7-31-2014

An Examination of Support Programs for Students on Academic Probation in the Pennsylvania State System of Higher Education

Karen J. Hamman
Indiana University of Pennsylvania

AN EXAMINATION OF SUPPORT PROGRAMS FOR STUDENTS ON ACADEMIC PROBATION IN THE PENNSYLVANIA STATE SYSTEM OF HIGHER EDUCATION

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Education

Karen J. Hamman

Indiana University of Pennsylvania

August 2014

Indiana University of Pennsylvania
School of Graduate Studies and Research
Department of Professional Studies in Education

We hereby approve the dissertation of

Karen J. Hamman

Candidate for the degree of Doctor of Education

May 28, 2014 — Signature on File
David M. Piper, D.Ed.
Professor of Employment and Labor Relations, Chair

May 28, 2014 — Signature on File
Cathy C. Kaufman, Ph.D.
Professor of Professional Studies in Education

May 28, 2014 — Signature on File
Kelli R. Paquette, Ed.D.
Professor of Professional Studies in Education

ACCEPTED

Signature on File
Timothy P. Mack, Ph.D.
Dean
School of Graduate Studies and Research

Title: An Examination of Support Programs for Students on Academic Probation in the Pennsylvania State System of Higher Education

Author: Karen J. Hamman

Dissertation Chair: Dr. David M. Piper

Dissertation Committee Members: Dr. Cathy C. Kaufman
Dr. Kelli R. Paquette

Institutions of higher education invest a lot of resources into supporting and retaining students. Most colleges and universities offer systems of support for students who struggle academically. This study aimed to investigate the components of various programs offered within the Pennsylvania State System of Higher Education to students on academic probation and to compare the academic recovery rates of the students attending these institutions. This mixed methods study includes data from interviews with campus representatives speaking about the programs that they offered to students on academic probation, as well as three years' worth of archival data on probation students' academic performance at each participating institution. Input from a small group of students at two of the participating universities was also reviewed.

This study uncovered an assortment of program types which yielded varied results in student success. Institutional success was measured by the percentage of returning freshman probation students who raised their GPA above a 2.0 in one semester. The most successful institution had a contract model program that was mandatory for every student on campus. While participation in the program is centrally monitored by the Dean of Undergraduate Studies and Student Support, the individual contracts are done by academic advisors across campus. These results suggest that mandating support for all students and having more people involved in these initiatives will yield higher success

rates for students. Additionally, because all of the higher performing schools used some variation of a counseling model with individualized support, it could be concluded that individual contacts with students allow for greater student success.

ACKNOWLEDGEMENTS

I owe many thanks to those who assisted and supported me along this very long journey. First, my wonderful cohort members made our class weekends so much fun and have kept checking in to make sure I've continued plugging along, even after they have finished. Special thanks to the awesome ladies of the infamous carpool, Dr. Amy Cotner-Klinger, Dr. Heidi Watson, and soon-to-be Dr. Carol Lugg. No one should ever know some of the things discussed in that car, but the laughs carried me through the weekends and the coursework.

Thank you to the IUP faculty who somehow made six-hour classes seem like three and a few classes seem like ten. Thanks to my committee members, Dr. Cathy Kaufman and Dr. Kelli Paquette, for your feedback, support, and encouragement. Thank you to my chair Dr. David Piper for your guidance and for talking me out of the tree on more than one occasion.

Thank you for my awesome team at Bloomsburg University, especially Ms. Elena Brobyn-Navarro and Ms. Ginny Larson, who kept things humming along during this past year of my dissertation work when I have been immersed in my research and writing. Thanks to my colleagues at Bloomsburg University who have heard far too much about my project but always patiently listened and provided encouragement.

Thanks to my many friends and family who kept telling me I can do this until eventually I started to believe them. Thank you especially to my parents, Nancy and Nelson Hamman for consistently telling me that they are proud of me. To my biggest cheerleader, my sister P. Sue Kullen, I want to thank for all of the encouraging notes, cards, bottles of champagne, baked goods, and flowers. She's the busiest person I know, but she was always checking in and helping me to celebrate each milestone in this long process.

I owe a very special thanks to Stephen Birrane, my dear friend who has become my most important support system. He has allowed me to burden him with my stress, has been there when I needed to unwind, and has offered selflessly to assist me in any way he could. You may never know just how important on your friendship and support have been to me and how much you have contributed to this accomplishment.

My biggest thanks is to the person who has sacrificed the most, my wonderful daughter Celia Janelle Sondheimer. When I started this degree, she was 3 years old. While I was at class on the weekends, she spent quality time with her father or my parents or occasionally with babysitters. While I worked on homework and research and writing, she occupied herself or watched me work wondering when I would finally be done. Now my almost 9-year-old will be able to see what WE were able to accomplish through a lot of hard work. I love you and I hope that through all this you've learned that you, too, can do anything.

TABLE OF CONTENTS

Chapter Page

Chapter Page

LIST OF TABLES

LIST OF FIGURES

Figure Page

CHAPTER 1

INTRODUCTION

Centuries ago higher education opportunities were solely reserved for those from influential families. Today the path to higher education is open to virtually any student who wants to pursue it. Many events have worked together to shape today's typical American college student. When Harvard opened its doors in 1636, it served an elite population of students (Harvard University, 2009). The 1800s saw more Americans pursuing higher education as the country began to prosper. Congress passed The Morrill Federal Land Grant Act of 1862, which assigned public land to establish colleges to serve the people of the region. The focus began to shift from educating the privileged to providing career preparation for all citizens (Wyatt, 1992). Continuing this trend, the Service Members' Readjustment Act of 1944, or the G.I. Bill, allowed millions of veterans to pursue a college education, opening the doors for yet more people to pursue postsecondary education (US Department of Veteran Affairs, 2009). In 1973, the Vocational Rehabilitation Act created access to higher education for students with disabilities allowing for even further growth in student enrollments (Hirsch, 2001).

In the past few decades, college continues to be the path for an increasingly greater percentage of high school graduates. According to the U.S. Census Bureau (2014), in 1960 only 19.4% of 20 to 21 year olds were enrolled in colleges. Comparatively, in 2012, more than half or 51.4% of those aged 20 to 21 years were enrolled in institutions of higher learning. This Census Bureau report shows a steady increase in students enrolled in colleges during the years in between.

More students seeking opportunities in higher education has created new challenges for the colleges and universities that serve them. One major concern of these institutions continues to be retaining students (Braxton, Bray, & Berger, 2000). Since colleges and universities spend a great deal of money recruiting students and rely, at least in part, on enrollments for funding their programs, it is imperative for schools to develop retention plans. The desire to retain students has sparked a broad area for educational research, including examining the population of students who struggle academically. In an effort to improve the academic outcomes of these students, many colleges develop support programs for probationary students. These programs include specialized counseling or advisement as well as more formalized models, such as programmatic solutions or courses for credit.

Statement of the Problem

Colleges and universities want to support and retain their students. Summer bridge programs, designed to prepare students who may not be college ready, and developmental coursework, intended to remediate students in specific curricular areas, as well as academic support services, such as tutoring centers, writing centers, and advising offices are current structures that are well-researched. Programs specifically designed to support students on academic probation are less standardized (Arcand & Leblanc, 2011) and less frequently found in the literature (Hwang et. al., 2014; Fletcher & Tokmouline, 2010; Mathies, Garner, & Bauer, 2006; Tovar & Simon, 2006).

Academic recovery is difficult for students, particularly for those students who were underprepared in the first place. Understanding why students struggle is essential to supporting them in their academic recovery. Programs designed to address the needs of

this population of students need to be carefully researched and implemented to ensure success.

Purpose of the Study

The purpose of this study was to examine the variety of support programs offered to students on academic probation. Support programs for this population are created to assist students in returning to good academic standing, so it is important to understand the elements that make a program successful. It is also important to understand what factors may contribute to students' likelihood of academic struggle or success.

Specifically, this study reviewed the support programs being offered to probation students at five of the fourteen schools in the Pennsylvania State System of Higher Education. The types of programs and the program elements were investigated and reported. To assess each program's effectiveness, the academic recovery rate of probationary students was be calculated for each school in the study.

Demographics of the students on academic probation at these five institutions were examined to determine if any factors increased the likeliness of returning after being placed on probation and being able to return to good academic standing. Finally, student perceptions of the interventions offered at two of the institutions were examined to help understand why these students ended up on probation and to gain insight into their perceptions of the interventions offered to them.

Research Questions

This dissertation aimed to address the following questions:

1. What types of support programs are offered to students on academic probation at universities within the Pennsylvania State System of Higher Education?
2. Do the programs account for academic and nonacademic issues? Do they use a counseling approach to assess and consider a student's readiness for change?
3. Which institutions within the Pennsylvania State System of Higher Education have the highest academic recovery rate among probationary students?
4. What individual factors, like gender, ethnicity, age, and type of admittance, contribute to one's likeliness to recovery academically from probationary status?

Background of the Study

The proliferation of post-secondary institutions has commenced in order to serve the increasing number of students pursuing education. As colleges serve more students, they also serve a greater percentage of underprepared students. The civil rights movement in the 1960s demanded equal opportunities in education and set the course for colleges to develop systems of support for the students deemed at risk. These federally-funded programs known as "total push" programs created a centralized system of support which included tutoring, guidance, and study skills courses, as well as other support systems such as financial aid services (Kulik, Kulik & Shwalb, 1983).

There are programs in place at virtually every university to serve the at risk population. For most colleges these programs fall under the umbrella of developmental education. According to the National Center for Education Statistics (1991), in 1989 approximately 91% of public colleges offered at least one developmental level course,

and 30% of college freshman took at least one developmental level course. In 2007, that number had risen to more than 36% of college students taking developmental coursework (NCES, 2010).

Besides offering developmental coursework aimed at students who enter colleges underprepared, many colleges offer support systems and coursework designed specifically to intervene with students who have begun to struggle academically. These students may or may not be the same population of students who were initially considered at risk. According to Hirsch (2001), "the personal and academic transition to college is a great one, and even high-ability students do not always automatically make the transition smoothly…many academically troubled students are scholastically ready to learn college material" (p. 5). Since all students may be at risk for academic failure, developmental education initiatives need to expand the focus to address the needs of all students, not just those initially labeled as underprepared.

As many as one-fourth of undergraduate college students will be placed on academic probation at least one time in their college careers (Cohen & Brawer, 2002; Garnett, 1990). Additionally, Miller and Sonner (1996) indicate that as few as 13% of the students placed on academic probation will eventually graduate. This at-risk group of students, regardless of their incoming preparedness, needs to be supported to increase their chances of academic success and graduation.

Definition of Terms

Listed below are the definitions of terms used throughout this study:

Academic Probation: The status of students who are not performing to an institution's stated standard and are at risk for being dismissed (Arcand & Leblanc, 2011). For the purposes of this study, academic probation refers to the status of students whose overall

grade point average (GPA) is below a 2.0 on a 4.0 scale (Cruise, 2002; Honken & Ralston, 2013).

Academic Recovery: The act of raising one's cumulative grade point average (GPA) from probation status, below 2.0 on a 4.0 scale, to good academic standing, 2.0 or above on a 4.0 scale (Mathies, Gardner, & Bauer, 2006).

Academic Recovery Rate: The percentage of returning students on academic probation who raised their cumulative GPA above a 2.0 after one semester on academic probation.

At-Risk Students: Students believed to be less likely to persist to graduation (Singell & Waddell, 2010)

Attrition: The decline of the number of students enrolled in an educational program or course. Students who either stop attending with or without formally withdrawing (Bean, 1992).

Conditional Admittance: A category of admission where a student must complete specific requirements prior to being matriculated. Some of these requirements could include a summer bridge program, an extended orientation, or specialized advising and required support services (Parisi, 2012).

Developmental Education : The field within higher education which focuses on students' intellectual, social, and emotional growth by providing coursework, advisement, counseling, and academic support appropriate to the learner's level of academic preparedness (National Association for Developmental Education, 2009).

Grade Point Average (GPA): Based on a 4.0 scale, it is calculated by multiplying the number of credits of a course by the numerical grade earned (e.g. A=4.0, B=3.0, C=2.0,

D=1.0 and F=0.0), adding the total scores together, and dividing this total score by the total number of credits attempted.

Higher Education Equal Opportunity Program/Act 101 Program : The state-funded program in Pennsylvania developed to serve students attending institutions of higher education who, without this program, may not have access to or the ability to succeed in college. Students who qualify for Act 101 will typically be culturally, economically, and educationally disadvantaged. This grant program is designed to create access, as well as provide learning and special counseling services for this population of students (Pennsylvania Department of Education, 2008).

Retention: The rate at which students persist from semester to semester (Trumpy, 2006).

Summer Bridge Programs: Programs which admit students early and allow them to take coursework over a summer term in preparation for a regular academic year. These programs are designed to prepare students who may not be academically ready for college (Kallison & Stader, 2012)

Study Skills: A variety of behaviors of typically successful students, such as time management, goal setting, note taking, reading strategies, organization, stress management, self-testing, and effecting studying (Proctor, Prevatt, Adams, Hurst & Petscher, 2006).

Underprepared Student: Students entering college without the expected performance level of in math, reading, and writing. Most likely, these students will be required to take precollege level courses in their areas of deficiency prior to taking college level courses (Kallison & Stader, 2012).

Theoretical Framework

In order to properly address the needs of students on academic probation, it is critical to look at the reigning theories on student success and attrition. There is a large body of work investigating students' success in college. The theoretical foundation for this study is rooted in the research related to student change theory, student departure, and student learning. Alexander Astin (1977) produced some of the earliest work examining college impact on students. In his book, *Four Critical Years,* Astin (1977) collected longitudinal data from undergraduates at several institutions. Astin (1993) created his own conceptual framework to explain college student development called the input-environment-outcome (I-E-O) model. He explains it in this way:

> *Inputs* refer to the characteristics of the student at the time of initial entry to the institution; *environment* refers to the various programs, policies, faculty, peers, and educational experiences to which the student is exposed; and *outcomes* refers to the student's characteristics *after* exposure to the environment….The basic purpose of the model is to assess the impact of various environmental experiences by determining whether students grow or change differently under varying environmental conditions. (Astin, 1993, p. 7)

Astin's model can be simplified by stating that, "Students learn by being involved" (p. 133). This represents a simple explanation without delving too deeply into specific factors that elicit change in college students.

Considered by many to be the seminal work in student attrition, Vincent Tinto's (1987) book, *Leaving College: Rethinking the Causes and Cures of Student Attrition,*

examines the reasons that students do not persist to graduation and what educators can do to address these issues. Tinto developed a "longitudinal model of institutional departure" (Tindo, 1993) to explain student attrition. When compared to Astin's model, Tinto's model (Appendix A) is a more inclusive representation of how a variety of attributes, goals, and experiences can lead to a student's decision to drop out. Tinto (1993) describes how this model explains a student's decision to leave:

> Broadly understood it argues that individual departure from institutions can be viewed as arising out of a longitudinal process of interactions between an individual with given attributes, skills, financial resources, prior educational experiences, and dispositions (intentions and commitments) and other members of the academic and social systems of the institution. The individual's experience in those systems…continually modifies his or her intentions and commitments. (Tinto, 1993, p. 114-115)

While Tinto's model doesn't specifically address academic probation, there are many parallels between academic success and retention. According to Tinto (1987), academic performance is a key element in a student's departure decision; therefore, this model can help educators begin to identify the factors influencing success.

More relevant to this study, Pascarella and Terenzini (1991) developed a causal model for student learning, which examines the specific attributes in college that affects student learning and cognitive development. Again, compared to the simplicity of Astin's model, this model (Appendix B) takes a more in depth look at interactions such as student background, characteristics of the institution and social agents and how they ultimately affect the quality of student effort and learning. Studying these factors will

allow educators to address the specific concerns of students struggling academically. Like Tinto, Pascarella and Terenzini (1991) identify students' background characteristics as key influences to their learning. These characteristics include demographic indicators, such as ethnicity and socio-economic status, as well as individual traits, like personality, aptitude, and achievement. Although these traits alone will influence learning, the institutional environment is also a key component in the mix, which itself is affected by the characteristics of the institution, as well as the social agents like faculty and peers.

Finally, Hirsch's (2001) model is most specific to students struggling academically. He proposes a multi-level intervention dependent upon a student's readiness and motivation for change. The Multiple Intervention Model (Appendix C) begins with a holistic problem assessment with the student, coupled with an assessment of the student's readiness for change. Dependent upon the student's readiness, he suggests three separate levels of intervention, appropriate to the student's motivation level. Intervention Level I helps students who are completely lacking in motivation to change, such as the student who seeks help only because his/her advisor told them to do so. This level of intervention involves helping the student examine the problem and discussing alternatives or consequences. Intervention Level II is for students who are ambivalent but have some awareness of their difficulties. They may be more open-minded toward seeking institutional support. For these students, it is important to address their willingness to change and what that entails. Finally, Intervention Level III works with students who are motivated to change. This student believes there is benefit to changing behaviors but needs assistance in addressing his/her personal issues. At this level, interventions consist of assessing barriers to success, setting and evaluating goals,

and managing personal challenges. Students may change intervention levels as their motivation and readiness changes for better or worse.

Study Design

This mixed method study incorporated descriptive, quantitative, and qualitative data collection and analysis methods. Initially, a contact person for each of the universities in this study was identified. The contact person was an individual familiar with the student support systems in place at that institution. Because program administration varies vastly from one institution to another, the contact person's role varied from an advisor to a dean to a learning assistance professional. After identifying the appropriate contact person, phone interviews were conducted to investigate the nature of the support systems they offer to students placed on academic probation.

Secondly, the academic recovery rates of freshman students from the last three years were evaluated, along with selected demographic information about the students: age (to determine traditional versus non-traditional aged students), ethnicity, and type of admittance (conditional admittance or regular admittance).

Additionally, feedback of selected students from the institutions with the highest academic recovery rates was gathered, as well as feedback of selected students from one of the institutions with a lower academic recovery rate. This information was used to determine student perceptions of the effectiveness of the intervention strategies utilized to assist in their academic recovery.

Significance of the Study

Support programs for students need to prove their value to a university's mission. Since support programs do not directly generate revenue but have a significant cost, it is

imperative to make sure that funding is directed to programs that will have the greatest direct impact on students. In other words, these programs should be seen as investments in students to aid in their persistence to graduation. To that end, it is critical to assess the effectiveness of academic interventions through comprehensive assessment strategies, such as determining the value of academic recovery initiatives to students on academic probation.

Research Limitations

There are limitations that may make this research difficult to generalize to other campuses. First, universities in the Pennsylvania State System of Higher Education are all small to mid-sized, state-owned institutions with a population of students that may or may not mirror the demographics at other institutions. Since every campus has its own unique attributes and challenges, it is critical to examine the students' needs as well as the campus dynamics in order to develop a program that is appropriate for that institution.

Secondly, this study examines the GPAs of students who may or may not be required to participate in interventions and those that may or may not participate in available programs. The result may not necessarily reflect a causal-comparative relationship. While it is believed that these interventions are critical to academic success, there are many outside factors that may contribute to whether or not a student recovers academically. For example, personal circumstances, motivation, and academic rigor of their other coursework would most certainly be contributing factors that could not be controlled for in this study.

Third, even with collecting 3 years' worth of data at 5 different institutions, some of the sample sizes for the demographic breakdowns were too small for quality analysis.

The adult population only represented a negligible percentage of the overall population, as did some of the ethnicity groups within this population. Small group sizes made it more problematic to draw specific conclusions about this sample; therefore, making it more difficult to draw conclusions on a larger scale.

Finally, the small number of students that agreed to give feedback makes it difficult to analyze for patterns. The challenge here was getting feedback from students who were on academic probation. Due to the nature of their academic situations, students were hesitant to discuss their perspectives, especially with individuals with whom they were unfamiliar. Additionally, perspectives of students at mid-sized public 4-year institutions may vary greatly from students at private universities, community colleges, larger institutions or more selective universities.

