominion University and may not be appropriate for distance learning students in other institutions.

Finally, the study is further limited by the fact that the researcher is employed by the institution from which the data was procured. This employment exists within the department of distance learning which could create unintended bias in the interpretation of results.

Chapter 2

Review of Literature

In order to fully understand the development and importance of distance education, the history of the movement provides an overview of the introduction of distance learning and the emergence of new pedagogies to meet the needs of the population. The historical review further supports the premise that distance learning is not a trend but rather a proven and viable delivery alternative.

A Short History of Distance Learning

Moore and Kearsley (2005) describe five generations of distance learning: correspondence, broadcast radio and television, open universities, teleconferencing, and internet and web-based programs. As society and technology have progressed, so have the modalities of distance learning pedagogy.

Correspondence Schools

Early distance learning through correspondence schools provided the opportunity to reach students regardless of their location, but resulted in slow response time and minimal interaction as transmittal of information was completely dependent upon the postal system and eventually the occasional telephone conversation. Correspondence schools saw an increase in 1862 with the enactment of the first Morrill Act and the establishment of land-grant universities. “The Morrill Act’s democratic ideals directed that educational opportunity would be open for people from all backgrounds” (Moore & Kearsley, 2005, p. 26). This meant that institutions were providing for more and different students as well as providing different educational opportunities, such as agriculture, business, and home economics. An example of this was Cornell University’s program for women developed under the leadership of Martha Van Rensselaer. This program

SERVING STUDENTS

was established to reach farm wives in rural New York through a correspondence extension program in home economics. It began by offering three credit courses in the first year and within five years had an enrollment of 20,000 women.

Another example of education reaching a diverse adult learning population was that of Chautauqua. Established in 1874 in New York, the Chautauqua Institution created by John H. Vincent and Lewis Miller was developed to provide individuals, particularly women, with an opportunity for self-improvement. It was based in Protestantism and on a liberal education philosophy. Although it was started as a summer camp, it later expanded into a correspondence program and then held lectures in locations across the country throughout the year. Vincent created the year-round Chautauqua Literary and Scientific Circle (CLSC); a four-year correspondence course that included required readings in the areas of literature, history, sociology, and science (Scott, 2005). In the first year of operation, over 8,400 people enrolled. Four years later, 1,718 completed the required reading and exams and receiving a diploma (Chautauqua Institution, 2008). Today, the CLSC maintains the oldest book club in America, no longer requiring reading and exams as part of its membership requirements.

The International Correspondence Schools of Scranton, Pennsylvania was established in 1891 as a means to educate miners in mine safety. After a significant amount of mine accidents, miners were required to take and pass a safety exam that was too difficult for many of them based on their limited educational background. The ICS developed a program that trained and prepared the miners to successfully take the safety exam. The initial enrollment of 500 miners, increased to 190,000 students after eight years. The success of this ICS program led to the development of additional courses and programs and an increase of over 100,000 students per year. The intent of the program was to provide “practical men with a technical education”

SERVING STUDENTS

(Vaughan-Tucker, 2006, p. 350). Payment plans were established to enable a greater number of students the ability to participate. ICS is still in operation today under the name of Education Direct, although the number of students participating has significantly decreased. The offering of more technical programs through the community colleges and proprietary schools caused a decrease in the popularity of the program but an audience of students still benefit from the delivery of distance learning through this modality.

The Young Men's Christian Association (YMCA) is another early example of adult education programs offering services through correspondence. The YMCA formed the Extension Division in February 1920 primarily as a means to provide educational opportunities for former military men who were receiving funding from the YMCA's War Council. Courses provided by the Extension Division included vocational, agricultural, business, law, commercial art, engineering, and even high school and elementary level courses. In just two and a half years, the Extension Division was offering over 275 courses. They used the most up-to-date textbooks and the professors provided personal correspondence and guidance to the students. The philosophy of the program was to provide quality information that would enable students to progress in their employment careers. The slogan of the YMCA program, as stated in the 1922 YMCA catalog, *Your Bigger Self*, was "*The most service for the least money*" (p. 9). Although initially the program met with interest and success, the Y's correspondence effort was short lived and the program dissolved when the funding for the War Council ran out (*Your Bigger Self*, 1922).

SERVING STUDENTS

Radio Schools

In January of 1929, The Ohio School of the Air made its debut through the radio airwaves (Saettler, 1990). The program was founded by Benjamin Darrow and funded by the National Committee of Education (NCE) also known as the Payne Fund (Ohio School of the Air, 2008). The initial year provided drama, theater, history, and broadcasts of the civil government. Subsequent years experienced a more seasoned staff, the publication of the *Ohio School of the Air Courier* that provided teachers with a schedule of broadcasts, and the first state and national Radio Institutes were held. Despite its apparent success and increase in listeners, the depressed economy ensued resulting in the Ohio legislature reduced funding for the program in 1931. The Ohio School of the Air was able to continue broadcasting by selling lesson plans but by 1937, the remaining funding provided by the Ohio state legislature was pulled resulting in the disbandment of the school.

The World Radio University was established in 1935 under the direction of Walter Lemmon. Classes were provided through the cooperation of the Massachusetts Institute of Technology, Mount Holyoke College, Boston University, Harvard University, Brown University, Tufts College, and Wesley College (Saettler, 1990). By 1938, a basic English course was being delivered to Latin American countries which expanded to 31 countries by the following year.

The Federal Radio Education Commission was formally organized in 1935 under the U.S. Commissioner of Education with the intent to establish cooperation between the commercial broadcasters and educators (Saettler, 1990). Funding was provided by the National Association of Broadcasters, the National Advisory council on Radio, the Carnegie Corporation, and the U.S. Office of Education. As a result of this commission, several programs were created: *The World is Yours*, a cooperative effort between the Smithsonian Institute and NBC: a natural

SERVING STUDENTS

science program, *Answer Me This*; a safety education program, *Safety Musketeers*; and *Have You Heard*, a natural science program (Saettler, 1990).

The onset of WWII led to an increase in the use of the air waves for communication to those people cut-off from the Allied countries, which meant a decrease in the number of air waves available for educational purposes. Radio stations were utilized as a means to provide information and communication with people in occupied areas as well as people separated from their families. Additionally, the cost of producing radio broadcasts was often restrictive for institutions of education and thus, the availability of educational stations was somewhat limited. Active participation of education using radio broadcast was limited. “The advent of stringent federal regulation, the rise of national commercial networks, and their use of inexperienced faculties were the chief factors promoting their failure” (Saettler, 1990, p. 204). For these reasons most radio educational program eventually had to fold.

At least one example of a successful use of radio in education was the Alice School of the Air in Australia. Originally established in 1951, the school was utilized as a supplement to correspondence courses that were provided to students living in rural and isolated regions of Australia. The initial courses utilized one-way transistor radios as a way to provide transmission of coursework several times a week at a pre-determined time. Eventually, students experiencing problems could call in and ask a teacher for assistance with their correspondence work. The school continued to flourish and “in 1974 the Alice Springs School of the Air became completely autonomous and took on the role of correspondence schools for the Central Australian (NT) region” (Alice Springs, 2006, p. 2). The school has continued to develop and mature and celebrated its 50th birthday in 2001. It has been successful due to the ability of the institution to reach the remote and isolated students who would otherwise not receive educational services.

SERVING STUDENTS

Other than the Alice Springs School of the Air, radio did not experience as much success in distance education as television did.

Television Schools

The first appearance of television in education was provided by public access broadcast and required the students to view a class at a designated time. The University of Iowa was one of the first universities to venture into educational television in 1934. Within their first five years of operation, they were offering over 400 courses through televised broadcast (Moore, 2003). At the end of World War II additional television broadcast channels were allocated specifically for non-commercial use. The major commercial stations began to offer programs such as *Continental Classroom* and *Sunrise Semester*. The *Sunrise Semester* started airing at 6:00 AM in 1957 and lasted through 1982. Anyone could tune into the channel to watch educational broadcasts originating from New York University. Those interested in receiving college credit for these broadcasts were charged a fee and required to take an exam at the end of the course time. The *Continental Classroom* began in 1959 and was broadcasted over 149 stations. The first program broadcast was entitled *Physics for the Atomic Age* and approximately 250 institutions gave college credit for students participating in the course. The *Continental Classroom* provided a Chemistry course and a fundamental mathematics course in subsequent years but discontinued broadcasting after funding from the Ford Foundation ran out. The *Sunrise Semester*, although experiencing a relatively long broadcast life, stopped broadcasts in 1982 due to decreased ratings and increased popularity in public television as well as CBS' desire to provide news broadcasts during the early morning hour (Saettler, 1990).

Another early example of televised education delivery was that of the Midwest Program on Airborne Television (MPATI) founded by Purdue University in September 1961 with primary

SERVING STUDENTS

funding from Westinghouse Corporation and the Ford Foundation. This program utilized a DC-6 aircraft equipped with state-of-the-art television transmission equipment. The classes were broadcast to classrooms in Ohio, Kentucky, Indiana, Illinois, Wisconsin, and Michigan. The plane would lower a 24 foot antenna and broadcast the classes at the same time each day while the plane flew in a figure-eight pattern 23,000 feet above Indiana (Gibson, 2001). This was an expensive means of broadcast and experienced a relatively short lifespan.

Some of the success of television can be attributed to the substantial grant money provided for educational broadcasting by the Ford Foundation. Further, the Carnegie Commission was instrumental in Congress' passing of the Public Broadcasting Act of 1967 (Moore & Kearsley, 2005). When President Johnson signed this Act into law, he likened it to the establishment of land-grant colleges through the Morrill Act. Television would utilize the air waves as a means to enlighten people who had little access to education and would otherwise not have the opportunity to pursue further educational endeavors (Public Broadcasting Act of 1967). This Act continued the Educational Television Facilities Act of 1962 authorizing \$38 million to be spent for educational television and radio over the next three years; created the Corporation for Public Broadcasting (CPB) whose purpose was to assist new stations in getting on the air; and authorized a study of instructional radio and television and allotted \$500,000 for this purpose (Saettler, 1990).

Public broadcast was just one example of how television could be used in educational delivery. It had the advantage of reaching a large and dispersed audience but was limited by the fact that delivery was provided at a designated time which could prevent some potential students from participating. This limitation provided other challenges for students such as: "a student cannot reflect upon an idea or pursue a line of thought during a programme, without losing the

SERVING STUDENTS

thread of the programme itself. A student cannot go over the same material several times until it is understood” (Bates, 1984, p. 31). This restricted a student’s ability to control his education as the majority of the learning was provided during the time of delivery and there was no opportunity for interaction or explanation during that time.

Open Universities

Institutions of higher education began to research new means of reaching a wide, diverse, and often distant audience while still providing needed response and support. The establishment and implementation of the Open University in 1970 had a significant impact on the success and popularity of distance education as it provided for opportunities to enhance televised education beyond the restricted hours of delivery. Established by the British Government, the Open University assembled teams of education specialists to collaborate in the development and offering of educational courses and programs to anyone who wanted an education. “Open University students tended to be non-traditionally aged adult learners in their late twenties, thirties, and forties who were completing college degrees part-time while maintaining their full-time employment” (Schwitzer, Ancis, & Brown, 2001, p. 5).

The Open University made use of a variety of modalities in their educational delivery: correspondence, audio and video cassettes, video discs, telephone, and television, which increased its accessibility to a variety of students. The intent behind the creation of the Open University was not only to reach more students, but also to utilize economies of scale in educational delivery by centralizing services in one area and distributing those services throughout Great Britain and beyond. It was very successful and other countries, such as Australia, Canada, Germany, Spain, China, India, Indonesia, Japan, Korea, Pakistan, and Thailand began to provide similar services based on those established by Open University.

SERVING STUDENTS

Constitutionally, the United States could not provide such a unified, government supported method of educational delivery. A few institutions such as Empire State College of State University of New York and the College of Education at The Pennsylvania State University, developed distance learning programs established with the idea of reaching a greater audience while providing economies of scale in delivery through the use of institutional resources.

The structure of higher education in the United States does not lend itself to the establishment of a government funded Open University. Institutions of higher education are autonomous units that govern their own academic and financial resources through regional accrediting guidelines and are not funded by the federal government. The lack of government funding and ultimately, the substantial cost of the establishment of distance learning was prohibitive to most individual institutions which ultimately led to the establishment of consortia, “voluntary association[s] of independent institutions that shared the costs, the work, and the results of designing, delivering, and teaching educational courses” (Moore & Kearsley, 2005, p. 39). One of the first such consortia established in the United States was NUTN, the National University Teleconferencing Network that began in 1982 with 70 institutional members. The National Technological University followed suit in 1984. The establishment of these consortia, through the pooling of resources and faculty, created the opportunity for their members to provide and/or receive a variety of satellite delivered courses (Moore & Kearsley, 2005).

Tele-conferencing and Internet-based Schools

Although televised distance learning programs provided the opportunity to reach a dispersed and diverse audience that might otherwise not be able to pursue their education, they still had their share of issues. The challenge of one-way televised education in the classroom was the inability to provide synchronous interaction and support. The students were able to hear

SERVING STUDENTS

and view their instructor but the instructor could not hear or view the student. Students could not ask questions and instructors could not anticipate a disruption in understanding. The desire for interactive ability led to the use of two-way video (Schwitzer, et al., 2001). Two-way video allowed the student and faculty to both see and hear each other from separate locations.

The initial introduction of two-way video was expensive and transmitted through a “T1” data line that required a device to “decode” the message. “Two-way or multi-point video-conferencing became easier and less costly with the development of fiber-optic telephone lines that permitted transmission of higher data rates, which allowed video-conferencing between small groups of learners or individual learners and their instructors, with the video displayed on personal computers” (Moore & Kearsley, 2005, p. 42). Advanced connectivity provided opportunities for enhanced one-way video and two-way video that allowed students to not only see and hear the instructor but the instructor and other students to see and hear other members of the class.

In the mid-1980s, Old Dominion University realized the need for programs to reach students away from the main campus and established learning centers at community colleges throughout the state of Virginia as well as to military sites and corporate centers near Washington DC. In these learning centers, it provided the delivery of classes broadcasted from their main campus in Norfolk, Virginia. This delivery was provided in either one-way or two-way interactive video. In the one-way interactive video, students were able to see and hear the instructors through live television broadcast and to be heard when they had questions through audio delivery. However, in this mode the instructor was still unable to see the students. The two-way video provided for sight and sound in both directions. The establishment of learning

SERVING STUDENTS

centers provided students in remote areas to come together in one location and view classes which provided the sense of classroom interaction (Schwitzer, et al., 2001).

Computers entered the commercial market in the late 1960s and early entry into computer networking began to emerge. The IPTO, Information Processing Techniques Office, developed the ARPANET on August 30, 1969, which was a very early and primitive version of the internet. Through the development of the first interface message processor (IMP) built at Honeywell and transported to UCLA, the ARPANET was born. Connecting the IMP and the UCLA computer the ability for communication between the two machines emerged (Living Internet). The ARPANET began to grow in 1970 with the inclusion of Bolt, Beranek & Newman, a consulting company, added as a node to the system. By 1977, 111 computers comprised the system. Military divisions and universities continued to join the system until its retirement in 1990 (Hauben, n.d.).

Contemporary Distance Learning

The introduction of the World Wide Web in the early 1990s provided the opportunity for individuals in various places to communicate and share files at the same time. Soon, educational institutions began to offer online programs with the Online Campus of the New York institute of Technology and Pennsylvania State University being some of the first to provide entire degree programs through online delivery (Moore, 2003). Capella University and the University of Phoenix are examples of contemporary online, for-profit institutions that have been actively involved in providing educational opportunities from a distance. Simultaneously non-profit institutions of higher education also began to develop courses and programs through the Web as this modality allowed students to pursue their educational goals in a timely fashion with unlimited time restraints. Online learning eliminated the need for specific time offerings of

SERVING STUDENTS

courses and provided the opportunity for students to access their education at any time and from any place where they had computer access (Moore, 2003).

The development of distance education has always been driven by the business needs of institutions of higher education: attracting a greater number of students while not having to meet their residential and spatial needs; meeting the educational needs of adults who cannot attend a traditional campus; and integrating new technologies that created a greater appeal in offering distance courses (Aoki & Pogroszewski, 1998). Today, as the population entering higher education has continued to increase and the cost for connection from a distance has decreased, additional institutions are providing online distance learning opportunities – and for the same primary reason: to increase their student population while maintaining their same physical properties. Allen and Seaman (2003) indicated that “eighty-one percent of all institutions of higher education offer at least one fully online or blended course” (p. 2). Of the institutions they surveyed, 67% stated that online education was a critical long-term strategy for the institution.

Another factor impacting the entrance of higher education institutions into distance learning is the increase in the number of students pursuing their education. During the fall 2002 semester, 1.6 million students took at least one course online, and this number was projected to increase to 1.9 million within a year (Allen & Seaman, 2003). The 2005 study by Allen & Seaman indicated that “overall enrollment increased from 1.98 million in 2003 to 2.35 million in 2004” (p. 3) indicating that the earlier prediction proved to be lower than the actual increase. At the same time, the government funding available to institutions to serve students decreased. Current economic conditions convey financial uncertainty for some institutions of higher education. As Eduardo J. Padron, president of Miami Dade College and economist, stated, “Economic downturns trigger a debilitating circumstance of increased enrollments and decreased

SERVING STUDENTS

funding” (as cited in Wolverton, 2008, p. 17). These facts provide greater motivation for institutions of higher education to pursue distance learning opportunities.

Changes in Demographics

As higher education looks forward to and prepares for the future, the population of students entering higher education, specifically distance learning, continues to change from that of traditional 19-24 year old students who are attending full time and have education as their primary focus. The National Center for Education Statistics (U.S. Department of Education, 2006) reports an increased enrollment in degree-granting institutions of 21% between 1994 and 2004. Further, the number of students entering higher education is expected to increase significantly between now and 2015. This increase will be coupled with a shift in the demographic make-up of students entering college from earlier days when the majority of students in higher education were white males under the age of 24. A 2008 report of online learners conducted by Noel-Levitz indicates that the majority of online learners are female (68%). The study also indicates that only 18% of the distance learner students are 24 and younger and the majority, 31% fall between the ages of 25 and 34. Additional studies indicate that this predominantly female population is also more likely to maintain full-time employment and family responsibilities (U.S. Department of Education, 2002).

Increases in outside responsibilities and greater limitations on time available for study create challenges often not faced by their on-campus, traditional-aged counterparts.

Demographic changes also include an increase in the number of older students pursuing education in an effort to acquire the necessary knowledge to progress in the workforce (Kim, Hagedorn, Williamson, & Chapman, 2001) as well as a significant increase in the minority population entering higher education (Kim, et al., 2001; Byrne, 2005; and Seurkamp, 2007).

SERVING STUDENTS

Thus, overall, the complexion of the current and future student body is aging as well as shifting in physical features. The anticipated shift in the demographics of the distance learner is expected through a growth in older students who have not had recent school experiences and minority students who may not have familiarity with the demands of higher education.

Reasons for Pursuing Education through Distance Learning

The reason for students pursuing their education through online means vary. A 2003 survey by the California Community College system found convenience, the ability to access classes at a time and place that is suitable to the student, as the most important reason for pursuing education through distance learning. Other frequent reasons for pursuing distance learning include fulfilling requirements for transfer or to finish the associate's degree and improving job skills and opportunities (Meyers & Ostash, 2004). These data from community college students may not be the only answers or the same answers for students entering online programs through a four-year institution but they are a reasonable starting point into the understanding of the needs of distance learners.

The history of distance learning indicates that as an educational format it has not only a past but a future in higher education. An increased interest by institutions participating in online learning as well as an amplified enrollment of students in online learning programs endorse this as a modality with a future worthy of continued research and interest. Studies should continue to evaluate the quality and substance of programs to provide continued validation of legitimacy. Delivery, curriculum, accountability are all areas of importance that should continue to be followed to insure that online learning is a viable option. Additionally, the characteristics of the students participating in the modality needs continued evaluation. Student participation should be tracked not only in terms of the number of students entering online courses and programs of

SERVING STUDENTS

study, but also the number of students who sustain continuance, that is, persistence and retention, in this modality. Although established standards for determining retention among campus-based students enable research and evaluation, methods to determine the continuance of distance learners have yet to be devised. Dropout rates are believed to be 10% to 20% higher in distance learning than in traditional bricks-and-mortar programs (Berge and Huang 2004; Carr 2000; Diaz 2002; Frankola 2001). This higher rate of dropout warrants evaluation and analysis to determine the best means of maintaining student enrollment after the initial entrance into distance learning.

Persistence, Retention, and Attrition

Persistence is a student's decision to continue in a program of study. Lynn Barr-Telford, Fernando Cartwright, Sandrine Prasil, and Kristina Shimmons (2003) describe persistence as the decision to continue and/or to graduate from post-secondary education. Persistence is often used interchangeably with retention that is primarily defined as a means to reduce or prevent attrition (McClanahan, 2004). The Integrated Postsecondary Education Data System (IPEDS) defines the retention rate as "a measure of the rate at which students persist in their educational program at an institution, expressed as a percentage" (Integrated Postsecondary Education Data System, 2003, p.772). Previous studies have indicated a challenge in evaluating persistence and retention consistently across institutions due to the vague and differing definitions associated with these terms (Berge, & Huang, 2004; Dietz-Uhler, Fisher, & Han, 2007; Frydenberg, 2007; Kinser, & Dietchman, 2007; Simpson, 2003). Challenges in defining retention and persistence exist due to a student's or institution's definition of completion. Although a student could define completion as the end of a course, an institution may define completion as the end of a program of study or graduation. The primary difference between persistence and retention is the recognition of the party responsible for the factors involved in the motivation for continuance of education.

SERVING STUDENTS

Attrition refers to the loss of a student from higher education. Again, this definition can vary depending on whether the institution's or the student's perspective is taken. If a student enters an institution to gain knowledge that will be beneficial towards future goals and leaves after the completion of one course, the student may be satisfied and feel that the goal has been attained. The institution may see the student as a dropout because they only completed one course rather than a program. Obviously, the dilemma of perspective shows the challenge in determining retention and attrition rates for institutions and finding a standard method of measurement.

To date, retention studies on distance learning have been based in community colleges (Bailey & Alfonso, 2008). Although these scholars have provided valuable information, many of the community college students in these studies were just starting into the college experience. Their dissatisfaction may have been biased by displeasure with college in general rather than distance learning specifically.

Jenny Wang and Emily Wu (2004) analyzed the factors impacting a students' decision to drop out or persist as opposed to the characteristics of the students who decided to persist. Focusing on new freshmen students they found that intrinsic motivation, external attribution, and students' perception of distance learning were all factors in their decision regarding persistence. These results provide some insight into persistence characteristics; however, analyzing freshmen patterns presents a restricted view: these students are faced with not only determining their compatibility with distance learning but also their desire to pursue higher education. The need to understand further the characteristics of online persisters exists in order to determine the best methods for keeping students enrolled. A distinction needs to be made between whether their

SERVING STUDENTS

decision to leave is based on distance learning factors or on issues related to the pursuit of higher education in general.

In their case study of online student success at the University of Cincinnati, Melody Clark, Lisa Hostrom, and Ann Millacci (2009) indicate that retention rates are higher among students in a degree track (85.15%) as opposed to students who are not part of a degree track (76.84%). They attribute this higher success rate to support services and student motivation as well as a campus commitment to support the needs of the growing distant population. In other words, students who were committed to the completion of a program received greater support and had greater motivation to complete their goals than did students who were taking classes but had not made a commitment.

A qualitative study of female distance learners pursuing undergraduate and graduate studies revealed that greater regularity in campus and faculty contacts were areas in need of improvement (Müeller, 2008). Additionally, it was recommended that better assessment of student readiness be administered and appropriate support training be provided when indicated.

Libby Morris and Catherine Finnegan (2006) indicate that student persistence can be predicted with 62.8% accuracy by evaluating demographic and academic variables with high school grade point average and mathematic skills being the highest predictors. Other significant predictive factors were the availability of financial assistance and locus of control. Locus of control is a psychological term that refers to an individual's belief in what causes good or bad to occur in their life; whether they have control or events occur because of external factors. Thus, knowledge of a student's background and characteristics can be useful in predicting student persistence therefore providing a valuable tool to differentiate potential problem students and provide opportunities for early intervention. Morris and Finnegan (2008) evaluated students who

SERVING STUDENTS

had dropped out of the online study as well as students who had persisted. They determined that faculty should be aware of students' previous academic experiences so that they would be able to anticipate the students likely in need of additional attention and support. These results provide valuable insight to faculty, but failed to provide insight to administrators as to services that could be developed to enhance retention. They recommended that in order to increase student participation, faculty must take on social, managerial, and pedagogical roles. However, the authors did not question students about the resources that they felt were unavailable and were deemed necessary for continued participation. Support systems outside of the classroom were not examined in the qualitative review process and could have been of great benefit for future persistence purposes.

The study of retention is important to institutions of higher education for many reasons with one of the primary reasons being the impact that high retention has on government funding provided to the institution (Park, Bowman, Care, Edwards, & Perry, 2008; Parker, 2003). The ability to predict continued attendance aids in more accurate budgeting and allows institutions to more accurately predict necessary adjustments. As stated by Angie Parker (2003), "if rate of completion could be enhanced, through better placement and counseling of distance education students, subsequent fiscal budgets could become more predictable" (p.1). Determining characteristics that increase the likelihood of persistence can enable institutions the ability to create appropriate resources that will enhance these characteristics in their students ultimately increasing their rate of persistence.

Local Research

The development of the Transfer Student Survey and the Transfer Biographical Questionnaire utilized at Old Dominion University resulted from study done by Mary Duggan in

SERVING STUDENTS

2002. Duggan's intent was to determine the characteristics of transfer and distance learning students at the institution. From the literature, Duggan identified variables proven to identify persistence in a nontraditional population as well as problems associated with transfer from a two-year to a four-year institution. Further she identified similarities between characteristics of upper level transfer students and distance learners.

Duggan developed probation scores for distance learners, upper classmen transfer students, sophomore transfer students, and freshmen transfer students to represent noncognitive variables. "An item was included in the probation score if a disproportionate number of respondents who chose a specific answer to a questions were in academic difficulty at the end of the second semester" (Duggan, 2002, p. 110). Transfer grade point average was used as the cognitive variable and gender, race, and age were used as demographic variables, however neither variable was significant and were eliminated in the analysis. Duggan found that characteristics defined by the probation score on the TSS can be used to predict academic difficulty or success in distance learning students. The study found "a negative relationship between noncognitive variables as identified by the probation score on the Transfer Student Survey and distance learning transfer student persistence into the second year" (Duggan, 2002, p. 123). The questions selected for the probation scores differed between distance learning and the upper level students as they were based on the responses of these populations. There was a variation in each area but there was a significant difference in the area of abilities and traits indicating a difference in the needs and abilities of distance learning students and traditional students. This finding supports the need for continued research of distance learning student issues separate from traditional student issues.

