

EXPLORING VARIABLES AND FACTORS THAT STUDENTS PERCEIVE  
CONTRIBUTED TO PERSISTENCE AFTER BEING PLACED  
ON ACADEMIC PROBATION

by

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## ABSTRACT

The purpose of this comparative study was to explore the student variables and factors that students perceive contribute to persistence after being placed on academic probation at a large urban community college. This research used a mixed-methods approach to analyze selected student demographic, academic, and behavioral characteristics for a population of 1,337 students who were placed on probation under the college's academic standing policy. For the study's online survey, an additional 580 students who were placed on probation under the college's policy and who persisted were brought into the study. The results of the quantitative analysis of the study revealed 13 of the 15 variables were found to be significant at the  $p < .05$  level. Further, statistical results identified that Pell eligible and advising contacts demonstrated at least a moderate strength of relationship for persistence using the Cramer's V statistical tests. In addition, the required academic probation intervention workshop indicated the greatest likelihood for persistence by demonstrating a strong relationship with at Cramer's V of at least  $V = .54$ . The results of the qualitative analysis provided insight into the differences and similarities in the probation students' perceptions and perceived factors that contribute to academic probation, utilization of college support, and required interventions for the persistence and non-persistence groups. The conclusion from this study indicated that keeping the probation student perspective and perceptions in mind while considering the variables that demonstrate a strength of

relationship for persistence can shape future policy, processes, programs, and interventions for this large urban community college.

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## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	vii
CHAPTER 1: INTRODUCTION OF THE STUDY .....	1
Introduction.....	1
Statement of the Problem .....	5
Purpose of the Study .....	5
Research Questions .....	6
Significance of the Problem .....	6
Research Context.....	7
Delimitations .....	12
Limitations .....	13
Definition of Terms .....	14
Organization of the Study.....	16
Summary.....	16
CHAPTER 2: REVIEW OF RELATED LITERATURE .....	18
Introduction.....	18
The Community College Challenges .....	19
Importance of Completion .....	21
Theoretical Perspective .....	27
Characteristics of Community College Students.....	30
Academic Probation Students Interventions.....	35
Student Perceptions .....	41
Academic Standing Policy .....	44
Summary.....	46

CHAPTER 3: RESEARCH METHODOLOGY .....	47
Introduction.....	47
Research Questions .....	47
Study’s Research Design .....	47
Quantitative Design .....	49
Qualitative Design .....	50
Study’s Hypothesis and Variables.....	51
Measurements.....	55
Population .....	55
Instrumentation and Data Collection .....	59
Validity and Reliability .....	62
Summary.....	65
CHAPTER 4: DATA ANALYSIS.....	66
Introduction.....	66
Data Collection Method and Analysis Process.....	66
Description of Population .....	70
Descriptive Variables Analysis .....	73
Student Variable Distribution for Persistence and Non-Persistence Groups .....	73
Frequency for Selected Behavior Variables for Population .....	76
Frequency for Behavior Variables for Persistence and Non Persistence Groups .....	77
Research Question 1: What factors are associated with persistence for students that have been placed on academic probation? .....	79
Research Question 2: What behaviors mattered for persistence of academic probation students?.....	83
Research Question 3: What are the student perceptions of the college’s intervention strategies for students placed on probation? .....	87
Summary.....	98
CHAPTER 5: SUMMARY, FINDINGS, AND RECOMMENDATIONS .....	100
Data Collection Method and Analysis Process.....	100
Limitations and Assumptions.....	102
Summary of the Findings .....	103

Research Question 1: What factors are associated with persistence for students that have been placed on academic probation? .....	103
Implications for These Findings and Institutional Consideration.....	106
Research Questions 2: What behaviors mattered for persistence of academic probation students?.....	108
Implications for These Findings and Institutional Consideration.....	110
Research Questions 3: What are the student perceptions of the college’s intervention strategies for students placed on probation? .....	112
Implications for These Findings and Institutional Consideration.....	116
Recommendation for Future Studies .....	119
Final Summary .....	119
REFERENCES .....	121
APPENDIX A: ONLINE SURVEY QUESTIONS.....	128
APPENDIX B: EMAIL COMMUNICATION FOR STUDENT PARTICIPATION REQUEST .....	131
APPENDIX C: ONLINE SURVEY INFORMED CONSENT FORM .....	133
APPENDIX D: GRCC IRB APPROVAL.....	136
APPENDIX E: FERRIS STATE UNIVERSITY IRB APPROVAL .....	138



## LIST OF TABLES

	Page
Table 1: <i>Student Success Indicator Outcome Measures and Comparison Summary from the Institutional Dashboard</i> .....	8
Table 2: <i>GRCC Academic Standing Progress Standards</i> .....	10
Table 3: <i>Variable Definitions</i> .....	53
Table 4: <i>Student Characteristics</i> .....	56
Table 5: <i>Academic Student Characteristics</i> .....	57
Table 6: <i>Behavioral Student Characteristics</i> .....	58
Table 7: <i>Data Analysis Guide</i> .....	67
Table 8: <i>Race/Ethnicity Comparison Between All Students at the College and Probation Students</i> .....	71
Table 9: <i>Selected Student Variable Frequency and Percentage Distribution for Population (N = 1,337)</i> .....	72
Table 10: <i>Descriptive Statistics for Selected Variables</i> .....	73
Table 11: <i>Student Variable Distribution for the Persistence and Non-Persistence Groups</i> .....	75
Table 12: <i>Frequency Counts for Selected Behavior Variables for Population (N = 1,337)</i> .....	77
Table 13: <i>Frequency Count for Persistence and Non Persistence Group Behavior Variables</i> .....	78
Table 14: <i>Chi-Square Tests and Cramer’s V for Selected Student Variables Based on Group (N = 1,337)</i> .....	80
Table 15: <i>One-Way ANOVA Comparisons for Selected Student Variables Based on Groups</i> .....	81
Table 16: <i>Student Perceptions on Factors Contributing to Probation</i> .....	82
Table 17: <i>Chi-Square Test and Cramer’s V for Selected Behavior Variables Based on Group (N = 1,337)</i> .....	83