Summary

Whether it is an issue of being underprepared, underrepresented, or unmotivated, many college students struggle academically, especially in their first year. With proper support and guidance, these students could go on to graduate and reap the benefits of a college education. Without it, they could drop out and owe money for an education that they were unable to complete.

Chapter 2 reviews selected literature related to students who encounter academic difficulties and examines the variety of interventions that institutions provide to assist them in academic recovery.

CHAPTER 2

REVIEW OF LITERATURE

Introduction

Academic probation is defined by most institutions as a status for students who are unable to achieve satisfactory academic progress, determined by a combination of number of credits earned with cumulative grade point average (GPA). Colleges and universities generally define academic probation as those students whose cumulative GPA is below 2.0 on a 4.0 scale. The standard has been set at that level since a 2.0 GPA is required to graduate from most institutions and also allows for students to continue qualifying for federal and state financial aid programs.

The review of literature will first discuss conditional admittance programs designed to create access for certain populations of students, followed by an overview of colleges' struggle to retain students. Following those discussions, the reasons that cause students to struggle academically will be explored. Next, a compilation of the variety of models of support that can be offered to this population of student will be described, including examples of programs from various institutions. Then, the effectiveness of these support programs on students' academic success will be examined. Finally, the barriers encountered by individuals or institutions trying to implement a support system will be outlined.

Conditional Admittance Programs

One goal of the higher education system in the United States is to provide opportunities to attend college. With more and more opportunities for students to attend college in the past one hundred plus years, the number of institutions of higher learning in

the United States has steadily risen. As the pool of potential candidates has begun to taper (McGrath & Braunstein, 1997), colleges are in competition for enrollments causing institutions to revisit their recruitment strategies. Consequently, there are even more attempts to offer programs designed to target enrollment of less qualified students. The programs geared at providing access do not necessarily support success in college. In fact, Lohfink and Paulsen (2005) remark that "although the American education system may be among the most diverse, open, and accessible in the world, substantial inequities exist in educational attainment by race, income, and gender" (p. 409).

One such access program is Act 101, which is unique to Pennsylvania. Act 101 was passed into law in Pennsylvania in 1971 as the Higher Education Equal Opportunity Program. According to the Pennsylvania Department of Education's website (2008), it was created to provide support services to those students believed to be at risk academically due to "cultural, economic, and educational disadvantages". Originally funded with $1 million, Act 101 served just over 1,000 students at 31 institutions in 1971. Data from 2005-2006 showed an appropriation of $9.32 million supporting over 14,000 students at 75 institutions (2008). In recent years, Act 101 has seen massive state budget cuts resulting in less appropriations and fewer students served. According to the Pennsylvania Higher Education Assistance Agency (PHEAA), which now has jurisdiction over the Act 101 program, the 2012-2013 report indicates appropriations of $2.25 million supports 4,232 students across the state of Pennsylvania (2014).

According to the Act 101 program manual (PDE, 1998), institutions use the grant money to pay for academic and support services for ACT 101 students including counseling, tutoring, instruction, and special activities such as cultural events and in-

service programming. Eligible students must be a resident of Pennsylvania and be attending one of the institutions with an Act 101 grant as a full-time or part-time student. They must be determined as economically and educationally disadvantaged according to the Pennsylvania State Board of Education. A student is considered economically disadvantaged if he/she has an annual family income less than 200% of the income level determined by the United States Bureau of the Census as poverty status. A student with a predicted GPA of 2.0 or less as determined by the institution's admissions guidelines is considered academically at risk (PDE, 1998).

Act 101 is unique to Pennsylvania; however, many universities offer some type of pre-college experience to students who may not meet regular admission requirements. Summer bridge programs are a common offering to serve historically underrepresented students and / or students in a lower socioeconomic group (Garcia & Paz, 2009). These programs may bring students to campus for an extended orientation or for a summer session of coursework, either developmental, academic, or a combination. These programs are designed to prepare students for success during the regular academic year.

The College Retention Problem

Providing more access to underrepresented groups means more underprepared students sitting in college classrooms. Hansen (1998) remarks that over the past several years there has been a notable decline in preparation level as well as engagement among students entering college. Bettinger, Boatman, and Long (2013) estimate that only one third of high school graduates are prepared with the skills necessary to be successful in college. Historically, the growth of necessary support services have not matched the increase of underprepared students (Kulik, Kulik, & Shwab, 1983). Unfortunately, even

when institutions do have services in place, they are often the first programs to be cut in budget crunches (Hebel, 2003).

In addition to increased competition for enrollments, colleges and universities are continually under pressure to retain their students. Truly, retention is of concern to many stakeholders: the students, their families, financers, the institution, and our community. According to Zajacova, Lynch, and Espenshade (2005), "high attrition rates complicate enrollment planning and place added burden on efforts to recruit new students." (p. 667). McGrath and Burd (2013) agree stating that "higher retention rates typically lead to higher graduation rates, key measures of institutional success." (p. 43). A student who is unable to complete their degree is unable to have the benefits of that degree but yet may have student loan debt similar to someone else who was able to finish. According to Pascarelli and Terenzini (1991), those who drop out of college are denied the occupational, monetary, and societal rewards offered by obtaining a college degree.

Research shows the highest attrition rates taking place during a student's first year of college. Tinto (1987) contends that 75% of attrition occurs in the first two years of college with the majority departing during their first year. Subsequently many colleges have instituted first year experience programs designed to support freshman and promote retention. First year programming includes orientation programs, first year seminar courses aimed at promoting success, living and learning communities, and social programming.

The reasons for dropping out vary from student to student, but looking at Tinto's (1987) longitudinal model of institutional departure, it basically becomes either an issue of academic integration or social integration. Of course, there are many factors that affect

a student's ability to integrate on either of these levels including their background, skills, goals, and commitments. Because the ability to integrate socially and academically will ultimately determine persistence, attention must be paid to both of these areas. Pascarela and Terenzini (1991) note the significant role that academic success plays in persistence from first to second year, which is supported by Lohfink and Paulsen's (2005) study of first generation college students (FGS). They determined that although there were many differences between the FGS and the continuing education students, first year GPA was "positively related to first-to-second-year persistence" for both groups of students. Similarly, Fletcher and Tokmouline (2010) state that "academic probation status reduces the chances that some students return to school for their second year" (p. 3).

The purpose here is to specifically explore ways to support academic success in the first year. To help support students in their first year, it's important to understand why students struggle and what may help a student be successful. According to Miller and Sonner (1996), "The national average graduation rate for academic probation students is 13%" (p. 4). Because probationary students are less likely to persist, this is an important group of students to support. More recently, Mathies, Gardner, and Bauer (2006) reported a 31% six-year graduation rate for probation students compared to 83% for students who never earned academic probation at the University of Georgia.

Reasons Students Struggle Academically

Trombley (2001) notes that "many colleges and universities focus on providing interventions that tackle this problem without clearly understanding the population they are addressing" (p. 239). Without understanding the background and issues of probation students, it may be difficult to properly support their academic recovery. According to

Cruise (2002), it is also important to note that not all probationary students are labeled at risk at the start of college. There are many students with outstanding test scores and high school ranking that will end up with probationary status. Balduf (2009) supports this claim stating that even some high achieving high school students enter college without all the necessary skills to be successful in a college environment. Additionally, Tovar and Simon (2006) argue that many students with at-risk labels become high achievers, meaning that many of the predictors are just unusable for some of the population. While the instruments cannot be used to predict all instances of academic jeopardy, the predictors for academic success can accurately forecast a great deal of students' academic achievement levels.

Although most colleges use high school GPA and SAT scores as predictors for achievement, these are not perfect instruments. According to Schmitt et al. (2007), even though high school GPA and SAT scores are very strong predictors for academic achievement, there is a lot of variance that remains unexplained, which is especially true for minority groups, who traditionally do not perform as well on standardized tests. Additionally, these predictors do not account for the many other factors that contribute to a student's success or lack thereof.

According to the U.S. Department of Education (1997), college students who are at risk include those with the following situations: delayed enrollment following high school, part time attendees, single parents or those having dependents, first generation college students, someone working more than 19 hours per week, and those with a non-standard high school diploma, like a General Equivalency Diploma (GED). In a study conducted at Los Angeles Southwest College, Trombley (2000) compared probation

students to students in good standing. In this particular population, probation students were more likely to work full-time, have children to care for, and have a lower high school GPA when compared to students in good standing. Balduf (2009) cited numerous possible factors that contribute to freshman probation status including low motivation, under preparedness, and ineffective time management strategies.

While these are statistically the factors that typically determine students who will struggle, several researchers (Pitcher & Blaushild, 1970; Miller & Sonner, 1996; Damashek, 2003) have identified other areas that contribute to a student's lack of academic success. These areas range from the socioeconomic factors and financial factors to lack of motivation, self-efficacy, and under preparedness.

Socioeconomic factors are one area that has been examined in attempts to predict success. The research offers conflicting views on whether or not these factors can predict success. Zajacova, Lynch, and Espenshade (2005) were unable to find any relationship between socioeconomic variables and academic outcomes; however, other researchers find a strong correlation between these variables. Whether or not there is a correlation, it is important to note that there is a larger percentage of minority students, who are considered first generation college students or those students who are the first in their families to attend a post-secondary institution.

Research examining first generation college students and their academic performance is quite common. According to Dennis, Phinney, and Chuateco (2005), "ethnic minority first-generation college students…typically have poorer academic performance and higher dropout rates than other students" (p. 223). The reason for this is lack of parental and peer support systems. It is difficult for parents who did not attend

college to support their children who are attending. Having not had that experience themselves, they are ill-equipped to discuss strategies for success or in worst cases, may not even think that attending college should be a priority for their children. These students typically don't understand how the college system works and are likely to have unrealistic expectations. Additionally, these students often lack the preparation necessary to be successful. In a study by Dennis, Phinney, and Chuateco (2005), they concluded that peer support and personal motivation were very strongly correlated with academic achievement among these minority groups.

Motivation is not just a concern among minority groups; this is a key issue in any student's success in college. A student's motivation to achieve and their willingness to seek support in that endeavor may be the ultimate factor in determining success. Hirsch's (2001) Multiple Intervention Model is designed according to a student's motivation for change. He contends that the first step in helping a struggling student is to first assess their readiness and motivation toward change. An individual must be highly motivated in order to be ready to receive support. Hirsch (2001) identifies seven different elements of academic motivation that students should possess to be considered a highly motivated individual:

1. The goal of being academically successful in college
2. A high value placed on working toward academic success now instead of later.
3. A belief in personal control over whether academic success is achieved.
4. A belief in personal ability to be successful.
5. The belief that effort expended will result in academic success.

6. Knowledge of goal-setting and related motivational techniques for completing daily work.
7. A willingness to apply motivational techniques to accomplish daily work and maintain motivation over time. (p. 76)

Students who are low or medium level in motivation must first explore their own academic motivation before any type of intervention will help. For many programs designed to support students academically, the motivation piece may be the portion that is missing.

Financial support is another challenge that often causes students to struggle. College affordability is increasingly becoming a huge problem for many low income and even middle income families. According to National Center for Public Policy and Higher Education (2008), college tuition and fees have increased by 439 percent since 1982; however, median family income has increased only by 147 percent in the same timeframe. Financial aid is supposed to fill this gap; however, the growth of federal funding cannot match the tuition increases, leaving students to borrow more, owe more and work more while they are in school. Even if a student's financial aid package enables him or her to pay for tuition, fees, and books, often it does not pay for living expenses. According to Shireman (2009), the major contributing factor to decreased graduation rates is students' lack of time to engage in the learning process due to the need to work to pay for living expenses. Colleges that see some of the highest graduation rates are those institutions where "few students are part time and very few work long hours. The result is high success rates, even for the students whose prior academic preparation are up to par" (p. 56).

Often lack of study skills is cited as a major contributing factor to a student's academic struggles. Study skills are defined as "competence in acquiring, recording, organizing, synthesizing, remembering, and using information and ideas" (Harvey, 1995, p. 932). The skills themselves include goal setting, managing time, reading strategies, note taking, and managing anxiety. Unfortunately, it is often assumed that if a student performed well in high school, he or she has developed the adequate study skills to be successful in college. However, adequate study skills are often lacking in freshmen students. In fact, Jones, Slate, and Marini (1995) determined that out of 266 students tested for study habits, only 51 percent of them used appropriate study strategies. Using the Learning and Study Strategies Inventory (Weinstein & Palmer, 2002) Proctor et al. (2006) demonstrated that students who experience academic issues are most often study skills deficient when compared to their successful counterparts. Knowing that many students have poor study habits and that an assessment of one's study skills can be a very strong predictor of academic success, this is an important area to pursue in a program designed at helping students be successful.

Finally, Zajacova, Lynch, and Espenshade (2005) discuss the role of self-efficacy and stress on academic success citing that self-efficacy was the single best predictor of a student's GPA. They also concluded that stress has a negative influence, not only on the students' GPA, but also on their likelihood to continue their enrollment. Holland's (2006) research supports the role that self-efficacy plays in a student's academic achievement and retention. Consistent with other research, Hsieh, Sullivan, and Guerra (2007) found that self-efficacy is an indicator for success but determined that the type of goal orientation that a student adopts is a more significant variable to study.

Predictors for success and skills that assist students in academic achievement are important to examine. In order to support the population of struggling students, it is most important to examine, specifically, the causes of probation. Ramirez and Evans (1988) identified eight principal probation-related factors:

- Inappropriate course selection and poor scheduling
- Poor motivation resulting from a lack of clear or realistic personal and career goals
- Failure to recognize or to adjust to increased expectations of the university environment
- Lack or insufficiency of support services
- Faculty members' limited familiarity with resources available to students recognized as having difficulties
- External factors such as financial difficulty, family obligations, job schedules, and medical emergencies
- Major personal life changes that reorder priorities
- Lack of comprehensive and ongoing counseling and monitoring

In order to conduct a successful intervention, it is critical that areas such as these are addressed. Obviously a student who is struggling due to financial difficulty will benefit from a different type of intervention when compared to a student who is struggling because of lack of study skills. In addition to understanding typical academic and social issues that face probationary students, it is important to recognize that some demographic factors may also affect a student's academic development.

Demographic Factors and Academic Recovery

Research shows differences in retention and graduation rates of students in various demographic groups. Table 1 contains data on graduation rates from the Higher Education Research Institute for the 2004 cohort of students (as cited in EIU CORE, 2014). Because academic success typically plays a significant role in graduation rates, it stands to reason that demographic factors that affect graduation rates may also affect academic probation and recovery.

Table 1

Demographics and National Graduation Rates

Characteristic	National Graduation Rate—All 4-year Institution Types	National Graduation Rate for Public Universities Only
Men	58.1%	62.9%
Women	63.6%	68.1%
African American	41.3%	46.7%
Asian/Pacific Islander	73.2%	76.4%
Latino/a	64.3%	57.7%
White	64.3%	66.9%

Women have higher graduation rates than men at public universities, as well as across all 4-year institutions. Several studies cite that freshman females perform better academically than their male counterparts. For example, Mattson (2007) states that "females outperformed males significantly when it came to first-semester GPA and first-year GPA" (p. 11).

Others contend that females are less likely to earn academic probation. Mathies, Gardner, and Bauer (2006) report that even though their freshman cohort was 42% male, 60% of the probation group was comprised of male students. Kampoff, Hutson, Amundsen, and Atwood (2007) reported that although 67.5% of students on their campus

were female, female students made up slightly less than half (49.5%) of the academic probation student population.

There is also a notable difference in national graduation rates between various ethnic groups with African American students having the lowest average graduation rate by far among ethnic groups. Research does support that academic probation students are disproportionately students of color. Mathies, Gardner, and Bauer (2006) reported that 84% of the freshman cohort was white, but only 12-14% of the probation group was white. Nance (2007) also notes that black students made up 7% of the probation students at University of California at San Diego, while they only make up 1% of the overall population.

Elements and Models of Support Programs Offered

Taking into account the factors that contribute to students' academic difficulties, it is imperative that universities offer interventions to these students. Tovar and Simon (2006) reported that probationary students "expressed a desire for institutional assistance to help them return to good academic standing" (p. 559). While there are some students that may be able to recover independently, many others will struggle on their own, eventually being dismissed or dropping out. The goal of these programs are the same. The intervention should focus on student success and help students "learn to meet the demands of the academic system, and thus, remain in college and graduate" (McGrath & Burd, 2013, p. 43). The method of intervention could take several forms depending on the needs and resources of a university.

Voluntary versus Mandatory Programs

A student can be required to participate in interventions or participation can be voluntary. Damashek (2003) examined several program models and categorized them as either "intrusive or non-intrusive", referring to whether or not a program was voluntary or mandatory. This decision is a vital component to planning. According to Damashek (2003) the rational for offering an intrusive program is that "students who are failing need help that they will not seek out on their own or accept when offered" (p. 6-7). This may be true but reflecting back on Hirsch (2001), if a student is not receptive to support, he or she will not fully benefit from it. Of course a mandatory program could capture some students who may not be aware of how much a system of support may assist them in academic recovery.

Kirk-Kuwaye and Nishida (2001) determined that intrusive programs were more successful for students on probation than voluntary programs. Their data showed higher GPAs and better retention with intrusive models of support. Hsieh, Sullivan, and Guerra (2007) agree, stating "poorer performing students are less likely to search out assistance in reversing their underachievement" (p. 278). Additionally, Kampoff, Hutson, Amundsen, and Atwood (2007) attributed their program's success to the fact that it's mandatory citing that the "teeth" in their program makes students take it more seriously. Vander Schee (2007) also concludes that the intrusive advisement approach works best with probationary students because these students are reluctant to seek out support services to assist them with academic recovery.

Whether or not the intervention is mandatory or voluntary, the program itself can take a variety of forms. An intervention can be developed as an individual model with

contract system including counseling or advisement; a group model using workshops, group work, or coursework for credit; or a comprehensive approach.

Individual Model: Contract, Counseling, or Advisement

Heisserer and Parette (2002) recommend intrusive advising with probationary students to enhance students' feeling of "belongingness" within the college and promote academic accountability. In this type of intervention, personal contact is the key element. Students have opportunities to discuss their individual situations and allows for adjustments to their plan when needed. Some institutions where this would work best would be those that have a retention office or advising office where there are staff members whose jobs are dedicated to meeting with and advising students. This approach usually involves some type of initial assessment and regularly scheduled meetings.

One intrusive program is the Students in Retention (SIR) program at Henderson State University. Garnett (1990) reports that the SIR program includes a signed contract requiring students to complete certain tasks during the semester: visit the Counseling center, have a conference with each instructor, meet with an academic advisor three times, attend supervised study hours, and submit weekly reports. In a presentation to the National Rural and Small School Consortium, Steinmiller and Steinmiller (1991) further discussed how Henderson State University's contract system assists at risk students. Students' contracts include "Individual Academic Assistance Work", referring to study hours, tutoring, study groups, and use of library resources. The weekly reports that students submit outlines their progress in the program and allows them engage in self-assessment by reporting successes, problems, and grades.

In another example of a counseling type program, Miller and Sonner (1996) reported on Corning Community College's "PASS" program (Promoting Academic Student Success). This program stressed constant contact with the probationary students, including working with staff individually and in groups. The students met in groups at least once every two weeks and also individually with the same frequency. The facilitators were a mix of faculty and staff who were chosen because of their passion for student success. Miller and Sonner (1996) reported a 19% increase in probation students progressing toward graduation during the three year pilot program.

More recently, Vander Schee (2007) describes an intrusive advising model at Aurora University. His study showed that students have greater academic success when there is more individual contacts, comparing students who met once or twice with those that met three or more times with an academic advisor.

The most recent example of this approach is detailed by Arcand and Leblanc (2011) in a probation program design called "companioning". This program offered at the University of Ottawa aimed to focus on students' short and long term academic success though a personalized, intrusive approach. Participants of this program were asked to reflect upon their academic goals and their personal challenges, while developing academic skills, such as writing and ways to enhance knowledge.