SERVING STUDENTS

Alan Schwitzer and Mary Duggan (2005) describe another option offered through Old Dominion University to distance learning students majoring in Human Resources. The Summer Institute for Distance invites distance learners to come to the main campus for a week or more to take accelerated classes. This innovative design provides the opportunity for a distance learner to have a *real* on-campus experience with face-to-face faculty and student interaction. Follow-up focus group discussions with students have found the program to be well received by those who are able to participate. This institute provides the opportunity for distance learners to experience a more traditional college life in a short, compressed amount of time. The program also excludes students who are not able to abandon their personal, family, and work obligations and contradicts the benefits of distance learning.

Rhine, Milligan, and Nelson (2000) argued the need to develop plans to assist students in transfer from the community college to four-year institutions. They discuss *transfer shock*, a psychological state of disorientation that results from students experiencing decreased grade point averages as one of the primary contributors to student attrition. Some of the challenges associated with transfer shock include the increased size of the four year institution, financial issues, transfer credits, and pre-requisites prohibiting registration for classes. Laube (1992) discovered a significant relationship between persistence and educational goals and study time but no relationship between persistence, family assistance, or peer interaction. These studies support the need for further evaluation of factors impacting retention specifically in distance learners.

In 1992, James Pickering, James Calliotte, and Garrett McAuliffe designed a Freshman Survey that would be used at Old Dominion University as a tool to identify students in danger of academic difficulty and attrition. Their analysis of the results of the survey indicated that the

SERVING STUDENTS

combination of cognitive, noncognitive and demographic predictors was a better determinant of retention than the use of one predictor. Cognitive factors included items such as high school grades, college entrance exam scores, and high school ranking. Age, sex, ethnicity, parents' level of education, and financial need were all factors categorized as demographics. The noncognitive factors included student attitudes, as well as integration and involvement with college. They concluded that the "collection of the noncognitive data through the Freshman Survey is cost effective, as it adds quite significantly to predictions that would otherwise be based solely on those data routinely collected as part of the admissions process (cognitive and demographic data" (Pickering, et.al., 1992, p. 26). This study supports the need for the collection of personal characteristics of students to aid in the identification of persisters and students who are not likely to persist.

Chapter 3

Methodology

This study sought to develop a better understanding of the characteristics and traits of students who persisted in online distance education. ODU students were required to participate in the Transfer Student Survey and the Biographical Survey to provide data that revealed the students' feelings regarding past educational experiences and online educational experiences at the beginning of the program. Data from these surveys between 2006 and 2008 were utilized to determine common characteristics among persisters as well as non-persisters. The aim was to describe the characteristics of each type of student along with the elements that challenged students in their pursuit of education. And through the analysis of these data opportunities for the development of needed resources and support systems emerged.

Students that participated in the surveys have transferred to the institution after completing a minimum of 24 credit hours of study and were registered for a degree completion program. The office of Institutional Research and Assessment (OIRA) distributed these surveys to students to complete at the end of their first semester of attendance. The completion of the survey is now required in order for the student to register for the next semester.

The OIRA and the Registrar agreed to permit me to utilize the data from the surveys completed from 2006 through 2008. These offices disaggregated the data to isolate the responses of online nursing and criminal justice students. They further disaggregated the sample by persisters and non-persisters within these two majors. I then subjected the data to a qualitative content analysis to determine characteristics that were common and specific to each of the six disaggregated groups.

SERVING STUDENTS

The Source of Data

The institution used for this study was Old Dominion University located in Virginia. The reason that this institution was chosen is that OIRA has been surveying distance learners for several years now and were able to differentiate between those who were online learners and those who were participating in other distance learning modalities. Another reason for the selection of Old Dominion University is the fact that I work for the institution and was given permission to utilize the data obtained from surveys including online learners.

Old Dominion University currently utilizes a transfer student survey and a transfer biographical questionnaire in their review of student persistence in distance learners. Mary Duggan developed the transfer student survey in 2002 based on the Freshman Student Survey used by the institution for over 10 years (Duggan, 2002). Duggan created additional questions that were more relevant to transfer students and distance learners. Duggan gave the creators of the original instrument her revised survey and solicited feedback and recommendations. No changes were made. From there, she asked 17 administrators, faculty, and staff for feedback and recommendations on the survey. Of those administrators that participated, only the Director of Distance Learning Site Development had a connection with distance learning. The other participants were selected for their knowledge and participation in student surveys. No recommendations for change were received from this group (Duggan, 2002).

The survey was then administered to transfer students and distance learning students during the 2002 orientation sessions for the institution. These students were given the option to participate at that time, to take the survey in an online format, or to complete the paper surveys at a later date, returning it to the institution in a self-addressed, stamped envelope. Participation of transfer students was good with a 51% response rate. On the other hand, “the size of the distance

SERVING STUDENTS

learning group alone ($n=81$ or 15% of all distance learning transfer students) was small when compared to the total number of distance learning transfer students ($n=531$) (Duggan, 2002, p. 199). This low number makes the results of the first administration of the survey less representative of distance learners.

The survey became the established instrument used by the OIRA and has been administered each semester, capturing students during their first semester of transfer to the institution. The next several years the students were asked but not required to take the survey. After 2006, the completion of the survey became a requirement for students before the end of their first semester of attendance.

Sample Selection

I used the data from the surveys of distance learning students pursuing Bachelor of Science degrees in Registered Nursing and in Criminal Justice who were enrolled in these degree completion programs between the years of 2006 and 2008. OIRA estimated that this should entail between 130 and 150 surveys. The reason for choosing these two groups was that these students could complete their degree entirely through the online modality whereas other distance learners at Old Dominion could also use teletechnet and video streaming modalities. Limiting the type of delivery used captured those students who normally experience reduced contact with university administrators, and made these online learners more typical of online students in other universities.

Content Analysis

In order to determine if characteristics of the six groups (the aggregate group of persisters, the aggregate group of non-persisters, persisting nursing and persisting criminal justice students, and non-persisting nursing and criminal justice students) existed, I proposed to

SERVING STUDENTS

conduct a conceptual content analysis on the sample and its sub-sets. This process was selected to provide a broader view than a statistical analysis of the elements impacting student retention. A content analysis “differs from scientific inquiry in its wholly qualitative nature and its cumulative process, whereby the analyst is in constant state of discovery and revision” (Neuendorf, 2002, p.6).

Coding steps established by Kathleen Carley (2002) were utilized as a guide to the format administered in the analysis of the survey results. As the original steps are often utilized in studies involving interviews or observation, not all steps pertained to this analysis and were therefore eliminated.

Carley’s first step is the *Level of Analysis* in which the researcher determines which words or phrases exemplify a concept. To this end, I dissected, evaluated, and distributed into categories the survey questions. This initial process resulted in four primary categories, nine sub-categories, and nineteen headings.

In step two, *Deciding How Many Concepts to Code*, the researcher determines whether the established categories should be allowed to have room for variance. To make this decision, I reevaluated the survey to ensure that all pertinent information was being utilized and surmised that the exclusion of the entire section on “Predictions about your involvement with Old Dominion University” left out valuable data pertaining to the students’ expectations of their college experiences. This resulted in the addition of two primary categories, two sub-categories, and two additional headings.

The third step, *Deciding Whether to Code for Existence or Frequency of a Concept*, was used as a guide and was adapted to fit my needs for evaluating survey responses as opposed to interview logs. I used the level of response before analyzing for frequency to provide a more in-

SERVING STUDENTS

depth analysis of the Likert scale responses used in the survey. Thus, I first evaluated these responses to determine whether a student answered in the positive or negative and then re-evaluated to determine the level of that response. For example, some questions provided a choice of only four answers: Not at all; To some extent; To a great extent; and To a very great extent. In this case, “to some extent” and “to a very great extent” both indicated a positive response but “to a very great extent” indicated a much stronger response and could have a substantial impact on the overall analysis of differences between persisters and non-persisters. For this reason, responses were evaluated at two levels to determine all potential relationships. For example, persisters and non-persisters could both indicate a positive response to a question but only non-persisters indicate a response of “to a very great extent” indicating that this particular response was of extreme importance to and could have a significant impact on a student’s decision to persist.

Code the Texts is the next step in Carley’s scheme that is relevant to the analysis of the survey responses, but again needed to be modified to fit the survey data. This step suggested that information be scrutinized and evaluated according to established coding standards. To successfully achieve this process, survey results were divided into six groups: Aggregate Persisters, Aggregate Non-persisters, Nursing Persisters, Nursing Non-persisters, Criminal Justice Persisters, and Criminal Justice Non-persisters. I created separate charts for each group to seek trends—as determined by frequency of like answers—and relationships relevant to each group. Frequency distributions were tracked according to sub-codes. If any patterns were detected, they emerged within groups through this step.

The final step, *Analysis of Results*, occurred after the data was examined. I analyzed for trends and relationships within each of the groups and across the population. These analyses

SERVING STUDENTS

were achieved by evaluating each group through frequency distribution of the Likert scales so that level of occurrence and degree of existence emerged. Frequencies were determined by utilizing mean and median responses per group and aggregate responses. The frequency distributions for each group were scrutinized to determine similarities and differences as well as the characteristics that existed in one group and not another.

Chapter 4

Previous College Experiences

The data for this study were obtained from a Transfer Student Survey administered to students at the end of their first semester of enrollment with ODU and were provided by the OIRA department of Old Dominion University. The data set consists of the survey results of participating online criminal justice and online nursing students between 2006 and 2008. After 2006, participation in this survey became mandatory for students but was optional during 2006 and earlier. As expected, the lowest number of participants across the years occurred in 2006 when participation was optional. Only 11 students participated in the survey that year with 24 and 21 students respectively over the next two years.

The number of online distance learning criminal justice and nursing students who took the survey between 2006 and 2008 was not as large as originally predicted. OIRA had anticipated the number to be somewhere between 130 and 150 participants when in actuality, the number was 56. Criminal justice persisters were 24, non-persisters were only five; nursing persisters were 23, whereas the non-persisters numbered four. These results support the decision to use qualitative analysis of the information as the low numbers might not accurately reflect larger populations in quantitative studies. However, they can still provide valuable and rich information through qualitative analysis.

The ODU Online Student Respondent Sample

The National Center for Educational Statistics reported population of participants in distance learning during the academic year 2004-2005 had a greater number of students between the ages of 25 and 54, of female participants, and of white participants. Only slightly more than half of the sample used for this study of ODU distance learners is above the age of 25; however,

SERVING STUDENTS

no student reported being more than 32 years of age. More than three-fourths of the full sample are female and two-thirds are white (see Table 1). The sample is reflective of the gender and race characteristics of the national portrait. However in terms of student age, although the majority is above the age of 25, the sample is not reflective of the national characteristics. In a 2008 study of distance learners by Noel-Levitz, Inc., the majority of the sample population (31%) fell between the ages of 25 and 34; 18% were 24 and younger; 27% were 35 to 44; 19% were 45 to 54; and 5% were 55 and older. This study's majority sample population falls between the ages of 25 and 34; no students older than 34 years of age filled out the survey. Thus, the current sample is somewhat younger than previous research.

Table 1

Percentage of On-line Nursing and Criminal Justice Students by Age and Ethnicity

| Age | Criminal Justice (n=29) | | | | | | Nursing (n=26) | | | | | |
|-------------|-------------------------|-------|------------------|-------|---------------------|-------|----------------|-------|------------------|-------|---------------------|-------|
| | White | | African American | | Other or Undeclared | | White | | African American | | Other or Undeclared | |
| | men | women | men | women | men | women | men | women | men | women | men | women |
| <25 years | 4 | 8 | 0 | 2 | 0 | 1 | 0 | 5 | 0 | 0 | 0 | 4 |
| 25-34 years | 5 | 5 | 1 | 1 | 0 | 2 | 0 | 10 | 0 | 3 | 2 | 2 |
| Subtotal | 9 | 14 | 1 | 2 | 0 | 3 | 0 | 15 | 0 | 3 | 2 | 6 |
| Total | 23 | | 3 | | 3 | | 15 | | 3 | | 8 | |

*one nursing student did not declare race or gender and was not counted in this table.

The number of white students answering the survey was higher than other ethnicities. In the sample, a higher percentage of white criminal justice students are represented (23 or 79%) while only 15 or 56% of the nursing students responding are white. Within the sample, the contingent of nursing students was more diverse than that of the criminal justice students. The

SERVING STUDENTS

number of African American students represented in the sample is comparable across the two majors. The nursing students overall are older than the criminal justice students. The nursing program also not surprisingly has a higher proportion of women students, although the criminal justice program sample contains 19 female students or 66%.

Results are somewhat different when comparing persisters to non-persisters by age and ethnicity in the sample (see Table 2). The proportion of white students is higher among both persisters and non-persisters with the largest number of white persisters between 25 and 34 years and the largest proportion of white non-persisters under 25 years.

Table 2

Percentage of Persisters and Non-persisters by Age and Gender

| Age | Persisters (n=46) | | | | | | Non-persisters (n=9) | | | | | |
|-------------|-------------------|-------|------------------|-------|---------------------|-------|----------------------|-------|------------------|-------|---------------------|-------|
| | White | | African American | | Other or Undeclared | | White | | African American | | Other or Undeclared | |
| | men | women | men | women | men | women | men | women | men | women | men | women |
| < 25 years | 3 | 10 | 0 | 2 | 0 | 4 | 1 | 3 | 0 | 0 | 0 | 1 |
| 25-34 years | 4 | 12 | 1 | 3 | 2 | 5 | 1 | 2 | 0 | 1 | 0 | 0 |
| Subtotal | 7 | 22 | 1 | 5 | 2 | 9 | 2 | 5 | 0 | 1 | 0 | 1 |
| Total | 29 | | 6 | | 11 | | 7 | | 1 | | 1 | |

*one persister did not declare sex or gender and was not counted in this table.

Not unexpectedly, because they represent the largest single group within the sample, white women represent the largest percentages in both persister and non-persister sample groups. The largest group overall is white women between the ages of 25 and 34, which is consistent with the national trends. In their 2008 study of 87 institutions across 22 states, Noel-Levitz, Inc.

SERVING STUDENTS

found that the demography of distance learners included: 74% Caucasian, 68% female and 75% between the ages of 25 and 54.

The largest number of students in the criminal justice program consists of women and most of them persisted (see Table 3). Remarkably, only eight of the criminal justice students were men, most of whom persisted also. The sample is fairly evenly divided across the age groups with the men tending to be a bit older and the women equally represented in the two age groups. Only five of the criminal justice students did not persist in their programs—two men and three women—and all of the non-persisters were white.

Table 3

Percentage of Criminal Justice Persisters and Non-persisters by Age and Ethnicity

| Age | Persisters (n=24) | | | | | | Non-persisters (n=5) | | | | | |
|-------------|-------------------|-------|------------------|-------|---------------------|-------|----------------------|-------|------------------|-------|---------------------|-------|
| | White | | African American | | Other or Undeclared | | White | | African American | | Other or Undeclared | |
| | men | women | men | women | men | women | men | women | men | women | men | women |
| < 25 years | 2 | 5 | 1 | 2 | 0 | 1 | 1 | 3 | 0 | 0 | 0 | 0 |
| 25-34 years | 4 | 5 | 1 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| Subtotal | 6 | 10 | 2 | 3 | 0 | 3 | 2 | 3 | 0 | 0 | 0 | 0 |
| Total | 16 | | 5 | | 3 | | 5 | | 0 | | 0 | |

The nursing students represent the most diversity, although white women predominate and fall slightly more into the older age bracket (see Table 4). Only two men majoring in nursing responded to the survey and both persisted in their studies. The three African American women who started the nursing program were 25 or over and only one dropped out of the program. Of the seven women self-identifying as other or not declaring their ethnicity, only one did not persist and she reported being in the younger age bracket

SERVING STUDENTS

Table 4

Percentage of Nursing Persisters and Non-persisters by Age and Ethnicity

| Age | Persisters (n=22) | | | | | | Non-persisters (n=4) | | | | | |
|-------------|-------------------|-------|------------------|-------|---------------------|-------|----------------------|-------|------------------|-------|---------------------|-------|
| | White | | African American | | Other or Undeclared | | White | | African American | | Other or Undeclared | |
| | men | women | men | women | men | women | men | women | men | women | men | women |
| < 25 years | 0 | 5 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 |
| 25-34 years | 0 | 7 | 0 | 2 | 2 | 3 | 0 | 2 | 0 | 1 | 0 | 0 |
| Subtotal | 0 | 12 | 0 | 2 | 2 | 6 | 0 | 2 | 0 | 1 | 0 | 1 |
| Total | 12 | | 2 | | 8 | | 2 | | 1 | | 1 | |

*one persister did not declare sex or gender and was not counted in this table.

The overall retention rate of the sample group was 84%. The retention rates for the criminal justice students were 83% and 85% for the nursing students. The retention rate of the older students was higher than that of the younger students resulting in a 79% retention rate of students less than 25 years of age and 87% retention of students between the ages of 25 and 34. Based on the results of the survey, white students had the lowest persistence rate with 81% of the 36 white students continuing with their studies. African American students from this study had an 86% persistence rate, while students identified as other experienced a 92% rate of persistence.

The Noel-Levitz (2005) demographic report on distance learners indicates that the greatest percentage of the population (37%) are married with children; 31% are single; 18% are married; and 11% are single with children. The survey utilized for this study did not ascertain marital status or information regarding whether the students had children. This information could have provided insight into some of the outside challenges faced by students as well as

SERVING STUDENTS

whether or not they have an immediate support system available. The lack of this information hampers some analyses regarding certain situations and corresponding responses.

Conclusion

Overall, the demography of the sample was comparable to the National Center for Educational Statistics report that stated that the majority of distance learning students were between the ages of 25 and 54, female, and white. The makeup of the sample population of distance learners indicated similar results with 56% between the ages of 25 and 32, 79% female, and 69% white. The age variance was different for this population in that, although the majority of the population was over the age of 25, the sample population did not have students over the age of 32; an age group that would most likely be represented in other studies. The larger female population could have been somewhat skewed by this study as one of the major areas chosen was nursing which continues to be a predominantly female field. However, one could argue that the criminal justice population was also predominantly female and represents a field that is not known for a majority female population.

The most noteworthy fact regarding the sample population is that although the numbers are smaller than originally hoped for, the primary demographic groups from the national study are represented in majority in this population and should likely have similar experiences, opinions and concerns that would be indicative of other sample distance learning populations.

Content Analysis of the Survey

As I indicated in the methods chapter, I assessed the survey questions and categorized them to be more reflective of the guiding questions. The general categories include Past Experiences, Current Comparison to Others, Attitudes about being a College Student, Causes for Departure, Outside Activities, and Cause for Leaving Studies. Then I analyzed the answers

SERVING STUDENTS

within the categories to determine related sub-categories. Finally, I evaluated between Criminal Justice Persisters and Criminal Justice Non-persisters; Nursing Persisters and Nursing Non-persisters; and Population Persisters and Population Non-persisters. In this analysis I sought to determine relationships, differences, and interdependence. Each of the categories is in turn presented through the rest of the chapter. But first, a few caveats about the survey and the students' possible answers are required.

All of the questions in the Past Experiences section of the survey as well as some of the questions in the section on Attitudes about being a College Student were asked using a four-point Likert scale. The use of the four-point scale as opposed to a five-point scale does not provide for a true middle response and therefore, as noted by Worcester and Burns (1975), has a tendency to force a response towards the more positive end of the scale. The use of a five-point scale provides for a response in a neutral zone while a four-point scale does not provide a middle ground of response. A study by Garland (1991) states that, "if you are surveying a population to ascertain opinion, then the inclusion or omission of a mid-point can alter your results considerably" (p. 4). These facts raise concern as to whether questions on the four-point scale are truly reflective of the views of the students.

Additionally, all questions in the Past Experience section include the phrase "have a negative impact on your most recent previous college experience". This phraseology has a tendency to force a response to the lower end of the scale if the student did not believe that their previous college experience was negative. The use of the negative context in these questions does not allow the students to answer the subject of the question but instead forces them to respond to the implication of a negative college experience. In addition, using the same format for all questions tends to permit respondents to take less care with their answers. Mixing

SERVING STUDENTS

positive and negative questions force respondents to think about the nature of the question being asked.

The four-point scale as well as the use of the negative context in the questions on Past Experiences do not provide the student with the choice to provide a neutral response to the question if their overall past experiences were not negative. The only response that indicates the lack of a negative experience is “not at all”. Students may feel that their overall experience was positive but that the situation, homework not completed, missed class, etc. was a problem area for them. The four level response forces the students to choose a lower response such as “not at all” or “to some extent” to indicate the lack of negative experience and does not allow for consideration of the questions at hand.

Finally, the ODU distance learning program was originally established as a partnership with the Virginia community college system. Off-site offices were established on community college campuses and the programs were set up as degree completion programs for students with transferable hours. In other words, courses offered through ODU did not start until the junior level as it was assumed that students would be transferring to ODU from the community college after completing their freshmen and sophomore years of study. It was not a requirement that students attend the community college first but it was required that they have at least 24 hours of transferable credit with a minimum grade point average of 2.2. Any freshmen and sophomore level courses that the student had not yet completed but that were required in the degree, could be taken through the community college and transferred into the program after the student had started. This meant that students coming into the program with fewer than 60 hours or who had not completed the specific lower level general education hours before entering the program, still had course work to complete outside of ODU before they would be able to graduate. This policy

SERVING STUDENTS

was responsible for the fact that some students did not complete their studies. In fact, the nursing department found these complications to be enough of a challenge that starting in 2008 they required students entering the nursing program to have completed all of the lower level requirements before they were granted admission.

Additionally, students did not have to attend the community college before transferring to ODU meaning that they could have taken courses at another institution at any time before deciding to make the transfer. This also meant that there may have been a significant amount of time that had passed since they were last in school. Time lapses allow for changes in lifestyle, maturity, a change in the reason for pursuing degree, and other factors that could impact the students' motivation to complete their studies.

Past Experiences

In order to analyze the data, I divided the first category of questions, Past Experiences, into Academic and Personal Elements. The Past Experiences section asks students to respond to a variety of questions pertaining to their most recent college experience prior to their online program at ODU. The answers provide an opportunity to identify issues that students indicated had a negative impact on their college experience and that could continue to distract or discourage the students' progress and persistence.

Further, the Academic Elements question group proved to have apposite subdivisions: *Commitment to Studies*, *Mental Challenges*, and *Interaction with Institution*. Additionally, I found the questions that fell into Personal Elements could be subdivided into *Outside Social Activities*, *Socio-economic Responsibilities*, and *Emotional State*. The distribution of questions and resulting survey results can be found in Appendix B-G.

SERVING STUDENTS

Academic elements. The group of questions related to Academic Elements looks at various aspects of study that could impact both the student's satisfaction and success with their studies. These questions range from inquiring about the student's time and commitment input to their ability to focus on studies. The composite further questions the student regarding the impact that interaction with institution members and organizations had on their studies.

Commitment to studies. In the survey, questions related to study habits, homework completion, and class attendance are concepts that form a cluster of activities that result from a student's active participation in their studies in the past. The questions are attempting to derive the students' belief that time spent studying, homework completion and class attendance or lack thereof could have impacted their studies in a negative manner. Each of the questions permits respondents to choose an answer on a four-point Likert scale, with one indicating a response of "not at all" and four, "to a very great extent". This cluster, which I have entitled *commitment to studies*, is explored in this section.

Of the nursing non-persisters, 75% indicated that insufficient time spent studying did not have a negative impact (mean of 1.50 and median of 1) on their studies in the past, while 48% of nursing persisters indicated that insufficient time spent studying in the past did have a negative impact "to some extent" response (mean of 1.78 and median of 2). Median scores support nursing persisters response of "to some extent" and non-persisters, "not at all" (see Table 5). Because of the small sample size, the difference is not great but is indicated as a potential area of concern.

Table 5

Academic Elements from the Past: Mean Responses to Commitment to Studies

| | Nursing | | Criminal Justice | |
|--|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Insufficient time | 1.78 | 1.75 | 1.96 | 1.80 |
| Homework Non-completion | 1.39 | 1.75 | 1.58 | 1.80 |
| Skipping Classes | 1.17 | 1.75 | 1.63 | 1.60 |
| Aggregated Commitment to Studies | 1.45 | 1.75 | 1.72 | 1.73 |

Criminal justice non-persisters had a 40% response rate in the “not at all” response and the “to some extent” response with a mean score of 1.80 and median of 2. Criminal justice persisters responded 67% “to some extent” with a mean of 1.96 and a median of 2. The overall difference between persisters and non-persisters indicate that a slight majority of persisters, 57%, felt that insufficient time spent studying did “to some extent” have a negative impact on their studies. Conversely, 56% of non-persisters did not feel that insufficient time spent studying had a negative impact on their studies. Mean scores indicate a greater difference between persisters and non-persisters with a score of 1.87 for persisters and 1.67 for non-persisters. Median scores reflected a 2.00 for persisters and a 1.00 for non-persisters. These data indicate that while persisters believed that insufficient time spent studying did “to some extent” have a negative impact on their studies; non-persisters believed that it did not. The implication that time spent studying did not have a negative impact on studies is that the student felt that the time necessary to be successful in their educational endeavors was achieved. Further, the slightly positive response of “to some extent” may indicate that some students did not have the necessary time or did not commit the necessary time to feel successful in their studies resulting in a less than

SERVING STUDENTS

satisfied experience. The fact that a difference between persisters and non-persisters was supported indicates a need for further evaluation as to whether this could be a contributing factor to a student's decision not to persist.

Students were next asked to consider whether the failure to complete a homework assignment on time impacted them in a negative way. In general, persisters and non-persisters responded differently regarding homework. In addition, the nursing persisters and non-persisters showed a greater difference than the criminal justice students. The difference between nursing persisters and non-persisters is slightly larger than indicated above with persisters having a mean score of 1.39 and non-persisters, 1.78 indicating that non-persisters found not turning in homework to be a greater problem than persisters did. It is interesting to note that the non-persisters found homework to be a greater area of problem than time. Further evaluation of differences regarding homework indicated that the mean level of response between all categories were closest between criminal justice non-persisters and nursing non-persisters. Median scores for all groups was one indicating that completing homework assignments on time did not have a negative impact on their most recent college experiences.