Group Model: Groups, Workshops, or Coursework

A second model of support is based on students working in groups or in a class or workshop environment. An example of an intrusive version is a program called SEG (Student Enhancement Groups), which was offered at Shippensburg University. Foreman and Rossi (1996) describe the program as "weekly sessions that attempt to promote

appropriate behavior and attitudes to foster enhanced motivation and grade achievement" (p. 7).

In another more recent program, Humphrey (2006) outlines Virginia Tech's Project Success program. This model is a voluntary, not-for-credit program that Virginia Tech has been running the program in some form for the last 15 years. They use the group facilitation approach with faculty, staff, and/or administrators pairing with peer facilitators. These peer facilitators are those who successfully completed the program and remain in good standing with the University. They discuss a variety of topics during their group meetings, and participants write a reflective journal on various topics each week. The short term results, as well as the longitudinal data, show a significant increase of participants returning to good academic standing when compared to non-participants.

University of California at San Diego also uses a workshop model called Goals in Action. According to Nance (2007), students participate in five different workshops conducted by individuals from their counseling center. Students are paired up in the workshops with other students to discuss their personal stories. They are encouraged to utilize tutoring services and work with counselors, although most do not choose to do so. They saw positive results in GPA with the average starting at a 1.2 and increasing to a 2.2 after one semester.

Some institutions find that offering course for credit, most often developmental, is a more attractive option because students tend to take it more seriously, and those working with the students have a captive audience. Most often this coursework is focused on assisting students with developing study strategies and helping them develop a personalized plan for success.

Lipsky and Ender (1990) studied the impact of a probation recovery course at Indiana University of Pennsylvania. Using Walsh's study (1985) citing that academic support programs can significantly improve academic outcomes in poorly performing student, Lipsky and Ender (1990) developed a study skills course to assist academically-at-risk students. The course was a one-credit course entitled "Strategies for Achieving Academic Success". The experimental group consisted of students who enrolled in the course voluntarily. "At the conclusion of spring semester the experimental group in each year of the study earned a significantly higher grade point average (GPA) than did the control group". In fact the experimental group maintained a significantly higher GPA than the control group for the next 2 years following the intervention.

Kamphoff, Hutson, Amundsen, and Atwood (2007) reported positive results at the University of North Carolina at Greensboro using a coursework approach. They enrolled all probation students in a mandatory course. They also met with students outside of class to assist them individually. Their course approach was less focused on developing specific study strategies and more focused on developing motivation and empowerment. They reported significantly higher academic achievement in students enrolled in this program when compared to the control group, a previous year's cohort without this intervention.

More recently, according to McGrath and Burd (2012), the University of Arizona offered a mandatory success course for freshman on academic probation during their second semester in college. The one-credit course, Success in Science, incorporated "five core areas: student development; test-taking and note-taking strategies; campus policies and procedures; exploration of different majors; and engagement with faculty members,

advisors, and other student resources on campus" (p. 46). When comparing the cohort of students who took the course against the prior year's cohort before the course was offered, McGrath and Burd (2012) reported an increased percentage of students recovering from probation, 9% to 49%, higher second year persistence rates, 22% to 60%, and higher graduation rates, 2% to 25%.

Comprehensive or Combination Model

A comprehensive approach refers to a program that offers a combination of the above strategies. This approach may offer different interventions and various levels of support depending on the student. According to Damashek (2003), a good comprehensive program has several components: an introduction to the program takes place between semesters, an orientation discussing GPA calculations and implications of probationary status, a one on one meeting to discuss individual goals, and a signed contract. There are several examples of the comprehensive approach model.

Mann, Hunt, and Alford (2004) utilize comprehensive approach at Lamar University called Monitored Probation. This model imposes a varied level of intervention for the students participating. The three levels of intervention were determined by the student's GPA range. The lower the GPA was, the more intensive the intervention. All students no matter what level met periodically with a Retention Coordinator, but all students were prescribed additional resources depending on individual need. Additionally, those with lower GPAs were enrolled in a two-credit course taught by the psychology department. The course "combined learning theory research with practical intervention to improve academic performance" (p. 248).

In another comprehensive model, Simon, Tovar, and Edson (2003) discuss a "re-orientation" program for students at Santa Monica College. This model utilizes small workshops, administration of the College Student Inventory (Stratil, 1988), a student assessment tool, and intrusive advisement. The workshops were designed to engage students in discussions regarding their academic recovery, as well as to inform them of campus resources available to support them.

Measuring the Effectiveness of Intervention Programs

The important question to ask is, do these programs achieve what they set out to do, which is support struggling students academically? Most research agrees that interventions can be very effective in supporting these students (Hirsch, 2001; McGrath & Burd. 2013). Hsieh, Sullivan, and Guerra (2007) see them as a way to correct a student's path toward failure. "Sensible intervention programs and practical ways of altering students' self-sabotaging beliefs and goals are warranted to break this vicious cycle. Interventions for students who are placed on academic probation seem especially critical." (p. 470).

There have been many probation programs have been successful due in part to the growing body of research specific about why students are challenged academically. Noel, Levitz, and Saluri (1985) offered varied interventions to influence student retention. In fact, Dr. Lee Noel and Dr. Randi Levitz founded the Noel-Levitz Centers for Institutional Effectiveness in Iowa City, an educational consulting firm aimed toward strategic planning for enrollment and student success. The research on the impact of direct instruction for probationary students increased around and after this time.

According to Walsh (1985), support programs for academically at-risk students can be successful. In fact, Kulik, Kulik, and Shwalb (1983) conducted a meta-analysis of findings reviewing 60 different studies. These studies included a variety of program types including study skills instruction, advisement, developmental coursework, as well as comprehensive support services. They looked at GPA comparisons and persistence statistics of these programs that spanned six decades of research. The findings demonstrated that, in general, these programs have a positive effect on students' GPAs as well as their persistence. Students participating in interventions had a .25 point higher GPA than non-participants, and over time there was a 15 percent increase in persistence of student participants. The conclusion here is that it is important to do something, whatever it is, for struggling students. Lipsky and Ender (1990) supported this conclusion but noted that successful programs have the following common characteristics: regular, frequent contacts with the student, "structured treatment" incorporating how to strategies into instruction opportunities, and relevancy of the activities to the student participants.

More recently, Mann, Hunt, and Alford (2004) discussed the program offered at Lamar University in Beaumont, Texas. This program was called "Monitored Probation" and consisted of a variety of intervention levels depending on their GPA. The students who participated in the program raised their GPA significantly more than those who did not participate, regardless of which level of intervention they participated. GPA analysis has become the most important measure of the success of these programs.

Armed with data that demonstrates the effectiveness of intervention programs for academically challenged students, administrators still need to consider the road blocks they will face at their institution when trying to implement such a program.

Barriers to Providing Support Programs

A university's willingness to offer programs such as these has a lot to do with the campus attitude toward probation. Ramirez and Evans (1988) describe the dichotomous nature of these attitudes:

> Unsatisfactory academic progress may be viewed as part of the natural attrition process by which less capable, less motivated, or underprepared students are removed from the institution that lacks or declines the special resources necessary to service such individuals. Other institutions of higher education (IHEs) may feel that because admitted students are presumed capable, given an understanding of the factors involved and the resources with which to address them, the provision of probation intervention services for some students is a moral and/or fiscal imperative.

Barefoot (2000) confirms that faculty resistance continues on college campuses, stating that courses that are viewed as more remedial could negatively impact the reputation of the programs offered. However, assuming that an institution is committed to providing support services, the fiscal barrier is yet another hurdle that must be crossed. Of the studies examined, there were researchers that indicated a lack of longitudinal data because of the absence of funding for a program beyond two to three years. Should an institution offer a monitored program, there are many staff hours that need to be dedicated to its support.

In spite of the students' success in the program at Shippensburg University, there are some issues. The two biggest challenges of this current model is the lack of ability to mandate it for all students and the lack of resources to have continued contact with the

students who do want to participate throughout the semester. Because those that participated had a significantly higher GPA, it is believed that it is a beneficial resource to all probationary students; however, in the Spring 2008 semester, the 117 students who opted to participate had 653 one-on-one contact hours, which is an overwhelming drain on the Learning Center's limited resources.

Offering a course for credit has its problems as well. In a unionized institution faculty may be the only ones who are able to teach the course. Also, it may be difficult to find a program to house such a course, unless the university has a formal developmental education program.

Universities that utilize an intrusive advising approach, one that proves to be exceptionally effective when working with probation students (Heisserer & Parette, 2002), need to commit the most resources to their initiative. This type of program not only needs a great deal of contact hours available to students but should include appropriate staff training. Much research (Tovar and Simon, 2006; Trombley, 2000-1; Heisserer & Parette, 2002; Cruise, 2002) stresses the importance of staff development for those individuals working with the probationary population.

When starting a new program, institutions need to be prepared to make adjustments. Early attempts although unsuccessful, provide educators important information from which to modify programming. According to Donnangelo (1978), when Bronx Community College (BCC) implemented an open admissions policy in 1970, they were challenged with an influx of students who were "socially, economically, and academically disadvantaged". By the late 1970s faced with some major attrition problems, Bronx Community College developed a support program for probationary

students. They had first adopted some of the City University of New York's (CUNY) "supportive services such as counseling, remedial instruction, and financial aid" before moving on to some additional, intensive programs. In spring of 1978, students who were readmitted after being suspended were mandated to attend large, counselor-led group meeting to discuss retention standards and later a smaller group meeting to discuss their barriers to academic success. This eventually evolved into a more formalized program. As stated in Donnangelo (1979), "The core of the program for the spring 1979 semester was a special seven week course entitled Probationary Workshop Program (PWP-99)". This was one of the first documented probation recovery courses. The course's effect on students' academic achievement and retention was insignificant, and Donnangelo (1979) concluded that the course was in need of revision.

This path is an important one to examine, since first attempts at interventions may not be overwhelmingly successful. It is important for institutions to remain committed to continued improvement of programming and keep revising programs until they are deemed the most effective for that particular institution.

Successful institutions will find a way to support these initiatives. In a two-year study of high performing colleges, Kuh, Kinzie, Schuh, and Whitt (2005) found that the most successful colleges have several things in common. The first of these commonalities was their constant drive to improve, even when they were performing well. Secondly, they were committed to student success. Finally, their decisions were driven by data. Commitment to student success is something every school says they have, but it's important to back this claim with funding for appropriate support services to help make that a reality. Even colleges with limited resources can implement an intervention to

benefit students. The self-monitored contract system is one example that requires very little staff intervention.

While there is no way for our institutions of higher education to guarantee success, we can certainly create conditions for students where success is within reach. Granting access to students through enrollment and funding initiatives is the first step, but this needs to be followed with continued support, both financial and academic, in order to truly give our students a chance at achieving their goals.

This particular study focused on examining the programming offered at five various universities within the Pennsylvania State System of Higher Education. The specific types of programs were described and assessed using the Academic Recovery Rate, or the percentage of students who successfully raised their cumulative GPA above a 2.0 after one semester on academic probation.

Pennsylvania State System of Higher Education

The Pennsylvania State System of Higher Education (PASSHE) was established in 1983, converting the fourteen state colleges in Pennsylvania into universities in the PASSHE system. According to the system's website (2009), the fourteen institutions all began as normal schools established to train teachers in the mid-1800s. They evolved from normal schools to state teacher colleges to state colleges before the formation of PASSHE. The fourteen schools lie in various rural, small town, and metropolitan areas in the state in the communities of Bloomsburg, California, Cheyney, Clarion, East Stroudsburg, Edinboro, Indiana, Kutztown, Lock Haven, Mansfield, Millersville, Shippensburg, Slippery Rock, and West Chester. These schools have a combined enrollment of approximately 112,000 students accounting for undergraduate, graduate,

part-time, and full-time students. They offer more than 250 separate degree or certificate programs to students including many masters' level programs. In addition, Indiana University of Pennsylvania, the largest in the system offers doctorate degrees in several areas of study. PASSHE's mission is to "to provide high quality education at the lowest possible cost to students" (PASSHE, 2009).

The Pennsylvania State System of Higher Education institutions, like most other public institutions, are student centered and are concerned with student retention and academic success. There is no standardized system of support for probationary students within the system. Instead, the institutions themselves are charged with assessing their own population to determine the best fit of support services to offer. Five of the universities within PASSHE participated and are part of this study.

Summary

This review of literature revealed several key ideas. First, as a way to provide access to students who may otherwise be unqualified to attend, colleges are enrolling students in conditional admittance programs. Conditional admittance programs can take the form of an extended orientation or a summer bridge program that allows the students to take courses in a supportive environment before starting in the fall as a freshman. Underprepared students, whether or not they start in this type of program, are increasing in number at most colleges and universities. With universities needing to retain their students, the need for programs to support these students is critical.

Being underprepared is one major issue that hinders students' success, but it is certainly not the only one. Low motivation, lack of self-efficacy, and poor study skills, especially time management, are other areas that have a direct effect on student

achievement. Outside circumstances such as financial issues, family commitments, and employment often have a negative effect on students' academic achievement. Finally, there are some demographic factors that correlate to academic struggles. Most underrepresented ethnic minority groups have increased likelihood of lower academic achievement than white students. Additionally, male students of any ethnic group tend to be more likely to experience academic issues than female students.

Programs designed to specifically address students on academic probation differ across institutions. Some programs are voluntary, some are mandatory. Program models vary from individualized programs using a contract structure or a counseling or advising model to group-based programs in the form of workshops or coursework. Yet other institutions offer comprehensive or combinations of programming, which may have a menu of program elements.

Because these intervention programs can be successful in supporting students who are struggling academically, the implementation of these systems should be considered part of a college's best practices. After examining the barriers to student achievement both in general and at a particular institution and determining the best fit as far as program design, the next step is developing a quality assessment plan that guides planning. An assessment program requires constant adjustments that are data driven and sensitive to the needs of the students at that college.

Chapter 3 will outline the methodology used to examine the variety of support programs available to students within the Pennsylvania State System of Higher Education and how effective the schools within the system are when it comes to assisting probation students in their academic recovery.

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

According to Tinto's (1987) longitudinal model of institutional departure, a student's social and academic integration affects their institutional commitment and ultimately their decision to depart or persist. Programs designed to assist students assimilate academically can help in promoting student persistence to graduation. According to Walsh (1985), programs designed specifically for supporting academically at-risk students can be successful in helping students to improve their academic performance and persistence.

It is this researcher's belief that the most successful probation recovery programs will incorporate the theories of Tinto, Pascarella, and Hirsch. Tinto (1987) and Pascarella (1985) both discuss the student background and skills as a partial predictor for learning and ultimately student persistence. The interactions that students have with both their peers and people within the institution have a large effect on their cognitive development and their decision to depart; therefore, it is important for programs to take a holistic approach to assisting students by not only supporting them with their academic issues, but also their issues that lie outside of the classroom. Additionally, it is essential to assess each student's readiness for change and help each student to develop his or herself to the next level of readiness as outlined in Hirsch's Multiple Intervention Model (2001).

Rationale for Methodology

This mixed methods study examined the various support programs for students on academic probation offered at five institutions within the Pennsylvania State System of

Higher Education to determine the model of program utilized and whether or not these programs account for academic and nonacademic issues and if they utilized a system of intervention recommended by Hirsch. Students' demographic characteristics were also considered to find any possible correlation between those characteristics and their likeliness to recover academically.

In order to obtain a comprehensive look at these programs, the research methodology incorporated descriptive, quantitative, and qualitative data. The use of descriptive information, similar to Damashek (2003), gives an overview of the types of programs offered. In addition to the model of support that is utilized, the overview of programs includes who administers the program, which students are served, which student concerns are addressed, and how the program is assessed.

The quantitative data gathered is a common method of research in the study of students on academic probation (Humphrey, 2006; Mann, Hunt, & Alford, 2004; Abelman & Molina, 2001; Ramirez & Evans, 1988). Because the objective of academic probation programs is to raise students' grade point averages (GPA), program evaluations should consist, at least in part, of an assessment of participating students' change in GPA. The success of each institution's program was measured by the number of probationary students who raised their GPA above probation status during the semester of intervention.

The qualitative piece of this study allows us to consider the perspectives of the students themselves. Researchers have long been interested in the perspectives of students who struggle academically (Arcand & Leblanc, 2011; Holland, 2006). In this study, an electronic survey instrument was used to gather student perspectives from two of the five participating institutions.

Research Questions

This dissertation aimed to address the following questions:

1. What types of support programs are offered to students on academic probation at universities within the Pennsylvania State System of Higher Education?
2. Do the programs account for academic and nonacademic issues? Do they use a counseling approach to assess and consider a student's readiness for change?
3. Which institutions within the Pennsylvania State System of Higher Education have the highest academic recovery rate among probationary students?
4. What individual factors, like gender, ethnicity, age, and type of admittance, contribute to one's likeliness to recovery academically from probationary status?

Research Design

Institution Participants

The institutions initially targeted in this study were the fourteen universities in the Pennsylvania State System of Higher Education (PASSHE) which includes Bloomsburg University, California University, Cheyney University, Clarion University, East Stroudsburg University, Edinboro University, Indiana University of Pennsylvania, Kutztown University, Lock Haven University, Mansfield University, Millersville University, Shippensburg University, Slippery Rock University, and West Chester University.

This system of institutions was chosen primarily because of the location and the researcher's familiarity with the student body, administrative structure, and general academic policies. Additionally, the researcher has an interest in the development of these types of programs within the PASSHE system. Ultimately, five of the fourteen

institutions in PASSHE fully participated in this study. The participating institutions are labeled from this point forward as Red University, Orange University, Yellow University, Green University, and Blue University.

Student Subjects

Participants for the data analysis included in this study were all full-time freshmen students admitted to any one of the five participating PASSHE schools during the fall of 2009, 2010, and 2011 and were placed on academic probation at the conclusion of their first fall semester. The data set includes students who may have started in a summer bridge program prior to the fall semester. Most institutions label academic probation as students with a cumulative grade point average (GPA) below a 2.0 on a 4.0 scale. Some colleges at certain institutions may include students with higher GPAs among their academic probation population. For example, students in the College of Business at Green University are considered on probation if their GPA is below a 2.5. For the purpose of this study, academic probation refers to students with a fall cumulative grade point average below 2.0 on a 4.0 scale. This study excluded upper classman placed on academic probation, students with transfer credits that classified them as sophomore status or above, non-degree seeking student, and part-time students defined as those students carrying a credit load of fewer than 12 credits.

Many students placed on probation did not return for their fall semester. Because the purpose of this study was to assess institutional interventions for probation students and these students did not participate in the spring programming, they were not included in the Academic Recovery Rate for each institution. However, the percentage of probation students that did not return for the spring semester was calculated and reported.

Table 2 shows an overview of the population data for the three years studied including total undergraduate population and total freshman population for each institution.

Table 2

Overview of Population Data from 2009, 2010, and 2011

Year	Population	Red	Orange	Yellow	Green	Blue
Fall 2009	Total Undergraduate Enrollment	8,605	6,223	5,004	6,942	11,920
	Total Freshman Enrollment	2,040	1,640	1,129	2,385	2,248
	Freshman on Probation	190	296	266	246	136
	Percentage of Freshman on Probation	9.3%	18.0%	23.6%	10.3%	6.0%
	Did not return for Spring	67	86	67	34	36
	Percentage Probation students who did not return	35.3%	29.1%	25.2%	13.8%	26.5%
Fall 2010	Total Undergraduate Enrollment	9,136	6,225	5,114	7,143	12,234
	Total Freshman Enrollment	2,140	1,624	1,147	2,393	2,067
	Freshman on Probation	198	273	247	229	162
	Percentage of Freshman on Probation	9.3%	16.8%	21.5%	9.6%	7.8%
	Did not return for Spring	62	84	53	43	38
	Percentage of Probation students who did not return	31.3%	30.8%	21.5%	18.8%	23.5%
Fall 2011	Total Undergraduate Enrollment	9,256	5,876	5,029	7,132	12,834
	Total Freshman Enrollment	1,981	1,607	1,187	2,522	2,292
	Freshman on Probation	241	258	247	288	205
	Percentage of Freshman on Probation	12.2%	16.1%	20.8%	11.4%	8.9%
	Did not return for Spring	63	106	70	63	46
	Percentage of Probation students who did not return	26.1%	41.1%	28.3%	21.9%	22.4%

"Freshman on Probation" are those students included in this study. The actual sample size for this study is 3,482 total students over the three years at the five institutions investigated.

Measures

Since the goal of probation recovery programs is to improve one's GPA, the use of GPA and persistence data are standard measurements for analyzing these types of programs. Kulik, Kulik, and Shwalb (1983) conducted a meta-analysis of findings reviewing 60 different studies. These studies included a variety of program types including study skills instruction, advisement, developmental coursework, as well as comprehensive support services. They looked at GPA comparisons and persistence statistics of these programs that spanned six decades of research. These findings demonstrated that, in general, these programs have a positive effect on students' GPAs as well as their persistence. This study also used GPA as the main method of evaluation for the various programs.

Instruments

In addition to GPA data, demographic data for each student was collected and studied. The demographic data included gender, ethnicity, age, and admittance category. The programs to support students on academic probation that were offered at each of the institutions were also examined. The information was gathered by interviewing an individual at each campus identified as being knowledgeable about academic probation programming. The institutional interview instrument used to gather this information was designed by the researcher.

Additionally, student perspectives at two of the institutions in this study were gathered through the use of a survey instrument, which was also designed by the researcher.

Institutional interview instrument. The interview questions were designed to uncover information about each institution's programs for students on academic probation. Information gathered includes program structure, administration, and assessment. Additionally, since this study aimed to compare regularly admitted students against conditionally admitted students, additional questions regarding the conditional admittance programs were added after piloting the interview questions. The initial questions were:

1. Who assumes the role of coordinating support services for students on academic probation?
2. Is it a centralized program of support or is probation recovery handled separately by different colleges or departments?
3. Is the system of support mandatory for everyone or certain populations of students or is it entirely voluntary?
4. Is the support system a counseling model, contract model, or coursework?
5. Does the intervention include assistance with both academic and non academic issues?
6. Does the intervention take into consideration an individual student's readiness for change?
7. How is the effectiveness of the support system assessed institutionally?

Pilot of institutional survey instrument. This instrument was piloted at an institution not contained in the Pennsylvania State System of Higher Education. The interview was conducted by telephone with a colleague at a semi private institution in Pennsylvania. After the pilot interview, the individual was asked to provide feedback on question clarity and flow. The individual suggested some clarifications and examples to offer on some of the questions. Also, the questions regarding the conditional admittance programs were added to the instrument. The final interview instrument can be found as Appendix D.

Student survey instrument. Initially, a student focus group was going to be administered to gather student perspectives; however, one institution's Institutional Review Board would not allow the focus group to be administered since the population was probation students and considered an at risk population. At the two institutions that were identified and agreed to allow the focus groups, the individuals that were organizing the groups were unable to get enough students to agree to discuss their academic information in front of other students. As a result, the questions were reformatted into an electronic survey instrument and sent out via email. The student instrument was designed to determine the reasons for the students' academic struggles, to uncover the students' understanding of the support offered to them, and to define the factors that contributed to their academic recovery, if applicable. The initial questions were:

1. What were the circumstances that contributed to your academic probation status? Academic? Social? Health? Personal?
2. What, if any, institutional support services did you use to assist you in your academic recovery?

3. Did your institution offer you support with both academic and nonacademic issues?
4. As a student on academic probation, what did your institution require you to do? Encourage you to do?
5. What, in your opinion, ultimately helped you in or prevented you from recovering from academic probation?

Pilot of student survey instrument. This instrument was piloted with three upperclassman at the researcher's institution of employment with whom a rapport had been established due to assisting them when they were placed on academic probation. The researcher met with this small group of students in a conference room on campus. After the interview was conducted, the students were asked to provide feedback on the question clarity and flow. The students suggested some examples to add to the questions, which was especially useful when converting the focus group instrument into an electronic survey instrument. The final survey instrument is included as Appendix E.

Procedures

Interview Administration

The researcher contacted each university's learning center director to determine the point person for probationary programs. The interview was conducted with the individual that was identified. The interviews took place by phone and were prearranged for a day and time that were mutually convenient for the researcher and the interviewee.

Validity and Reliability

In order to establish validity for the interview instrument, the data was triangulated through the field notes of the observer, an audio-taped transcript of the

interview, and member-checks by the interviewees. Once each interview was completed, the researcher created a transcript overview of the conversation. This transcript overview was then emailed to the interviewee for review. They were each offered the opportunity to clarify certain responses, validate the information, and correct any anomalies.

Data Collection

The following descriptive data about the student participants was gathered from each university's archival data: gender, ethnicity, age (to be used to determine traditional aged and non-traditional aged students, and type of admittance (conditional admittance or regular admittance). Additionally, the following GPA data was gathered to be analyzed: fall cumulative GPA (2009, 2010, 2011) and corresponding spring cumulative GPA (2010, 2011, 2012). This information was gathered by contacting the Institutional Research Department at each of the five participating universities.

In addition the student information, the Institutional Research Department was asked to provide population information, like total undergraduate population and total freshman population, for each of the years studied. Some data collected needed to be reformatted to only include students that were part of the protocol. For example, one institution provided information for every freshman student over the three year period, so all of the student not on probation were deleted. Additionally, some institutions label students as academic probation with a grade point average (GPA) over 2.0. For example, business and education students may require a higher GPA to graduate, so the students in that college may be placed on probation with a GPA of lower than a 2.5. Any student in the data sets with a cumulative GPA of 2.0 or higher for their fall semester were deleted from the data file.

Student Survey Administration

After the GPA data was analyzed, the researcher identified top performing institutions based on the academic recovery rate. The researcher then attempted to conduct student interviews at the top performing institution, Blue University, as well as one of the lower performing institutions, Red University, in order to gain insight into the student's perspective of their academic recovery. Because students were reluctant to appear in person to discuss the sensitive issue of their academic struggles, the interview instrument was put into an online format and responses were gathered electronically.

An administrator at each institution that was targeted for the student focus groups was given the survey link, and they each sent out the survey to the student participants via the students' university email account. The students were sent the survey if they were placed on academic probation during their freshmen year and were a currently enrolled student at their respective university.

Data Analysis

The data was analyzed from two different perspectives: institutionally and individually. Institutions were analyzed by determining the rate of academic recovery for their students. The recovery rate was calculated by dividing the number of students who were able to raise their cumulative GPA above a 2.0 by the number of students who were initially placed on academic probation and returned for their spring semester. This formula generated the percentage of the original probationary population who were able to academically recover. Once the academic recovery rate was determined for each institution over 3 years and averaged, these rates were compared to determine whether or

not there were significant differences between the academic recovery rates at the various institutions.

The second part of the data analysis for institutions examined the change in cumulative GPA for each student at each institution. The net change in GPA was determined by simple subtraction between each student's fall cumulative GPA and spring cumulative GPA. The net change helped to determine the number of students who increased their GPA as well as give a mean net change for each institution. This calculation is simulated in Table 3.

Table 3

Net Change in Cumulative GPA (Sample Data)

	Fall GPA	Spring GPA	Net Change
Student A	1.54	1.7	0.16
Student B	1.57	1.31	-0.26
Student C	0.89	2.01	1.12
Student D	1.02	0.61	-0.41
Student E	0.52	0.66	0.14
Student F	0.44	1.7	1.26
Student G	1.91	1.86	-0.05
Student H	1.61	2.12	0.51
Student I	1.41	1.94	0.53
Student J	1.49	2.34	0.85

In addition to serving as data for institutional evaluation, the net change in GPA was analyzed through independent sample t-tests and a one-way ANOVA to determine if there was a significant difference in net change for GPA between the various demographic groups. The factors examined to find differences were gender, ethnicity, traditional aged versus nontraditional aged students, and conditionally admitted students versus regularly admitted students.

Other factors used to investigate individual differences were whether or not a student returned for the spring semester after being placed on academic probation and whether or not they were able to recover from academic probation, or achieve a 2.0 or higher cumulative GPA. These factors were analyzed using a binary logistic regression to determine which factors, if any, contributed to the likelihood of these two circumstances. Because binary logistic regression only deals with factors with two levels, the ethnicity factor was broken into 3 categories, white or non-white, black or non-black, and Hispanic or non-Hispanic.

Summary

The targeted institutions were universities contained within the Pennsylvania State System of Higher Education. Five of the fourteen universities are included in this study. Multiple methods of data collection were utilized to provide analysis. Descriptive data was collected through interviews with university personnel, quantitative data was analyzed using archival data collected at each institution, and qualitative data was collected using an electronic survey instrument. Both the instruments were piloted prior to the study. As a result of the pilot, some questions on the institutional interview instrument were modified slightly and one question about conditional admittance programs was added. Some wording on the student survey instrument was also adjusted after the pilot.

CHAPTER 4

FINDINGS

The focus of the research was to examine the types of programs offered to students in universities within the Pennsylvania State System of Higher Education and to compare academic recovery rates among the institutions. Although all fourteen universities in the system were contacted and invited to participate, ultimately five of the fourteen universities fully participated and are included in this study. In attempt to maintain the anonymity of the schools and students participating in this study, the participating universities will be referred to as Red University, Orange University, Yellow University, Green University, and Blue University.

Campus Profile and Population Data for Participating Universities

All universities participating in this study are universities within the Pennsylvania State System of Higher Education (PASSHE). According to PASSHE's website, the entire system of fourteen universities has a current combined student enrollment of approximately 112,000 students (2014). The population of the surrounding town, city, or borough, as well as the surrounding county for each university, is shown in Table 4.

Like the majority of the fourteen universities in the Pennsylvania State System of Higher Education, the universities included in this study are located in primarily rural areas of the state with one of the five being located in a more suburban location. Four of the five universities had average undergraduate enrollment of between 5,000 – 10,000 students during the years investigated, with one university having average undergraduate enrollment of over 10,000 students during the years investigated.

Table 4

Surrounding Population and Undergraduate Enrollment Data

University	Population of Surrounding Town / City / Borough*	Population of Surrounding County*	Average Undergraduate Enrollment 2009, 2010, 2011
Red	14,633	66,887	8,999
Orange	5,154	39,646	6,108
Yellow	9,797	39,517	5,049
Green	5,500	238,614	7,072
Blue	18,857	506,575	12,329

*Source: U.S. Census Bureau, State and County Quick Facts (2014)

Demographic Information for Entire Sample of Students on Probation

The sample of students used in this analysis were all freshman students that started at any of the five universities during fall 2009, 2010, or 2011, who, after their fall semester, were placed on academic probation. Academic probation for this study refers to students with a cumulative grade point average (GPA) below a 2.0. In addition to their fall and spring GPA data, the following demographic data was collected about each student: gender, ethnicity, age, and admittance category. The total sample of freshman students on academic probation across all five universities over the three year period was 3,482. There were 1,995 male students (57.3%) and 1,487 female students (42.7%) in the total sample.

Because each institution categorizes and labels ethnicity differently, the categories were initially collapsed into the following: 1) Asian, 2) Black / African American, 3) Hispanic, 4) Multiracial, 5) Native American, 6) Non-resident, 7) Unknown, and

8) White. The percentage of the sample using this breakdown is shown in Table 5. In the sample there were 45 Asian students (1.3%), 512 Black or African American students (14.7%), 170 Hispanic students (4.9%), 81 students identified as multiracial (2.3%), 7 Native American students (0.2%), 4 students listed as non-resident (0.1%), 95 students listed as Unknown (2.7%), and 2,568 White students (73.8%).

Table 5

Initial Ethnicity Frequencies for Entire Sample

Ethnicity Category	Frequency	Percent
Asian	45	1.3 %
Black	512	14.7 %
Hispanic	170	4.9 %
Multiracial	81	2.3 %
Native American	7	.2 %
Non Resident	4	.1 %
Unknown	95	2.7 %
White	2568	73.8 %
Total	3482	100.0 %

After totaling the frequency of ethnicity categories for all 5 institutions for 3 years, some of the group sizes were too small to provide good analysis. In order to increase the size of the groups, the groups labelled Asian, Multiracial, Native American, Non Resident, and Unknown were collapsed into the category “Other / Unknown” for further analysis. The collapsed ethnicity frequencies are shown in Table 6. These five categories combined represent 6.7% of the whole sample.

Table 6
Collapsed Ethnicity Frequencies for Entire Sample

Ethnicity Category	Frequency	Percent
White	2568	73.8 %
Black	512	14.7 %
Hispanic	170	4.9 %
Other / Unknown	232	6.7 %
Total	3482	100.0 %

Age of the student at the time of their freshman year enrollment was collected. This age was used to categorize students as a "traditional-aged student", defined as less than 25 years of age, or "adult student", defined as 25 years or more. There were 3,396 or 97.5% of students in the entire sample who were defined as traditional-aged students and 86 or 2.5% of sample that were adult students.

Finally, although the institutions usually offer more than one conditional admittance program, for the sake of analysis the various programs were not delineated. Students were categorized as either "regularly admitted" or "conditionally admitted". Of the entire sample of 3482 students, 2529 students were regularly admitted (72.6%) and 953 students were conditionally admitted (27.4%).

Conditional Admittance Programs for Participating Universities

In order to gain some understanding of the population of students admitted to the participating universities, the types of conditional admittance programs were examined. This information was gathered through the phone interviews conducted with an individual at each institution who was identified as someone knowledgeable about the programs offered to students on academic probation at their university.

Conditional admittance programs give students who do not meet regular admission requirements, typically with low high school grade point average and / or low SAT scores, an opportunity to start their college coursework with support structures in place. Usually for students to be able to matriculate, they must attain a predetermined academic standard, such as a C or higher in all of their courses and / or a certain GPA. The academic recovery of students admitted through conditional admittance programs will be compared to regularly admitted students since students admitted through these programs are, by definition, an at risk group.

Common programs offered in the Pennsylvania State System include Act 101 programs and other summer bridge programs. Act 101 is funded, at least in part by the Pennsylvania Higher Education Assistance Agency (PHEAA). According to PHEAA, Act 101 is "a state-funded program which allocates funds to Pennsylvania schools that operate an Act 101 program at their institution. Schools use these funds to provide services to academically and financially disadvantaged students to assist them so they can successfully complete postsecondary study" (2014). Summer bridge programs are often similar to Act 101 programming, but the students are not required to meet the specific requirements outlined in the Act 101 grant, such as financial need. Other programs could include specialized orientation programming or limitation of credit loads. Table 7 provides a summary of conditional admittance programs offered at the five universities included in this study. A more detailed overview of the programming at each institution follows the table.

Table 7

Summary of Conditional Admittance Programs Offered

University	Programs Offered	Description
Red	Act 101	Structured Summer program, intensive support during academic year
	Summer Freshman	Summer coursework and orientation programming
Orange	Summer Bridge	Summer coursework- No longer being offered
	Engaged Learner Program	Fall program- Learning Communities and support programming
Yellow	Act 101	Structured Summer program, intensive support during academic year
	Scholars Program	Fall program- Learning Communities and support programming
Green	Act 101	Structured Summer program, intensive support during academic year
	Summer Bridge	Summer coursework and orientation programming
	Summer Start	One week extended orientation program
Blue	Academic Development Program – Act 101	Five week summer bridge with additional support systems into fall
	Academic Development Program- Motivational Group	Five week summer bridge, restriction to 12 credits in fall with special advising

Red University

According to an Academic Advisor for Undeclared Students and Summer Freshman Program Coordinator at this institution, Red University offers two conditional admittance programs for students who do not meet regular admission requirements into the university. The first is an Act 101 program. At Red University, Act 101 students participate in a 6-week summer bridge program taking 6 credits of course work. For most

students, this is a developmental course and an academic course. Additionally, students are required to participate in mandatory workshops, group meetings, and structured study hours.

Red University also offers a Summer Freshman program to students who do not meet regular admission requirements. Students take 7 credits in the summer including a 1 credit study skills course and 2 other courses, one of which could be a developmental course depending upon their Accuplacer scores. This program is less structured than the Act 101 program, but does have some workshops and orientation activities while the students are participating in the summer.

Orange University

According to the Department Chair for Academic Enrichment, Orange University at one time had offered an Act 101 program, but due to decrease in state funding, the program has been eliminated. Similarly, Orange University had offered a summer bridge program for conditionally admitted students for approximately 15 years. Effective summer 2013 the summer bridge program was replaced with an Engaged Learner Program for high risk students entering the university in the fall. This model utilizes a learning community approach with linked courses and peer mentors. It is important to note that the summer bridge program was active during the time that the data was collected for this institution.

Yellow University

According to the Associate Provost for Enrollment Management, Yellow University offers 2 different conditional admittance programs. One program is the Act 101 program, which includes a summer bridge and academic year support services. The

other is the Achievers Program, which is a fall program using a learning community model with peer mentors and support services available. Students in the Achievers program will take two common courses, participate in mandatory study hours, and have access to peer mentors, specialized advising, and counseling.

Green University

According to the Coordinator of Academic Recovery Programs, Green University offers 2 summer bridge programs for conditionally admitted students. The first is their Act 101 program, which includes a summer bridge component, as well as specialized coursework, specifically a first year seminar course specifically for program students and intensive support services. Green University also offers a summer bridge program for students who do not meet the Act 101 criteria. These students also takes summer classes in order to matriculate in the fall. Finally, Green University has a Summer Start program for students who do not meet the SAT requirements for regular admissions. They attends a one week summer program and are required to take the freshman seminar course in the fall.

Blue University

According to the Dean of Undergraduate Studies and Student Support Services, like most of the other institutions, Blue University offers two different conditional admittance programs. The overarching program is the Academic Development Program, which has a five-week summer bridge program, which includes credit bearing courses. Students who meet Act 101 guidelines are offered the additional support that is provided through the state grant program. The Motivational group is for students who are not low

enough to meet Act 101 requirements. They are admitted as undeclared and receive special advising and are permitted to take only 12 credits in the fall semester.

Programs Offered to Students on Probation for Participating Universities

This section addresses two research questions:

Research question 1. What types of support programs are offered to students on academic probation at universities within the Pennsylvania State System of Higher Education?

Research Question 2**.** Do the programs account for academic and nonacademic issues? Do they use a counseling approach to assess and consider a student's readiness for change?

The information regarding programs offered to students on academic probation was obtained by phone interview by one individual identified to be knowledgeable of these programs. The individuals identified held various positions at their respective universities, such dean, department chair, or a learning center staff person. In addition to the background information about the conditional admittance programs, the individuals were each asked the following questions:

1. Who assumes the role of coordinating support services for students on academic probation?
2. Is it a centralized program of support or is probation recovery handled separately by different colleges or departments?
3. Is the system of support mandatory for everyone or certain populations of students or is it entirely voluntary?
4. Is the support system a counseling model, contract model, or coursework?

5. Does the intervention include assistance with both academic and nonacademic issues?
6. Does the intervention take into consideration an individual student's readiness for change?
7. How is the effectiveness of the support system assessed institutionally?

A summary of the program elements for the universities is presented in Table 8. The detailed overview for each university follows the table.

Table 8

Summary of Programs Offered to Students on Academic Probation.