In this sample, 60% of criminal justice non-persisters believed that skipping classes “to some extent” negatively impacted their studies. This problem was not expressed at this level with any of the other groups. Again, this response could relate to a time factor if the students did not feel that they had sufficient time to spend attending class. Time is a concern with adult students who are trying to juggle work and family commitments with school. Bird and Morgan confirmed this when they stated “most adult distance learners study part-time and need to balance a range of responsibilities, conflicting commitments is a frequently cited problem” (2003, p. 2). The lack of historical data related to the students' previous studies makes it

SERVING STUDENTS

impossible to ascertain whether or not the student was a distance learner or an adult learner therefore making it difficult to determine whether the above statement is relevant to their past experiences.

Acknowledging that the act of skipping class had some level of negative impact on their studies may imply that they did not have the necessary time to appropriate for class ultimately creating a negative impact on their success. It could also indicate that they were not committed to their studies, allowed other things to get in their way, did not like the class, etc. When mean scores for this area were evaluated, the level of difference expressed by criminal justice non-persisters as opposed to persisters was very small. In fact, the greatest level of difference was exposed between nursing persisters and non-persisters with a .58 difference. The difference between the mean scores between persisters and non-persisters does not indicate as large of a difference in response with persisters indicating 1.40 and non-persisters, 1.67 indicating a .27 difference as opposed to the .58 difference between nursing persisters and non-persisters.

Conclusion. Differences between persisters and non-persisters were indicated in some areas of *commitment to studies*. The first question asks students to consider whether time spent studying had an impact. Median scores indicated “not at all” for non-persisters as opposed to “to some extent” for persisters. The amount of difference between the groups, although not great, does indicate a difference in views as to the importance of time spent studying. The differences regarding homework assignments were indicated more between the nursing population and the criminal justice population as opposed to being between the persisters and non-persisters. Criminal justice students indicated a median score of 2 or “to some extent” while nursing students’ median response was 1 or “not at all”. Does this indicate that nursing students turned in their homework and criminal justice students did not or does it indicate that criminal justice

SERVING STUDENTS

students did not feel that they had the time necessary to dedicate to completing homework assignments in a timely manner? Additional information regarding this question is certainly warranted. The last question, skipping class, showed a difference with one group, criminal justice non-persisters. This group indicated a median score of 2 while all other groups, including the aggregate non-persister scores indicated a median of 1 reflecting a response of “not at all”. The fact that this group expressed concern indicates a need for further exploration among other non-persisters.

One of the analytical challenges resulting from this group of questions is that it refers to the students’ previous college experiences. Since no information is provided regarding the length of time since the students’ were last in class, it is not possible to surmise whether or not this reflects study as an adult student or as a traditional-age student. As indicated by the references to Bird and Morgan’s study above, adult students face challenges that are not as likely to be experienced by traditional aged students.

Mental challenges. Survey questions categorized in mental challenges ask about the students’ ability to concentrate, being bored in class, and carelessness on tests. I grouped these questions together as they are all impacted by the students’ level of mental engagement in their studies. Students who are involved in a variety of activities beyond education may indicate challenges in focusing their concentration and energies on their studies ultimately indicating a challenge in these particular areas. However, the questions do not permit knowing the level of stimulation from or instructional quality of the instructors. The answers also do not provide a glimpse into whether the students felt that they had an adequate academic background, were interested in the academic work, or were advanced developmentally to display attention to detail.

SERVING STUDENTS

Large percentages of the nursing non-persisters (75%) and criminal justice non-persisters (60%) both responded that concentrating on assignments was not a problem as opposed to their persister counterparts; nursing persisters (52%) and criminal justice persisters (21%). Criminal justice persisters indicated that concentration on assignments was an area that did affect their studies (see Table 6) with a mean of 2.08 and they were the only group with a median score of 2 which impacted the overall persister median score resulting in a response level of “to some extent” for this group as well. The same level of disparity was not indicated between nursing persisters and non-persisters. In fact, the nursing persisters had a lower mean score than the non-persisters yet median scores (1) were the same for both groups.

Table 6

Academic Elements from the Past: Mean Responses to Mental Challenges

| | Nursing | | Criminal Justice | |
|------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Concentration on Assignments | 1.52 | 1.25 | 2.08 | 1.60 |
| Bored with Studies | 1.52 | 1.25 | 1.88 | 1.80 |
| Careless on Tests | 1.78 | 2.00 | 2.00 | 1.80 |
| Aggregated Mental Challenges | 1.61 | 1.50 | 1.99 | 1.73 |

The ability to concentrate on studies with adult students is often the result of multiple responsibilities such as work and family that distract the student from being able to maintain focus and can lead to difficulty in achieving success in their studies. This problem can shift and change throughout the student’s time in studies as demands and responsibilities shift and change. As stated by Bird and Morgan, “Individual student motivation and commitment are not static. Over the span of a three to five year program of study, distance learners’ motivations may

SERVING STUDENTS

change enormously, due to the nature of their incremental achievements, shifting perspectives, and family and financial circumstances” (2003, p. 3). Again, the lack of historical data on these students makes it impossible to ascertain the delivery format of their previous studies which could render this statement irrelevant.

When students were questioned as to whether being bored in class impacted their studies, the overall majority responded that it did not. There was some difference in reaction between criminal justice students and nursing students as is indicated by the mean results. Similar to the previous question, criminal justice persisters were the only group with a median score of two indicating a slightly higher concern with being bored in class. The difference in mean scores between criminal justice persisters and non-persisters is miniscule but an overall difference is revealed through median scores.

Fifty-two percent of nurse persisters indicated “to some extent” when asked if being careless on tests had a negative impact on their college experience, with a mean of 1.78. On the other hand, 25% of nursing non-persisters responded that carelessness impacted their studies “to some extent” and 25% indicating “to a very great extent” which brought their overall mean to 2.00. The majority of the responses by criminal justice persisters and non-persisters related to being careless on tests, 62% and 80% respectively, indicated “to some extent”. Thus, persisters and non-persisters alike felt that they had been careless in their previous academic experiences, but a larger number of non-persisters seem to feel that their carelessness presented problems. The median scores for all groups were higher on this question than any of the others with all groups indicating a median score of 2. This implies that persisters and non-persisters alike have concern regarding carelessness on tests.

SERVING STUDENTS

Aggregate scores on this section indicate scores ranging from 1.50 for nursing non-persisters to 1.99 for criminal justice persisters. When aggregate scores are determined for persisters versus non-persisters, 1.80 and 1.61 respectively, the difference between the two groups is .19 indicating that views between persisters and non-persisters are closely matched regarding the cluster of mental challenges.

Conclusion. The questions in the *mental challenges* cluster were all written with a double negative perspective, yet interestingly did not create a positive. For example, the first question in this section reads: “To what extent did having difficulty concentrating on assignments have a negative impact on your most recent college experience?” Before the students can answer this question, they must first decide whether or not they had difficulty concentrating; then they must decide if their previous college experience was negative. After these decisions are made, they can begin to consider the question at hand. Responses are given on a four-point Likert scale which, as discussed earlier, provides little room for a positive response. All of these factors impact the outcome of the response and have a tendency to skew the answers to a lower level of response. Additionally, the consistent negative tone and redundant nature of the questions may have caused respondents to put less thought into their responses. All of these factors call to question the possible validity of the results.

Criminal justice persisters responses showed the greatest difference from all the other groups with a 2 median score for each question. Nursing persisters, and non-persisters as well as criminal justice non-persisters indicated a median score of 2 regarding carelessness on tests only. Further review of criminal justice persisters might be warranted in this category.

Interaction with Institution. Questions in this category, which still fall under the academic heading, ask the student to consider how their interactions with instructors outside of

SERVING STUDENTS

the classroom as well as participation in campus clubs and groups may have impacted their studies. Students who develop a relationship with their faculty or other students outside of the classroom can develop a sense of loyalty to the institution that might not exist without these relationships. Nash (2005) indicated that distance learning student attrition is often attributed to “lack of personal contact and immediate instructor feedback. ...One of the most frequently stated reasons for dropout is the sense of isolation experienced by students studying off campus” (Nash, 2005, p. 2). Ludwig-Hardman and Dunlap also addressed the separation issue: “One of the most consistent problems associated with distance learning environments is a sense of isolation due to lack of interaction” (2003, p. 2). These questions explore the possibility of whether the students feel that these social relationships or the absence of these relationships impacted them in a negative manner rather than providing a positive experience. Again, these questions are based on past academic experiences which may or may not have occurred in a distance learning format and might render the previous statement irrelevant. The feelings of isolation should warrant concern when entering a distance learning program and should be addressed very early in the process. Identification of potential issues related to isolation could be beneficial in developing programs and resources for distance learners’ future progress.

Criminal justice students indicated they felt some negative impact caused by not communicating with instructors outside of class, while nursing students indicated it was not a problem. The scores between persisters and non-persisters were almost identical with means of 1.62 and 1.67 respectively and a median score of 1 for both groups (see Table 7). These responses may indicate one or more of the following: that the faculty communicated with the students appropriately, that the students took the time to communicate with their instructors, or that they did not feel that their lack of communication impacted their studies. In any case, this

SERVING STUDENTS

area does not indicate any noteworthy level of concern as a potential problem resulting in previous studies. The means from the questions regarding participation in clubs and groups showed a low amount of impact. This indicates that either students did not spend a significant amount of time participating in group activities or that they were able to manage the demands of the time that they did spend in group participation.

Table 7

Academic Elements from the Past: Mean Responses to Interaction with Institution

| | Nursing | | Criminal Justice | |
|------------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Not Communicating with Instructors | 1.35 | 1.75 | 1.88 | 1.60 |
| Participating in Clubs and Groups | 1.13 | 1.00 | 1.29 | 1.20 |
| Aggregated Interaction Issues | 1.24 | 1.38 | 1.59 | 1.40 |

Conclusion. Aggregate scores for interaction with institutions are low overall indicating minimal dissatisfaction or concern by the students in this area of their past experiences. Not communicating with instructors was the one topic area that received a higher median response for criminal justice students revealing that they were dissatisfied “to some extent”. Feelings of concern in this area could have been caused by a multitude of factors such as unavailability of faculty, lack of effort to interact on the part of the student, etc. The fact that some dissatisfaction does exist warrants further review of this topic.

Personal elements. Questions in this section deal with *outside social activities, family and work responsibilities, and emotional state*. This cluster asks students to consider issues separate from their academic encounters that may have had a negative impact on their previous educational experiences.

SERVING STUDENTS

Outside social activities. This cluster of questions asked students whether involvement in activities involving socializing with friends, going to parties, playing computer games, and surfing the internet interfered with their studies. Activities such as these often take a considerable amount of time away from studies and impact students' academic progress. Possible responses to these questions were on a four point Likert scale with 1 indicating "not at all" and 4, "to a very great extent".

Criminal justice non-persisters did indicate "to some extent" being impacted by partying with a mean score of 2.20 and a median of 2 (see Table 8). Criminal justice persisters' responses displayed a mean of 1.42 and a median of 1. On the other hand, both nursing groups indicated that this area did not have much of an impact indicated by lower mean scores than either of the criminal justice groups. The mean scores between persisters and non-persisters were minimal with a 1.77 for persisters and 1.56 for non-persisters. In fact, in this section of questioning, the criminal justice non-persisters were the only group that indicated some impact to any of the activities questioned, which may suggest an issue behind their decision not to continue their studies. The criminal justice non-persisters were the only group with a positive response evidenced by their median score of 2. All other groups indicated a median of 1 reflective of the fact that outside activities did not negatively affect their past college experiences. Overall, criminal justice non-persisters had the highest aggregate score closely followed by their persister counterparts.

The aggregate mean scores in response to outside social activity issues are extremely close for criminal justice persisters and non-persisters as well as for nursing persisters and nursing non-persisters. The only area that indicates a score above 2.00 is criminal justice non-persisters' response to partying. Responses to these questions are based on past college

Table 8

Personal Elements from the Past: Mean Responses to Outside Social Activities

| | Nursing | | Criminal Justice | |
|--------------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Socializing with Friends | 1.61 | 1.25 | 1.92 | 1.80 |
| Partying | 1.04 | 1.00 | 1.42 | 2.20 |
| Playing Computer/Video Games | 1.22 | 1.00 | 1.29 | 1.20 |
| Internet for Recreation | 1.26 | 1.00 | 1.67 | 1.20 |
| Aggregated Outside Social Activities | 1.03 | 1.06 | 1.58 | 1.60 |

experiences. Because there is no available data regarding time when past experiences occurred, there is no way to surmise as to whether this problem could persist. However, it does warrant attention as a possible cause for concern in potential student challenges.

Conclusion. Aggregate scores for personal elements indicate a bigger difference between criminal justice students and nursing students than indicated between persisters and non-persisters within the groups. Responses overall for this category did not indicate areas of high concern with the exception of the criminal justice non-persisters particularly related to partying and socializing with friends. These questions are based on previous college experience as opposed to current problems and may now be resolved by time and maturity. Overall, this does not appear to be an area indicative of great concern.

Family and work responsibilities. The next section of this study deals with general personal elements and socio-economic responsibilities. The questions in this section addressed the impact of family responsibilities on a student's success. These questions also referred to the student's previous college experiences at a time that may have placed the student in a different

SERVING STUDENTS

set of responsibilities and obligations. It is a good indicator of previous problems but may not be an indicator of current situations or challenges that could impede the student's success.

The first question asks "to what extent did transporting family members/others to appointments and activities have a negative impact on your most recent college experience?" Because this question is based on the students' most recent previous college experiences and the oldest students participating in this survey are 32, students will most likely be answering questions related to events that occurred when they were in their 20s. Additionally, historical information to determine whether students were participating in a traditional or distance program is unavailable, it is impossible to ascertain as to the living arrangement of the students during this time. Responsibilities and obligations for students living at home as opposed to students living on a college campus can be significantly different resulting in very different responses.

Overall, responses indicated a large sample population that was not at all affected by the transporting of others. A very small percentage of persisters indicated a response of "to a very great extent" while none of the non-persisters shared this level of response. Ultimately, the transporting of family appears to have impacted a very small population of this sample. The next question pertained to the responsibility of caring for a dependent parent. The criminal justice persisters did have 50% with responses of "not at all" and the rest of the answers divided between "to some extent" and "to a very great extent" with 38% and 12% respectively. There was also a 4% response of "to a very great extent" by nursing persisters and neither of the non-persister groups indicated that they had been affected at all. Again, this deals with previous experiences and does not indicate whether this is a current factor for students. It is hard to surmise whether students who had been affected previously would still have the responsibility of a dependent parent as well as how many students may now be responsible for a parent. Overall,

SERVING STUDENTS

the previous impact seems to be miniscule to all groups but this is certainly an area which will continue to change as students and their families continue to age.

Students were next questioned about transportation problems having a negative impact on their education. All groups had an overwhelming response of a “not at all” impact on studies. Criminal justice persisters had a 79% response, criminal justice non-persisters an 80% response, nursing persisters a 96% response and nursing non-persisters a 100% response. Mean scores also reflected that this was not an area of great concern. Again, this is an area that is impacted by circumstantial occurrences and can change accordingly. Overall, it was not a concern in the past and there is no reason to anticipate that it will be a problem in the future.

Childcare issues were the next area of *family and work responsibility*. Nursing non-persisters indicated a 100% response that this was not a problem. Nursing persisters indicated 78%, criminal justice non-persisters indicated 80% and criminal justice persisters, 83%. Again, mean scores also indicated that this was not an area of concern. However, students have aged since their previous college experiences and the majority of the students currently fall between the ages of 25 and 32. Historically, these have been considered childbearing years and as such increase the probability that childcare could impact current and future studies although the responses regarding previous studies indicate no reason for concern.

Work conflicts were also a concern “to some extent” to criminal justice non-persisters, with 80% response at this level. Yet, less than half (46%) of criminal justice persisters said that it was not a concern. For the nurses, 74% of persisters and 75% of non-persisters did not feel that work was a conflict. Nursing programs have historically been full-time day programs so it may be that the nursing students did not attempt to work during their previous studies thus explaining why work would not have been a conflict. Although the majority of students in both

SERVING STUDENTS

nursing groups indicated that it was not a conflict, there were a few that still responded that it was a great challenge. The lack of historical information regarding their work and study situations makes it difficult to surmise as to why it may have been less of a problem overall for nursing students than for criminal justice students. Mean scores were closer to 2.00 in every group with the exception of nursing persisters who indicated a 1.35 mean score (see Table 9). Overall, persisters reflected a mean of 1.60 and non-persisters had a mean of 1.78. Median scores for both nursing groups are 1 but the answers from both criminal justice groups translated to a median of 2 indicating that their studies did experience some negative impact from work.

Nursing students entering the ODU distance learning program are required to have completed studies to become a registered nurse while criminal justice students were not required to have any type of prior certification or exposure to the field. Criminal justice students are required to take three lower level criminal justice courses but can start the ODU program before all three of these courses are done. This requirement may mean that more of the nursing students were pursuing full time study prior to coming to ODU while criminal justice students may have been attending school part-time and working part-time or full time causing greater conflicts between work and studies.

Family issues showed the majority of responses in the “not at all” category, although three out of four of the groups also had responses in the “to a very great extent” category as well. This indicates that even though it did not have the highest response rate in other categories, family issues definitely had an impact on studies. Criminal justice non-persisters responded equally on either end of the Likert scale; 40% felt that family issues did not affect their previous academic work while the same amount of respondents felt that it affected them “to a great extent”. This same reaction to the question is evident in the mean scores with criminal justice

SERVING STUDENTS

non-persisters mean score being 2.40 indicating that family issues were a problem “to some extent”. Non-persisters as compared to persisters showed a 44% response rate in “to a great extent” and “to a very great extent” while persisters indicated an overall response rate of 10% at the “to a great extent” and “to a very great extent” levels. Mean scores of persisters were 1.45 as opposed to non-persisters whose mean score was 2.11. Even with the indication of impact from the non-persisters, the median score was still 1 indicating that although a few were impacted at the highest level, the majority of respondents were not impacted. Regardless, the disparity of mean responses between persisters and non-persisters was still an area of concern for a notable population of non-persisters indicating that family issues may in fact have had an impact on a student’s decision to continue or withdraw from school.

Table 9

Personal Elements from the Past: Mean Responses to Family and Work Responsibilities

| | Nursing | | Criminal Justice | |
|--|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Transporting Family | 1.39 | 1.00 | 1.46 | 1.20 |
| Dependent Parent | 1.13 | 1.00 | 1.25 | 1.00 |
| Transportation Problems | 1.04 | 1.00 | 1.29 | 1.20 |
| Childcare Issues | 1.35 | 1.00 | 1.33 | 1.20 |
| Work Conflicts | 1.35 | 1.75 | 1.83 | 1.80 |
| Family Issues | 1.22 | 1.75 | 1.67 | 2.40 |
| Aggregated Socio-Economic Responsibilities | 1.25 | 1.25 | 1.47 | 1.47 |

Conclusion. It is interesting to note that the aggregate mean scores for the cluster of family and work responsibilities are the same for nursing persisters and nursing non-persisters

SERVING STUDENTS

and for criminal justice persisters and criminal justice non-persisters indicating no difference within each group in the impact of family and work responsibilities. The biggest differences between the groups were related to family issues with the non-persisters having higher scores than the persisters in both criminal justice and nursing however these differences were not enough to impact the aggregate scores between persisters and non-persisters.

In this category as in the category above, there are greater differences between criminal justice and nursing students overall than there are between persisters and non-persisters within the two groups. The aggregate scores for this section all reflect scores indicative of these issues not resulting in areas of concern for students in their past studies. The one question that did generate the greatest negative response related to work conflicts having a negative impact on studies. As this is based on previous college experiences when students were younger, it could warrant review of current concern as the students are older and the likelihood that they are working while attending college has probably increased.

Emotional state. This cluster of issues asked about the impact of the student's overall mental state on their studies and asked questions regarding feeling depressed and feeling overwhelmed. In the first question, students were asked to what extent being depressed had a negative impact on their most recent college experiences. The majority of responses for each group indicated "not at all" although each group also had responses at other levels and criminal justice persisters and nursing non-persisters both had responses of "to a very great extent". The criminal justice non-persisters were split evenly between no effect (40%) and "to some extent" (40%) while criminal justice persisters had a 42% response rate of "to some extent". Although the majority of the scores indicated that depression was not a problem, mean and median scores

SERVING STUDENTS

do not reflect the same lack of impact. Criminal justice persisters and non-persisters had a median score of 2 with mean scores of 1.75 and 1.80 respectively and nursing non-persisters indicate a mean score of 1.75 with a median of 1 (see Table 10). Nursing persisters were the least impacted by depression with a mean score of 1.30. These results indicate that depression is an area that needs further study and evaluation.

The sense of being overwhelmed had the greatest area of discrepancy in responses. Criminal justice persisters had the most impact with 33% of the population expressing that being overwhelmed negatively impacted their studies “to a great extent”. These responses were supported by a mean score of 2.46. Nursing persisters had a 43% response rate in the “to some extent” rate and 13% “to a very great extent” and an overall mean and median of 2. Criminal justice non-persisters and nursing non-persisters had lower mean scores than their counterparts indicating 1.80 and 2.00 respectively. Overall, being overwhelmed rendered higher levels of impact than other areas of family and work responsibilities. It is interesting to note that the persisters were the ones who reflected a greater sense of being overwhelmed yet they were the ones who persevered. One must keep in mind that these results are based on students’ previous college experiences but none the less should be given attention when considering issues that impact a students’ overall college experience.

Table 10

Personal Elements from the Past: Mean Responses to Emotional State

| | Nursing | | Criminal Justice | |
|-----------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Depressed | 1.30 | 1.75 | 1.75 | 1.80 |
| Overwhelmed | 2.00 | 2.0 | 2.46 | 1.80 |
| Aggregated Emotional Issues | 1.65 | 1.88 | 2.11 | 1.80 |

SERVING STUDENTS

Conclusion. Aggregate cluster means for the emotional state section reflect criminal justice persisters with the only score above a 2.00. Non-persister scores for criminal justice and nursing are almost identical with 1.80 and 1.88 respectively. Aggregate scores for criminal justice persisters and nursing persisters vary by .46 reflecting a difference between the two majors rather than between persisters and non-persisters within the majors. Overall, criminal justice persisters have the highest scores overall indicating a greater impact by emotional issues. There is not enough supporting information to determine whether the field of study has any impact on the resulting information.

Conclusions about Student's Reactions to their Past Studies

Differences surfaced between persisters and non-persisters regarding whether time not spent studying had a negative impact. Persisters believed that it did to some extent while non-persisters indicated that it did not. A difference regarding turning in homework assignments also emerged but this difference was between criminal justice students and nursing students. Criminal justice students felt that not turning in homework in their past learning experiences did have a negative impact and nursing student felt that it did not.

Criminal justice persisters were the only group that indicated that concentrating on assignments was problem ultimately impacting the overall persister score. Therefore, persisters believed that concentrating on assignments presents a problem that was not experienced by non-persisters.

Regarding interaction with the institution, there was some indication that not communicating with instructors was a problem in previous studies for some of the students. Investigation into whether this continued to be a problem for future studies is warranted before conclusions are drawn.

SERVING STUDENTS

Issues regarding personal elements related to outside social activities resulted in greater differences between criminal justice and nursing students than between persisters and non-persisters. The only area that indicated significant concern resulted in responses from criminal justice non-persisters related to partying and socializing with friends. Again, the responses relate to past experiences; time may have eliminated the need for concern in this area. Personal elements dealing with family and work also indicated greater differences between criminal justice and nursing as opposed to differences between persisters and non-persisters. The only question in this area that had scores reflecting area of concern was regarding work issues. The impact of work on studies has likely changed for the students as they have matured and would warrant further investigation.

The responses in this section are based on experiences and circumstances of the students' past educational encounters. The information provided in this survey does not allow us to determine what has changed in the students' lives since that time, whether the student was taking on campus or distance classes, or whether the student has consistently pursued their studies or is returning after time spent away from school. Although this information may indicate some areas in which a student has felt challenged in the past, there is not enough data to assume that it will be a continuing problem. Asking students to consider previous challenges may in fact result in the student's realization that resources need to be pursued or changes created to prevent continued difficulty. Certainly areas that indicated large differences or areas of discrepancy should be evaluated further for current impact but no definitive need for change can be drawn solely from the information gleaned from past experiences.

Chapter 5 **Current College Experiences**

The survey is divided into two sections. In the previous chapter, I reported on the students' responses to their experiences prior to their online program of study. Information in this chapter is based on students' responses to experiences in their current online program of study. Questions asked students to compare themselves with their college peers based on both academic issues and personal skills. The survey also asked them to consider issues that would impact their motivation and forward progress and to assess how certain factors would affect their ability to continue with their studies.

Current Comparison to Peers

This section asked the students to consider their current abilities as compared to those of their peers and rate their responses accordingly. I subdivided the section into two categories: academic skills and personal attributes. This division provided the opportunity to determine whether students believed that they were impacted by their academic skills and abilities or whether they were challenged by their overall ability to manage the demands of pursuing a college education.

Questions in this section were all asked on a five-point Likert scale with responses ranging from "lowest 10%" to "highest 10%" and providing the opportunity for a mid-point response of "average". This level of scoring provided students with the opportunity to evaluate themselves over a larger spectrum providing less probability of skewing responses than with the use of a four-point scale. Additionally, the questions had a neutral tone asking the students to rate themselves compared to their peers as opposed to posing questions in a manner that would imply a better or worse expectation as compared to peers.

SERVING STUDENTS

Academic skills. The cluster of academic skills asked students to rank themselves academically in comparison with their peers. These comparisons to others were based on how the students perceived their current abilities compared to the abilities of other students who pursued the same educational program and provided insight as to the extent of confidence the students have in their ability to be academically successful. The questions in the cluster asked students to first consider their overall academic ability and then to further self-evaluate their skills in mathematics, reading, writing, and studying.

In addition to the five-point Likert scale, the questions provided possible choices of a positive or negative level as well as a neutral level indicated by a response of “average”. Scores were broken down by criminal justice persisters, criminal justice non-persisters, nursing persisters, and nursing non-persisters and compared across the spectrum for percentage of responses in each category as well as mean scores. Scores were then subdivided by persisters versus non-persisters and percentage comparisons as well as mean scores were again evaluated for areas of differences and potential patterns.

Regarding the question of overall academic ability as compared to others, 75% of nurse non-persisters rated themselves as “above average” in general academic ability in contrast to the 30% “above average”, 52% “average”, and 18% “below average” response of the nurse persisters. On the other hand, the majority of criminal justice persisters (67%) and non-persisters (80%) both rated themselves in the “average” range. More criminal justice persisters rated themselves “above average” (29%) than “below average” (4%) while the remaining 20% of the non-persisters feel that they fall in the “top 10%”. Mean scores related to general academic ability showed a response level of “average” for all groups (see Table 11). Nursing persisters (3.13) had the lowest score and criminal justice non-persisters (3.40) had the highest score.