Program Elements	Red	Orange	Yellow	Green	Blue
Program Administration	Decentralized	Centralized	Decentralized	Centralized	Decentralized
Populations of students not served	Yes	No	No	No	No
Mandatory or voluntary	Depends	Voluntary	Depends	Depends	Mandatory
Type of program	Combination	Group-Coursework	Combination	Combination	Individual-Contract
Supports non-academic issues	Yes	Yes	Yes	Yes	Yes
Considers students' readiness for change	Yes	Yes	Yes	Yes	Yes

Red University

The probation support program is decentralized with each college taking responsibility for its own students. There is a structured program in place for undeclared students. The Act 101 program uses a contract system for their students that involves mandatory tutoring hours and contact logs that are turned in weekly. Additionally, Act 101 students on probation are required to attend regular check in meetings with a faculty

member in Developmental Instruction that has release time to facilitate the program. The director and assistant director are in charge of monitoring the program.

Similarly, the Trio program has structured support system for all of the Trio students, including the probation students. They monitor their students very closely and require regular check in meetings and tutoring whether they are on probation or not.

All other undeclared students are handled by the Academic Advisement office, which provide academic advisement for all undeclared students that are not Act 101 or Trio program students. The structure of the probation program has been growing each year as they have gotten additional staff to assist. Undeclared students on academic probation are required to attend a meeting at the beginning of the semester. The purpose of this meeting is to outline the information the students need regarding their probation status, including number of credits to schedule, retaking classes, financial aid implications, and strategies to get back on track academically. Previously, students were encouraged to meet with their advisor to discuss strategies to return to good academic standing. More recently, the university has hired academic coaches to provide academic support to first year students, students with disabilities, and other students with academic support needs. With this additional available staff as well as several graduate assistants that are trained to academically support students, the Office of Academic Advisement has been able to require individual meetings for undeclared students on academic probation. In the initial meeting, the student's academic performance is reviewed, and the student and staff member work together to create an academic recovery plan for the semester. This plan includes use of additional campus resources, such as tutoring, writing center, counseling center, etc., as needed by individual students. At minimum, probationary

students are required to return at midterm for a check in, but students who need additional support will schedule regular meeting with their academic advisor, academic coach, or graduate assistant that has been assigned to them.

Because this structure contains both contract and counseling model of support, academic and non-academic issues are able to be addressed through individual meetings. The program was developed from known best practices for probationary students. The program is assessed in combination with other support programs with retention and graduation rate data.

Orange University

The Department of Academic Enrichment is responsible for programming all students on probation, including undecided students, Trio students, and students in majors. The department is made up of approximately 16 faculty members teaching developmental coursework, many of which are full-time temporary faculty. The probation program is run by the Department Chair for Academic Enrichment, who teaches 50% and has 50% administrative duties as department chair.

The program for probation students is entirely voluntary. Students on probation are sent a letter from the Registrar's Office stating that they are on academic probation. Students are encouraged to work with the Department Chair for Academic Enrichment to adjust their schedules to include the 3-credit College Reading and Study Skills course if they have not yet taken it. Some sections are reserved specifically for students on probation and are geared specifically to returning to academic good standing. The Department Chair for Academic Enrichment also works with them to evaluate what services, like tutoring and supplemental instruction, they should utilize and tracks their

midterm progress. If students had previously taken the College Reading and Study Skills course, they are encouraged to meet with the Department Chair for Academic Enrichment throughout the semester to discuss services available to them and check in on their progress.

This program is mostly a coursework model and does allow students to explore both academic and nonacademic issues that affected their academic progress. Because the program is voluntary to students, it can be said that it does account for a student's readiness for change. The program was developed out of interest to affect retention. The Department Chair for Academic Enrichment is hoping to develop a strategy to assess the program in the future but doesn't currently have a formal program assessment, since this program is a voluntary add-on to her current duties.

Yellow University

Yellow University's programs for students on academic probation are currently in transition. Currently the Center for Excellence and Inclusion coordinates the program along with the deans from the individual colleges. Although they are moving to centralized program going forward, they have most recently been operating with a more decentralized model. They previously had a variety of voluntary programs that had been run by various colleges and offices that supported different populations of students. Going forward they are pulling all the programs under one umbrella. Students were previously encouraged to participate in the programs or told it was a conditional of re-admittance if they had been suspended. Effective fall 2014, students will be required to participate in the program. They will continue to offer the programs previously offered in

various departments but expand services to meet the needs of all students. Prior to fall 2014 the program was entirely an optional program.

The new program will consist of the existing elements and will include peer led workshops and counseling. The peer led workshops cover topics such as time management and study skills. They will also be doing mandatory study tables. The peer mentors involved with this program consist of peer mentors from other programs, honors program students, and students who have successfully recovered from academic probation. They will offer one on one counseling if they choose. This can be with their academic advisor or a staff member from the Center for Excellence and Inclusion. Students' participation in the support services will be tracked and reported to the deans who are the ones that make the determination of a students' return if they are not able to recover from probation status.

Because the program does include a one-on-one element, the intervention is able to assist with both academic and non-academic issues. The program was developed based on current research and Association of American Colleges and Universities (AACU) recommended and high impact best practices, as well as using what has been successful at their individual campus in supporting students. For example, this campus noted that peer led workshops are far more well attended than professionally led workshops. The program is assessed using retention, GPA, and length of probation status.

Green University

The program is a centralized system of support with the Coordinator of Academic Recovery Programs assuming the role for supporting all students on academic probation at the institution. However, there is a person specifically assigned to work with student

athletes on probation. Additionally, the Associate Dean for each college is assigned the role to work with the Coordinator to provide services to probation students. Each college has at least one graduate assistant who is trained by the Coordinator and then works with probation students from their college. Additionally, the College of Arts and Sciences also has a faculty member with release time to provide additional support to their probation students.

All students on probation are offered support under this program. Each college determines whether or not the program is mandatory. Act 101 students and students in the college of business are mandated to participate in the program. Other colleges strongly urge students to participate and are told that if they do not participate, they may not get the college's support to be reinstated if they are dismissed due to academic issues.

This program uses a comprehensive form of support for students. Included in this is a pilot program for readmitted business students, which are considered the highest need students, who take a noncredit course called PACES where they work on study skill development in groups based on the courses they are taking. Second tier students take the LASSI, Learning and Study Skills Inventory, and work with a graduate assistant or a learning specialist to develop a set of goals based on their needs and what they want to work on for the semester. They continue to meet periodically with that staff person to judge their progress. These students are put into optional study groups based on the courses they take.

While the focus of the program is primarily academic issues, they do provide referrals to appropriate resources for non-academic issues. The development of the program was based on research by Dembo and Seli (2004), a four-step model of support

and intervention. They also continue to do their own research on best practices for interventions for these students. The program is assessed by using pre-test and post-test LASSI scores, term and cumulative GPAs, student surveys, and exit interviews at the end of the semester. They are also beginning to review repeated course performance as well.

Blue University

The probation support program is a mandatory program that began in 2005 and uses a decentralized approach. The Special Assistant for Academic Policy, who reports to the Dean, sends the probation letter to all students on academic probation explaining to students that they need to complete an academic recovery plan (ARP). The ARP is filled out by the student and his/her advisor. The ARP can only be accessed by the advisor online, so the student is required to meet individually to complete it.

The ARP includes talking points regarding the student's probation status. The student and the advisor will work together to determine the steps that the student will take during the probationary semester and develop a contract. These steps may include tutoring, repeating courses, financial aid, etc. The advisor will check them off as they are completed. Once the contract is completed, the Dean's office tracks the student's progress. If the student doesn't complete the ARP by the third week of the semester, there is a hold placed on the student's record that doesn't allow them to schedule. The Special Assistant will pull the list of students who haven't completed it by the third week and will send it to the department chairs. Very few students do not complete the form. If the form indicates that a student is supposed to attend tutoring, the LARC receives a copy of the form as well, so they can follow up.

The ARP items contain academic and nonacademic issues, like financial aid issues or alcohol issues. The advisor may refer students to Health and Wellness or Pre Major Advising Center among other offices that are involved in the Early Alert Program.

At the end of the semester, students who did not return to academic good standing are dismissed. They may appeal the dismissal. Students who do not complete the contract requirements are generally not granted an appeal. Those who did complete the requirements and raised their GPA, even though they didn't make a 2.0 are more successful at appealing the dismissal. Students who have been granted continued probation are required to meet regularly with a counseling grad assistant in the LARC during the second semester of probation. They meet biweekly to review time management and other topics and to review their progress.

Program is assessed by tracking the students, the demographic data, the number of contacts, attendance in tutoring, credits earned, and GPA data. Their internal assessments show an increase in students who return successfully from academic probation over time. The program was originally developed by the Academic Policies Committee. They assessed the needs of student and developed it based on best practices.

Summary of Programs Offered

The institutions investigated offer a variety of programs to their students on academic probation. Three of the five institutions use a decentralized model of support, meaning that programming is administered by individuals in various colleges. Two of the five offer a centralized model with programming being administered from one division of the campus, one being run by the Department of Academic Enrichment at Orange University, the other by the Learning Center at Green University. All universities in this

study except Red University claim to have probation programming available to all students across campus.

Orange University had the only purely voluntary program and the only coursework model, while Blue University had the only program mandatory for all students and the only contract model. Red, Yellow, and Green University had programs that were mandatory for some populations of students, like undeclared students or Act 101, and they all offered a combination of programs to their students. All universities in this study claimed to support students' nonacademic issues, as well as addressing academic concerns. Finally, all universities indicated that their program considers the students' readiness for change in their program offerings.

Academic Recovery Rates for the Participating Institutions

Research Question 3. Which institutions within the Pennsylvania State System of Higher Education have the highest academic recovery rate among probationary students?

The first factor examined was the percentage of freshman students on academic probation at each institution over the three year period, which includes fall 2009, fall 2010, and fall 2011. Next, to determine the Academic Recovery Rate for each institution, the percentage of students who did not return for the spring semester were calculated. Because the effectiveness of the interventions offered are being examined, only students who returned for the spring semester would have the opportunity to participate and were therefore considered in the Academic Recovery Rate. Since programs are in place to help students increase their academic performance and because some students may require more than one semester to recover academically, the percentage of students that had some increase in their cumulative GPA is reported.

Ultimately, the Academic Recovery Rate was calculated by dividing the number of students who returned to good academic standing, defined by a cumulative GPA of 2.0 or higher in their spring semester, divided by the number of freshman students on academic probation from the fall semester who had returned for the spring semester.

Table 9 shows the average undergraduate enrollment and the average freshman enrollment for the three years examined in this study.

Table 9

Probation Student Information by University

Sample includes Fall 2009, Fall 2010, and Fall 2011	Red	Orange	Yellow	Green	Blue	All Five Universities
Average Undergraduate Enrollment	8,999	6,108	5,049	7,072	12,329	
Average Freshman Enrollment	2,054	1,624	1,154	2,433	2,202	
Average Number of Freshman on Probation	210	276	253	254	168	
Percentage of Freshman on Probation	10.2%	17.0%	22.0%	10.4%	7.6%	12.3%
Percentage of Probation Students Who did not Return in Spring Semester	30.9%	33.6%	25.0%	18.2%	24.1%	26.3%
Percentage of returning students with an improved cumulative GPA	53.6%	48.7%	66.0%	51.3%	68.4%	57.1%
Academic Recovery Rate (Percentage of returning Probation students with a 2.0 or higher)	29.2%	22.1%	31.6%	24.5%	40.5%	28.9%

The average number of students on probation at the end of their fall semester over the three year period is also shown. From these numbers the average percentage of freshman students on probation was calculated. The average percentage of students on probation who did not return for the spring semester is reported. From the probation students who continued their enrollment to the spring semester, the percentage of those

students with improved cumulative grade point average (GPA) from fall to spring is listed. Finally, the average percentage of students who successfully raised their cumulative GPA above a 2.0, therefore removing them from academic probation, is stated.

When examining the percentage of students on probation at each institution, the institutions with the largest populations also have the lowest percentage of freshman students on probation. The largest university in the sample, Blue University, had an average undergraduate population of 12,329 over the three-year period examined but had the smallest percentage of freshman on academic probation at just 7.6% of the freshman class. In contrast, the university with the smallest population, Yellow University, with an average undergraduate population of 5,049 had the largest percentage of freshman on academic probation with 22.0%.

The percentage of probation students who were not retained into the spring semester varies from 18.2% at Green University to 33.6% at Orange University. Although more than half (57.1%) of students across the five universities improved their cumulative GPA from fall to spring, only 28.9% of continuing probation students were able to return to good standing with a cumulative GPA of 2.0 or higher. Academic Recovery Rate (ARR) is calculated by looking specifically at this percentage.

The average percentage of returning probation students across the five institutions was 28.9%. Blue University had the highest Academic Recovery Rate at 40.5%. Yellow University had the second highest Academic Recovery Rate at 31.6%. Red University's Academic Recovery Rate was close to the average at 29.2%. Two universities, Green

University and Orange University had Academic Recovery Rates at below the average with 24.5% and 22.1% respectively.

Individual Factors that Effect Retention and Academic Recovery of Probationary Students

Research Question 4. What individual factors, like gender, ethnicity, age, and type of admittance, contribute to one's likeliness to recovery academically from probationary status?

In addition to determining the programs offered by institutions that increase the likelihood of retention and academic recovery from probation status, individual factors such as gender, age, ethnicity, and admission status were reviewed to determine which, if any, influenced a student's retention and academic recovery.

Factors that Affect Likeliness to Return

First, a binary logistic regression was completed to determine which of the above factors would impact a student's likelihood to return for the spring semester after ending the fall semester on academic probation. Since a binary logistic regression was the best fit, the variables were labeled as follows: Gender (Male or Female), White (Yes or No), Black (Yes or No), Hispanic (Yes or No), Age Category (Traditional or Adult), and Admittance Category (Regular or Conditional). The results of the binary logistic regression appear in Table 10.

Table 10

Factors that Influence a Probation Student's Likeliness to Return

Variable	B	SE	Sig.
Gender	-.171	.078	.030*
White	-.168	.159	.292
Black	.542	.195	.005*
Hispanic	-.303	.226	.181
Age Category	1.305	.225	.000*
Admittance Type	.052	.090	.562

Of the six factors examined in this test, three of the values made a statistically significant contribution to the model. The first factor is gender, which as a *p* value of .030. Since 1 indicates female and the B value is negative, this means that females are less likely to return for the spring semester if they are placed on academic probation. The second factor is one of the ethnicity factors. With a *p* value of .005 and a positive B value, this means that a black or African American student who is placed on probation is more likely to return for the spring semester than a non-black student. Finally, the age category factor has a *p* value of .000 and a positive B value. Since a traditional-aged student is labeled as 1, this means that a traditional-aged student is more likely to return than an adult student if they are placed on probation.

Factors that Affect Academic Recovery

Next, a binary logistic regression was completed to determine which of these same factors contribute to the likelihood of students' academic recovery. The results for this appear in Table 11.

Table 11

Factors that Influence a Probation Student's Likeliness to Recover Academically

Variable	B	SE	Sig.
Gender	.273	.089	.002*
White	.248	.183	.174
Black	-.156	.212	.463
Hispanic	.053	.277	.849
Age Category	-.394	.352	.263
Admittance Type	.451	.107	.000*

Of these six factors, two on them has a significant relationship to a student's academic recovery. Gender had a *p* value of .002 and a positive B, meaning that a female student placed on probation was significantly more likely to recover academically after being placed on probation. Admittance category was the other significant value. There was a *p* value of .000 and a positive B value. Since a 1 was defined as a regularly admitted student, this means that regularly admitted students in this sample were more likely to recover academically than provisionally admitted students.

Factors that Affect Degree of Academic Recovery

Next, in order to examine the comparison of degree of academic recovery among groups, independent sample t-tests were run for the demographic categories with two levels. The dependent value used was the difference between fall cumulative GPA and spring cumulative GPA, which was calculated using a simple subtraction for each student in the sample. The first t-test was run to compare the cumulative GPA difference among males and females.

The mean difference in cumulative GPA between fall and spring was .1535 for males and .1859 for females. The results reveal a *p* value of .100 meaning there is no

significant difference between the mean difference of fall and spring GPA among males and females in the entire sample.

The second t-test was run to compare the cumulative GPA difference among adult and traditional-aged students. The mean difference in cumulative GPA between fall and spring was 1.0205 for adult students and .1545 for traditional aged students. The results reveal a *p* value of .000 meaning there is a significant difference between the mean difference of fall and spring GPA among adult students and traditional-aged students in the entire sample.

The third and final t-test was run to compare the cumulative GPA difference among regular admitted students and conditionally admitted students. The mean difference in cumulative GPA between fall and spring was .1281 for conditionally admitted students and .1815 for regularly admitted students. The results reveal a *p* value of .001 meaning there is a significant difference between the mean difference of fall and spring GPA among regularly admitted students and conditionally admitted students in the entire sample.

Finally, in order to compare means among the ethnicity categories, a one-way ANOVA was done. The ethnicity category had 4 levels: White, Black or African American, Hispanic, and Other / Unknown. The mean difference in cumulative GPA between fall and spring was .1820 for white students, .1211 for black or African American students, .0907 for Hispanic students, and .1720 for other / unknown students. The results reveal a *p* value of .101 meaning there is no significant difference between the mean difference of fall and spring GPA among the various ethnicity categories of students in this sample.

Student Perspectives

In the final area of data collection, two of the institutions in this study were selected to get student perspectives. Originally, the intention was to conduct focus groups; however, students were hesitant to discuss their academic struggles in the presence of other students, so instead student perspectives were gathered using a survey instrument. Surveys were conducted at Blue University, the top performing university, and Red University, a university that performed third or average within the sample.

Blue University

There were 5 surveys completed by students at Blue University who were identified as being placed on academic probation in their freshman year. These students are labeled as Student A, Student B, etc.

Student A cited motivation as the number one factor that caused academic probation. Health issues and difficulty adjusting to college life were also contributing factors. The student's academic advisor was the one resource that was utilized in assisting with academic recovery. Student A claims that realizing that it was necessary to improve self- motivation was the most important aspect that contributed to academic recovery.

Student B experienced all academic issues citing poor time management and difficult coursework as the two factors that caused probation. It was stated that the institution encouraged the student to utilize campus resources to assist in academic recovery. The student attributes academic recovery to lowering the course load and utilizing peer tutoring.

Student C admitted having class attendance issues in addition to poor time management skills, which were the major contributors to academic probation. The

student claimed to not utilize any campus resources and stated that academic recovery was due to improved class attendance and increased study time.

Student D attributed academic probation status to a variety of academic issues, including poor time management, ineffective study strategies, and difficult coursework. The student met with an advisor to set up an Academic Recovery Plan and identified changing majors and improved study habits as the reasons for academic recovery.

Student E cited a large variety of issues that contributed to academic probation status. The student struggled not only academically with ineffective study strategies and poor time management skills, but also had low motivation and social transition issues including roommate issues, difficulty adjusting to college, and over-involvement. According to the student, the notification of being on probation was the biggest contributing factor to academic recovery. "It was a real eye opener receiving the letter that I had one more chance and I did not want to disappoint." The student was encouraged by the advisor to get tutoring and regularly utilized sorority study hours to assist in recovery.

The responses were varied in regards to the circumstances that contributed to their academic probation; however, 80% of the students cited time management as a contributing factor. Factors that were identified by 40% of students included other academic factors such as ineffective study strategies and difficult coursework, as well as social transition and personal motivation.

There were no identifiable trends in the support sought by students at Blue University. Each respondent had a different answer: none, tutoring, advisement, sorority study hours, and change of major. No student who responded claimed knowledge of

institutional support of their nonacademic issues with all of them stating either they were not aware, they were not informed, or this did not apply to them.

All respondents for Blue University stated that they were able to return to good academic standing after one semester on probation. The reasons given for their success included increased motivation, better study strategies, more time dedicated to studying, and decreased work load.

Red University

The student survey was completed by 12 students who attend Red University and were identified as being placed on academic probation as a freshman. These students are labeled as Student F, Student G, etc.

Student F stated that ineffective study strategies were the sole reason for the academic probation status. The student was encouraged by the institution to seek out peer tutoring, which was done. The student felt the institution was supportive with both academic and nonacademic issues. The student was unable to academically recover after one semester citing lack of time management as the major issue still involved.

Student G chose all social issues- roommate issues, personal relationship issues, difficulty adjusting to college, and over-involvement- as the reasons for academic probation. Student G also had disciplinary issues as well. This student regularly met with an academic coach. One meeting was required, but this student chose to meet more frequently. In addition to coach meetings, attending academic workshops, and regularly meeting with a peer tutor, the student had to complete 20 hours of community service for the disciplinary offense. Student G mainly credits the discussions with an academic coach to the outcome of getting a 2.21 GPA after one semester on probation.

Student H had all personal issues that affected the ability to succeed academically. These issues included a family situation, financial issues, and motivation. Although Student H was not required to participate, there were meetings with an academic advisor, who encouraged the student to utilize other campus resources as well. This student was not able to successfully return to academic good standing after one semester. When asked why there was not a successful academic recovery, the student stated, "Actively struggling with depression and a lack of person approval from myself. I feel sick all the time, sad, constantly have to lie to my mother about my emotional state and getting out of bed in the morning is a struggle. I attend 95% of my classes but I dissociate easily and end up having trouble finalizing what I've learned."

Student I had all academic issues claiming ineffective study strategies, poor class attendance, and difficulty with courses. Student I used academic coaching and advisement to assist with issues even though the student claimed to be unaware of services available to students on probation. The student was unable to return to academic good standing after one semester on probation.

Student J had financial issues as well as time management and coursework issues. Difficulties came primarily from having an intensive work schedule on top of a full class schedule. Student J used academic coaching and academic advisement and was required to participate in the recovery program. The student was encouraged to dedicate more time to studying and reduce the work schedule. Because of continued difficulties with the work-school balance, the student was unable to return to academic

Student K had a multitude of factors that contributed to academic struggles. In addition to health issues and difficulty adjusting to college, the student also experience

difficulty with time management, study strategies, and difficult courses. This individual stated no awareness of available support services and did not utilized any services. In spite of attempts to improve study habits, the student was unable to return to academic good standing citing continuing health issues.

Student L attributed academic performance to low motivation, poor time management skills, and course difficulties. The student acknowledged receiving a letter inviting participation in support services but chose not to do so. Without utilizing available support, this student was unable to recover academically in one semester.

Student M cited a large variety of circumstances that contributed to academic probation status including low motivation, over-involvement, poor class attendance, difficulty with coursework, and ineffective study strategies. This student, like several others, did not utilize campus resources to assist in academic recovery and was, therefore, unable to return to good academic standing in one semester.

Student N stated that lack of motivation coupled with poor study strategies and difficulty adjusting to college were the major contributors to academic probation. This student was informed of academic support services but not required to utilize. Student N did seek assistance from an academic coach and indicated that this support was very helpful, in spite of the fact that academic recovery did not happen in after one semester of probation.

Student O claimed to not be adequately prepared for college life with poor time management skills and study strategies, difficulty adjusting to college, and roommate issues all contributing to academic probation. This student was required to participate in academic support and met with both an advisor and academic coach for support. Student

O felt that the support offered did address nonacademic issues as well as academic concerns. Through these support systems and hard work, this student was able to recover from probation after one semester.

Student P struggled with health issues as well as having difficulty with the college transition and challenging coursework. This student was required to attend a meeting at the beginning of the semester but not required to participate in other support services. The student did not utilize available support and was unable to recover from probation after one semester.

Student Q attributed poor study strategies and ineffective time management skills to probation status. This student was not informed about support services or required to participate; however, an academic advisor and an academic coach were utilized to assist in recover. In spite of seeking the support, this student was unable to return to good academic standing after one semester.

When asked what circumstances contributed to their probation status, all students cited multiple reasons. The academic reasons were the most frequently identified with ineffective study strategies being the most common at 66.67% students selecting it, followed by difficulty with coursework at 50%. Other recurrent circumstances were social difficulty adjusting to college and poor time management skills at 41.67% each and issues with motivation at 33.33%.

While 33.33% of students responding at Red University claimed to not use any support services during their probationary semester, the remaining students used academic coaching (50%), advisement (33.33%), and peer tutoring (16.67%) as means of support during their probation period. Although 33.33% of students indicated they were

required to participate in support programming, there were 41.67% who stated that they were informed of support but not required with the remaining 25% declaring that they were not informed of what support was available to them.

Only 25% of students reported knowledge that their institution offered support for non-academic issues, but the remaining 75% cited that they were not aware, they were unsure, or this did not apply to their situation. Ten of the twelve respondents (83.33%) stated that they were unable to return to good academic standing after one semester of probation. When those ten were asked why, they cited continued struggles with time management, health issues, depression, lack of preparation, and low motivation. Only one of the ten stated inadequate support services available. The two remaining respondents (16.67%) who were able to return to good academic standing credited their academic progress to meeting with an academic coach or mentor and improving their study habits.

Summary

The five universities examined in this study offered a variety of programs to their students on academic probation and yielded varying results. In Table 12, the program differences and Academic Recovery Rates are highlighted. The institutions are ordered from highest to lowest Academic Recovery Rate.

The three decentralized models have the top three ARR, while the centralized models finished in the bottom two. The mandatory contract model has the highest ARR at 40.5%, while the voluntary coursework model has the lowest ARR at 22.1%. The combination programs that are mandatory for some lie in the middle of the pack. This suggests that decentralized contract style programs that are mandatory for all students are the most effective in aiding probation students in academic recovery.

Table 12

Programs Offered and Academic Recovery Rate

	Blue	Yellow	Red	Green	Orange
Program Administration	Decentralized	Decentralized	Decentralized	Centralized	Centralized
Mandatory or voluntary	Mandatory	Depends	Depends	Depends	Voluntary
Type of program	Contract	Combination	Combination	Combination	Coursework
Academic Recovery Rate	40.5%	31.6%	29.2%	24.5%	22.1%

Regarding individual differences, the summary of individual differences and their effects on returning after being placed on probation and academic recovery appear below in Table 13.

Table 13

Individual Factors that Influence Persistence and Academic Recovery

Variable	Return for Spring Semester	Academic Recovery
Males	More likely	Less Likely
Females	Less Likely	More Likely
White	--	--
Black	More Likely	--
Hispanic	--	--
Traditional Age	More Likely	--
Adult	Less Likely	--
Regular Admit	--	More Likely
Conditional Admit	--	Less Likely

While males are more likely to return for the spring semester after being placed on academic probation, the male students that do return are less likely to recover

academically. Females, however, are more inclined to drop out after being placed on probation, but those that do return are more apt to academically recover.

Other significant differences are black students are more likely to return than non-black students, adult students tend to drop out after being placed on probation when compared to traditional aged students, and regularly admitted students are more likely to recover academically than conditionally admitted students.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to examine programs offered to students on academic probation at the various universities within the Pennsylvania State System of Higher Education and to determine which types of programs are more likely to support students in their academic recovery as well as which student characteristics are correlated with successful academic recovery. This mixed methods study utilized descriptive, quantitative, and qualitative analysis to assess the programs. The data used in this study was gathered from five different universities in the PASSHE system using three different collection methods.

First, the institutional information regarding academic probation programs and conditional admittance programs were gathered via telephone interview with a designated representative from that institution. Second, archival student data was collected from each of the five university's institutional research department. The sample analyzed was full-time freshman students, including conditionally admitted students, who were placed on academic probation at the conclusion of the fall 2009, 2010, and 2011 semesters. The information collected was fall and spring grade point averages, both semester and cumulative, and whether or not the student returned after being placed on probation. Additionally, the following demographic data was collected for each student in the sample: gender, ethnicity, age, and admittance category, regular or conditional. Finally, surveys were conducted to gather student perspectives from two of the five institutions in this study.

Discussion

Research Question 1

What types of support programs are offered to students on academic probation at universities within the Pennsylvania State System of Higher Education?

Although the programs offered varied significantly from institution to institution, it was evident in the phone interviews that every university was committed to providing support services to assist students in their academic recovery. The program elements assessed were mandatory or voluntary, centralized versus decentralized support, support for all students versus special populations, model of support such as individual, group, or combination, assistance with non-academic issues, and consideration of a student's readiness for change.

Mandatory versus voluntary. When reviewing the literature on support programs for students on academic probation, certain themes regarding the types of programming offered emerges. First, programs are labeled as either mandatory or voluntary. According to Damashek (2003), mandatory or voluntary is often referred to as "intrusive" or "non-intrusive," respectively. Mandatory or intrusive programs require students below the specified GPA threshold, usually a 2.0, to participate in the support program that is offered at their institution. The rationale for mandatory programming is based on the idea that "poorer performing students [are] less likely to search out assistance in reversing their underachievement" (Hsieh, Sullivan, & Guerra, 2007, p. 278).

The decision to offer non-intrusive or voluntary programs could be based on the idea that students who are not receptive to support will not fully benefit from the

intervention (Hirsch, 2001). However, some institutions in this study indicated that their programs were voluntary for either all or some of the students on their campus because they lacked the resources to support all students on probation with their programming model.

In looking at the five institutions in this sample, Blue University, the only university with a program that was mandatory for all students, also had the highest Academic Recovery Rate (ARR). In contrast, Orange University had the lowest ARR and the only totally voluntary program out of the participants. Yellow University with the second highest ARR indicated that, although their program was currently mandatory for only some of their students, they were moving towards a program that was mandatory for all students. The remaining universities, Red and Green, had programs that were mandatory for some populations, based on admittance program or major and were voluntary for others.

Based on these results, mandatory programs are the most effective in yielding higher Academic Recovery Rates among the students at the universities in this study. This finding is consistent with other studies that attribute at least some of their program success to the fact that it is mandatory. Vander Schee (2007) contends that students in academic jeopardy are reluctant to seek support, and Kampoff, Hutson, Amundsen, and Atwood (2007) stated that they needed "teeth" for their program to be effective.

Centralized versus decentralized. Centralized versus decentralized refers to how the probation support program is housed and administered. Centralized means that one department controls the program, whereas decentralized mean that various departments oversee the academic recovery of different groups of students. Three of the five

institutions cited using a decentralized models of support. However, two of those three institutions, Red University and Yellow University indicated future plans to move to a centralized model. The last university using a decentralized model, Blue University, was the best performer among the schools. Although their model was decentralized in the sense that probation students were met with and advised through individual colleges, the university does have a uniform model of support that was adopted across colleges. Initial communication to the probation students comes from one office and the Academic Recovery Plan (ARP) is a standard document used across the colleges.

The two institutions using a centralized model, Green University and Orange University, had the lowest Academic Recovery Rates (ARR) among the institutions included in this study. Green University runs its program from the university's learning center and Orange University from their department of developmental studies. From this, it can be concluded that for these universities, the more people involved in supporting probation students on a campus, the better the success rate of the students on that campus.

Support available to all students. The majority of the institutions had some type of programming in place for all students on academic probation with four of the five institutions offering support programs to all students in all majors and programs. Only one institution, Red University, had some populations without an organized form of support, although it appeared that academic advisors for students not supported by a probation program at Red University did play a role in supporting their students, even if it was not in a standardized format.

Support model: Individual, group, or combination. Models of programs for students on academic probation can be placed into one of three categories or sub-groups

(Damashek, 2003). The first one is an individual model, which can be a contract approach or a counseling method. The common thread is that these programs are specifically focused on the concerns of individual students, which, according to Heissere and Parette (2002), is the most effective method of assisting students in academic jeopardy.

The second type is a group model. This can take the form of group meetings, workshops, or coursework. Trumpy (2006) believes the group approach is helpful to probation students because it gives them a sense of shared common struggles with other students and allows them to compare their experiences while being supported by professionals that are interested in their success.

The third model is a combination or comprehensive approach. This type of model offers a variety of strategies or levels of support, sometimes depending on the particular students involved. Mann, Hunt, and Alford (2004) uses varied intervention levels depending on the GPA range of the participants, students with the lowest GPAs participating in the most intensive interventions.

It is important to note that no research was located that compared the success rates of various programs models. Studies reported on a particular model and compares it against a control group or evaluates the program based on the outcome of student participants. Additionally, this study looked at institutional Academic Recovery Rates (ARR) overall and did not analyze student participants versus non-participants. This study aimed to report on which programs best served each institution as a whole measured by the campus wide ARR.

In this study, the institution with the highest ARR at 40.5%, Blue University, used an individualized contract model. Their academic recovery plan is posted online for academic advisors to access and review individually with each probation student. The success of an individual model is mirrored in other studies (Steinmiller & Steinmiller, 1991; Miller & Sonner, 1996; Vander Schee, 2007; Arcand & Leblanc, 2011).

The institution with the lowest recovery rate at 22.1%, Orange University, used a group coursework model. Students who volunteer to participate are enrolled in a 3-credit College Reading and Study Skills course. Although this course is also offered to other students, certain sections that are designated for probation students are focused on returning to good standing. This contrasts with other examples of a workshop model (Foreman & Rossi, 1996; Humphrey, 2006; Nance, 2007), or coursework model (Lipsky & Ender, 1990; Kamphoff, Hutson, Amundsen, & Atwood, 2007; McGrath & Burd, 2012), which showed positive results. It is important to note that these studies looked at students specifically participating in this program, while this study looks at the institution as a whole, regardless of participation in programming offered.

The other three institutions offer a comprehensive approach or combination of services and had ARR in between the two extremes. Green University uses a model similar to the one reported by Mann, Hunt, and Alford (2004). Green University, which has the second lowest ARR at 24.5%, offers varied programming dependent upon the individual student's characteristics, such as conditional admittance program or major. Yellow University with the second highest ARR at 31.6% has a variety of program elements, including peer led workshops, one-on-one counseling, and supervised study hours. Similarly, Red University, with an ARR of 29.2%, ended up in the middle of the

pack with a program that was varied, depending on the population of students being served. They incorporated contracts, individualized counseling, and group models of support.

Research Question 2

Do the programs account for academic and nonacademic issues? Do they use a counseling approach to assess and consider a student's readiness for change?

While all of a college student's struggles tend to show up on their grade report, not all of the issues plaguing probationary students are directly academic. Certainly under-preparedness (Balduf, 2009) and poorly developed study habits (Proctor et al., 2006) are some of the top issues that surface with students on academic probation. However, long work hours (Shireman, 2009), social integration issues (Tinto, 1987), lack of parental and / or peer support systems (Dennis, Phinney, & Chuateco, 2005), and personal life concerns (Ramirez & Evans, 1988) are all issues that can have profound effects on students' ability to achieve academically. It is important for interventions to consider that every student may not need to have study skills instruction to support them in their academic growth, but they need to provide support for the non-academic issues with which some of these students struggle.

The institutions in this study all stated that there were processes in place to support students with these other concerns. Red University uses advisors or academic coaches to do initial intakes for probation students and refer students to other campus resources as deemed necessary. Orange University's students are encouraged to meet with the Department Chair for Academic Enrichment if they need individualized support, who will then refer them appropriately if needed. Yellow University offers individualized

support with their academic advisor or a staff member from the Center for Excellence and Inclusion. Students at Green University meet either with an advisor or a staff member or graduate assistant in the Learning Center as part of their intervention. If non-academic issues emerge, the advisor, staff member, or graduate assistant is trained to refer them to the appropriate resource. Finally, Blue University requires all probation students to meet with their advisor to develop their individual plan for academic recovery. Included in that plan is referrals to support services as needed.

According to Hirsch (2001), students on probation need a counseling approach so that the staff member can properly assess the student's motivation and readiness for change. He describes a "flash point" in a student when "a helper and student identify motivation and actions coming together" (p. 9). Until the student reaches this point, he or she is not receptive to any suggestions that people have regarding behaviors to change. A student needs to have this motivation before any interventions will work.

When looking at the institutions in this study, they all have some processes in place that allow to focus on individual needs, even if they may not formally be assessing readiness for change. For the populations that are served at Red University, student have some type of staff interaction. Most work with a staff member to develop a plan or a contract. Because Orange University's program is entirely voluntary, students choosing to participate is a large indicator of motivation and readiness for change. Students who volunteer and wish to meet one-on-one are given that opportunity. Yellow University's programming at the time when the data was assessed was varied depending on the population of students. Although mandatory for readmitted students, programming was optional for all other students. So, similar to Orange University, students choosing to

participate is an indicator of motivation for change. Green University using an individualized approach for most students. Students meet with a trained graduate assistant to discuss their academic issues. Because the intervention is individualized, it gives the opportunity to assess motivation. They modeled their intervention based on Dembo and Seli (2004), which specifically addresses students' motivation as part of their four-step process. Finally, Blue University uses a mandatory, individualized contract approach with students' academic advisors serving as the main point of contact. Again, an individualized approach gives staff members the opportunity to assess each student and his or her readiness for change.

All institutions in this study have processes in place to at least offer one-on-one support, if not mandate it, to the students on probation on their campus. This demonstrates the understanding at each institution that a "one size fits all" approach does not work with this population of struggling students.

Research Question 3

Which institutions within the Pennsylvania State System of Higher Education have the highest academic recovery rate among probationary students?

The archival data analysis was used to determine academic recovery rates for the five institutions participating in this study. Several factors were reviewed such as the percentage of freshman students on probation at the end of the fall semester, the percentage of probation students who returned for the spring semester, and the percentage of remaining probation students who improved their GPA, as well as Academic Recovery Rate. An Academic Recovery Rate comparison is illustrated in Table 12.

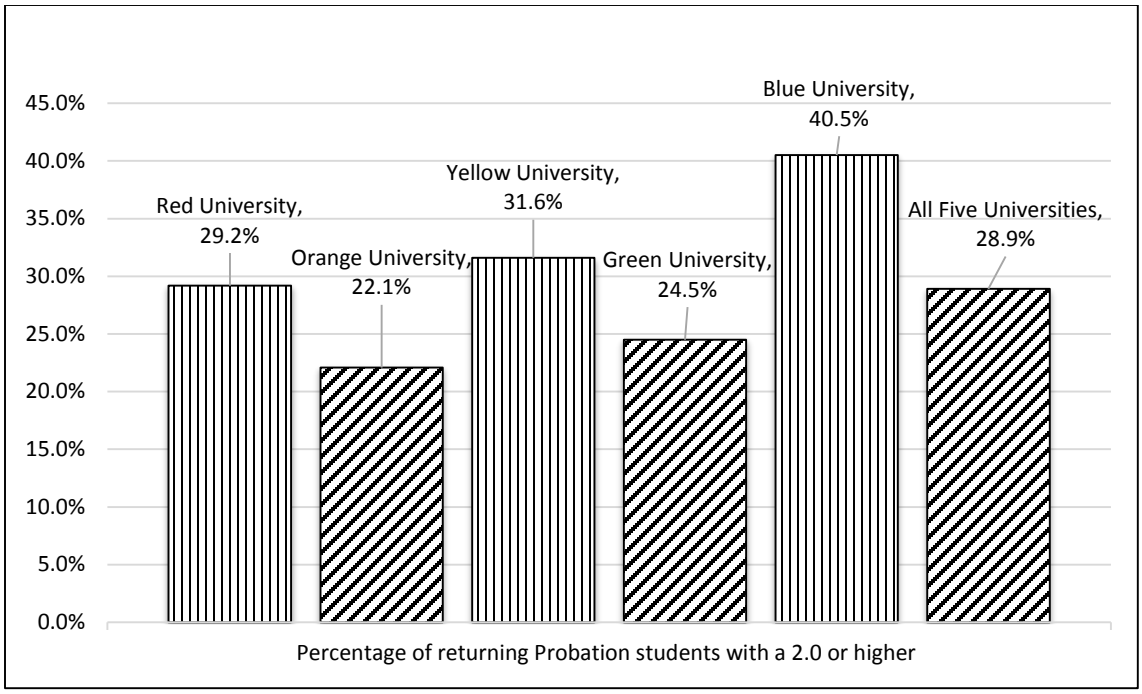


Figure 1. Academic recovery rate comparison.