SERVING STUDENTS

Nursing non-persisters and criminal justice persisters (3.25) had the same level of response. The overall difference between mean scores was .27 indicating no substantial discrepancy in responses.

Table 11

Current Comparison to Peers: Mean Responses to Academic Skills

| | Nursing | | Criminal Justice | |
|----------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| General Academic Ability | 3.13 | 3.25 | 3.25 | 3.40 |
| Mathematical Ability | 3.39 | 3.50 | 3.67 | 2.80 |
| Reading Comprehension | 3.26 | 3.00 | 3.25 | 3.40 |
| Writing Ability | 3.65 | 3.50 | 3.38 | 3.00 |
| Study Skills | 3.52 | 3.75 | 3.54 | 3.00 |
| Aggregated Academic Skills | 3.39 | 3.40 | 3.42 | 3.12 |

Non-persister students in both majors rated themselves higher in overall academic ability than their persister counterparts. It is interesting to note that the two groups that withdrew from their studies believed they were stronger academically than the other students. Is this an indication that these students were bored or felt unchallenged in their studies? Perhaps the students' reason for departure was not based on a lack of ability but rather based on the fact that the studies were not difficult enough to keep them engaged.

The next three questions asked the students to reflect on their abilities in particular areas of study: mathematics, reading, and writing. In general, the mean scores across all four groups and within the groups show little difference and students either feel that they are average or

SERVING STUDENTS

slightly above average in these three areas of abilities with the exception of criminal justice non-persisters in regards to mathematical ability.

The first question related to mathematical abilities compared to peers. On a five-point scale, criminal justice non-persisters was the only group that indicated a mean score (2.80) of “below average”. The other groups indicated average scores with criminal justice persisters indicating the highest score at 3.67. Criminal justice persisters and nursing persisters both had some responses in the “top 10%” category with 17% and 9% respectively. Criminal justice non-persisters had the lowest mean score ranking slightly below “average”. This may indicate an area of concern for this group. All other groups indicated average scores regarding mathematical abilities. The greatest area of disparity between scores was revealed between criminal justice persisters and non-persisters indicating an overall difference of 0.87 as opposed to a difference of .11 between nursing persisters and non-persisters. Further research may be warranted to determine reasons for the low level of confidence in mathematical abilities for criminal justice non-persisters.

When asked about reading abilities, every group except criminal justice non-persisters had less confidence than in their mathematic abilities. The majority of responses for each group indicated “average” scores. Both criminal justice groups had some students that ranked themselves in the “top 10%” category, 8% for persisters and 20% for non-persisters, yet neither nursing group did. No student ranked him/herself in the “lowest 10%” group. However, all groups had responses in the “below average” category. Mean scores were highest for nursing non-persisters but all groups’ mean scores fell within the “average” response level. The mean scores between persisters (3.26) and non-persisters (3.22) indicated a small amount of difference between the two groups. Overall, reading did not reveal a reason for concern.

SERVING STUDENTS

Students in all groups rated themselves as “average” in their writing abilities. Both criminal justice groups had responses in the “below average” area, but none in the lowest 10%. Some students from all four groups rated their abilities in the “top 10%” and all but the nursing non-persisters had some “above average” responses. Mean scores were higher than the reading scores for the criminal justice persisters and nursing persisters. Criminal justice non-persisters had slightly lower mean scores and nursing non-persisters stayed the same. There was a greater difference between persisters and non-persisters in writing than reading but not as great a difference as there was in math. Overall, writing did not reveal any particular areas of concern with all groups revealing average scores and the difference between groups relatively small.

Study skills had higher overall averages for criminal justice persisters and nursing non-persisters while the other groups stayed at the same or a slightly lower average. Criminal justice persisters had highest scores in the “above average” range while criminal justice non-persisters and nursing persisters were evenly divided between “above average” and “average” and nursing non-persisters had the greatest response as “average”. All groups again had “average” mean scores with nursing non-persisters having the highest score of all groups and criminal justice non-persisters had the lowest. The difference between persisters and non-persisters was relatively low: 3.53 compared to 3.33. These levels do not indicate that academic issues appear to be an area of concern as the overall differences between persisters and non-persisters is minimal.

Conclusion. The aggregate mean scores indicate close scores between all groups. Nursing persisters and non-persisters had a discrepancy in mean scores of a mere .01 indicating no difference in their assessment of their current academic skills as compared to peers. The difference in aggregate scores between criminal justice persisters and non-persisters was only .30

SERVING STUDENTS

and the difference between persisters and non-persisters overall was .15. None of these scores reveal any signs that students—both persisters and non-persisters—feel that they differ from their peers. The only indication for concern related to academic issues was revealed in criminal justice non-persisters' mathematical skills. Again, these are small sample sizes so similar results may not occur with a larger population but future investigation would be needed to make that determination. The overall confidence level of non-persisters regarding their academic abilities does not indicate that the lack of academic ability is an area responsible for the decision to discontinue studies. However, it might indicate that the students are not challenged enough academically to stay engaged in their studies and decide to withdraw due to lack of interest. This is an issue that is worthy of additional study.

Personal attributes. The cluster of questions about personal attributes inquired about current issues that might impact a student's academic success and overall direction. I divided this section into *organizational*, *directional*, *mental*, *communication*, and *physical health* categories. All questions asked the students to compare themselves to their peers as related to current events. Responses were given on a five-point Likert scale which provided the students with positive, negative, and neutral response opportunities.

Organizational. The two questions categorized as organizational issues are related to a student's ability to handle multiple priorities. It is believed that this could be a notable area of concern for distance learning non-persisters as most of these students are older and consequently handling work and family issues as well as academic responsibilities. Jia Frydenberg (2007) found that life, that is, work, family, and other responsibilities, is the primary reason for dropout. That being said, the inability to manage multiple responsibilities could impact the student's decision to continue studies. This section asks questions to determine whether multi-tasking and

SERVING STUDENTS

time management skills are a concern for these students so as to expose potential indicators of future problems.

The first question in this category asked the students to rate themselves on time management skills as compared to their average peers. The inability to develop strong time management skills could be a reason for departure. In response to this question, criminal justice persisters were the only group to indicate the majority of responses as “above average”. Students in the other groups rated themselves at the “average” level. The criminal justice persisters had the highest mean scores although they still fell within the average range. The difference between persister responses (3.49) and non-persister responses (3.33) did not indicate that time management was a challenge for either group (see Table 12).

Another area that should give an indication of students’ ability to manage multiple responsibilities is that of multi-tasking in comparison to their peers. Scores were not considerably high for any group in this area with responses in the “below average” level for every group but nursing non-persisters. The criminal justice persisters straddled both sides of the middle: more than 1/3 of them (38%) rated themselves “below average” in comparison with their peers and another 1/3 of them (33%) at the “above average” level. All other groups rated

Table 12

Personal Attributes: Mean Responses to Organizational Skills

| | Nursing | | Criminal Justice | |
|----------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Time Management | 3.30 | 3.25 | 3.67 | 3.40 |
| Multi-tasking | 3.04 | 3.25 | 2.79 | 3.00 |
| Aggregated Organizational Skills | 3.17 | 3.25 | 3.23 | 3.20 |

SERVING STUDENTS

themselves as falling in the “average” range. Mean scores were lower for every group in this category with the exception of nursing non-persisters. They rated themselves at the same level of response as expressed in time management. The criminal justice persisters reflected a “below average” rating, indicated by a below average mean score of 2.79 compared to a 3.00 for non-persisters. With the exception of the criminal justice persisters, these responses indicate that this population of students believes that, compared with their peers, they are able to multi-task at an average level. Some indication of concern exists for the criminal justice persisters who indicated that they are slightly below their peers when it comes to multi-tasking responsibilities. Further study should be considered as well as providing resources to assist students in learning how to prioritize and manage multiple responsibilities. There is not a strong indication that they excel nor fail compared to the ability of their peers.

Conclusion. Based on the students’ self-appraisal of their abilities, they feel that their organizational skills compare with their peers with no strong indication of greater or lesser success. Students specified that their skills in multi-tasking and time management were comparable to that of their peers. Aggregate mean scores for responses to organizational issues within the personal attributes section were all between 3.17 and 3.25 indicating very little difference in response between persisters and non-persisters and between nursing and criminal justice students. With the exception of criminal justice persisters in multi-tasking all groups indicated that they feel that their abilities for multi-tasking and time management were at the average level in comparison to peers. There is no insinuation that this should be an area for concern.

Directional. The next set of questions asked students to reflect on their drive to achieve and leadership skills. Responses showed some differences between persisters and non-persisters.

SERVING STUDENTS

The questions asking students to rate themselves on drive to achieve as compared with their peers indicate some differences between persisters and non-persisters in the mean scores with persisters scoring a 2.89 indicating a “below average” mean, while non-persisters rated themselves at 3.11 or “average” (see Table 13). The highest number of responses for both groups fell within the average level. The differences occurred because persisters had a greater number of responses as “below average” with 34% as compared to non-persisters at 22% and non-persisters had a greater number of responses as “above average” with 19% compared to 33%. This is not the response that would be expected as one would most likely surmise that persisters would have more drive resulting in their perseverance in studies. Certainly this area warrants further investigation. One might interpret this to mean that non-persisters do not see continued studies as the most productive means to accelerate their progress and ultimate achievement and therefore are not driven to complete their studies.

The second question asked the students to reflect on their leadership skills as compared to their peers. Students rated themselves as “average” across the groups. Interestingly, some criminal justice and nursing persisters rated themselves within the “top 10%” and none from Table 13

Personal Attributes: Mean Responses to Directional Issues

| | Nursing | | Criminal Justice | |
|-------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Drive to Achieve | 2.91 | 3.25 | 2.88 | 3.00 |
| Leadership Ability | 3.30 | 3.25 | 3.21 | 3.00 |
| Aggregated Directional Issues | 3.11 | 3.25 | 3.05 | 3.00 |

the non-persister groups felt that they had attained that same level. Overall, there does not appear to be a major difference between the groups.

SERVING STUDENTS

Conclusion. Some noteworthy differences appear between persisters and non-persisters related to the question on drive to achieve but no notable difference existed regarding leadership ability. Results concerning drive to achieve indicated that persisters believed that their drive was “below average” as compared with their peers, while non-persisters indicated “average” results. Further study is warranted here as this may be an indication that non-persisters are not receiving academic support and encouragement from the workforce ultimately leading to withdrawal. In other words, job force success may supersede the drive to complete their degree.

Cognitive and affective abilities. These questions asked the students to rate their ability to think through issues as well as their confidence in their abilities to be successful—again in comparison with their peers. The questions probe students for their self-assessment of their problem-solving skills, concentration and memory, and self-confidence.

With the exception of criminal justice non-persisters, mean scores indicate that each of the groups rated themselves at the average level for problem solving skills. Criminal justice non-persisters rated themselves at the higher end of “below average” with a score of 2.80 (see Table 14). Nursing persisters were the only group that indicated a response in the “top 10%” however only 4% rated themselves this high. Both criminal justice group had some “below average” responses but neither nursing group did. Overall, persisters rated their problem-solving skills to range between “above average” and “average” responses. Non-persisters had the highest response rate score as “average” although they did have responses above and below average. Overall persisters (3.28) and non-persisters (3.11) felt that they were comparable to their peers in cognitive and affective abilities.

When asked to compare themselves to their peers on concentration and memory, responses were almost identical between persisters and non-persisters with a 57% and 56%

SERVING STUDENTS

respectively rating themselves at the average level. Persisters did have some “below average” responses and non-persisters had an 11% response at the “top 10%” level compared to 6% of persisters. Criminal justice non-persisters had the highest overall mean score rising by .8 points over the mean score of problem solving skills. The mean score for persisters was 3.28 which was slightly lower than the non-persisters 3.56.

With regard to self confidence, criminal justice non-persisters was the only group that had no responses at the “top 10%” level and nursing persisters were the only group that had responses at the “below 10%” level. Nursing persisters had responses at the “above average” level and criminal justice persisters and nursing non-persisters both had the majority of responses at the “average” level. Criminal justice non-persisters were evenly disbursed between “average” and “above average”. Criminal justice non-persisters and nursing non-persisters both had higher

Table 14

Personal Attributes: Mean Responses to Cognitive and Affective Issues

| | Nursing | | Criminal Justice | |
|--------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Problem Solving Skills | 3.35 | 3.50 | 3.21 | 2.80 |
| Concentration and Memory | 3.13 | 3.50 | 3.42 | 3.60 |
| Self-Confidence | 3.35 | 3.75 | 3.17 | 3.20 |
| Aggregated Mental Issues | 3.28 | 3.58 | 3.27 | 3.20 |

mean scores than their persister counterparts. The difference between these groups was relatively small but still somewhat of a surprise as a lack of self-confidence would be thought to be a deterrent to continued studies. The mean scores for persisters and non-persisters overall

SERVING STUDENTS

were 3.26 and 3.44 respectively, signifying that a lack of self-confidence was not a cause for withdrawal from studies.

Conclusion. Aggregate mean scores for mental issues are very similar across the board. Nursing non-persisters rated themselves slightly higher than their peers (3.58). Overall, the students appear to feel as though their abilities are similar to their peers.

Communication. Questions in this cluster ask about both students' computer skills as well as their interpersonal communication skills. Since distance learning requires the ability to communicate with people that cannot be seen typically through computer/internet, the development of these skills can impact a student's decision to continue in a distance learning program. Interpersonal skills, that is the ability to communicate with others, is also a necessary skill when working with individuals with whom face-to-face conversations do not occur. Lack of ability in either of these two areas could have an impact on a distance learning student's success.

A higher percentage (75%) of nursing non-persisters reported possessing "average" computer skills than any other group. In comparison, 43% of the nursing persisters felt that their computer skills were "above average". Criminal justice non-persisters were evenly divided between "average" and "above average" and 46% of criminal justice persisters indicated an "average" score. A full 13% difference separated the persisters (43%) and the non-persisters (56%) who felt that they had "average" computer skills, yet their means amounted to 3.34 and 3.22 respectively (see Table 15).

Even though fewer non-persisters rated their interpersonal communication skills as average, they still managed to land in the mid-range category. Forty-three percent of the

SERVING STUDENTS

persisters felt that their interpersonal communication skills were “average” while 56% of non-persisters indicated “average” skills. The means do not reflect the 13% difference. These mean

Table 15

Personal Attributes: Mean Responses to Communication Issues

| | Nursing | | Criminal Justice | |
|---------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Computer Skills | 3.39 | 3.25 | 3.29 | 3.20 |
| Interpersonal Communication | 3.48 | 3.50 | 3.17 | 3.00 |
| Aggregated Communication Issues | 3.44 | 3.38 | 3.23 | 3.10 |

scores were almost identical to those given to computer skills. Criminal justice students’ mean scores were slightly lower for interpersonal skills versus computer skills while nursing students reflected an opposite effect with interpersonal skills being higher. Overall, nursing students had higher mean scores than criminal justice students.

Conclusion. Aggregate mean scores for communication issues ranged from 3.10, criminal justice non-persisters to 3.44, nursing persisters. Scores were closer within majors but overall did not differ by a large amount. These data indicate that students in both groups feel that in general they are comparable to their peers, although a slightly higher amount of confidence appears in the aggregate among the persisters in both groups.

Physical health. Physical health, another aspect of personal attributes, had mixed responses. This question asked students to compare their physical health to that of other students of their age. Eighty percent of the criminal justice non-persisters responded equally to below and above average. More criminal justice persisters felt that their health was better than peers (42%)

SERVING STUDENTS

while 33% judged it to be “average”. Among the nursing non-persisters, 25% classify themselves as the “top 10%” in physical health, but 75% felt that they possessed average health. The nursing persisters indicated the greatest percentage of response, 43% as “average”, they also had responses of “above average” (35%) and “below average” (22%). Mean scores were all in the average range with little difference between groups (see Table 16). Career choices for both of these groups would suggest a need for at least an average level of physical health. This might be different for other fields of study. Regardless of response rates regarding physical health, there is nothing that the university can do to improve this area. It is uncertain as to why this question may have been included in the survey unless there was speculation that students might not be completing their studies due to personal health issues. None of the groups of students indicated that this was an area of concern.

Table 16

Personal Attributes: Mean Responses to Physical Issues

| | Nursing | | Criminal Justice | |
|--------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Health | 3.13 | 3.50 | 3.17 | 3.00 |

Conclusions about Students’ Current Comparison to Peers

The section involving personal attributes was subdivided into sections related to *organizational, directional, mental, communication, and physical health* issues. The majority of the responses indicated average mean scores with a few exceptions: criminal justice persisters indicated a less than average score (2.79) in reference to multi-tasking skills; nursing persisters and criminal justice persisters both indicated less than average scores, 2.91 and 2.88 respectively, in their self-evaluation of drive to achieve; and finally, criminal justice non-persisters were

SERVING STUDENTS

below average (2.80) in problem-solving skills. Aggregate scores for each category achieved an average level of response and indicated that no subdivision denoted feelings of less than adequate ability. The few exceptions warrant further review to determine rationale for the less than average response. Overall, this category indicates that the survey population feels that they are competitive with their peers in regards to their personal attributes.

Attitude about Being a College Student

This section poses statements regarding attitudes and values about being a college student. Students are asked to evaluate questions such as, “It is important to me to be a good student” and to respond to their level of agreement as it applies to them. These items should provide insight into the student’s level of commitment to their studies. The statements were analyzed and subdivided into categories of like kind. There are two major subdivisions, statements that imply a positive response and those that agreement results in a negative connotation. Both subdivisions are further divided to give a more congruent distribution of thoughts within the cluster.

Positive statements. Questions in this section had a positive implication and possible responses were given on a four-point Likert scale ranging from “strongly agree” to “strongly disagree”. The four-point selection did not allow for a neutral response meaning that students had to either agree or disagree to some level. This section was subdivided into two different categories; *commitment* and *satisfaction* with related questions in each category.

Commitment. Students are asked to reflect on their attitudes towards certain attributes of a college student. Commitment questions seek the students’ opinion about the attitudes they hold towards their studies. This section includes questions that attempt to gauge the students’ feelings of significance on various topics such as importance of being a good student,

SERVING STUDENTS

commitment to active participation in studies, and being motivated in college. A negative response to a question in this category would indicate that the student is not committed to their studies or is not concerned regarding the view that others have towards their ability to be a strong student.

When asked if being a good student was important, not surprisingly all the students agreed with the statement. The majority of criminal justice persisters “strongly agree”, yet the majority of criminal justice non-persisters “agree” indicating a difference in the level of importance. This difference resulted in a slightly higher mean score (3.75) for criminal justice persisters as opposed to the mean score (3.40) of criminal justice non-persisters (see Table 17).

Table 17

Positive Issues about being a College Student: Mean Responses to Commitment

| | Nursing | | Criminal Justice | |
|--------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Important to be a Good Student | 3.83 | 3.50 | 3.75 | 3.40 |
| Expectation to Study Hard | 3.78 | 3.50 | 3.67 | 3.20 |
| Active Participant in Studies | 3.78 | 3.50 | 3.58 | 3.00 |
| Allow Time to Study | 3.48 | 3.50 | 3.33 | 2.80 |
| Continue Education | 3.83 | 3.50 | 3.54 | 3.20 |
| Effective Student | 3.65 | 3.50 | 3.67 | 3.00 |
| Motivated to be Successful | 3.65 | 3.50 | 3.57 | 3.00 |
| Aggregated Academic Skills | 3.71 | 3.50 | 3.59 | 3.09 |

The difference in the means between criminal justice persisters and non-persisters (.35) was almost identical to the difference between nursing persisters and non-persisters (.33). Mean

SERVING STUDENTS

scores for all four groups regarding the importance of being a good student were in the high range of “agree” with slightly lower scores for non-persisters as compared to persisters. The difference between overall mean scores of persisters and non-persisters was 3.79 versus 3.44 respectively with both scores in the “agree” range. The possibility of a neutral level of response is not an option indicating that a lower response may be indicative of less importance placed on being a good student by the non-persisters. Although they agree that there is some value to such a statement, it may not be an issue of higher priority for this group of students. The overall difference between the means of persisters and non-persisters was .35 still indicating responses at the average level but also representing a divide between the upper and lower levels of the average response range. The fact that there is a difference between the persisters and non-persisters indicates that further evaluation of a larger population is warranted to determine if this difference exists in other areas of study.

Similar responses were found when students were asked to respond to the statement, “I expect to work hard at studying in college”. Criminal justice persisters and nursing persisters both had the majority of responses in “strongly agree”; criminal justice non-persisters had the majority of responses as “agree”; and nurse non-persisters were evenly divided between the two responses. Persisters responded 72% to “strongly agree” and non-persisters responded 67% to “agree”. Again, mean scores reflected a higher score for persisters (3.73) than non-persisters (3.34) but all responses still fell within the “average” range. Like the previous statement, the response to this statement reflected average means for both groups but persister means were in the higher spectrum of average scores while non-persisters were in the lower level. The difference in mean scores between persisters and non-persisters was slightly greater for this group (.375) as the non-persisters had a slightly lower aggregate mean score.

SERVING STUDENTS

Next answers were in response to the statement, “I am committed to being an active participant in my studies”. Criminal justice and nursing persisters had the majority of responses as “strongly agree”; criminal justice non-persisters had 100% “agree”; and nursing non-persisters were evenly divided between “agree” and “strongly agree” resulting in the majority of persisters expressing “strongly agree” and non-persisters, “agree”. Criminal justice non-persisters had the lowest mean scores at 3.0 but all responses still fell within the average range with a slightly higher difference between overall mean scores of persisters (3.68) versus non-persisters (3.22) again reflective of the lower and higher end of the mean range.

When asked if they allow sufficient time for studies, the majority in three of the four groups registered “agree” but the nurse non-persisters were divided between “strongly agree” and “agree”. This was the first time that any group had responded less than “agree” with some criminal justice students disagreeing with the statement. Criminal justice non-persister mean scores were below the average level; some obviously feel that they are not attending to their studies enough. This could be the result of multiple responsibilities requiring too many demands on time and ultimately not allowing for the necessary time needed to study.

Aggregate mean scores for persisters and non-persisters still remain in the average range with non-persisters indicating 3.11 and persisters, 3.40. Because criminal justice non-persisters mean scores indicated a response of “disagree” and scores for non-persisters versus persisters overall were lower, this area indicates that further study may be warranted. The four-point Likert scale does not allow the students to pick a neutral response which has the impact of skewing responses. Further study should allow for greater freedom in responses related to sufficient time for studies.

SERVING STUDENTS

The statement, “I see myself continuing my education in some way throughout my entire life”, resulted in the majority of persisters with a response of “strongly agree” and non-persisters divided between “strongly agree” and “agree”. A small percentage of criminal justice students disagreed with the statement. Persisters had higher mean scores (3.68) than their non-persister counterparts (3.33). There is not a large difference between the persisters and non-persisters and I believe that the fact that the persisters had the higher mean score should have been anticipated.

When asked if others see them as an effective students, persisters and non-persisters varied in their responses. More persisters strongly agreed (66%), whereas most non-persisters (78%) merely agreed. Among the criminal justice students, 100% of non-persisters agreed, but 67% of persisters felt strongly that they were perceived as effective. The difference was not as great with nursing students; 65% of persisters “strongly agree” and non-persisters were evenly divided between “strongly agree” and “agree”. Persisters obviously have more confidence in themselves—or at least in their perceptions of how others see them—than do non-persisters. The overall difference between persisters and non-persisters was noteworthy with 66% of persisters indicating that they “strongly agree” but 78% of non-persisters only “agree”. Mean scores showed a greater disparity between criminal justice persisters (3.67) and non-persisters (3.00) but the aggregate difference between persisters (3.66) and non-persisters (3.22) was not as great.

When asked if they feel “really motivated to be successful in” their college career, the distribution of responses was similar. Persisters in general and across the two majors were more likely to strongly agree (criminal justice 54%; nursing 65%), but the criminal justice non-persisters were more likely to only agree (60%) while the nursing non-persisters were evenly divided between agree and strongly agree). Mean scores again showed the greatest disparity

SERVING STUDENTS

between criminal justice students though not as great as with the previous statement. Overall mean scores indicated a 3.57 for persisters and 3.22 for non-persisters.

Conclusion. Aggregate mean responses are closer between nursing students than between criminal justice students with a 3.71 for nursing persisters and 3.50 for nursing non-persisters and a 3.59 for criminal justice persisters and 3.09 for criminal justice non-persisters. Responses by criminal justice non-persisters never exceeded the 3.40 mean while all other groups had scores above this level. Additionally, some criminal justice non-persisters disagreed when responding to having sufficient time for studies. Overall, the difference in aggregate scores between persisters and non-persisters was .36 while the difference between criminal justice persisters and non-persisters was .50. The limitations of the survey do not permit an indication of whether the differences were more indicative of the major or of the decision to discontinue studies. Regardless, further evaluation is warranted to ascertain whether the lack of connection to the major in criminal justice or dissatisfaction with studies in general resulted in the greater disparity between persisters and non-persisters.

Satisfaction. The two statements selected for placement under satisfaction reflect feelings of pride and fulfillment towards ones' studies. The term satisfaction was chosen because the result of agreement with these two statements would indicate satisfaction with studies.

The same distribution of responses occurred as a result of the statement, "I will be proud to do well academically in college" with the difference between persisters and non-persisters being 81% of persisters that "strongly agree" and 67% of non-persisters that "agree". Nursing persisters had the highest mean score with a 3.91 and criminal justice persisters were next with a 3.71 indicating this is more important to the persisters than the non-persisters (see Table 18).

SERVING STUDENTS

Since the mean scores for non-persisters were 3.50 for nursing students and 3.20 for criminal justice students, the satisfaction levels are relatively high for all. However, the overall mean scores also reflected this with a 3.81 mean score for persisters as opposed to the 3.33 of non-persisters. Although both scores are within the average range, a difference of .48 between the two groups indicates a slightly greater sense of pride in studies with the persisters.

There was slightly less of a discrepancy in reaction to the assertion, "I find learning to be fulfilling". The difference between "strongly agree" and "agree" still existed but the level of response was not as diverse with 64% of persisters responding "strongly agree" and 67% of non-persisters responding "agree". There was also less of a difference in mean scores between persisters (3.78) and non-persisters (3.33).