For the purpose of this study, Academic Recovery Rate (ARR) is defined as the percentage of freshman probation students, or those with below a 2.0 cumulative GPA at the end of the fall semester, who returned to good academic standing, or above a 2.0 cumulative GPA, at the end of the spring semester. While the average Academic Recovery Rate across all five universities was 28.9%, one of the universities in this study, Blue University, had by far the highest ARR at 40.5%.

Blue University had the highest average undergraduate enrollment at 12,329 across all the universities included in this study. In spite of having the highest enrollment, Blue University had the lowest percentage (7.6%) of their freshman students on academic probation compared to the other four universities. There are a couple of possible explanations for the lower percentage of probation students. It is possible that Blue University has a more selective admissions process meaning they are enrolling

students with greater academic potential. Another explanation could be a larger university may have more support services available that are proactive in preventing more students from struggling. It is also possible that Blue University's campus climate is supportive to students with quality, but not necessarily more, support services. Likely, the answer is some combination of all of these explanations. In addition to the highest ARR, Blue University also had the highest percentage of students (68.4%) with improved cumulative GPA from fall to spring. Between the ARR and the percentage of students who are able to improve their GPA, it appears that Blue University is offering support services to their students that are effective for their population of students.

The institution with the second highest ARR at 31.6% was Yellow University. They had the smallest average undergraduate enrollment at 5,049, but had the highest percentage of their freshman on probation at 22.0% compared to the sample average of 12.3%. A higher percentage of freshman on probation could be an indication of less selective admissions processes or that smaller institutions in more rural settings do not attract a large number of highly qualified students. In spite of the large percentage of probation students, they not only had the second highest ARR, they also had the second highest percentage of students with improved GPA (66.0%). These good results could be due to higher quality programming, as well as a smaller campus being able to provide a more intimate college experience to its students.

The institution with the lowest ARR was Orange University at 22.1%. Orange University had the largest average number of students on academic probation at 276 in spite of being the second smallest university with an average undergraduate enrollment of 6,108. Again, poor student performance could be attributed to less selective admissions

or inability to attract higher qualified students. In addition to the lowest ARR, Orange University also had the largest percentage of probation students (33.6%) who did not return for their spring semester. The low ARR rate could be attributed to the fact that their program is entirely voluntary. While their programming may be of high quality, a voluntary program would have low participation and that quality programming may not connect with those who need it most.

According to McGrath and Burd (2013), a success course for probation students at the University of Arizona yielded not only a high percentage of students recovering from academic probation, but also improved retention and graduation rates over time. This program and the program at Orange University differ because the Arizona program is mandatory and for students in the college of science, while Orange University offers this course voluntarily for all students.

Research Question 4

What individual factors, like gender, ethnicity, age, and type of admittance, contribute to one's likeliness to recovery academically from probationary status?

In addition to assessing institutional programs and their successes, individual student factors were reviewed to determine what, if any, of these factors contributed to a student's likeliness to persist, to improve their cumulative GPA, and to return to good standing. While there is no national data available on academic probation students, the Higher Education Research Institute shows differences between six-year graduation rates among certain demographic categories (as cited in EIU CORE, 2014). Males have a 58.1% graduation rate compared to females at 63.6% nationally at all four-year institutions. Additionally, African American students with a 41.3% graduation rate have

by far the lowest when compared to other ethnic groups like white or Latino, both at 64.3%.

When looking at the students who returned for the spring semester after being placed on academic probation at the end of their fall semester, only some factors were statistically significant. Male students on probation are significantly more likely to return for their spring semester than females on probation. This finding is not consistent with the national research on graduation rates. It is possible that male students initially may have higher self-efficacy, in spite of their academic jeopardy. Similarly, black or African American students are significantly more likely to return than non-black students. A possible explanation for this is institutions in the PASSHE system have specific retention goals for underrepresented minority students; therefore, there may be more efforts in place to retain students of color.

Third, a traditional-aged student is significantly more likely to return than an adult student. Adult students, who are often balancing life and education, typically have a more difficult time dealing with adversity. Hardin (2008) summarizes this well stating, "For many adult students, returning to college and fulfilling their goals is much like building a house of cards. In order to be successful, each part of their lives must be in place and carefully balanced. When changes occur…the student feels that the only option is to drop out" (p. 56).

When looking at likelihood of students who return to recover academically, only two factors were significant. Female students over male students were significantly more likely to recover academically. More success in academic endeavors among female students over male students is well-documented (Ewert, 2012; Buchmann & DiPrete,

2006; Goldin, Katz, & Kuziemko, 2006), although not focused specifically on female students who are initially in academic jeopardy. Additionally, regularly admitted students over conditionally admitted students were significantly more likely to recover academically. Because conditionally admitted students are, by definition, less academically prepared for college, their struggles to recover from a deficit are even more challenging. There were no significant differences in academic recovery among ethnicity categories or age categories.

When looking solely at cumulative GPA difference between fall and spring among the groups in the independent t tests and ANOVA, there were no significant difference among gender or ethnicity. However, there were significant differences between age groupings and admittance category.

In summary, female students on probation in this sample were less likely to return, but those that did return did not have significantly higher GPAs or academic recovery rates. This may indicate that females make a more conscious decision to improve themselves if they choose to return after being placed on probation.
Black or African American students on probation were more likely to return; however, there were no significant differences in GPA or academic recovery rates among ethnic groups. An adult student on probation in this sample was more likely to drop out before the spring semester. Although the adult students who did return had a significant overall difference in GPA from fall to spring, they did not have a significantly higher recovery rate than traditional aged students.

There was a large difference when comparing the performance of students based on admittance category. Although there was no significant difference in the return rate of

conditionally admitted students and regularly admitted students, there were significance in the difference between the fall and spring cumulative GPA and their overall recovery rates. This shows that based on this sample students who are conditionally admitted will have the most difficult time recovering from academic probation when compared to regularly admitted students.

Study Limitations

Ideally, this sample would have contained all fourteen institution in the Pennsylvania State System of Higher Education to give a larger sample of students and a larger variety of institutions and programs to compare. With only five institutions participating, it is difficult to make confident conclusions regarding the impact of specific program elements on students' academic recovery rates. It is also difficult to draw conclusions about individual student characteristics with relatively small group sizes. Even with three years' worth of data at five institutions, some of the group sizes were very small. For example, out of 3,482 students in the sample, only 86 students were adult students.

For ease of analysis, students were either labelled as conditionally admitted or regularly admitted students; however, the conditional admittance programs offered to students varied greatly from institution to institution as well as program to program. Also, while conditionally admitted students are generally thought to be a higher at risk group, there was no analysis to compare the incoming characteristics of these students. It is quite possible that incoming characteristics of conditionally admitted students at one university could be similar to the profile of a regularly admitted student at another institution.

Additionally, practically all institutions in this study were in a constant state of making adjustments and improvements creating difficulties in making static statements about the programs offered and therefore, solid conclusions regarding which program elements yielded the highest academic recovery rates. The institution with the highest ARR, Blue University, also had the longest running support program in place with it starting in 2005. Even well-designed programs of academic support may take several years to perfect, meaning many of these programs may be much more successful, even in their current form, once they are longer established.

Finally, this study attempted to examine student perspectives at two of the institutions; however, it was very difficult to get students who had struggled academically that were willing to speak candidly about their perspectives. Ideally, a broader range of student participants could offer some valuable data.

Recommendations for Further Research

In order to more confidently make conclusions regarding the program elements that yield the highest academic recovery rates, more institutions should be examined. Ideally, these institutions should include a variety in size, type, and demographic makeup in order to truly assess program successes. More comparisons among program types and success rates should be investigated, especially across various institutions. Additionally, a longitudinal study of the students who were on probation as freshman would be beneficial to determine longer range success and persistence of students who participate in these programs.

Since this study did not include students' pre-admission characteristics, research that includes this information may provide further insight into why institutions have higher attrition and probation rates. Some characteristics, in addition to demographic data collected in this study, recommended to review are entrance test scores, high school GPA, socioeconomic status, and parents' education. This research can further our understanding of the students that struggle with academic jeopardy.

The only institution with a mandatory program was Blue University, which also had the highest Academic Recovery Rate (ARR). Because Blue University also had the only contract model as well, it is difficult to determine if their success is due to their program model or the fact that it was mandatory for all students. Further research into mandatory programing and its effect on ARR would help institutions make decisions on whether or not an intrusive approaches would be the best approach on their particular campus.

The institutions reviewed in this study all indicated an understanding of the importance of recognizing motivation levels of students. However, the only institution specifically stated using a published model of support accounting for student motivation was Green University. Since Hirsch (2001) suggests a specific model for intervention with students who struggle with academics, an experimental study utilizing this approach to assess its effectiveness would provide some much needed information regarding working with students with multiple levels of motivation.

When looking at the findings for individual students, there were some interesting results that warrant further investigation. First, females are more likely to drop after receiving probation status but more likely to recover academically if they do return for

the following semester. There are studies showing greater academic success and graduation rates among females nationally; however, there wasn't anything found that could explain this situation. Further studies on gender and its effect on probation status, persistence after probation, and recovery from probation could help explain these results.

Black students on probation were more likely to return than non-black students but there were no significant differences in academic recovery rates among ethnic groups. However, national data shows significantly lower graduation rates among black students. Since this study shows these institutions are not losing first year struggling students of color, a study to investigate where in the process institutions are losing these students to attrition would help give insight into how best to support them.

Adult students in this sample were more likely to drop out after being placed on academic probation, which seems to be in line with other research. A more in-depth study on adult students in academic jeopardy would be a valuable contribution to probation student literature, as well as the literature of adult students.

Since this study showed that conditionally admitted students struggle most with academic recovery, a more detailed investigation of conditional admittance programs and the probation support programs that are more successful at supporting this population of students would assist institutions in designing programs that best assist their particular students. Even better, support initiatives that connects these students with resources early in their academic program, before being placed on probation, should be reviewed, since it is evident that conditionally admitted students struggle most in digging themselves out of an academic hole.

Finally, there is a serious gap in the literature in regards to nation data about students on academic probation. Individual institutions report on their programs and the success of the students on their campuses. A larger scale research project that gives data about persistence, academic recovery, and graduation rates of students who at some point were labelled as probation students across the nation would allow institutions to compare themselves against other institutions to properly assess their results.

Summary

It is important for universities to commit to supporting their students, especially those that are labeled at risk and those that struggle academically. The type of programming offered must be based upon available resources and the institutional climate. Based on the institutions and students included in this sample, there are a few conclusions that can be drawn about some of the most effective program models. First, institutions will have higher academic recovery rates for their students if the programs they offer are mandatory for all populations of students and include individual contact at least at the beginning of the semester. Programs that have more campus involvement from various offices and colleges tend to have higher academic recovery rates than those with programs solely administered from one central office.

It is also critical for universities to understand what factors may influence a student's success in order to target them early and provide necessary support. When reviewing this particular sample, it can be concluded that freshman students on academic probation have a higher likelihood of returning the following semester based on several demographic factors. Male students are more likely to return when compared to female students, black or African American are more likely to return than non-black students,

and traditional-aged, or less than 25 years old, are more likely to return than adult students. However, among the students that return after being placed on probation, female students are more likely to return to good academic standing, as well as regularly admitted students when compared with conditionally admitted students.

Ideally, if institutions can be armed with this information, they can take a preventative approach in their first year programming as well as adjust the support program for students on academic probation to adequately assist all struggling students. It seems especially critical, given the data reviewed in this study showing the difficulties conditionally admitted students have in recovering after academic probation, that institutions revisit their programs offered to conditionally admitted students in their first year. It seems imperative take a proactive approach to ensuring these at risk students do not find themselves trying to dig themselves out of an academic hole, since they are the ones least likely to be successful in their recovery. Bottom line, institutions committed to supporting their students need to have structured programming in place to improve the success rate of freshman students, especially ones that have difficulty with their first year transition.

References

Arcand, I., & Leblanc, R. N. (2011). Academic probation and companioning: Three perspectives on experience and support. *Mevlana International Journal of Education, 1*(2), 1-14.

Astin, A. W. (1977). *Four critical years*. San Francisco: Jossey-Bass.

Astin, A. W. (1993). *What matters in college? : Four critical years revisited*. San Francisco: Jossey-Bass.

Balduf, M. (2009). Underachievement among college students. *Journal of Advanced Academics, 20*(2), 274-294.

Barefoot, B. O. (2000). The first-year experience: Are we making it any better? *About Campus, 4*(6), 12-18.

Bean, J. P. (1982). Conceptual models of student attrition: How can theory help the institutional researcher. In E. T. Pascarella (Ed.), *New directions for institutional research: Studying student attrition* (pp. 155-167). San Francisco: Jossey Bass.

Bettinger, E. P., Boatman, A., & Long, B. T. (2013). Student supports: Developmental education and other academic programs. *The Future of Children, 23*(1), 93-115.

Braxton, J. M., Bray, N. J., & Berger, J. B. (2000). Faculty teaching skills and their influence on the college student departure process. *Journal of College Student Development, 41*, 215-227.

Buchmann, C. & DiPrete, T. A. (2006). The growing female advantage in college completion: The role of family background and academic achievement. *American Sociological Review, 71*(4), 515-41.

Cohen, A. & Brawer, F. (2002). *The American Community College (4th ed.).* San Francisco: Jossey-Bass.

Cruise, C. A. (2002). Advising students on academic probation. *The Mentor.* Retrieved from dus.psu.edu/mentor

Damashek, R. (2003). *Support programs for students on academic probation.* Retrieved from ERIC database (ED475734).

Dembo, M. H., & Seli, H. P. (2004). Students' resistance to change in learning strategies courses. *Journal of Developmental Education*, *27*(3), 2-4.

Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development, 46*(3), 223-236.

Donnangelo, F. P. (1979). The relationship between participation in PWP-99, a special course for probationary students at Bronx Community College, and academic performance. Retrieved from ERIC Database (ED 212323).

Donnangelo, F. P. (1978). The Bronx Community College counseling program for probationary students: A final evaluation. Retrieved from ERIC Database (ED 169 412).

Eastern Illinois University Committee on Retention Efforts (CORE): Retention Forum 2013. Retrieved from http://castle.eiu.edu/~core/index.php

Ewert, S. (2012). Fewer diplomas for men: The influence of college experiences on the gender gap in college graduation. *The Journal of Higher Education*, *83*(6), 824-850.

Fletcher, J. M., & Tokmouline, M. (2010). The effects of academic probation on college success: Lending students a hand or kicking them while they are down? *Texas Higher Education Opportunity Project.* Retrieved from http://theop.princeton.edu/publications/wp.asp

Foreman, J., & Rossi, N. A. (1996). Reversing the academic probation dilemma. *Selected proceedings from the Annual Conference of the Pennsylvania Association of Developmental Educators (PADE),* edited by Wilkie, C. University Park, Pennsylvania, March 1995.

Garcia, L., & Paz, C. (2009). Bottom line: Evaluation of summer bridge programs. *About Campus, 14*(4), 30-32.

Garnett, D. T. (1990). Retention strategies for high risk students at a four-year university. *NCADA Journal, 10*(1), 22-25.

Goldin, C., Katz, L. F., & Kuziemko, I. (2006). The homecoming of American college women: The reversal of the college gender gap. *Journal of Economic Perspectives, American Economic Association, 20*(4), 133-156.

Hansen, E. J. (1998). Essential demographics of today's college students. *AAHE Bulletin*, 5*1*(3), 3-5.

Hardin, C. J. (2008). Adult students in higher education: A portrait of transitions. *New Directions for Higher Education*, *2008*(144), 49-57.

Harvard University. (2009). Harvard at a Glance. Retrieved from http://www.harvard.edu/about/glance.php

Harvey, V. S. (1995). Teaching study skills. In A. Thomas & J. Grimes (Eds.), *Best Practices in School Psychology (3rd ed., pp. 931-942).* Washington, DC: National Association of School Psychologists.

Hebel, S. (2003). Unequal impact. *The Chronicle of Higher Education.* Retrieved from www.chronicle.com.

Heisserer, D. L., & Parette, P. (2002). Advising at-risk students in college and university settings. *College Student Journal, 36*, 69-83.

Hirsch, G. (2001). *Helping college students succeed: A model for effective intervention*. Philadelphia, PA: Brunner-Routledge.

Holland, R. (2006). Launching college students on academic probation into the first phase of self-efficacy: A descriptive case study. Retrieved from ERIC Database (ED 490639).

Honken, N. B., & Ralston, A. S. (2013). High-achieving high school students and not so high-achieving college students: A look at lack of self-control, academic ability, and performance in college. *Journal of Advanced Academics, 24*(2), 108-124.

Hsieh, P., Sullivan, J. R., & Guerra, N. S. (2007). A closer look at college students: Self-efficacy and goal orientation. *Journal of Advanced Academics, 18*(3), 454-476.

Humphrey, E. (2005-2006). Project Success: Helping probationary students achieve academic success. *College Student Retention, 7(*3-4*),* 147-163.

Hwang, M. H., Lee, D., Lim, H. J., Seon, H. Y., Hutchison, B., & Pope, M. (2014). Academic underachievement and recovery: Student perspectives on effective career interventions. *The Career Development Quarterly*, 62, 81-94.

Jones, C. H., Slate, J. R., & Marini, I. (1995). Locus of control, social interdependence, academic preparation, age, study time, and the study skills of college students. *Research in the Schools, 2,* 55-62.

Kallison, J., & Stader, D. (2012). Effectiveness of summer bridge programs in enhancing college readiness. *Community College Journal of Research & Practice, 36*(5), 340-357.

Kamhoff, C. S., Hutson, B. L., Amundsen, S. A., & Atwood, J. A. (2006-2007). A motivational / empowerment model applied to students on academic probation. *College Student Retention, 8*(4), 397-412.

Kirk-Kuwaye, M., & Nishida, D. (2001). Effect of low and high advisor involvement on the academic performances of probation students. *NACADA Journal, 21,* 40-45.

Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2005). Never let it rest. *Change, 37*(4), 44-51.

Kulik, C. L. C., Kulik, J. A., & Shwalb, B. J. (1983). College programs for high-risk and disadvantaged students: A meta-analysis of findings. *Review of Educational Research, 53*(3), 397-414.

Lipsky, S. A. & Ender, S. C. (1990). Impact of a study skills course on probationary students' academic performance. *Journal of the Freshman Year Experience, 2*(1), 7-15.

Lohfink, M. M., & Paulsen, M. B. (2005). Comparing the determinants of persistence for first-generation and continuing-generation students. *Journal of College Student Development, 46*(4), 409-428.

Mann, J. R., Hunt, M. D., & Alford, J. G. (2004). Monitored probation: A program that works. *College Student Retention, 5*(3), 245-254.

Mathies, C., Gardner, D., & Bauer, K. W. (2006). *Retention and graduation: An examination of students who earn academic probation*. Paper presented at 2006 Southern Association for Institutional Research Forum, Arlington, VA.

Mattson, C. E. (2007). Beyond admission: Understanding pre-college variables and the success of at-risk students. *Journal of College Admission, 196*, 9-13.

McGrath, M., & Braunstein, A. (1997). The prediction of freshman attrition: An examination of the importance of certain demographic, academic, financial and social factions. *College Student Journal, 31*(3), 396-408. Retrieved from PsycINFO database.

McGrath, S. M., & Burd, G. D. (2012). A success course for freshmen on academic probation: Persistence and graduation outcomes. *NACADA Journal, 32*(1), 43-52.

Miller, D. & Sonner, B. (1996). PASS: Promoting academic student success. Final report. *Fund for the Improvement of Postsecondary Education.* Retrieved from ERIC Database (ED 475734).

Molina, A., & Abelman, R. (2000). Style over substance in interventions for at-risk students: The impact of intrusiveness. *NACADA journal*, *20*(2), 5-15.

Nance, M. (2007). The psychological impact of academic probation. *Diverse: Issues in Higher Education*, *24*(19), 12.

National Association for Developmental Education. (2009). 2009 Fact Sheet." Retrieved from http://www.nade.net/NADEdocuments/FactSheet.pdf

National Center for Education Statistics. (2010). Digest of Education Statistics: 2010. Retrieved from http://nces.ed.gov/programs/digest/d10/

National Center for Public Policy and Higher Education. (2008). *Measuring up 2008: The national report card on higher education.* Retrieved from http://measuringup2008.highereducation.org/print/NCPPHEMUNationalRpt.pdf

Noel, L., Levitz, R., & Saluri, D. (1985). *Increasing student retention.* San Francisco: Jossey-Bass.

Parisi, J. (2012). *Correlation of conditional admittance and student achievement in an undergraduate higher education setting.* (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3506116)

Pascarella, E. T. (1985). Students' affective development within the college environment. *The Journal of Higher Education*, *56*(6), 640-663.

Pascarella, E. T. & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research.* San Francisco: Jossey-Bass.

Pennsylvania Department of Education. (1998, March). ACT 101 Regulations and guidelines 1998-1999 (1998, March). Retrieved, from http://www.pdehighered.state.pa.us/higher/

Pennsylvania Department of Education. (2008). ACT 101 Program Guidelines. O. o. A. Initiatives. Harrisburg, PA**.** Retrieved from www.revenue.state.pa.us/

Pennsylvania Higher Education Assistance Agency. (2014). Act 101 Program. Retrieved from http://www.pheaa.org/partner-access/schools/act-101.shtml

Pennsylvania State System of Higher Education. (2009). Fact Sheet. Retrieved from http://www.passhe.edu/about/Pages/facts.aspx

Pennsylvania State System of Higher Education. (2014). Answers. Retrieved from http://www.passhe.edu/answers/pages/why.aspx

Pitcher, R. W. & Blaushild, B. (1970). *Why college students fail.* New York: Fund and Wagnalls.

Proctor, B. E., Prevatt, F., Adams, K. , Hurst, A., & Petscher, Y. (2006). Study skills profiles of normal-achieving and academically-struggling college students. *Journal of College Student Development, 47*(1), 37-51.

Ramirez, G. M. & Evan, R. J. (1988). Solving the probation puzzle: A student affirmative action program. *NACADA Journal, 8*(2), 34-45.

Schmitt, N., Oswald, F. L., Kim, B. H., Imus, A., Merritt, S. Friede, A., and Shivpuri, S. (2007). The use of background and ability profiles to predict college student outcomes. *Journal of Applied Psychology, 92*(1), 165-179.

Shireman, R. (2009). College affordability and student success. *Change, 41*(2), 54-56.

Simon, M. A., Tovar, E., & Edson, M. E. (2003, March). *Return to excellence: Re-orientation of two-year college students on probation.* Poster session presented at the annual meeting of the American Counseling Association, Anaheim, CA.

Singell, L., & Waddell, G. (2010). Modeling retention at a large public university: Can at-risk students be identified early enough to treat? *Research in Higher Education, 51*(6), 546-572.

Steinmiller, R., & Steinmiller, G. (1991). Retention of at-risk students in higher education. Proceedings from Rural Education Symposium. Nashville, TN. Retrieved from ERIC Database (ED 342555)

Stratil, M. (1988). *College Student Inventory*. Coralville, IA: Noel-Levitz.

Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd Ed). Chicago: University of Chicago Press.

Tovar, E., & Simon, M. A. (2006). Academic probation as a dangerous opportunity: Factors influencing diverse college students' success. *Community College Journal of Research and Practice, 30*, 547-564.

Trombley, C. M. (2001). Evaluating students on probation and determining intervention strategies: A comparison of probation and good standing students. *Journal of College Student Retention, 2*(3), 239-251.

Trumpy, R. J. (2006). *The impact of an academic recovery program on underperforming first-year college students' retention, grade point average, and credits earned.* (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3252649)

U.S. Census Bureau (2009). American Fact Finder. Retrieved from http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=01000US&-qr_name=DEC_2000_SF3_U_QTP19&-ds_name=DEC_2000_SF3_U

U.S. Census Bureau (2013). State and County Quick Facts. from http://quickfacts.census.gov/qfd/states/42000.html

U.S. Census Bureau. (2014). School Enrollment in the United States. Retrieved from http://www.census.gov/hhes/school/data/cps/2012/tables.html

U.S. Department of Veteran Affairs. (2009). Born of controversy: The GI Bill of Rights. Retrieved from http://www.gibill.va.gov/GI_Bill_Info/history.htm

Vander Schee, B. A. (2007). Adding insight to intrusive advising and its effectiveness with students on probation. *NACADA Journal, 27*(2), 50-59.

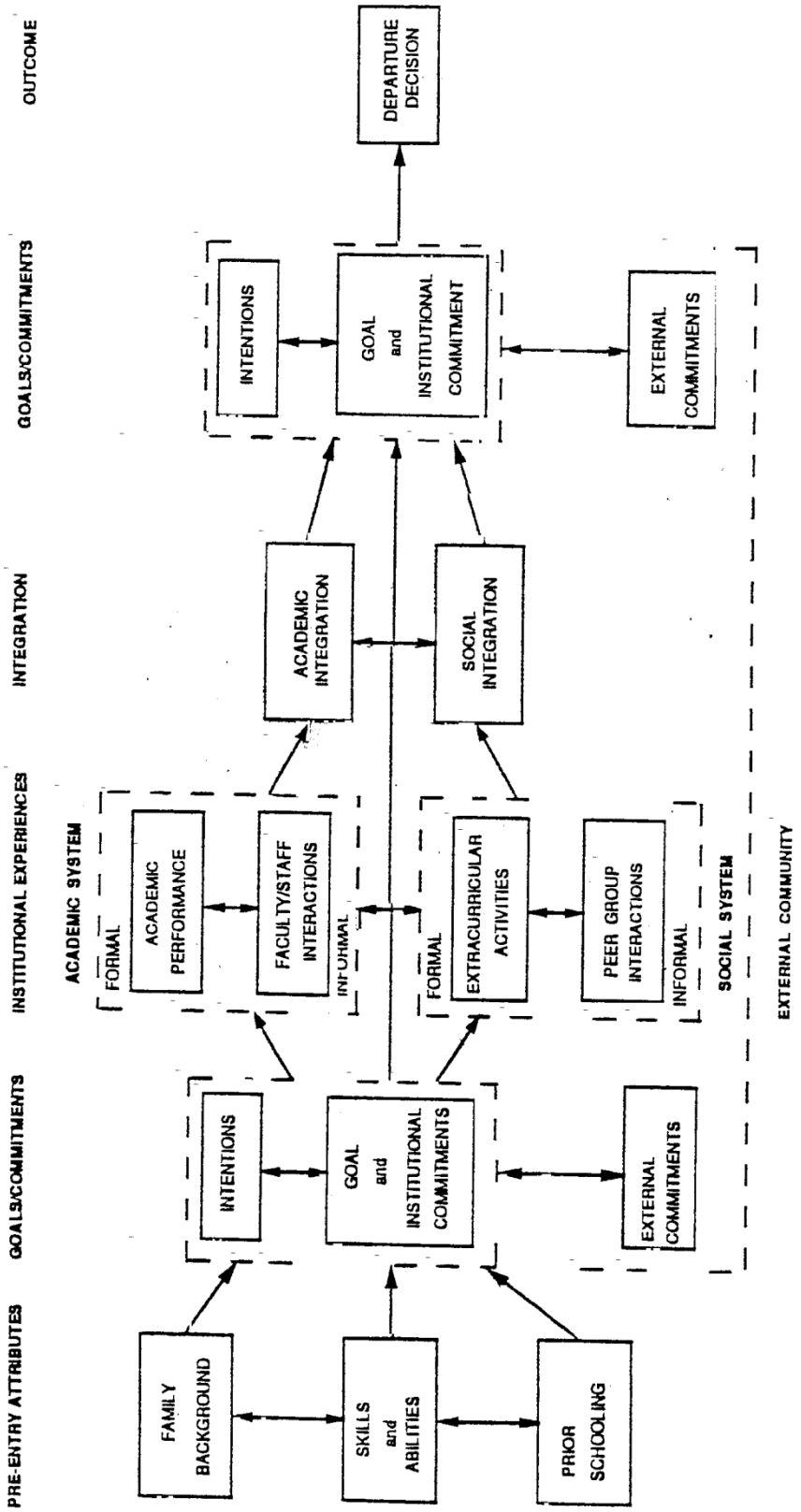
Walsh, R. W. (1985). Changes in college freshman after participation in a student development program. *Journal of College Student Personnel, 26,* 310-314.

Weinstein, C. E., & Palmer, D. R. (2002). *Learning and Study Strategies Inventory (LASSI): Users Manual* (2nd Ed.). Clearwater, FL: H & H.

Wyatt, M. (1992). The past, present, and future need for college reading courses in the U.S. *Journal of Reading 36*(1), 10-20.

Zajacova, A., Lynch, S. M., and Espenshade, T. J. (2005). Self-efficacy, stress, and academic success in college. *Research in Higher Education, 46*(6), 677-706.

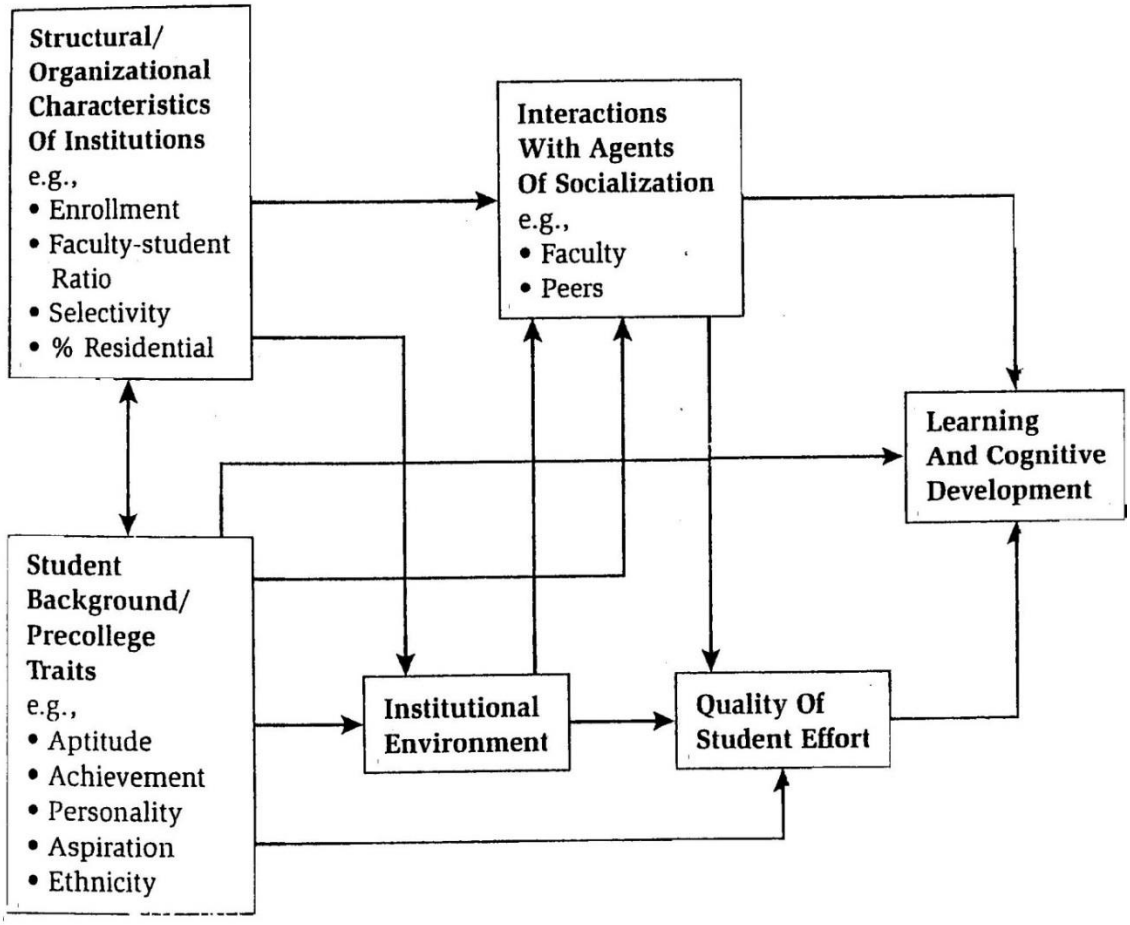
Appendix A- Tinto's Model



A longitudinal model of institutional departure.

Appendix B- Pascarella's Model

A General Causal Model for Assessing the Effects of Differential Environments on Student Learning and Cognitive Development



Source: Pascarella, 1985, p. 10. Copyright © 1985 Agathon Press, Inc., with kind permission of Kluwer Academic Publishers.

Appendix C- Hirsch's Model

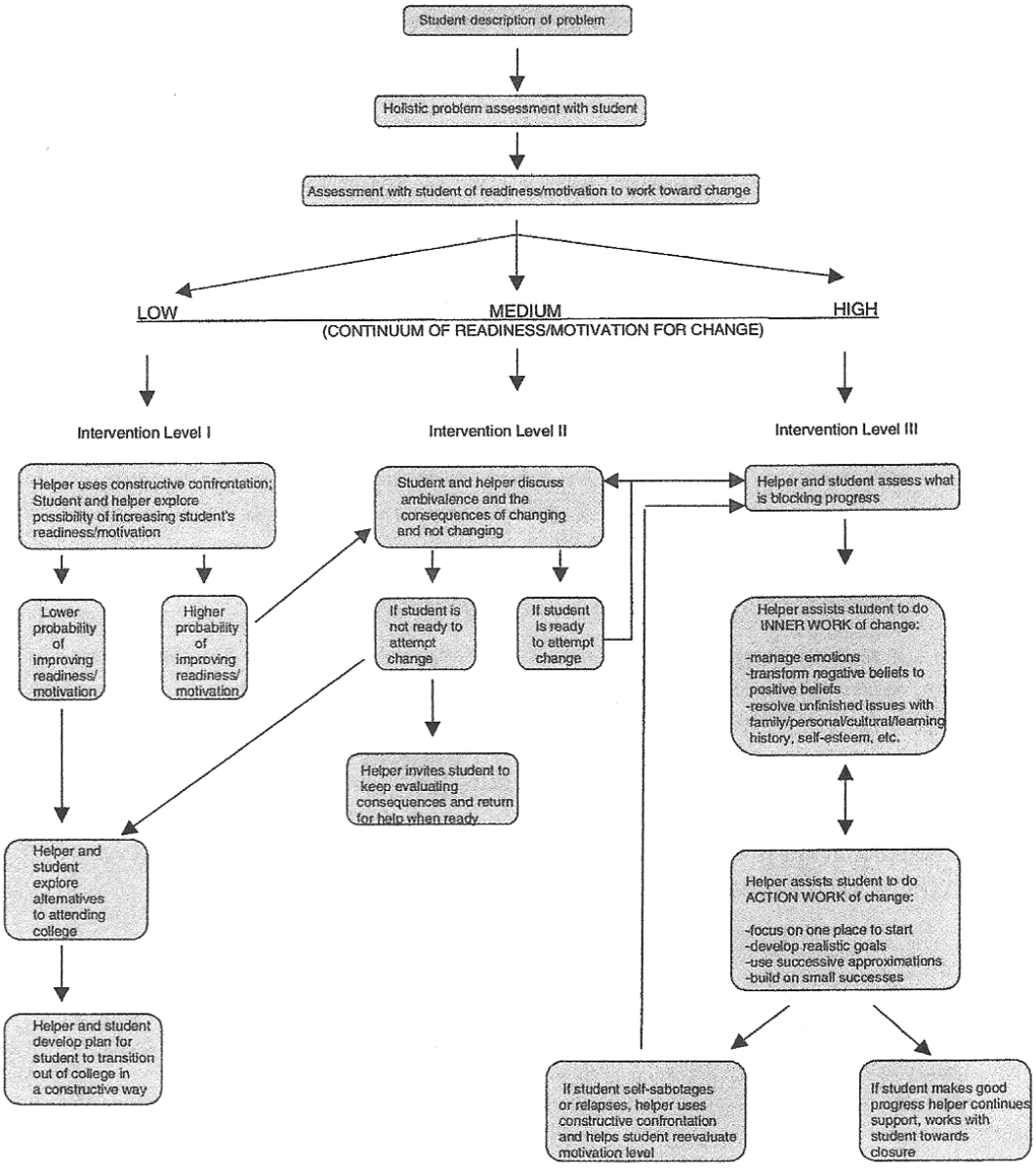


FIGURE 2.1. The Multiple Intervention Model for helping academically troubled college students.

Appendix D- Institution Interview Instrument

1. Who assumes the role of coordinating support services for students on academic probation? Is there a specific individual or office?
2. Is it a centralized program of support or is probation recovery handled separately by different colleges or departments?
3. Is the system of support mandatory for everyone or certain populations of students or is it entirely voluntary?
4. What is the nature of the support system that is available? Is it a counseling model, contract model, or coursework? Explain how the program is administered.
5. Does the intervention include assistance with both academic and non-academic issues? Are the students required to meet individually with anyone? If not, are they offered that option?
6. Does the intervention take into consideration an individual student's readiness for change? Do you consider the students' level of motivation when you are working with them?
7. How is the effectiveness of the support system assessed institutionally? What data do you regularly collect and analyze?

Appendix E- Student Survey Instrument

Please read the following information carefully. Scroll to the bottom to continue with the survey.

Informed Consent Form

Study: An examination of support programs for students on academic probation

You are invited to participate in this research study. The following information is provided in order to help you to make an informed decision whether or not to participate. If you have any questions please do not hesitate to ask. You are eligible to participate because you are a student who was placed on academic probation at one of the universities in the Pennsylvania State System of Higher Education.

The purpose of this study is to determine the effectiveness of programs to support students on academic probation. Participation in this study will require approximately thirty minutes of your time. You will be scheduled for an interview and will be asked a series of questions related to your academic performance during your freshman year and the support made available to you.

There are no known risks or discomforts associated with this research.

Your participation in this study is voluntary. You are free to decide not to participate in this study or to withdraw at any time. Your decision will not result in any loss of benefits to which you are otherwise entitled. Upon your request to withdraw, all information pertaining to you will be destroyed. If you choose to participate, all information will be held in strict confidence and will have no bearing on your academic standing or services you receive from the University. Your response will be considered only in combination with those from other participants. The information obtained in the study may be published in scientific journals or presented at scientific meetings but your identity will be kept strictly confidential.

If you are willing to participate in this study, please proceed to the next page of this survey.

Project Director:
Ms. Karen Hamman
Doctoral Student, Indiana University of PA
Assistant Professor, Bloomsburg University
Developmental Instruction
400 E. Second Street, Bloomsburg, PA 17815

Faculty Sponsor:
Dr. David Piper
Professor, IUP
Employment / Labor Relations
4C Keith Hall
Indiana, PA 15705

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724-357-7730).

Please select a response below.

- o **I have read the informed consent information above and agree to participate in this study (please print out a copy for your records).**
- o **I do not wish to participate in this study.**

Appendix E- Student Survey Instrument (continued)

1. Please indicate the university for which you are answering these questions.

2. What were the major circumstances that contributed to your academic probation status?

3. What, if any, institutional support services did you use to assist you in your academic recovery?

4. Did your institution offer you support with nonacademic issues that may have affected your academic performance?

5. Did your institution require you to participate in any services when you were on probation?

6. As a student on academic probation, what did your institution require or encourage you to do? If nothing, please type "nothing" in the comment box.

7. Were you able to return to academic good standing after one semester on academic probation?

8. What, in your opinion, most helped you in recovering from academic probation? If you did not get above a 2.0, please respond with "NA".

9. What, in your opinion, prevented you from recovering from academic probation? If you DID get above a 2.0, please respond with "NA".