Table 18

Positive Issues about being a College Student: Mean Responses to Satisfaction

| | Nursing | | Criminal Justice | |
|--------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Proud to do Well | 3.91 | 3.50 | 3.71 | 3.20 |
| Find Learning Fulfilling | 3.78 | 3.50 | 3.50 | 3.20 |
| Aggregated Satisfaction | 3.84 | 3.50 | 3.61 | 3.20 |

Conclusion. Aggregate mean scores for responses to satisfaction questions range from 3.20 to 3.84. Criminal justice mean scores are slightly lower than nursing scores with the greatest amount of variance, .41, between criminal justice persisters and non-persisters. Although all responses indicated an average level of response, some difference existed between responses in the lower level and higher level of average response. The greatest difference occurred between criminal justice persisters and non-persisters regarding the sense of pride. Again, it is not known whether this difference has to do with the connection to the major or to their studies in general.

SERVING STUDENTS

Further review might provide insight into the reasons for the level of difference between majors and between persisters and non-persisters.

Negative statements. Questions in this section had a negative connotation and agreement with the statements would indicate possible feelings of disconnection, lack of skills, or lack of drive. Answers to the questions were given on a six-point Likert scale. Use of this scale did not provide for a neutral level of response but instead provided a choice between three levels of positive response and three levels of negative response. Students who do not feel particularly opposed to or supportive of the response have to settle for a level that might not be indicative of how they feel.

I subdivided the negative statement section into *disconnection* and *feelings of apathy*. The first subdivision, *disconnection*, provided statements that, if students agree with them, would be indicative of feelings of separation and guilt towards studies. Potent feelings of support in this area would be expected to indicate a strong likelihood of departure as there would be no driving incentive or sense of support to encourage a student to continue moving forward. Agreement with statements under the subtitle *feelings of apathy* could result from a lack of motivation and drive to continue with studies. These questions dealt with the students' view of their drive to accomplish their work as well as whether or not they had future plans beyond their studies. Students who have no sense of direction or purpose towards the completion of their studies are less likely to continue the process.

Higher scores in this section are more indicative of reasons for departure or agreement with the statement and lower scores reflect disagreement with the negative comment. Students who respond at a level of four or higher, that is, (a response of “slightly agree”, “moderately agree”, or “strongly agree”) are indicating some level of agreement with a negative stance.

SERVING STUDENTS

Therefore in this section, a lower mean is more desired as far as expected potential for continuance.

Disconnection. Agreement with the first statement in this section, “I have no one to turn to with my problems” may indicate that the student may feel alone, separated from others, or have no support system—either external to the institution or within the institution. The majority of responses for each group were “slightly disagree”. Each group, with the exception of criminal justice non-persisters registered responses of “strongly agree”. Criminal justice persisters had the largest level of strongly agree with a 33% response rate, followed by nursing non-persisters (25%) and nursing persisters (17%). All groups, with the exception of nursing non-persisters, provided responses of “strongly disagree”. At this level, criminal justice non-persisters had the highest level of response (20%), nursing persisters (17%) were a close second, and criminal justice persisters (4%) had the lowest level of response. Criminal justice non-persisters had the lowest mean scores with a 2.6 indicating “moderately disagree” while the other three groups had mean scores of “slightly disagree” (see Table 19). Response differences are likely not to be as

Table 19

Negative Issues about being a College Student: Mean Responses to Disconnected

| | Nursing | | Criminal Justice | |
|---------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| No one to Turn to with Problems | 3.00 | 3.75 | 3.83 | 2.60 |
| Not Smart Enough | 3.04 | 3.75 | 2.75 | 3.60 |
| Guilty | 2.96 | 3.50 | 3.17 | 2.60 |
| Aggregated Disconnected Issues | 3.00 | 3.67 | 3.25 | 2.93 |

SERVING STUDENTS

large due to the potential number of responses and the small sample size. Therefore, a smaller difference can still be an indication of potential concern. It is interesting to note in this case that between criminal justice students, persisters had the higher score and non-persisters had the higher score among nursing students. There is a difference of 1.23 between mean scores of criminal justice groups indicating a different level of response. Although the indication is that the students do not agree with this statement, the level of difference between the responses indicate reason for concern that the non-persisters are feeling more isolated than their persister counterparts and for this reason, warrants further study and evaluation.

Next students were asked to reflect on the statement, "I fear I am not smart enough to pursue a degree". Responses to this statement indicate the largest number for each group at the "slightly disagree" level, with criminal justice non-persisters (80%) having the largest number followed by nursing non-persisters (75%), criminal justice persisters (67%), and nursing persisters (48%). Each group also indicated some responses in the "strongly agree" level. At this level, nursing non-persisters (25%) had the highest response followed by criminal justice non-persisters (20%), nursing persisters (17%), and criminal justice persisters (4%). Not surprisingly, higher mean scores were calculated for non-persisters (3.67) as opposed to persisters (2.89). These responses indicate a lack of confidence by non-persisters who may believe that they are not intelligent enough to pursue a degree. Although the degree of response still indicates disagreement with the statement, the difference in the level of response indicates less confidence by non-persisters than persisters and is indicative of concern for continued studies. This difference contradicts the earlier section when students were asked to consider their academic abilities as compared with their peers. In that case, the non-persisters indicated

SERVING STUDENTS

the greater level of confidence in overall academic ability. The disparity between the responses of this section and the earlier section supports the suggestion of further evaluation.

The next statement has to do with the students' level of guilt for pursuing a college education in terms of time and money. It states, "I feel guilty spending time, money, and/or energy on my education". Again, responses were rated on a six-point Likert scale between strongly disagree and strongly agree. The format of the question does not allow the student the ability to expand on their response therefore one is left to speculate as to which area; time, money, or energy, causes the student to feel guilty. This lack of information makes the resulting responses inconclusive when trying to determine the areas that are most challenging to the students.

The majority of responses were in the "slightly disagree" range although nursing non-persisters had the majority of responses (75%) in the "slightly agree" range. In terms of means, two groups, criminal justice non-persisters (2.60) and nursing persisters (2.96), fell within the moderately disagree range while the other two groups only slightly disagree. Mean scores between the overall persisters and non-persisters category were very close with a 3.06 and 3.00 respectively indicating that the difference occurs within career fields with criminal justice persisters and nursing non-persisters having a stronger feeling of guilt than their counterparts. Guilt in participating in education activities can impact the amount of time and commitment a student contributes towards their studies and can ultimately lead to departure from the program. The difference in the responses within the categories indicates reason for further evaluation. It is interesting to note that the nursing persisters and criminal justice non-persisters as well as the nursing non-persisters and the criminal justice persisters are the groups that are most similar in this area of questioning. The differences between majors rather than between persisters and non-

SERVING STUDENTS

persisters support the premise that the program of study and potential ties to the profession can impact how immersed the student may become in their studies which may ultimately impact their decision to complete the program.

Conclusion. Aggregate mean scores for the negative issues relating to being disconnected indicate that criminal justice non-persisters were the only group with mean scores at the “moderately disagree” range while all other groups answered at the “slightly disagree” level indicating a stronger sense of connection for the criminal justice non-persisters. The lower scores in regard to having no one to turn to and feeling guilty for pursuing studies were the ones most out of line with the other groups and ultimately resulted in the overall lower score or greater level of comfort for this section. Criminal justice non-persisters aggregate scores, although in a different category level, were closest to those of the nursing persisters and were furthest from the nursing non-persisters indicating that the greatest difference in this particular category is between majors rather than between persisters and non-persisters.

Feelings of apathy. The next two statements were classified as feelings of apathy as they caused the students to reflect on their drive to get their work done as well as whether they had plans upon completion of their studies. Support of either of these statements could indicate that the student has no career goals or future plans that would motivate and encourage him/her to continue to move forward should studies become challenging.

Students were first asked to consider the statement, “I don’t seem to have the drive to get my work done”. Criminal justice persisters and nursing non-persisters responses were evenly divided between “strongly agree” and “slightly disagree” while the two other groups had the greatest number of responses in “slightly disagree”. Nursing non-persisters response of “moderately agree” for a mean score of 4.50 indicates that this is a definite area of concern for

SERVING STUDENTS

this group as compared with the other groups (see Table 20). Nursing persisters had a mean score of 2.43 for a response level of “moderately disagree” indicating that they felt they had the drive to get their work done. The higher score of the non-persisters indicates that they support this statement and are having difficulty maintaining their drive in their studies. There was also a notable but reverse response between criminal justice persisters and non-persisters with a .70 difference in mean scores. Overall, persisters had a mean score of 2.98 and non-persisters a score of 3.56. These overall mean scores indicate that non-persisters have identified that they have less drive towards the pursuit of their degree which ultimately could result in their departure from studies. Further evaluation of this area is warranted as lack of motivation and drive can cause a student to become discouraged or withdraw from studies.

Table 20

Negative Issues about being a College Student: Mean Responses to Feelings of Apathy

| | Nursing | | Criminal Justice | |
|-----------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| No Drive | 2.43 | 4.50 | 3.50 | 2.80 |
| No Future Plans | 2.87 | 2.75 | 3.25 | 4.40 |
| Aggregated Apathetic Issues | 2.65 | 3.63 | 3.38 | 3.60 |

The last statement in the apathetic section was “I have no idea what I will do after I graduate”. Unlike some of the other statements, a lower mean score indicates that the student does have some future goals or directions upon the completion of their degree. Criminal justice non-persisters had the highest overall response rate in the “slightly agree” section indicating that they had no plans for their future beyond the completion of the degree. Criminal justice persisters had the next highest score indicating a response in the “slightly disagree” level.

SERVING STUDENTS

Nursing students in both groups responded at the “moderately disagree” level indicating some future plans. This is not a surprising difference as the job market for nurse graduates has been high for the last several years and is likely to provide greater opportunities for future employment for these graduates. Additionally, nursing students had to be a licensed registered nurse before they could start the program and as such were more likely to already have employment or employment opportunities within their field. Current budget situations have indicated a decline in hiring opportunities in entry level community service positions such as law enforcement. Criminal justice students who are not already employed in the field may have greater difficulty entering the market. Overall, the non-persisters had less certainty about future plans with a mean score of 3.67 compared to the mean score of 3.06 for persisters indicating that opportunities to provide career counseling might be warranted to maintain student persistence.

Conclusion. Aggregate mean scores related to apathetic issues indicate a low level of 2.65 for nursing persisters compared to the high scores of 3.63 and 3.60 for nursing and criminal justice non-persisters. This leaves the nursing persisters at the level of “moderately disagree” and all other groups within the “slightly disagree” section. These questions relate to issues of not having the drive to get work done and having no idea of what the student will do after graduation. The lower scores would be expected to have a greater probability of persistence as opposed to higher scores indicating that the nurse persisters would be the most likely to move forward in their educational endeavors. Criminal justice persisters have the next lowest scores with both groups of non-persisters having almost one full number above the nursing persisters. These results support the need for further study in this area. Additionally, they support an earlier study by Bird and Morgan (2003) that determined that if students are able to maintain their motivation and commitment, they could overcome other obstacles and persevere with their

SERVING STUDENTS

studies. The fact that these students are already showing signs of difficulty with motivation within their first semester of study definitely indicates reason for concern.

Conclusions Regarding Students' Attitudes about being a College Student

This section contains questions reflecting both positive and negative connotations. The responses to these questions were provided on an even-numbered Likert scale which, by design, eliminates the ability for a neutral response and skews the subsequent answers. The tone of the questions, negative or positive, also has a tendency to guide responses in the implied direction causing one to question the validity of the resulting information. Questions in this category deal with issues pertaining to commitment, satisfaction, disconnection, and apathy.

Some differences are exhibited between persisters and non-persisters as well as some differences between majors. It is difficult to ascertain the actual cause of these differences due to the limited amount of available information, but the indication of the existence of discrepancy supports the need for additional research and evaluation.

In the section dealing with commitment, criminal justice non-persisters had lower scores than any other group particularly regarding sufficient time for studies. This group had the lowest overall mean scores with the next closest group being nursing non-persisters. It is difficult to determine whether the low scores for criminal justice non-persisters was more a result of the major or the decision not to persist. Similar results were revealed in dealing with issues of satisfaction.

In regards to negative questions classified as disconnection, criminal justice non-persisters were again the group most skewed from the other responses. Surprisingly, the differences in this category projected criminal justice non-persisters as having a stronger sense of

SERVING STUDENTS

connection, particularly related to having no one to turn to and feeling guilty for studying. The indications here are the differences are greater between majors than within majors.

Nursing non-persisters indicated reason for concern in reference to drive towards studies. There was a notable difference in their scores as opposed to every other group and particularly within the major. This sizeable difference reflects a need for additional evaluation.

Causes for Departure

This section, causes for departure, questions students regarding their intent for continued studies. The major divisions within this category are persistence, academic progress, change of focus, and personal challenges. The persistence section is further subdivided by *commitment* and *anticipated disconnection*. All questions ask students to consider the possibility of future degree completion or withdrawal.

Persistence. Questions in this cluster provided a three-point Likert scale with possible responses of “no chance”, “some chance”, and “very good chance”. Because fewer choices of response are given differences between responses would need to be larger to indicate a difference worthy of concern. Questions in this cluster concern the students’ anticipated probability of continuing their studies in general and continuing their studies at this institution specifically.

Commitment. The first question in this cluster involves the intent of the student to complete their bachelor’s degree at Old Dominion University. The question does not specify as to the modality of study that the student will pursue so it is possible that a student could become dissatisfied with distance learning but continue their studies through ODU in another modality. The higher the score, the greater the anticipation of the student that he or she would complete the degree with this institution. All groups indicated greater than majority response to “very good chance” that they will complete their degree with ODU. Only a few nursing persisters (4%) felt

SERVING STUDENTS

that there was “no chance” that they would complete their degree. Likewise, a similar small proportion of criminal justice persisters (4%) felt that there was “some chance” of not finishing their degrees, but a large portion of the criminal justice non-persisters (40%) felt that there was “some chance” of not experiencing graduation. Nursing non-persisters had the highest mean score with a 3.00, meaning that all the non-persisters planned to finish their degrees at ODU (see Table 21). The lowest mean score (2.60) was that of criminal justice non-persisters. Based on mean differences between persisters (2.94) and non-persisters (2.78), there appears to be no need for further evaluation. The majority of the students anticipate continuing with their studies at this institution until completion. However, 40% of non-persisters indicated some level of concern that they would not complete their degree and this does present reason to continue with additional study.

The next question, “how great are the chances that you will return for another semester at this college?” showed a difference in response rates with the nursing non-persisters who indicated a 2.25, which is .49 below the lowest level of the other three groups. The answers for Table 21

Persistence: Mean Responses to Commitment

| | Nursing | | Criminal Justice | |
|-----------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Complete degree at ODU | 2.91 | 3.00 | 2.96 | 2.60 |
| Return Another Semester | 2.74 | 2.25 | 2.83 | 2.80 |
| Satisfied with this College | 2.78 | 3.00 | 2.88 | 3.00 |
| Aggregated Commitment | 2.81 | 2.75 | 2.89 | 2.80 |

SERVING STUDENTS

this section contradict responses for the previous question especially with the nursing non-persisters. Nursing non-persisters indicated that there was a very good chance that they would complete their degree with ODU but only 50% indicated that there was a very good chance that they would return for another semester. This contradiction may indicate that either the student is not paying attention to the questions or they do not fully understand what they are being asked. It could also be an indication that they have had financial or work issues that require that they temporarily stop out from their studies. Regardless, the scores are lower than the previous question for three of the four groups, which indicate a need for further investigation as the results may indicate that the students intend to sit out in the next semester.

Overall mean scores for persisters (2.85) and for non-persisters (2.33) showed that the intent to continue another semester with this institution is not as great for non-persisters as it is for persisters. This difference may indicate that the non-persisters are experiencing some anxiety related to time commitments that may impede continuation in the next semester. The previous question indicates that they intend to finish their studies but responses to this question indicate that there might be occasions for stop outs during the process. Further research is warranted to determine if resources can be provided to assist in avoiding stop outs.

Students were also questioned as to the likelihood that they would be satisfied with the institution with over an 80% response rate for each group in the “very good chance” selection. Both non-persister groups indicated a 100% response of a “very good chance”. It is surprising that the highest scores of expected satisfaction came from the students who did not persist. This return may indicate that the reason for leaving was not related to the institution but rather to outside factors.

SERVING STUDENTS

Conclusion. The lower responses given regarding the next semester continuation raise some questions as to the responses in this section. One would have expected stronger responses regarding the next semester continuation as opposed to completion of the program. There should be some concern as to whether or not this is indicative of potential stop outs for students rather than continuous completion of studies. Students who stop out during the time that they are pursuing a degree do not always return for completion. Providing resources and services to assist these students in dealing with stress, time management, and financial aid issues can assist in their continued studies.

Aggregate mean scores for commitment all fell between 2.75 and 2.89 which is the “some chance” response level. Persisters had slightly higher scores but overall difference between persisters and non-persisters was .07, thus not indicative of concern between the two groups. The indication for concern is a result of the difference in response levels between the questions for the nursing non-persisters. One could surmise that these students actually have the intent of completing their studies at some point but that something is concerning them regarding their current forward progress. The ability to ascertain the source of the inconsistencies in responses might provide insight as to factors that might trigger a withdrawal from a student. Providing resources and alternatives to students electing to stop out would potentially result in an improvement in retention as it is not uncommon for a student to elect to stop out resulting in the student not returning to complete studies.

Anticipated disconnection. The next division of questions pertained to the feeling of disconnection and the probability that a student would not remain with the institution. Questions ranged from the chance of missing class to the probability of transfer to another institution.

SERVING STUDENTS

Mean scores indicate a response level of “no chance” for most questions (see Table 22), although on two separate occasions, a response of “some chance” was given, both by non-persisters.

When students were asked about the likelihood that they would “miss more than one class session per week”, the criminal justice non-persister mean score indicated “some chance”. This could be a concern based on time constraints and outside commitments and may warrant further evaluation.

Table 22

Persistence: Mean Responses to Anticipated Disconnection

| | Nursing | | Criminal Justice | |
|--------------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Miss More than one Class per Week | 1.17 | 1.25 | 1.50 | 2.00 |
| Drop Out Temporarily | 1.17 | 1.75 | 1.17 | 1.60 |
| Transfer | 1.48 | 2.00 | 1.33 | 1.60 |
| Aggregated Anticipated Disconnection | 1.27 | 1.67 | 1.33 | 1.73 |

The probability that the student would “drop out temporarily” indicated lower scores for both criminal justice groups than the previous question but higher scores for nursing non-persisters. The highest mean score was indicated by nursing non-persisters but it still fell within the level of “no chance” and therefore does not indicate reason for concern.

The possibility of transfer was highest for nursing non-persisters who indicated “some chance” that this would occur. The difference between the nursing persisters and non-persisters was .52. This difference might indicate a reason for further discussion.

SERVING STUDENTS

Conclusion. The response rate of “no chance” when questioned about missing more than one class per week received majority rankings in every group but criminal justice non-persisters. These students had the highest level of response at “some chance” in both missing class and dropping out of college while “no chance” ranked highest in the likelihood of transfer to another institution. A lower response number indicates a higher expectation of completing studies at the current institution. Criminal justice non-persisters had a higher score than the other groups but the overall aggregate response still indicated that there was no anticipated disconnection. Mean scores for persisters (1.34) versus non-persisters (1.67) were not quite as large.

Aggregate mean scores ranged from 1.27 to 1.73 with the lowest scores being the two persister groups and the higher scores, the non-persisters. The difference between persisters and non-persisters was .4 overall as well as between majors. Non-persisters both indicated a mean response of “some chance” to at least one question; criminal justice non-persisters did regarding missing more than one class per week, and nursing non-persisters did regarding transfer. However, in both of these areas, their persister counterparts also had the highest response rate related to the same question as the non-persisters.

Academic Progress. The next section looks at issues that relate to the students’ expectation of their academic progress including satisfaction, dissatisfaction, and inability. Each question asks the student to consider the probability of their participation in certain occurrences such as studying with other students or failing a class. Answers are given based on a three-point Likert scale with one indicating “no chance” and three, “very good chance”. The three-point Likert provides an opportunity for a neutral level of response. Because it only provides for a three-point level of response, differences in mean scores can be noteworthy within levels as well as between levels.

SERVING STUDENTS

Satisfaction. These questions pertained to academic satisfaction. The cluster included questions regarding grades, faculty relationships, and interaction with other students. The first question, “How great are the chances you will earn at least a “B” average?” had a majority responses of “very good chance” for all groups with mean scores falling within the upper range of the “some chance” level. This indicates confidence in academic abilities for all groups.

Table 23

Academic Progress: Mean Responses to Satisfaction

| | Nursing | | Criminal Justice | |
|-----------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Earn at Least a “B” | 2.78 | 2.75 | 2.75 | 2.80 |
| Develop Relationship with Faculty | 2.26 | 2.00 | 2.29 | 2.20 |
| Study with Others | 2.35 | 2.25 | 2.00 | 2.20 |
| Aggregated Satisfaction | 2.46 | 2.33 | 2.35 | 2.40 |

The probability of developing a relationship with a faculty member or advisor was not as convincing. The majority response with every group except criminal justice persisters was “some chance”. Criminal justice persisters had a majority response level of “very good chance” (46%) but they also had several responses of “some chance” (38%) and “no chance” (16%) resulting in a mean score response of “some chance”. Overall, all group mean scores fell within the “some chance” response rate with little difference between groups (see Table 23).

Nursing students indicated that they would be more likely to study with other students than their criminal justice counterparts. Scores again fell within the “some chance” level indicating a possibility that this will occur. The greatest difference occurred between nursing persisters (2.35) and criminal justice persisters (2.00) with an overall difference between the two

SERVING STUDENTS

of .35. The low level of differences between responses does not indicate any reason for concern in this area.

Conclusion. Aggregate mean scores for responses to issues of satisfaction were very closely in line indicating that there was no indication of concern for issues in this area. Lower scores in this section would be anticipated to reflect a higher probability of departure, however study participant scores did not reflect an issue.

Dissatisfaction. There was only one question in this section. It asked students to consider “how great are the chances you will find classes boring?” Like other questions in this part of the survey, it asks students to consider the likelihood of a future occurrence as opposed to contemplating past occurrences. Little difference existed between persisters and non-persisters in this category but differences between majors surfaced (see Table 24). Criminal justice students indicated that there was “some chance” they would find classes boring while nursing student responses had a

Table 24

Academic Progress: Mean Responses to Dissatisfaction

| | Nursing | | Criminal Justice | |
|----------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Classes Boring | 1.96 | 1.75 | 2.08 | 2.20 |

high score in the “no chance” section. This difference may have to do with the fact that nursing students are already vested in the field and know what to expect whereas criminal justice students are still new to their field and are probably uncertain as to what to expect.

Academic inability. This section questions students on the likelihood of failing a course or being placed on academic probation. The responses are scored on a three-point Likert scale with one indicating “no chance” and three, “very good chance”. A lower response regarding

SERVING STUDENTS

these questions indicates that the student believes there is a probability that the event will not occur. As agreement with the questions asked would imply that the student believes that they will fail a class or be placed on academic probation, a lower score is the more favorable response.

The first question asked students to consider the likelihood that they would fail one or more courses. All groups had the majority of responses as “no chance”, which was also reflected by mean scores (see Table 25). Criminal justice persisters were the only group to have some responses (4%) of “very good chance”. Though all groups did have some responses indicating “some chance”, the resulting mean scores still indicated a response level of “no chance”.

Table 25

Academic Progress: Mean Responses to Academic Inability

| | Nursing | | Criminal Justice | |
|--------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Fail One or More Courses | 1.17 | 1.25 | 1.25 | 1.40 |
| Academic Probation | 1.09 | 1.25 | 1.21 | 1.20 |
| Aggregated Inability | 1.13 | 1.25 | 1.23 | 1.30 |

Question two in this cluster asked students to consider the likelihood that they would be placed on academic probation. Scores for all groups were slightly lower than responses to the previous question indicating a lower level of expectation that this would occur. The mean response rates for all groups ranged from 1.09 to 1.25 indicating that there was not a strong expectation of this event occurring.

Conclusion. The fact that a student would predict the possibility of either of these occurrences indicates possible insecurity in their ability to successfully meet the academic

SERVING STUDENTS

requirements necessary to complete a degree. The majority of responses to both questions and in all categories was “no chance”, indicating that they felt confident in their ability to meet the minimal GPA requirements. Criminal justice persisters did have a 4% response rate of “very good chance” to both questions indicating some concern by a small percentage of this population but this did not affect the overall mean for this group. Aggregate mean responses indicated little difference between groups and no indication of concern in this area.

Conclusions about Students' Causes for Departure

Responses in this section were not notably different between groups. Reaction related to commitment did reveal some interesting issues. Students reported that they felt they had a greater likelihood of completing a degree with the institution than they would return for another semester. This difference in responses reflects a likelihood of anticipated stop outs. Students who stop out with the intent to return do not always accomplish their plan, which results in permanent attrition. Knowledge of the anticipated stop outs reveals a need to make students aware of available resources such as tutoring, counseling, and financial aid that may provide the assistance necessary so that the student can continue studies.

Non-persister groups indicated some reason for concern in at least one area related to an *anticipated disconnection*. Criminal justice non-persisters suggest a greater likelihood of missing more than one class per week while nursing non-persisters denote a possibility of transfer.

No issues were discovered regarding *academic progress* revealing that students did not foresee issues related to academic failure. Mean scores were very closely in line between groups giving no indication of probable departure related to *academic progress*. The problem areas were related to issues related to an *anticipated disconnection*.

SERVING STUDENTS

Outside Activities

The cluster of outside activities covers issues and activities that occur outside of the “virtual classroom”. Classroom time for distance learning students is different than that of traditional students but it still requires time devoted to “conversations” with faculty and classmates. Questions in this section refer to events that occur outside of that time. This section is broken into three separate categories; family academic, and work.

Family. This section only contains one question regarding the impact school may have between the student and their family or friends: “How great are the chances that you will have serious disagreements with your family and/or friends regarding your personal, social, academic, or career decisions?”. The question does not provide students with the ability to elaborate on their response ultimately impacting the amount of data one can glean from the available response choices. The response is given on a three-point Likert scale with one indicating “no chance” and three indicating a “very good chance”. Neither criminal justice non-persisters nor nursing non-persisters provided responses that indicated a very good chance of problems but both criminal justice persisters (4%) and nursing persisters (9%) did have a small percentage that indicated that this could be a significant problem. Criminal justice non-persisters had the largest percentage of responses (60%) indicating “some chance” that this could be a problem with the highest mean score of 1.60 which is at the upper level of a “no chance” response (see Table 26). Nursing non-

Table 26

Current Comparison to Personal Challenges: Mean Responses to Family

| | Nursing | | Criminal Justice | |
|-----------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Disagreements with Family/Friends | 1.57 | 1.25 | 1.33 | 1.60 |

SERVING STUDENTS

persisters had the highest percentage of responses indicating “no chance” and the lowest overall mean score.

Conclusion. The differences between nursing persisters and non-persisters (.32) compared to criminal justice persisters and non-persisters (.27) are very close however, scores are higher for nursing persisters and criminal justice non-persisters. As no group reached the level of “some chance”, there does not appear to be any reason for concern regarding this question. Results do not indicate that the students anticipate their studies causing serious disagreements between them and their family or friends. As noted, the question does have several components: personal, social, academic, and career. Providing one response to this many issues can be confusing and cause responses that may not be indicative of each category.

Academic activities. The academics section asks about students’ individual academic activities such as library use, thinking about and utilizing class material outside of class, and active class participation. These questions are asked on a four-point Likert scale with responses ranging from never (1) to very often (4), again not providing a mid-point answer. A higher response level would be expected to indicate a greater likelihood of continuance and success in studies.

The first question asks the student to consider how often they believe that they will “use the library resources to do research for classes”. With the exception of criminal justice non-persisters, all groups had mean scores at the “occasional” level (see Table 27). Twenty percent of the criminal justice non-persisters responded that they would never use the library and none of this group indicated use above the “occasional” level causing the mean score to be lower. All of the other groups, although having the majority of responses at the “occasional” level, also had some responses of “often” and “very often”. Distance students may not understand that it is still

SERVING STUDENTS

possible to use the library even if they are not on the main campus, but they also may have interpreted the question not to include on-line research through the library. It is important that instruction regarding these resources is made available to students when they first begin their studies.

Table 27

Outside Activities: Mean Responses to Academic Activities

| | Nursing | | Criminal Justice | |
|----------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Use Library | 2.22 | 2.25 | 2.25 | 1.80 |
| Think about Course | 2.24 | 2.75 | 2.38 | 2.20 |
| Use What You Learn | 2.43 | 3.00 | 2.50 | 2.60 |
| Participate in Class | 2.96 | 3.00 | 3.08 | 3.20 |
| Aggregated Academics | 2.46 | 2.75 | 2.55 | 2.45 |

The next statement, “How often do you expect to think about course material outside of class and/or discuss it with other students?” had a higher response rate for every group. The question itself involves two different issues; thinking about material outside of the class and discussing material outside of the class. The requirement of one response for two different issues may confuse the students and cause the response not to be an accurate depiction of how they feel about both issues.

Nursing non-persisters had a higher score than nursing persisters and the opposite was true for criminal justice students. All groups scored within the “occasional” level indicating the potential of studies becoming a part of the students’ outside life. The fact that the students did give a response at the “occasional” level indicates that the students believe that the knowledge

SERVING STUDENTS

obtained from their studies will be beneficial to their life and/or work. There is no indication of significant discrepancies regarding this section.

Students were next asked how often they thought they would use what they learned outside of the classroom. The highest response in this category came from nursing non-persisters (3.00) with the lowest score from the nursing persisters (2.43). The mean score of nursing non-persisters indicates that they anticipate they will often use the material learned. Criminal justice persisters also responded at a lower level than their non-persister counterparts but the difference between the scores was not great. It is a good indication that students' consider their studies important if they believe that they can use the material that they learn outside of the classroom. Interestingly the nursing non-persisters indicated the highest expectation of using material they learn outside of the classroom yet they did not continue their studies. This might be an indication that issues beyond academics were responsible for their decision to withdraw before completion.

The last question in this section, "how often do you expect to actively participate in your classes?" is not separate from one's studies but does require time and effort above just attending class. With distance learning classes, active participation in classes can involve several activities such as time spent on a discussion board. Students that provide threads of communication on these discussions boards as opposed to just reading them are actively participating. Student may choose to read the discussions and put in a required comment but those students who choose to read through the comments and provide rebuttal discussions to what is occurring are exerting additional effort and actively participating. The need to exert additional effort is the reason why the question was included in this section. The decision to exert this extra effort requires additional time on the part of the student; time that might have been spent in other activities and

SERVING STUDENTS

as such is noted as participating in outside activities. With the exception of nursing persisters, all groups indicated mean responses at the “often” level indicating that they anticipate spending time on studies above and beyond the minimum requirements. Nursing persisters were very close with a 2.96 mean score. The indication of intent to participate shows motivation and ambition on the part of the students.

Conclusion. Answers in this section were fairly consistent across the board. Yet nursing non-persisters had higher scores than their persister counterparts. One would expect that students who do not continue their studies would not anticipate spending time, effort, and thought on work outside of the classroom. The non-persisters answers show that motivation and ambition towards studies is good at this early junction in their studies as a distance learner. There is some concern about the lower score for criminal justice non-persisters regarding library use. Again, it would be beneficial to make sure that information regarding available resources is thoroughly communicated with the students earlier on in their studies. Other issues in this section do not indicate significant reason for concern.

Work Issues. This section asked students to consider the probability that they would be working full or part-time during their first year of study. Because these surveys were administered at the end of the students’ first semester, one could anticipate that students have already been working so these responses can be considered more of a probability rather than a possibility of work.

When asked about the probability of working full time, all groups had the greatest level of response as “a very good chance” with nursing non-persisters indicating the largest response of 75%. Neither non-persister group had any response of “no chance” regarding the possibility of working full time. Mean scores for all groups indicated responses at the level of “some

SERVING STUDENTS

chance” with nursing persisters having the lowest overall mean score and nursing non-persisters having the highest mean score (see Table 28). Criminal justice non-persisters also had a higher mean score than their persister counterparts and overall mean scores indicated a difference of .54 between persisters and non-persisters. These results are not surprising as distance learners tend to be older students with multiple responsibilities. The fact that non-persisters had a higher score

Table 28

Outside Activities: Mean Responses to Work

| | Nursing | | Criminal Justice | |
|----------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Work Full Time | 2.04 | 2.75 | 2.25 | 2.60 |
| Work Part Time | 2.00 | 2.25 | 2.29 | 2.60 |
| Aggregate Work | 2.02 | 2.50 | 2.27 | 2.60 |

than persisters may be an indication that outside forces have a significant impact on a student’s ability to pursue their studies. Further investigation should be administered to determine if the demands of work are in fact a primary cause of attrition for these distant students.

Conclusions about Outside Activities

Questions in this section dealt with activities outside of the “virtual classroom” related to family, academics, and work. Related to family issues, all of those surveyed anticipated that they would not experience problems with family and friends associated with their studies.

The primary area of concern linked with academic issues was the suggestion made by criminal justice non-persisters that they would not use library resources. This problem may be remedied by ensuring that all distance learning students have appropriate knowledge of how to utilize library services from a distance. Other responses to academic issues indicated motivation and ambition for all groups as related to utilizing learned knowledge in other areas of their life.

SERVING STUDENTS

The last category dealt with work issues. All groups indicated a likelihood that they would work either part-time or full-time while attending school. This is not an unexpected response as it is assumed that distance learning students are older and subsequently have work responsibilities.

Predictions about Academic Success

One of the final questions in the survey states, “What will be the most likely cause for you to leave before you get a degree?” Students were given a choice of 11 different responses from which they were to pick the one response that they felt predicted what would be the most likely cause of their decision not to continue their studies. This question provided the students with multiple choices, but required them to pick only one response. No additional opportunity was provided for the students to expand on their choice or to select more than one choice and give priority ratings (see Table 29).

Of the possible responses, answers were given in eight of the choice areas. Across the board, “absolutely certain I will obtain a degree” received the majority response as rates ranged from 40% by criminal justice non-persisters to 75% by nursing non-persisters. The criminal justice non-persisters confidence in completing their degree was 23% lower than the criminal justice persisters indicating signs of concern. Nursing non-persisters were the most certain that they would complete their degree. This response supports the premise that the decision to withdraw is not a foreseeable action but instead occurs as a result of unpredictable circumstances.

The three responses that were not selected were: get married/divorced; course schedule not convenient; and friends/family not supportive. The statement, “it would cost more than I or

SERVING STUDENTS

my family could afford” received a low response (4%) by criminal justice persisters and no response from all other groups. “Military service” was only selected by nursing persisters (4%).

The greatest differences occurred between majors. Criminal justice students were the only ones that had a response of “accept a good job” with a response of 21% for persisters and 20% for non-persisters. This could be explained by the structure of these degree programs. As stated earlier, nursing students are required to be licensed registered nurses before they can enter the bachelor degree and consequently, many are already working as registered nurses when they start the program. The decision to continue their degree may be supported or encouraged by their employer and make the challenges of combining work and school simpler.

Table 29

Predictions about Academic Success by Degree

| | Nursing | | Criminal Justice | |
|----------------------------------|------------|----------------|------------------|----------------|
| | Persisters | Non-persisters | Persisters | Non-persisters |
| Certain will Obtain Degree | 65% | 75% | 63% | 40% |
| Accept a Good Job | 21% | 20% | 0 | 0 |
| Military Service | 0 | 0 | 4% | 0 |
| More than can Afford | 4% | 0 | 0 | 0 |
| Disinterested in Study | 0 | 0 | 9% | 0 |
| Lack of Academic Ability | 4% | 20% | 0 | 0 |
| Inefficient Reading/Study Skills | 4% | 0 | 4% | 0 |
| Home Responsibilities | 4% | 20% | 17% | 25% |

Nursing students were also the only ones that responded to lack of academic ability causing a departure from studies resulting in a 4% rate for persisters and a 20% response rate by

SERVING STUDENTS

non-persisters. The higher response rate by non-persisters warrants further evaluation as to services that can be provided to assist the students. The institution can provide resources such as counseling and tutoring through distant measures to support these students who feel academically challenged. Additionally, the nursing department should be advised of this concern so that additional resources can be made available.

Nursing persisters were the only group to indicate military service as a potential deterrent from continued academic studies and criminal justice persisters were the only group to select “cost more than I can afford”. Criminal justice persisters (9%) were the only group to express a disinterest in studies. This is certainly an area of concern as lack of interest and motivation in studies challenge students to continue to pursue their education.

There were also differences between persisters and non-persisters (see Table 30). Non-persisters responded to four different topics: “certain will obtain a degree” (56%); “accept a good job” (11%); “lack of academic ability” (11%); and “home responsibilities” (22%). That 11% of the non-persisters responded that a lack of academic ability may prevent their attainment of their degree is of considerable concern. This is one area that the institution has the capacity to provide resources that will strengthen the students’ confidence in their academic skills and encourage them to continue their studies if they are aware of the need. The fact that non-persisters specified a larger response in this category should denote a greater lack of academic confidence in non-persisters than persisters and alert the institution that students need to be made aware of available resources.

Home responsibilities had the second highest level of response from non-persisters and tied for the second highest level of response from persisters. These responses are not surprising

SERVING STUDENTS

Table 30

Predictions about Academic Success by Persisters and Non-persisters

| | Persisters | Non-persisters |
|----------------------------------|------------|----------------|
| Certain will Obtain Degree | 64% | 56% |
| Accept a Good Job | 11% | 11% |
| Military Service | 2% | 0 |
| More than can Afford | 2% | 0 |
| Disinterested in Study | 4% | 0 |
| Lack of Academic Ability | 2% | 11% |
| Inefficient Reading/Study Skills | 4% | 0 |
| Home Responsibilities | 11% | 22% |

when considering the demographics of distance learners as a majority of these students are older with family responsibilities. Information regarding marital status and children of the sample population are not available through the Transfer Student Survey used for this study.

Demographic information utilized from the Noel-Levitz 2005 report of online learners indicates that the majority of online learners are married with children. Additionally, large numbers of students in the Noel-Levitz study indicated that they were married or that they were single with children. Resources that provide counseling services to assist students in dealing with the demands of these responsibilities can aid in increasing persistent rates.

Persister but not non-persisters responded to the options of “military service”, “more than I can afford”, “disinterested in studies”, and “inefficient reading/study skills”. The percentage of response to each of these categories was only 2% to 4% indicating a small population that expressed concern. Nine percent of the criminal justice persisters indicated a disinterest in their

SERVING STUDENTS

studies. The combination of nursing and criminal justice persisters masked the significance of this group's response and may result in a lack of attention to this area of concern. Further evaluation needs to be given to this group of persisters who have expressed a lack of interest in their studies to determine the cause and possible solutions to maintain interest.

Home responsibilities reflected a large response from both persisters (11%) and non-persisters (22%). As the population of distance learners has a greater percentage of students over the age of 25, it is not surprising that a suggestion of home responsibilities would occur. Providing resources that assist the students in dealing with the demands of multiple responsibilities can be beneficial in this category. Chat rooms and online communities can be established to provide students with a support group and sounding board to assist them in dealing with the demands of juggling family responsibilities and school. Online counseling as well as contact numbers for counseling services can also be provided for these students. Insuring that these resources are available through distance means and that students are aware of their existence is essential.

Conclusion Regarding Predications about Academic Success

Overall, the students indicated at the highest level that they were certain they would obtain a degree. Sixty-four percent of the persisters were certain that they would complete their degree. This response is not a high persistent rate and suggests reason for concern. The surveys were given at the end of the first semester of attendance at this institution and the 36% level of uncertainty as to the probability of continuing studies does not indicate a strong level of commitment. Further evaluation is necessary to determine the largest areas of apprehension in continued studies and resources for distant learning students should be established. Because two of the groups, criminal justice and nursing non-persisters both left before completing their

SERVING STUDENTS

studies, it is important to also review responses that they anticipated could ultimately lead to their attrition.

The limitations created by the structure of the question do not allow for rich response information to be gleaned. Students have to select a response that matches their needs based on a predetermined list. The opportunity for the students to provide their own response or rank a choice of more than one response does not exist. The format of the question thus limits their ability to express themselves beyond the parameters of the question. Additional research providing qualitative responses, interviews, and focus groups are warranted to provide a more accurate picture of potential concerns that students have related to their decision to continue to pursue their studies.

Chapter 6 **Conclusions and Recommendations**

The results of this analysis illustrate the strengths and weaknesses associated with this study. The use of quasi-qualitative analysis provided a rich review of quantitative data so that differences and patterns could be illuminated despite the small sample size. Issues that may not have been revealed as important through quantitative examination but that still may have impacted the retention of the students could be brought to the forefront through the evaluation and scrutiny of the quasi-qualitative procedure. In this chapter, I address two sets of conclusions. The first derive from the analysis in chapters four and five that will lead to recommendations to the University. The second stem from the serious limitations of the survey. Following the conclusions, I will offer limited recommendations to the distance learning offices about potential services that might be initiated for their learners. I will also suggest modifications to the survey and issues regarding student challenges to the faculty in the two academic programs included in this study. Finally, I offer general recommendations for future research in this area.

Survey Findings

Although the sample size was small, the demographics of the sample were consistent with that of the distance learning population as identified in the 2006 analysis by the National Center for Educational Statistics. This analysis revealed that the majority of distance learners were over the age of 25, female, and white. Slightly more than half of the population was above the age of 25; more than three-fourths were female; and two-thirds were white. The predominantly white, female, and 25-32 age population should provide valuable insight into the opinions of the distance learning population. The sample population yielded results that may be duplicated in other similar studies to determine the soundness of this study.

SERVING STUDENTS

ODU offers distance learning programs throughout the state of Virginia and beyond in several different modalities: online, video streaming, and teletechnet (live televised delivery). Due to the nature of the distance learning program offered through Old Dominion University, the students whose surveys were selected for this research were pursuing degrees in one of two undergraduate areas: criminal justice or nursing. Nursing and criminal justice programs can be completed entirely through the online modality, which is why these students were chosen from the survey population for this study.

My study revealed differences in the responses between persisters and non-persisters as well as between majors. These differences provided insight into potential explanations of why students decide not to persist with their studies. I will begin with an assessment of persisters and non-persisters followed by the review of differences between majors.

Differences between Persisters and Non-persisters

Survey results did illuminate differences in characteristics between persisters and non-persisters across the two majors that may assist in early detection of potential problems. The following section will highlight strengths and weaknesses exposed in each group.

Criminal justice persisters. Criminal justice persisters indicated that they believed their academic skills were equal to that of their peers with some indicating that they were above average. They had a higher expectation of their abilities related to mathematical skills with a slightly lower expectation related to their reading and writing abilities. The overall aggregate response for criminal justice persisters indicated that they had confidence in their academic abilities. They indicate a greater sense of confidence in being capable enough to pursue their degree. Their apparent comfort in their academic abilities supports their decision to persist as opposed to their non-persister counterparts whose confidence was not as high.

SERVING STUDENTS

Interestingly, criminal justice persisters were the only group to indicate that being disinterested in their studies was a possible reason that would result in their withdrawal. The fact that they did not withdraw could be an indication that this was considered a possibility in their future endeavors. This reaction may be related to the fact that they did not have to have previous knowledge of the field and that they had some initial concerns that it would not be an area that would continue to maintain their interest.

Criminal justice persisters do not have confidence in their ability to multi-task and their drive to achieve is not as strong as their non-persister counterparts. Although neither of these issues indicated significant difference from the other groups, they do show a slight variation from those in their field who did not continue with their studies.

The criminal justice persisters did indicate a stronger feeling that they did not have anyone to turn to with their problems even though their counter-part non-persisters indicated the strongest sense of support. This lack of support may produce a stronger sense of independence. Additionally, criminal justice persisters indicated a stronger drive to get their work done than those criminal justice students who did not persist, which may have encouraged their decision to persevere.

Nursing persisters. Nursing persisters do not exude as high a level of confidence in their overall academic abilities as do criminal justice persisters although they reported certain strengths. They are confident about their writing skills and also report more confidence in their leadership skills than the other groups. They support the concept that it is important to be a good student and to continue their education and they expect that they will study hard and be an active participant in their studies, which they have indicated fulfilling to them. They also indicate that they have plans for their future and have confidence that they will complete their degree. The

SERVING STUDENTS

early goal of working hard academically and completing their degree could explain their ability to continue in their endeavors.

Persisters. Persisters appear to have a variety of strengths. For them, education was a priority. This value was revealed in that they specify the perceived need of dealing with educational issues and allowing time for these responsibilities as well as a lower level of priority placed on non-academic work. They placed a higher level of importance on issues related to being a good student, expecting to study hard, and participating actively in their studies. Placing their education as a priority allows the students to organize their lives and to manage their time demands accordingly. In other words, they are likely to set aside enough time for their academic work and even to choose their coursework when non-essential time conflicts arise.

In general, persisters reported that being a good student was very important to them. Not only did they feel that they were motivated to be successful in college, but they believe that others see them as effective students. Persisters' academic goals are more likely to project into their future lives than non-persisters. They see themselves continuing their education throughout their lives. The commitment to education both now and in the future is a driving factor in their continued persistence. Persisters expressed an expectation that they would continue to have interactions with the institution. A stronger likelihood of communication with faculty and use of library resources supports this discovery. Activities such as these create a connection between the student and the institution that aids in creating a sense of belonging and strengthens one's commitment to the institution and ultimately to their studies. As LaPadula (2003) has stated, "Institutions' experience and research demonstrate that students' retention, completion, and satisfaction depend heavily on achieving a sense of connection with the institution" (p.123).

SERVING STUDENTS

The expectation of completing their degree was strong among the persisters. Establishing degree completion as a goal early in the educational process motivates a student toward forward progress and aids them in preparing a path towards that end

Persisters also admitted a few areas of weakness. For one, they seem to possess a lower level of confidence in their academic abilities. Persisters did not exude great confidence in their academic abilities when they compare themselves to their peers. This lower self-esteem may actually drive them to work harder and give them greater satisfaction when they succeed.

Additionally, students indicated lower drive compared to peers related to outside activities. The greater level of importance placed on their studies as opposed to their outside activities increases the probability that they will have time available for educational responsibilities.

Criminal justice non-persisters. Criminal justice non-persisters had the highest level of confidence in their overall academic abilities but ranked themselves below other students in mathematical ability and problem solving skills. They did not feel that it was as important to be a good student as others surveyed indicated and they felt that they would be challenged to have time to study. They did not indicate pride in doing well nor was there a strong indication that learning would be fulfilling. They had the lowest expectation of future plans and had the highest expectation that they would miss class or find classes boring. They did not anticipate utilizing library resources. They had the lowest overall anticipated rate of obtaining the degree and indicated that accepting a good job and home responsibilities as well as a lack of academic abilities could cause them to abandon their studies. Their responses all indicate a sense of separation from their studies. The demands of a career in criminal justice are typically hands-on and interactive which is something that may be missed in an online format of study and may

SERVING STUDENTS

result in increased apathy towards degree completion. The inclusion of an internship opportunity might increase the students' connection to their studies and peak their interest in both studies and career.

Their responses indicate a level of disconnection from studies as they do not expect learning to be fulfilling and anticipate that they might be bored with their studies. These issues coupled with the anticipated lack of time to pursue their education do not support a probability of perseverance.

Nursing non-persisters. Similar to their persisting counter-parts, these students indicated a sense of confidence in studies particularly related to mathematical skills, writing ability, and study skills. They indicated a drive to achieve as well as leadership skills. They also indicated a higher level of self-confidence and interpersonal communication skills than found in any other group. They anticipated having time to study and finding learning fulfilling. These traits do not trigger concern related to continued studies.

Areas that conveyed thoughts of departure related to self-evaluations of not being capable, not having anyone to turn to with problems, and low drive to get work done. These students indicated that they anticipated graduation from the institution, yet the likelihood of their returning for another semester was not strong. They indicated a stronger probability of dropping out temporarily or transferring. This reaction may be an indication of dissatisfaction with the current program or the method of delivery. The likelihood that they would work full time while attending school was stronger for this group than any other group. Working full time while attending school puts greater demands on a students' time and requires the ability to juggle multiple priorities; both issues are likely to increase the probability of departure. They had a high probability of degree completion but indicated that home responsibilities might cause them

SERVING STUDENTS

to leave their studies. Throughout the survey, this group repeatedly indicated a possibility of stopping out. Nursing persisters did not indicate difficulty in these areas but rather expressed a stronger commitment to being a good student and studying hard.

Non-persisters. In comparison to persisters in general, non-persisters indicated different areas of confidence with regard to their competence within academics. Non-persisters rated themselves equal to or higher than their peers in overall academic abilities. As a group, their high level of confidence in their own abilities may indicate that they have been surprised at the abilities of their peers. It may also lead to boredom related to their studies if they believe that they are not being mentally challenged or that material is not presented at an appropriate pace or level of challenge.

Time management bubbled up as a consistent problem throughout the survey for non-persisters. Their answers suggest that other areas such as work, family and outside social activities may take greater precedence when determining how to allocate their time. Survey results for the non-persisters also indicate a stronger likelihood of skipping class or dropping out temporarily. Perhaps they have too many commitments or are not willing to sacrifice time from other areas of their lives to commit to their programs. They also may not have initially understood the necessary time commitment for successful college work. It is possible that these students chose distance education thinking that they could study and engage in their work at will and fitting their study into their normal schedule, not recognizing the amount of time away from other commitments.

Education is not a top priority for non-persisters. Indications of skipping class and dropping out as well as the possibility of leaving for a job were revealed. The likelihood of

SERVING STUDENTS

continued studies when other priorities make increased demands is not as strong when studies are not considered an important activity.

The survey results reveal that non-persisters have commitments to and place priority on issues related to non-academic endeavors. As time constraints increase, the likelihood that the student will have to decide whether to utilize available time on work, family, or school issues increases. The possibility that this decision may result in skipping class or not completing assignments exists. Students who have strong confidence in their academic abilities may choose skipping class as an alternative. If this act occurs on a regular basis then the possibility that the student will stop attending arises as well ultimately resulting in attrition.

Differences between persisters and non-persisters indicate a greater number of strengths related to the persisters and a greater number of difficulties experienced or reported by non-persisters. Additionally, these differences reveal certain types of attitudes that seem to lead to the continuation or end of the educational process. These issues revealed themselves several times in the survey results.

Thus, as aggregates, both groups indicate elements that seem to be related to their immediate academic future. The lack of importance related to studies coupled with the concern associated with consistent time restraints and feelings of being overwhelmed revealed in non-persisters are a strong signal that the possibility of attrition is imminent. Conversely, persisters indicate a sense of priority and importance related to their studies. They are concerned with being a good student with a goal of degree completion. Furthermore, they do not express concerns related to time demands or feeling overwhelmed and they indicate an expectation of a connection with the institution. These traits increase the prospect of persistence because they indicate that the students are willing to include their studies as a part of their regular activities

SERVING STUDENTS

whereas non-persisters allude to the fact that studies will be something that they “fit in” to their schedule. Early identification of non-persister traits in students may enable institutions to intercede in the initial stages of study and reduce the probability of attrition.

Differences between majors

Nursing students must be licensed in the profession before entering the program. Although students in other fields may have experience in the discipline, they may not be as tethered to their profession; the predisposed connection to the field and their careers could create differences in reaction to studies. Based on this premise, criminal justice student responses might be considered likely to be representative of students in other disciplines.

Nursing students. Survey results indicate that studies are a priority for the majority of nursing students and time constraints were not an issue. Their commitment to scheduling the necessary time to meet school demands is a strength. It shows a sense of responsibility to studies as opposed to treating it as an addition to other obligations. However again, nursing students are possibly working in the field and are accustomed to keeping a tight schedule. That nursing students did not feel overwhelmed and felt that they were able to manage the time constraints of attending school support the probability of their continuation.

Nursing students indicated greater expectations for their future direction. The preadmission connection to the field and their careers impact the resulting security in future employment coupled with the continued shortage of nurses in the field. The apparent positive relationship between work and studies probably encourages an increased desire to be successful academically and in the workforce. Most reported having reached a balance between work, school, and other demands. They did not indicate feelings of being overwhelmed and revealed a commitment to their studies. Their responses indicate a sense of stability and forward direction

SERVING STUDENTS

that are supportive traits to maintaining focus. The fact that they anticipate a need to allocate time for studies eliminates the likelihood of feeling overwhelmed.

There was a subset of nursing students who did not persist and did not indicate strength in all of the above areas. These students shared a confidence in academic abilities and leadership skills as well as indicating that they found learning fulfilling. However, they also revealed a lack of time for study and a probability of either dropping out or transferring.

Criminal justice students. Education is not indicated as a priority for most criminal justice students. The fact that students reported both an insufficient time dedicated to their studies as well as boredom with their academic work revealed problems in several areas.

Criminal justice students reported some disconnection related to academic progress. Students' survey responses revealed a stronger expectation that they would become bored with classes. Additionally, criminal justice non-persisters indicated that they would not utilize library resources. This expectation that there was some chance that classes would be boring may again be related to the fact that the topic area may be a new field for these students and they have some uncertainty as to whether they will find the topic of information appealing or it may indicate that time spent in class rather than in other activities will be boring. Criminal justice persisters indicated a lower level of confidence in their ability to multi-task while criminal justice non-persisters indicated less likelihood that they would allow time to study. Both responses are closely related to the lack of priority placed on education. Students who do not actively plan to allot time in their schedules for educational activities can become overwhelmed when assignments are due and work and social obligations are eminent. Learning to appropriately allocate time between school, work, family, and other obligations is necessary to successfully balance the demands of each area.

SERVING STUDENTS

Criminal justice non-persisters only had 40% indicate that they were certain they would complete their degree. This lack of commitment increases the possibility that other demands will receive precedence over degree completion creating the opportunity for attrition when there are too many other responsibilities. This response is further supported by the fact that home responsibilities, accepting a good job, and lack of academic abilities were viewed as potential reasons for this group departing. Criminal justice persisters had a higher expectation that they would complete their degree.

Noteworthy differences emerged when comparing responses by major. Strengths were revealed for nursing students while difficulties prevailed for criminal justice students. Often scores between nursing student persisters and non-persisters were closer than between the two groups of criminal justice students. Criminal justice non-persisters scores varied to a greater degree than the other groups resulting in lower overall scores for criminal justice. Clearly, an improper choice of major can impact students' decision to continue their studies. Testing the abilities and areas of interest prior to enrollment could aid a student in picking an appropriate field and may result in greater satisfaction in studies.

The institution cannot impact all of the areas of challenge indicated by criminal justice students but they can have an effect on some. The insinuation of boredom with studies may in fact be reflective of boredom with the topic. Providing resources to assist students in determining the correct career path may result in greater satisfaction with studies. Providing internship opportunities for students so that they can "test the waters" for an appropriate fit may also add in this endeavor. Finding ways to pique their interest in the topic will hopefully spur a greater interest in studies and increase the likelihood of retention.

Limitations of the Study

This study was limited to the data that were collected from online students between 2006 and 2008. As is true of any study that employs the data set resulting from a survey constructed by someone else, limitations result. The types and format of individual questions both provide and limit data to a secondary researcher. With this in mind, I offer some thoughts on what I found to be the limitations of the existing survey. Additionally, I offer suggestions for additional questions and data that might be collected to make the survey more robust.

The survey utilized for this study is one that is administered by the OIRA at the end of the first semester of study for transfer and distance students. The questionnaire was developed by Mary Dugan for the purpose of reaching both audiences; however, the questions utilized are designed to address the structure and issues of main campus transfer students as opposed to being geared to meet the circumstances of an exclusively distant learning student population. Changes to the questions should be considered so that they are directed to a transfer audience that includes both traditional and distant students. Or possibly an entirely different survey dedicated to the online students should be contemplated.

One element that impacted this particular study had to do with the available data regarding students' personal and historical details. The inclusion of additional facts such as modality previously utilized and whether students dropped out or continued their studies could enhance the depth of information that might be utilized. It is possible that other historical data, such as grade point average, number of transfer hours, and hours necessary to meet graduation requirements, could enhance the quality of future studies. Furthermore, certain elements about the students' previous academic studies were not identified for purposes of this study but could adversely impact their decision to continue. The information could also provide greater depth

SERVING STUDENTS

and understanding to the survey results. Some of the factors that could augment the results of the survey include previous grade point average, number of lower level credit hours needed for graduation, and modality of previous studies.

Information regarding student's previous grade point average as well as current grades indicates whether or not a student is having difficulty with studies. Many of the questions in the survey call for self-reporting of academic ability. The availability of grade information enables the researcher to evaluate to some degree the veracity of students' assessment of strengths and weaknesses and ultimately identify students who may be in academic difficulty.

Student responses were limited by the structure of the some of the survey questions. Some of the questions provided for answers on a four-point and six-point Likert scale that restricted the level of response as well as swayed answers to be selected in either a positive or negative tone due to the omission of a neutral option. As discussed by Garland (1991), this lack of a midpoint can alter the ultimate response of the question. In other words, it requires that students commit to either agree or disagree with a topic when in fact, they may not have feelings of commitment in either direction. Ultimately, they are selecting a response that is not truly representative of their views.

Additionally, several sections of the survey consist of statements delivered in a negative tone that can also impact the level of reaction. Results in these cases especially are driven by response options rather than by personal reaction to survey questions. An example of this type of statement—"To what extent did not communicating with instructors outside of class have a negative impact on your previous studies?"—reveals that any response to this statement implies some sort of agreement that the student did not communicate with the instructor. Selecting a response of "not at all" can imply that the situation existed but did not impact studies. Questions

SERVING STUDENTS

that provide greater clarity and less directional focus would provide for more accurate responses and results. Additionally, richer and more in-depth details could be acquired by the use of open-ended questions.

Some of the statements utilized in the survey were unclear as to what they were asking the student to consider, which also lead to confusion in the resulting responses. An example of this is the statement—"I feel guilty spending time, money, and/or energy on my education." The question is actually asking for one response to three different variables. A student who feels guilty spending money towards their studies yet has a desire to exert time and energy towards their studies cannot accurately respond to this statement. Therefore the information derived from the response will not correctly reflect the views and attitudes of the student.

It is realistic to assume that a few of the students classified in this study as persisters may actually have withdrawn from school before the completion of their degree. As stated by Bird and Morgan (2003), the decision to continue one's studies is not static but rather a changing entity that is impacted by the demands of one's environment. Students were classified as persisters or non-persisters based on their status at the time of the study. Circumstances that occurred after that time may have created an insurmountable challenge that required that the student withdraw, changing their status to that of a non-persister. This possibility will exist in any study that utilizes the responses of students still active in a program as opposed to only utilizing students who have withdrawn or graduated. The fact that some of the students who participated in the study did withdraw from the program provided a realistic view of potential differences between persisters and non-persisters. However, it is impossible to tell whether the students identified as non-persisters were actually merely stop outs who returned the following semester.

SERVING STUDENTS

Results of this study should be indicative of other populations of online distance learners pursuing a degree from a liberal arts research institution. Insight regarding signs of potential at risk behavior can be identified so that students exhibiting signs of this behavior can be identified early. Resources and services can then be provided that will hopefully result in an increase in distance learning retention.

I recommend that a separate survey be developed to specifically address distance learners issues. Questions regarding issues of separation from campus, available resources, and satisfaction with modality were not addressed. These are items that are a constant part of a distant student's life. The institution cannot improve on possible shortfall of this delivery if it does not solicit comments on issues and challenges related to the delivery.

Recommendations to the Institution

Recommendations will be limited by the constraints of the survey results and will therefore be more applicable to the sample population as opposed to the general population. Survey results have identified several areas of challenge for students that create a high probability of attrition. Resources to address these issues should be provided to all online learners in a delivery format that is easily accessible and are available to them at all times. Resources can be placed together on the portal page for easy, one-stop access. An ideal situation would be to provide staffing for students at extended hours to accommodate the schedule of distance learners. Realistically, ensuring that email contacts in various departments are available and that students are advised that they will receive a response within a designated amount of time may be the most appropriate and cost effective manner to handle increased services. Effective communication regarding the availability of resources will assist in providing student

SERVING STUDENTS

satisfaction. Additionally, information regarding the location of these resources should be iterated in class syllabi and orientation packages. A variety of resources are possible.

Several problems identified in this survey have indicated a need for online counseling resource services that assist a student in dealing with personal and school related problems. A professional counselor should be available to discuss these issues with students either by telephone or email. This type of resource is available to main campus students and is needed by and should be accessible to distance learners. Non-persisters in particular indicated difficulties in managing multiple tasks and school. Assurances in dealing with time management issues could be beneficial to these students. Power point presentations and readings as well as online counselor resources can be made available to assist them in working through these issues.

The survey revealed indications that some students may not have selected the appropriate field of study. Programs that test for learning styles and cognitive skills are available and can be administered through online modality. This would provide students with insight regarding their skill and learning styles and assist them in matching these skills to an appropriate field of study.

There are limited tutorial services currently available to students in an online format. There are a greater number of lower level courses than upper level courses that provide tutorial assistance in an online modality. There needs to be an expansion of the type of courses that provide these services online.

An online community “hot spot” or “chat room” should be developed to provide students with a location where they can “converse” online with other students in similar situations. It allows them to develop relationships and talk with others who have experienced some of the challenges that they are experiencing. It also provides a connection to the institution and aids students in developing a peer support system.

SERVING STUDENTS

Additionally, steps can be taken early in the academic process to identify at risk students and assess the type and degree of their participation in online classes. It is possible that this type of learning process, non-spoken and physically separated from the professor is not an appropriate modality for an auditory learner. Pre-screening tests can be utilized to assess computer and learning skills to determine potential areas of strength and weakness. Students, who are identified as potential risks for attrition due to challenges associated with the online modality, can be provided with an online tutorial program to strengthen their skills and assist in their success. Other delivery options can be discussed if the student is not comfortable with the challenges presented. It is possible that they could still utilize a distant format such as video streaming or teletechnet, one-way and two-way televised delivery, that provide for a more structured and interactive delivery.

Programs are available to assist faculty in identifying students who are not actively participating in course activities. An effective system needs to be developed that assists faculty in making contact with counselors. Counselors might then be able to make connection with these students by email or telephone to assess the cause of idleness in an effort to try to reduce the probability of attrition. Periodic focus groups of distance learning students could be utilized to further identify areas of concern. Focus groups could be administered through live chats so that students are not required to travel to campus locations. Information gleaned from these discussions could then be used to assess the effectiveness of established resources and to enhance the quality and make adjustments if studies deem it necessary.

Because ODU has multiple distance learning sites on community college campuses, they do not offer lower level courses through their distance learning program. This means that students who enter the program before completing all of their lower level requirements still must

SERVING STUDENTS

take these courses and transfer them back to the institution. These additional courses can create added stress as well as impact a students' decision to continue their studies if they are not able to complete these courses. Prior knowledge of this requirement can allow for a more accurate assessment of outside academic demands.

Knowledge of the modality through which students attended previous courses may assist those using the survey data sets in identifying students who are challenged by delivery format. Some of the challenges indicated by students in their current situation may be a result of a difficulty adjusting to the new delivery format as opposed to dissatisfaction with the course of study. Early identification of students challenge by modality can provide opportunities to assist them in transition or facilitate a transfer to a more appropriate method of delivery.

The president of the university sent an electronic mailing recently to the administration and staff that stressed the importance of not just retention, but the provision of excellence in education. The correspondence revealed that this latter point was an element of the 2009-14 Strategic Plan and that an external review of all departments had recently been performed to reveal institutional strengths and weaknesses. The President named members of a recently established core committee developed to analyze study results. No distance learning personnel have been placed on this core committee. The lack of representation and resulting lack of input related to distance learning issues serves to isolate this population further and creates a risk of services not being allocated to distance learners ultimately denying them of the same quality provided to campus learners. It is essential that distance learning be actively included in the activities for the promotion of student services to ensure that these learners are receiving appropriate services.

Recommendations for Future Research

I recommend that future studies include students from other disciplines to determine if the field of study is a significant factor in retention decisions. Indications from this study revealed several differences between criminal justice and nursing students. As nursing students may be atypical distance learning students, the inclusion of other majors would provide greater insight into program differences.

Additional research related to distance learners and retention is needed to continue to find primary issues that lead to attrition. This study identified issues with time constraints and lack of priority placed on studies as well as a disconnection from the institution. Additional studies that support or dispute these findings are necessary to determine the appropriate measures necessary to improve retention.

Studies involving distance learning faculty could assist in determining the level and type of contact that they currently have with their learners. Further evaluation can also reveal whether this amount of contact was anticipated by the faculty and the institution. Additionally, surveys can be provided to faculty to ascertain whether they feel that they are able to be effective through the current delivery format as well as what other resources that they feel are needed to appropriately support the learner. Studies to compare the level of success between distance learners and traditional learners in classes taught by the same faculty member in both modalities can reveal the effectiveness of distance delivery. This information can be used to assist faculty in determining methods that are successful.

Focus groups of distance learners can be utilized to further evaluate their feelings of connection with the institution. Questions can be asked to determine their awareness and use of resources as well as to identify areas that they feel are not being addressed.

SERVING STUDENTS

Research is needed to assess the effectiveness of current programs and determine areas that need improvement. To this end, identifying potential causes of attrition and developing the appropriate resources to reduce the probability serve to benefit the students as well as the institution.

Conclusion

Persistence continues to be a challenge for distance education and for educational institutions. The increased use and popularity of distance learning modalities creates an opportunity for institutions to increase their student base and fiscal resources. Distance learning provides a learning opportunity to students who are not able to attend traditional course delivery.

This study of criminal justice and nursing online distance learners provides insight into some of the differences between those who persist and those who do not. Differences emerged not only between the persisters and non-persisters as aggregate groups but also between these same groups within the two majors. These inconsistencies illuminated potential areas of challenge, that if addressed could help to reduce the likelihood of attrition.

It is important to understand that all attrition cannot be prevented. As David Diaz (2002) indicates there are times that a student's decision to drop out of their studies is "the right thing to do" (p. 3). However, it is incumbent upon the institution to make sure that the appropriate resources are available so that the student can make an informed decision. It is hoped that information from this study can be used towards that endeavor.

As the number of institutions providing programs through a distance learning modality continues to grow as well as the number of students who need a distance modality to pursue their education expands it is essential that similar studies also continue. Programs are only successful if they are reaching the needs of the students that they serve. For this reason, it is essential that

SERVING STUDENTS

institutions continue to evaluate and assess their effectiveness and adjust and change programs when it is deemed necessary.

Institutions that utilize distance learning modalities as part of their educational delivery need to ensure that they actively solicit the views of the distance population. Failure to include representatives from this population in activities created to address student issues fail to appropriately serve all component of the student population resulting in further isolation and potential dissatisfaction for distance learners.

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Appendix A

**Content Analysis, Step 1
Categorization of Survey Questions**

Past Experiences

Academic Elements:

Commitment to Studies:

- Insufficient time spent studying or doing homework
- Failed to complete homework assignment on time
- Skipped class

Mental Challenges:

- Difficulty concentrating on assignments
- Too bored to study
- Careless on tests

Interaction with Institution:

- Not communicating with instructors outside of class
- Participating in campus clubs and groups

Personal Elements:

Outside Social Activities:

- Socializing with friends
- Partying
- Playing computer/video games
- Use the internet for recreation

Family and Work Responsibilities:

- Transporting family members/others to appointments and activities
- Being the primary care giver of a dependent parent
- Having transportation problems
- Dealing with childcare issues
- Experiencing work conflicts
- Other family issues

Emotional State:

- Felt depressed
- Felt overwhelmed by all I had to do

Current Comparison to Peers

Academic Skills:

- General academic ability
- Mathematical ability
- Reading comprehension

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- Writing ability
- Study skills

Personal Attributes:

Organizational:

- Time management skills
- Multi-tasking

Directional:

- Drive to achieve
- Leadership ability

Cognitive and Affective Abilities

- Problem-solving skills
- Concentration and memory
- Self-confidence

Communication:

- Computer skills
- Interpersonal communication skills

Physical Health:

Attitude about being a College Student

Positive Statements:

Commitment:

- Important to be a good student
- Expectation to study hard
- Commitment to active participation in studies
- I will allow sufficient time for studying in college
- I see myself continuing my education in some way throughout my entire life
- I want others to see me as an effective student
- I feel really motivated to be successful in my college career

Satisfaction:

- I will be proud to do well academically in college
- I find learning to be fulfilling

Negative Statements:

Disconnection:

- I have no one to turn to with my problems
- I fear that I am not smart enough to pursue a degree
- I feel guilty spending time, money, and/or energy on my education

Feelings of Apathy:

- I don't seem to have the drive to get my work done

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- I have no idea what I will do after I graduate

Causes for Departure

Persistence:

Commitment:

- I am certain I will obtain a degree
- Return for another semester
- Be satisfied with this college

Anticipated Disconnection:

- Miss more than one class session per week
- Drop out of college temporarily
- Transfer to another college

Academic:

Satisfaction:

- Earn at least a “B” average
- Develop a relationship with a faculty member
- Study with other students

Dissatisfaction:

- Find my classes boring

Inability:

- Fail one or more courses
- Be placed on academic probation

Family:

- Have serious disagreements with my family and/or friends

Outside Activities

Personal Challenges:

- Have serious disagreements with my family and friends

Academic:

- Use the library resources to do research
- Think about course material outside of class and/or discuss it with other students
- Use what you learn through classes in your outside life
- Actively participate in your classes

Work Issues:

- Work at least part-time while attending college
- Work full time while attending college

Cause for Leaving Studies

- Single reason that would to Departure

Appendix B

Past ExperiencesAcademic Elements:*Commitment to Studies:*

Questions 1: To what extent did insufficient time spent studying or doing homework have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 21% | 40% | 39% | 75% |
| To some extent | 67% | 40% | 48% | 0 |
| To a great extent | 8% | 20% | 9% | 25% |
| To a very great extent | 4% | 0 | 4% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 30% | 56% |
| To some extent | 57% | 22% |
| To a great extent | 9% | 22% |
| To a very great extent | 4% | 0 |

Question 2: To what extent did failure to complete a homework assignment on time have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 46% | 40% | 61% | 75% |
| To some extent | 50% | 40% | 39% | 0 |
| To a great extent | 4% | 20% | 0 | 0 |
| To a very great extent | 0 | 0 | 0 | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 53% | 56% |
| To some extent | 45% | 22% |
| To a great extent | 2% | 11% |
| To a very great extent | 0 | 11% |

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Academic Elements:

Commitment to Studies:

Question 3: To what extent did skipping classes have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 50% | 40% | 83% | 75% |
| To some extent | 38% | 60% | 17% | 0 |
| To a great extent | 12% | 0 | 0 | 0 |
| To a very great extent | 0 | 0 | 0 | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 66% | 56% |
| To some extent | 28% | 33% |
| To a great extent | 6% | 0 |
| To a very great extent | 0 | 11% |

Mental Challenges

Question 1: To what extent did having difficulty concentrating on assignments have a negative impact on your most recent college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 21% | 60% | 52% | 75% |
| To some extent | 58% | 20% | 44% | 25% |
| To a great extent | 13% | 20% | 4% | 0 |
| To a very great extent | 8% | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 36% | 67% |
| To some extent | 51% | 22% |
| To a great extent | 9% | 11% |
| To a very great extent | 4% | 0 |

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Academic Elements

Mental Challenges

Question 2: To what extent did being too bored have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 42% | 60% | 61% | 75% |
| To some extent | 38% | 20% | 31% | 25% |
| To a great extent | 12% | 0 | 4% | 0 |
| To a very great extent | 8% | 20% | 4% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 51% | 67% |
| To some extent | 34% | 22% |
| To a great extent | 9% | 0 |
| To a very great extent | 6% | 11% |

Question 3: To what extent did being careless on tests have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 21% | 20% | 35% | 50% |
| To some extent | 62% | 80% | 52% | 25% |
| To a great extent | 13% | 0 | 13% | 25% |
| To a very great extent | 4% | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 28% | 44% |
| To some extent | 57% | 44% |
| To a great extent | 13% | 12% |
| To a very great extent | 2% | 0 |

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Academic Elements

Interaction with Institution

Question 1: To what extent did not communicating with instructors outside of class have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 46% | 40% | 70% | 75% |
| To some extent | 29% | 60% | 26% | 0 |
| To a great extent | 17% | 0 | 4% | 0 |
| To a very great extent | 8% | 0 | 0 | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 57% | 56% |
| To some extent | 28% | 33% |
| To a great extent | 11% | 0 |
| To a very great extent | 4% | 11% |

Question 2: To what extent did participating in clubs and groups have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 79% | 80% | 87% | 100% |
| To some extent | 17% | 20% | 13% | 0 |
| To a great extent | 0 | 0 | 0 | 0 |
| To a very great extent | 4% | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 83% | 89% |
| To some extent | 15% | 11% |
| To a great extent | 0 | 0 |
| To a very great extent | 2% | |

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Personal Elements

Outside Social Activities

Question 1: To what extent did socializing with friends have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 42% | 60% | 52% | 75% |
| To some extent | 38% | 20% | 35% | 25% |
| To a great extent | 8% | 0 | 13% | 0 |
| To a very great extent | 12% | 20% | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 47% | 67% |
| To some extent | 36% | 22% |
| To a great extent | 11% | 0 |
| To a very great extent | 6% | 11% |

Question 2: To what extent did partying have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 83% | 40% | 96% | 100% |
| To some extent | 4% | 20% | 4% | 0 |
| To a great extent | 0 | 20% | 0 | 0 |
| To a very great extent | 13% | 20% | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 89% | 67% |
| To some extent | 4% | 22% |
| To a great extent | 0 | 11% |
| To a very great extent | 7% | 11% |

Question 3: To what extent did video games have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 75% | 80% | 78% | 100% |
| To some extent | 21% | 20% | 22% | 0 |
| To a great extent | 4% | 0 | 0 | 0 |
| To a very great extent | 0 | 0 | 0 | 0 |

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Personal Elements

Outside Social Activities

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 77% | 89% |
| To some extent | 21% | 11% |
| To a great extent | 2% | 0 |
| To a very great extent | 0 | 0 |

Question 4: To what extent did internet have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 54% | 80% | 74% | 100% |
| To some extent | 33% | 20% | 26% | 0 |
| To a great extent | 4% | 0 | 0 | 0 |
| To a very great extent | 8% | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 64% | 89% |
| To some extent | 30% | 11% |
| To a great extent | 2% | 0 |
| To a very great extent | 4% | 0 |

Personal Elements:

Family and Work Responsibilities

Question 1: To what extent did transporting family members/others to appointments and activities have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 79% | 80% | 70% | 100% |
| To some extent | 8% | 20% | 26% | 0 |
| To a great extent | 0 | 0 | 0 | 0 |
| To a very great extent | 13% | 0 | 4% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 74% | 89% |
| To some extent | 17% | 11% |
| To a great extent | 0 | 0 |
| To a very great extent | 9% | 0 |

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Personal Elements:

Socio-economic Responsibilities

Question 2: To what extent did a dependent parent have a negative impact on your most previous recent college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 50% | 100% | 96% | 100% |
| To some extent | 38% | 0 | 0 | 0 |
| To a great extent | 12% | 0 | 0 | 0 |
| To a very great extent | 0 | 0 | 4% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 66% | 56% |
| To some extent | 28% | 33% |
| To a great extent | 6% | 0 |
| To a very great extent | 0 | 11% |

Question 3: To what extent did having transportation problems have a negative impact on your most recent college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 79% | 80% | 96% | 100% |
| To some extent | 17% | 20% | 4% | 0 |
| To a great extent | 4% | 0 | 0 | 0 |
| To a very great extent | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 87% | 89% |
| To some extent | 11% | 11% |
| To a great extent | 2% | 0 |
| To a very great extent | 0 | 0 |

Question 4: To what extent did childcare issues have a negative impact on your most recent college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 83% | 80% | 78% | 100% |
| To some extent | 4% | 20% | 13% | 0 |
| To a great extent | 8% | 0 | 4% | 0 |
| To a very great extent | 4% | 0 | 4% | 0 |

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Personal Elements:

Socio-economic Responsibilities

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 81% | 89% |
| To some extent | 9% | 11% |
| To a great extent | 6% | 0 |
| To a very great extent | 4% | 0 |

Question 5: To what extent did work conflicts have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 46% | 20% | 74% | 75% |
| To some extent | 38% | 80% | 22% | 0 |
| To a great extent | 4% | 0 | 0 | 0 |
| To a very great extent | 12% | 0 | 4% | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 60% | 44% |
| To some extent | 30% | 44% |
| To a great extent | 2% | 0 |
| To a very great extent | 8% | 12% |

Question 6: To what extent did family issues have a negative impact on your most recent college experiences?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 62% | 40% | 83% | 75% |
| To some extent | 21% | 0 | 13% | 0 |
| To a great extent | 4% | 40% | 4% | 0 |
| To a very great extent | 13% | 20% | 0 | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 72% | 56% |
| To some extent | 17% | 0 |
| To a great extent | 4% | 22% |
| To a very great extent | 6% | 22% |

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Personal Elements:

Emotional State

Question 1: To what extent did feeling depressed have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 46% | 40% | 74% | 75% |
| To some extent | 42% | 40% | 22% | 0 |
| To a great extent | 4% | 20% | 4% | 0 |
| To a very great extent | 8% | 0 | 0 | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 60% | 56% |
| To some extent | 32% | 22% |
| To a great extent | 4% | 11% |
| To a very great extent | 4% | 11% |

Question 2: To what extent did feeling overwhelmed have a negative impact on your most recent previous college experience?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------------|------------|-------------|-----------|------------|
| Not at all | 21% | 60% | 35% | 50% |
| To some extent | 29% | 20% | 43% | 25% |
| To a great extent | 33% | 0 | 9% | 0 |
| To a very great extent | 17% | 20% | 13% | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------------|-------------------|----------------------|
| Not at all | 28% | 56% |
| To some extent | 36% | 22% |
| To a great extent | 21% | 0 |
| To a very great extent | 15% | 22% |

Appendix C

Current Comparison to PeersAcademic Skills:

Questions 1: Rate yourself on general academic ability compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 0 | 20% | 0 | 0 |
| Above Average | 29% | 0 | 30% | 75% |
| Average | 67% | 80% | 52% | 25% |
| Below Average | 4% | 0 | 18% | 0 |
| Lowest 10% | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 0 | 11% |
| Above Average | 30% | 33% |
| Average | 60% | 56% |
| Below Average | 10% | 0 |
| Lowest 10% | 0 | 0 |

Questions 2: Rate yourself on mathematical ability compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 17% | 0 | 9% | 0 |
| Above Average | 50% | 40% | 39% | 50% |
| Average | 21% | 20% | 35% | 50% |
| Below Average | 8% | 20% | 17% | 0 |
| Lowest 10% | 4% | 20% | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 13% | 0 |
| Above Average | 45% | 44% |
| Average | 28% | 33% |
| Below Average | 12% | 11% |
| Lowest 10% | 2% | 11% |

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Academic Skills:

Questions 3: Rate yourself on reading comprehension compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 8% | 20% | 0 | 0 |
| Above Average | 29% | 20% | 39% | 25% |
| Average | 42% | 40% | 48% | 50% |
| Below Average | 21% | 20% | 13% | 25% |
| Lowest 10% | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 4% | 11% |
| Above Average | 34% | 22% |
| Average | 45% | 44% |
| Below Average | 17% | 22% |
| Lowest 10% | 0 | 0 |

Questions 4: Rate yourself on writing ability compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 8% | 20% | 13% | 25% |
| Above Average | 29% | 20% | 39% | 0 |
| Average | 42% | 40% | 57% | 75% |
| Below Average | 21% | 20% | 0 | 0 |
| Lowest 10% | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 4% | 11% |
| Above Average | 34% | 22% |
| Average | 45% | 44% |
| Below Average | 17% | 22% |
| Lowest 10% | | |

Academic Skills

Questions 5: Rate yourself on study skills compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 8% | 0 | 4% | 25% |
| Above Average | 54% | 40% | 43% | 25% |
| Average | 29% | 40% | 43% | 50% |
| Below Average | 0 | 0 | 9% | 0 |
| Lowest 10% | 8% | 20% | 0 | 0 |

SERVING STUDENTS

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 6% | 11% |
| Above Average | 49% | 33% |
| Average | 36% | 44% |
| Below Average | 4% | 0 |
| Lowest 10% | 4% | 11% |

Personal Attributes

Organizational

Questions 1: Rate yourself on time management skills compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 4% | 20% | 0 | 0 |
| Above Average | 63% | 20% | 39% | 25% |
| Average | 29% | 40% | 52% | 75% |
| Below Average | 4% | 20% | 9% | 0 |
| Lowest 10% | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 2% | 11% |
| Above Average | 51% | 22% |
| Average | 40% | 56% |
| Below Average | 6% | 11% |
| Lowest 10% | 0 | 0 |

Personal Attributes

Organizational

Question 2: Rate yourself on multi-tasking compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 0 | 20% | 0 | 0 |
| Above Average | 33% | 20% | 39% | 25% |
| Average | 29% | 40% | 52% | 75% |
| Below Average | 38% | 20% | 9% | 0 |
| Lowest 10% | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 2% | 11% |
| Above Average | 51% | 22% |
| Average | 40% | 56% |
| Below Average | 6% | 11% |
| Lowest 10% | 0 | 0 |

SERVING STUDENTS

Directional

Question 1: Rate yourself on drive to achieve compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 0 | 0 | 4% | 0 |
| Above Average | 25% | 40% | 13% | 25% |
| Average | 38% | 20% | 52% | 75% |
| Below Average | 38% | 40% | 30% | 0 |
| Lowest 10% | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 2% | 0 |
| Above Average | 19% | 33% |
| Average | 47% | 44% |
| Below Average | 34% | 22% |
| Lowest 10% | 0 | 0 |

Personal Attributes

Directional

Question 2: Rate yourself on leadership skills as compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 8% | 0 | 9% | 0 |
| Above Average | 33% | 40% | 35% | 25% |
| Average | 29% | 20% | 35% | 75% |
| Below Average | 29% | 40% | 21% | 0 |
| Lowest 10% | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 8% | 0 |
| Above Average | 34% | 33% |
| Average | 32% | 44% |
| Below Average | 26% | 22% |
| Lowest 10% | 0 | 0 |

SERVING STUDENTS

Personal Attributes

Cognitive and Affective Abilities

Question 1: Rate yourself on problem-solving skills as compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 0 | 0 | 4% | 0 |
| Above Average | 42% | 20% | 39% | 50% |
| Average | 38% | 40% | 43% | 50% |
| Below Average | 21% | 40% | 0 | 0 |
| Lowest 10% | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 2% | 0 |
| Above Average | 40% | 33% |
| Average | 40% | 44% |
| Below Average | 17% | 22% |
| Lowest 10% | 0 | 0 |

Question 2: Rate yourself on concentration and memory as compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 13% | 20% | 0 | 0 |
| Above Average | 25% | 20% | 26% | 50% |
| Average | 54% | 60% | 61% | 50% |
| Below Average | 8% | 0 | 13% | 0 |
| Lowest 10% | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 6% | 11% |
| Above Average | 26% | 33% |
| Average | 57% | 56% |
| Below Average | 11% | 0 |
| Lowest 10% | 0 | 0 |

SERVING STUDENTS

Personal Attributes

Cognitive and Affective Abilities

Question 3: Rate yourself on self-confidence as compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 8% | 0 | 4% | 25% |
| Above Average | 29% | 40% | 43% | 25% |
| Average | 33% | 40% | 39% | 50% |
| Below Average | 29% | 20% | 9% | 0 |
| Lowest 10% | 0 | 0 | 4% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 6% | 11% |
| Above Average | 36% | 33% |
| Average | 36% | 44% |
| Below Average | 19% | 11% |
| Lowest 10% | 2% | 0 |

Personal Attributes

Communication

Question 1: Rate yourself on computer skills as compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 8% | 0 | 4% | 0 |
| Above Average | 29% | 40% | 43% | 25% |
| Average | 46% | 40% | 39% | 75% |
| Below Average | 17% | 20% | 13% | 0 |
| Lowest 10% | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 6% | 0 |
| Above Average | 36% | 33% |
| Average | 43% | 56% |
| Below Average | 15% | 11% |
| Lowest 10% | 0 | 0 |

Question 2: Rate yourself on interpersonal communication skills as compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 0 | 0 | 4% | 0 |
| Above Average | 37% | 20% | 48% | 50% |
| Average | 42% | 60% | 39% | 50% |
| Below Average | 21% | 20% | 9% | 0 |
| Lowest 10% | 0 | 0 | 0 | 0 |

SERVING STUDENTS

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 2% | 0 |
| Above Average | 43% | 33% |
| Average | 40% | 56% |
| Below Average | 15% | 11% |
| Lowest 10% | 0 | 0 |

Personal Attributes

Physical Health

Question 1: Rate yourself on physical health as compared to the average student your age.

| LEVEL | CJP | CJNP | NP | NNP |
|---------------|------------|-------------|-----------|------------|
| Top 10% | 0 | 0 | 0 | 25% |
| Above Average | 42% | 40% | 35% | 0 |
| Average | 33% | 20% | 43% | 75% |
| Below Average | 25% | 40% | 22% | 0 |
| Lowest 10% | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------|-------------------|----------------------|
| Top 10% | 0 | 11% |
| Above Average | 38% | 22% |
| Average | 38% | 44% |
| Below Average | 23% | 22% |
| Lowest 10% | 0 | 0 |

Appendix D

Attitudes about being a College StudentPositive Statements:*Commitment*

Questions 1: To what extent do you agree with the statement: "it is important to me to be a good student"?

| LEVEL | CJP | CJNP | NP | NNP |
|-------------------|------------|-------------|-----------|------------|
| Strongly Agree | 75% | 40% | 83% | 50% |
| Agree | 25% | 60% | 17% | 50% |
| Disagree | 0 | 0 | 0 | 0 |
| Strongly Disagree | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|-------------------|-------------------|----------------------|
| Strongly Agree | 79% | 44% |
| Agree | 21% | 56% |
| Disagree | 0 | 0 |
| Strongly Disagree | 0 | 0 |

Questions 2: To what extent do you agree with the statement: "I expect to work hard at studying in college"?

| LEVEL | CJP | CJNP | NP | NNP |
|-------------------|------------|-------------|-----------|------------|
| Strongly Agree | 67% | 20% | 78% | 50% |
| Agree | 29% | 80% | 22% | 50% |
| Disagree | 4% | | | |
| Strongly Disagree | | | | |

| LEVEL | PERSISTERS | NONPERSISTERS |
|-------------------|-------------------|----------------------|
| Strongly Agree | 72% | 33% |
| Agree | 26% | 67% |
| Disagree | 2% | 0 |
| Strongly Disagree | 0 | 0 |

SERVING STUDENTS

Positive Statements:

Commitment

Questions 3: To what extent do you agree with the statement: "I am committed to being an active participant in my studies"?

| LEVEL | CJP | CJNP | NP | NNP |
|-------------------|------------|-------------|-----------|------------|
| Strongly Agree | 58% | 0 | 78% | 50% |
| Agree | 42% | 100% | 22% | 50% |
| Disagree | 0 | 0 | 0 | 0 |
| Strongly Disagree | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|-------------------|-------------------|----------------------|
| Strongly Agree | 68% | 22% |
| Agree | 32% | 78% |
| Disagree | 0 | 0 |
| Strongly Disagree | 0 | 0 |

Questions 4: To what extent do you agree with the statement: "I will allow sufficient time for studying in college"?

| LEVEL | CJP | CJNP | NP | NNP |
|-------------------|------------|-------------|-----------|------------|
| Strongly Agree | 38% | 0 | 48% | 50% |
| Agree | 58% | 80% | 52% | 50% |
| Disagree | 4% | 20% | 0 | 0 |
| Strongly Disagree | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|-------------------|-------------------|----------------------|
| Strongly Agree | 43% | 22% |
| Agree | 55% | 67% |
| Disagree | 2% | 11% |
| Strongly Disagree | 0 | 0 |

Positive Statements:

Commitment

Questions 5: To what extent do you agree with the statement: "I see myself continuing my education in some way throughout my entire life"?

| LEVEL | CJP | CJNP | NP | NNP |
|-------------------|------------|-------------|-----------|------------|
| Strongly Agree | 58% | 40% | 83% | 50% |
| Agree | 38% | 40% | 17% | 50% |
| Disagree | 4% | 20% | 0 | 0 |
| Strongly Disagree | 0 | 0 | 0 | 0 |

SERVING STUDENTS

| LEVEL | PERSISTERS | NONPERSISTERS |
|-------------------|-------------------|----------------------|
| Strongly Agree | 70% | 44% |
| Agree | 28% | 44% |
| Disagree | 2% | 11% |
| Strongly Disagree | 0 | 0 |

Positive:
Commitment

Questions 6: To what extent do you agree with the statement: “I want others to see me as an effective student”?

| LEVEL | CJP | CJNP | NP | NNP |
|-------------------|------------|-------------|-----------|------------|
| Strongly Agree | 67% | 0 | 65% | 50% |
| Agree | 33% | 100% | 35% | 50% |
| Disagree | 0 | 0 | 0 | 0 |
| Strongly Disagree | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|-------------------|-------------------|----------------------|
| Strongly Agree | 66% | 22% |
| Agree | 34% | 78% |
| Disagree | 0 | 0 |
| Strongly Disagree | 0 | 0 |

Questions 7: To what extent do you agree with the statement: “I feel really motivated to be successful in my college career”?

| LEVEL | CJP | CJNP | NP | NNP |
|-------------------|------------|-------------|-----------|------------|
| Strongly Agree | 54% | 20% | 55% | 50% |
| Agree | 42% | 60% | 35% | 50% |
| Disagree | 4% | 20% | 0 | 0 |
| Strongly Disagree | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|-------------------|-------------------|----------------------|
| Strongly Agree | 60% | 33% |
| Agree | 38% | 55% |
| Disagree | 2% | 11% |
| Strongly Disagree | 0 | 0 |

Positive:
Commitment

Satisfaction

Questions 1: To what extent do you agree with the statement: “I will be proud to do well academically in college”?

SERVING STUDENTS

| LEVEL | CJP | CJNP | NP | NNP |
|-------------------|------------|-------------|-----------|------------|
| Strongly Agree | 71% | 20% | 91% | 50% |
| Agree | 29% | 80% | 9% | 50% |
| Disagree | 0 | 0 | 0 | 0 |
| Strongly Disagree | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|-------------------|-------------------|----------------------|
| Strongly Agree | 81% | 33% |
| Agree | 19% | 67% |
| Disagree | 0 | 0 |
| Strongly Disagree | 0 | 0 |

Questions 2: To what extent do you agree with the statement: "I find learning to be fulfilling"?

| LEVEL | CJP | CJNP | NP | NNP |
|-------------------|------------|-------------|-----------|------------|
| Strongly Agree | 50% | 20% | 78% | 50% |
| Agree | 50% | 80% | 22% | 50% |
| Disagree | 0 | 0 | 0 | 0 |
| Strongly Disagree | 0 | 0 | 0 | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|-------------------|-------------------|----------------------|
| Strongly Agree | 64% | 33% |
| Agree | 36% | 67% |
| Disagree | 0 | 0 |
| Strongly Disagree | 0 | 0 |

Negative Statements

Disconnection:

Questions 1: To what extent do you agree with the statement: "I have no one to turn to with my problems"?

| LEVEL | CJP | CJNP | NP | NNP |
|---------------------|------------|-------------|-----------|------------|
| Strongly Agree | 33% | 0 | 17% | 25% |
| Moderately Agree | 0 | 0 | 0 | 0 |
| Slightly Agree | 4% | 0 | 4% | 0 |
| Slightly Disagree | 46% | 80% | 39% | 75% |
| Moderately Disagree | 13% | 0 | 22% | 0 |
| Strongly Disagree | 4% | 20% | 17% | 0 |

SERVING STUDENTS

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------------|-------------------|----------------------|
| Strongly Agree | 26% | 11% |
| Moderately Agree | 0 | 0 |
| Slightly Agree | 4% | 0 |
| Slightly Disagree | 43% | 78% |
| Moderately Disagree | 17% | 0 |
| Strongly Disagree | 9% | 11% |

Questions 2: To what extent do you agree with the statement: "I fear I am not smart enough to pursue a degree"?

| LEVEL | CJP | CJNP | NP | NNP |
|---------------------|------------|-------------|-----------|------------|
| Strongly Agree | 4% | 20% | 17% | 25% |
| Moderately Agree | 0 | 0 | 0 | 0 |
| Slightly Agree | 4% | 0 | 0 | 0 |
| Slightly Disagree | 67% | 80% | 48% | 75% |
| Moderately Disagree | 8% | 0 | 22% | 0 |
| Strongly Disagree | 17% | 0 | 13% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------------|-------------------|----------------------|
| Strongly Agree | 11% | 22% |
| Moderately Agree | 0 | 0 |
| Slightly Agree | 2% | 0 |
| Slightly Disagree | 57% | 78% |
| Moderately Disagree | 15% | 0 |
| Strongly Disagree | 15% | 0 |

Questions 3: To what extent do you agree with the statement: "I feel guilty spending time, money, and/or energy on my education"?

| LEVEL | CJP | CJNP | NP | NNP |
|---------------------|------------|-------------|-----------|------------|
| Strongly Agree | 8% | 0 | 9% | 0 |
| Moderately Agree | 0 | 0 | 4% | 25% |
| Slightly Agree | 0 | 0 | 4% | 75% |
| Slightly Disagree | 83% | 80% | 43% | 0 |
| Moderately Disagree | 8% | 0 | 35% | 0 |
| Strongly Disagree | 0 | 20% | 4% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------------|-------------------|----------------------|
| Strongly Agree | 9% | 0 |
| Moderately Agree | 2% | 11% |
| Slightly Agree | 2% | 33% |
| Slightly Disagree | 64% | 44% |
| Moderately Disagree | 21% | 0 |
| Strongly Disagree | 2% | 11% |

SERVING STUDENTS

Negative Statements

Feelings of Apathy

Questions 1: To what extent do you agree with the statement: "I don't seem to have the drive to get the work done"?

| LEVEL | CJP | CJNP | NP | NNP |
|---------------------|------------|-------------|-----------|------------|
| Strongly Agree | 30% | 0 | 4% | 50% |
| Moderately Agree | 8% | 20% | 4% | 0 |
| Slightly Agree | 4% | 0 | 0 | 0 |
| Slightly Disagree | 30% | 40% | 39% | 50% |
| Moderately Disagree | 12% | 20% | 26% | 0 |
| Strongly Disagree | 16% | 20% | 26% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------------|-------------------|----------------------|
| Strongly Agree | 17% | 22% |
| Moderately Agree | 6% | 11% |
| Slightly Agree | 2% | 0 |
| Slightly Disagree | 34% | 44% |
| Moderately Disagree | 19% | 11% |
| Strongly Disagree | 21% | 11% |

Questions 2: To what extent do you agree with the statement: "I have no idea what I will do after I graduate"?

| LEVEL | CJP | CJNP | NP | NNP |
|---------------------|------------|-------------|-----------|------------|
| Strongly Agree | 8% | 40% | 0 | 0 |
| Moderately Agree | 8% | 20% | 9% | 0 |
| Slightly Agree | 8% | 0 | 4% | 0 |
| Slightly Disagree | 60% | 20% | 61% | 75% |
| Moderately Disagree | 8% | 20% | 17% | 25% |
| Strongly Disagree | 8% | 0 | 9% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|---------------------|-------------------|----------------------|
| Strongly Agree | 4% | 22% |
| Moderately Agree | 9% | 11% |
| Slightly Agree | 5% | 0 |
| Slightly Disagree | 60% | 44% |
| Moderately Disagree | 13% | 22% |
| Strongly Disagree | 9% | 0 |

Appendix E

Causes for DeparturePersistence:*Commitment*

Questions 1: How great are the chances you will complete a bachelor's degree at Old Dominion?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 96% | 60% | 96% | 100% |
| Some Chance | 4% | 40% | 0 | 0 |
| No Chance | 0 | 0 | 4% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 96% | 78% |
| Some Chance | 2% | 22% |
| No Chance | 2% | 0 |

Questions 2: How great are the chances you will return for another semester at this college?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 88% | 60% | 82% | 50% |
| Some Chance | 8% | 40% | 9% | 25% |
| No Chance | 4% | 0 | 9% | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 85% | 56% |
| Some Chance | 9% | 33% |
| No Chance | 6% | 11% |

Question 3: How great are the chances you will be satisfied with this college?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 88% | 100% | 83% | 100% |
| Some Chance | 12% | 0 | 13% | 0 |
| No Chance | 0 | 0 | 4% | 0 |

SERVING STUDENTS

Persistence:

Commitment

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 85% | 100% |
| Some Chance | 13% | 0 |
| No Chance | 2% | 0 |

Anticipated Disconnection

Questions 1: How great are the chances you will miss more than one class session per week?

| I LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 8% | 20% | 0 | 0 |
| Some Chance | 33% | 60% | 17% | 25% |
| No Chance | 58% | 20% | 83% | 75% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 4% | 11% |
| Some Chance | 26% | 44% |
| No Chance | 70% | 44% |

Questions 2: How great are the chances you will drop out of college temporarily?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 0 | 0 | 4% | 25% |
| Some Chance | 17% | 60% | 9% | 25% |
| No Chance | 83% | 40% | 87% | 50% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 2% | 11% |
| Some Chance | 13% | 44% |
| No Chance | 85% | 44% |

Questions 3: How great are the chances you will transfer to another college?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 0 | 20% | 9% | 25% |
| Some Chance | 33% | 20% | 30% | 50% |
| No Chance | 67% | 60% | 61% | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 4% | 22% |
| Some Chance | 32% | 33% |
| No Chance | 64% | 45% |

SERVING STUDENTS

Academic *Satisfaction*

Questions 1: How great are the chances you will earn at least a "B" average?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 75% | 80% | 83% | 75% |
| Some Chance | 25% | 20% | 13% | 25% |
| No Chance | 0 | 0 | 4% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 79% | 78% |
| Some Chance | 19% | 22% |
| No Chance | 2% | 0 |

Questions 2: How great are the chances you will develop a good relationship with at least one faculty member or an advisor?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 46% | 20% | 35% | 25% |
| Some Chance | 38% | 80% | 57% | 50% |
| No Chance | 16% | 0 | 8% | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 40% | 22% |
| Some Chance | 47% | 67% |
| No Chance | 13% | 11% |

Questions 3: How great are the chances you will study with other students?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 21% | 20% | 52% | 50% |
| Some Chance | 58% | 80% | 30% | 25% |
| No Chance | 21% | 0 | 17% | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 36% | 33% |
| Some Chance | 45% | 56% |
| No Chance | 19% | 11% |

SERVING STUDENTS

Academic

Dissatisfaction

Questions 1: How great are the chances you will find classes boring?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 13% | 20% | 9% | 0 |
| Some Chance | 83% | 80% | 78% | 75% |
| No Chance | 4% | 0 | 13% | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 11% | 11% |
| Some Chance | 81% | 78% |
| No Chance | 8% | 11% |

Academic

Inability

Question 1: How great are the chances you will fail one or more courses?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 4% | 0 | 0 | 0 |
| Some Chance | 17% | 40% | 17% | 25% |
| No Chance | 79% | 60% | 83% | 75% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 2% | 0 |
| Some Chance | 17% | 33% |
| No Chance | 81% | 67% |

Question 2: How great are the chances you will be placed on academic probation?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 4% | 0 | 0 | 0 |
| Some Chance | 13% | 20% | 9% | 25% |
| No Chance | 83% | 80% | 91% | 75% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 2% | |
| Some Chance | 11% | 22% |
| No Chance | 87% | 78% |

SERVING STUDENTS

Work Issues

Question 1: During your first year, how often do you expect to: Work full-time while attending college?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 46% | 60% | 43% | 75% |
| Some Chance | 33% | 40% | 17% | 25% |
| No Chance | 21% | 0 | 39% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 44% | 67% |
| Some Chance | 26% | 33% |
| No Chance | 30% | 0 |

Question 2: During your first year, how often do you expect to: Work full-time while attending college?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| Very Good Chance | 50% | 60% | 39% | 50% |
| Some Chance | 29% | 40% | 22% | 25% |
| No Chance | 21% | 0 | 39% | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| Very Good Chance | 45% | 56% |
| Some Chance | 25% | 33% |
| No Chance | 30% | 11% |

Appendix F

Outside ActivitiesPersonal Challenges:*Family:*

Question 1: How great are the chances that you will have serious disagreements with your family and/or friends regarding your personal, social, academic, or career decisions?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| No Chance | 71% | 40% | 52% | 75% |
| Some Chance | 25% | 60% | 39% | 25% |
| Very Good Chance | 4% | 0 | 9% | 0 |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| No Chance | 62% | 56% |
| Some Chance | 32% | 44% |
| Very Good Chance | 6% | 0 |

Academic:

Question 1: During your first year, how often do you expect to use the library resources to do research for your classes?

| LEVEL | CJP | CJNP | NP | NNP |
|--------------|------------|-------------|-----------|------------|
| Never | 12% | 20% | 13% | 25% |
| Occasionally | 63% | 80% | 61% | 50% |
| Often | 12% | 0 | 17% | 0 |
| Very Often | 12% | 0 | 9% | 25% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|--------------|-------------------|----------------------|
| Never | 13% | 22% |
| Occasionally | 62% | 67% |
| Often | 15% | 0 |
| Very Often | 11% | 11% |

Question 2: During your first year, how often do you expect to think about course material outside of class and/or discuss it with other students?

| LEVEL | CJP | CJNP | NP | NNP |
|--------------|------------|-------------|-----------|------------|
| Never | 25% | 40% | 13% | 25% |
| Occasionally | 29% | 20% | 30% | 0 |
| Often | 29% | 20% | 26% | 50% |
| Very Often | 17% | 20% | 30% | 25% |

SERVING STUDENTS

| LEVEL | PERSISTERS | NONPERSISTERS |
|--------------|-------------------|----------------------|
| Never | 19% | 33% |
| Occasionally | 30% | 11% |
| Often | 28% | 33% |
| Very Often | 23% | 22% |

Academic:

Question 3: During your first year, how often do you expect to use what you learn through classes in your outside life?

| LEVEL | CJP | CJNP | NP | NNP |
|--------------|------------|-------------|-----------|------------|
| Never | 4% | 20% | 13% | 25% |
| Occasionally | 46% | 20% | 48% | 0 |
| Often | 46% | 40% | 22% | 25% |
| Very Often | 4% | 20% | 17% | 50% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|--------------|-------------------|----------------------|
| Never | 8% | 22% |
| Occasionally | 47% | 11% |
| Often | 34% | 33% |
| Very Often | 11% | 33% |

Question 4: During your first year, how often do you expect to actively participate in your classes?

| LEVEL | CJP | CJNP | NP | NNP |
|--------------|------------|-------------|-----------|------------|
| Never | 4% | 0 | 9% | 25% |
| Occasionally | 17% | 20% | 26% | 0 |
| Often | 46% | 40% | 26% | 25% |
| Very Often | 33% | 40% | 39% | 50% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|--------------|-------------------|----------------------|
| Never | 6% | 11% |
| Occasionally | 21% | 11% |
| Often | 36% | 33% |
| Very Often | 36% | 44% |

SERVING STUDENTS

Work Issues

Question 1: During your first year, how often do you expect to work full time while attending college?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| No Chance | 21% | 0 | 39% | 0 |
| Some Chance | 33% | 40% | 17% | 25% |
| Very Good Chance | 46% | 60% | 43% | 75% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| No Chance | 30% | 0 |
| Some Chance | 25% | 33% |
| Very Good Chance | 45% | 67% |

Question 2: During your first year, how often do you expect to work part-time while attending college?

| LEVEL | CJP | CJNP | NP | NNP |
|------------------|------------|-------------|-----------|------------|
| No Chance | 21% | 0 | 39% | 25% |
| Some Chance | 29% | 40% | 22% | 25% |
| Very Good Chance | 50% | 60% | 39% | 50% |

| LEVEL | PERSISTERS | NONPERSISTERS |
|------------------|-------------------|----------------------|
| No Chance | 30% | 11% |
| Some Chance | 25% | 33% |
| Very Good Chance | 45% | 56% |

SERVING STUDENTS

Appendix G
Causes for Leaving Studies

Question: Nationally, about 50% of college students typically leave before receiving a degree. If this should happen to you, which one of the following do you think would be the MOST LIKELY cause?

| RESPONSE | CJP | CJNP | NP | NNP |
|----------------------------------|------------|-------------|-----------|------------|
| Certain will Obtain Degree | 63% | 40% | 65% | 75% |
| Accept a Good Job | 21% | 20% | 0 | 0 |
| Military Service | 0 | 0 | 4% | 0 |
| Cost More than I can Afford | 4% | 0 | 0 | 0 |
| Get Married/Divorced | 0 | 0 | 0 | 0 |
| Disinterested in Study | 0 | 0 | 0 | 0 |
| Lack of Academic Ability | 4% | 20% | 0 | 0 |
| Inefficient Reading/Study Skills | 4% | 0 | 4% | 0 |
| Course Schedule not Convenient | 0 | 0 | 0 | 0 |
| Friends/Family not Supportive | 0 | 0 | 0 | 0 |
| Home Responsibilities | 4% | 20% | 17% | 25% |

| | PERSISTERS | NONPERSISTERS |
|----------------------------------|-------------------|----------------------|
| Certain will Obtain Degree | 64% | 56% |
| Accept a Good Job | 11% | 11% |
| Cost More than I can Afford | 2% | 0 |
| Disinterested in Study | 4% | 0 |
| Lack of Academic Ability | 2% | 11% |
| Inefficient Reading/Study Skills | 4% | 0 |
| Home responsibilities | 11% | 22% |
| Military service | 2% | 0 |

Vita

Ann L. Sorensen

Birthdate: November 23, 1959

Birthplace: Tulsa, Oklahoma

Education: 2003 – 2010 The College of William and Mary
Williamsburg, Virginia
Doctor of Education

1994-1996 Averett University
Danville, Virginia
Master of Business Administration

1978-1982 University of Arkansas
Fayetteville, Arkansas
Bachelor of Business Administration