Table 18: <i>Student Workshop Attendance</i> .....	84
Table 19: <i>Student Connections While on Probation Summary</i> .....	85
Table 20: <i>Student Resources Utilized by Probation Students</i> .....	86
Table 21: <i>Student Preparedness Rating to Continue Classes and Complete Goals</i> .....	87
Table 22: <i>Student Perceptions on Preparedness</i> .....	88
Table 23: <i>Student Ratings on Support Resources</i> .....	90
Table 24: <i>Total Group Perceptions on the Benefit and No Benefit for Academic Probation Support</i> .....	92
Table 25: <i>Student Perceptions on College Assistance</i> .....	94
Table 26: <i>Student Perception on Requiring the Workshop Intervention</i> .....	94
Table 27: <i>Student Perceptions on Requiring Other Interventions</i> .....	95
Table 28: <i>Student Perceptions on Requiring Interventions</i> .....	96
Table 29: <i>Student Perceptions on Strategies to Avoid Academic Probation</i> .....	97

## CHAPTER 1: INTRODUCTION OF THE STUDY

### INTRODUCTION

In 2009, President Barack Obama provided a vision to increase graduation rates for students across the nation and challenged higher education to double the number of college degrees nationwide by 2020. Today, student completion continues to be at the forefront of the national higher education agenda. The continued emphasis around completion is particularly important for community colleges as the completion agenda is being driven at the national level, ultimately creating an era of accountability that has never before been seen in higher education. When considering President Obama's charge to double the number of college degrees nationwide by 2020, the increased number of students enrolled in higher education is good news. However, research shows that the number of students persisting on their educational pathway to completion are currently demonstrating disappointing results. It has been reported that 79% of college students report that they plan to earn an associate's degree when they first enter college, yet only 45% of the full-time students meet that goal within six years (Center for Community College Student Engagement, 2012). Colleges and universities must ensure access, as well as completion, if the United States is to accomplish President Obama's goal. In an open letter to college and university leaders, the National Commission on Higher Education Attainment (2013) mentions a historic advancement in

student access with more Americans attending college presently than ever before in history. As the commission outlines concerns in its letter, it specifically directs accountability to institutions of higher education, stating, “Offering access without a commitment to help students complete their degrees is a hollow promise” (p. 9). As a response to this concern, the letter issued a call to action for leaders in higher education to make college retention and completion a critical priority. This call to action comes with a warning: by not addressing the unacceptably low number of graduates as a nation, there is a risk of hindering human potential, resources, social mobility, and economic progress. In moving forward, access coupled with completion is necessary to successfully fulfill the mission of higher education. President Obama (2009) believes that the power of community colleges in resolving many of the national economic, social, and workforce employment issues will occur through the open door and accessible educational system.

The American Association of Community Colleges (2012) reports that the American Dream has stalled and is at risk because the United States lacks the educated workforce to compete at the global level, and this threat raises the completion agenda stakes even higher for community college leaders. For the first time in history, competing nations outperform the U.S. in educational attainment; the American middle class is shrinking, record numbers are falling into poverty, and the younger generation of today is less educated than any generation before. Further, the report states, “If community colleges are to contribute powerfully to meeting the needs of the 21<sup>st</sup>-century student, and the 21<sup>st</sup>-century economy, education leaders must reimagine what

these institutions are and are capable of becoming” (American Association of Community Colleges, 2012, p. vii). It is suggested that the community colleges must meet this challenge and help reclaim the American Dream by redesigning the community college educational system, its mission, and the student educational experience. This redesign must be focused on access coupled with completion.

Leveraging the community college mission is a powerful response to the present shifting and unsettling economic times. However, access to higher education alone cannot provide the recovery that is needed to ensure that the U.S. regains a leading position globally in higher education attainment. It will take a commitment from community college leaders to advance the completion agenda by increasing student success and ensuring that students do not get lost in the educational process. One national response to these unsettling times led to the creation of the Achieving the Dream initiative that was supported by educational investors and the Lumina Foundation. Achieving the Dream is a community college shared student success agenda that was created in 2004 and built momentum that was focused on guiding evidence based institutional change, influencing educational policy reform, generating and sharing student success strategies knowledge and metrics, and establishing a common community understanding of the barriers to students success (Achieving the Dream, 2013). In the report *Turning the Tide: Five Years of Achieving the Dream in Community Colleges*, Rutschow et al. (2011) mention the need to improve programs and services for students to impact real change. Further it is suggested “a strategy will make an observable impact on institutional performance only if it (1) raises academic outcomes

among the students who are served, and (2) reach enough students to ‘move the needle’ on college wide measures” (p. 95).

When considering the completion agenda, educational leaders must also have a clear understanding of how institutional policies, practices, and processes impact student persistence and completion. While documented research and theoretical considerations can be found that indicate community colleges have multiple retention and completion policies in place that vary in effectiveness, Tinto (2012) points out that much of the research on attrition has not been useful for developing and implementing programs because there is an assumption that knowing why students leave is equally as important as knowing why students persist and complete. He cautions, “The process of persistence is not the mirror image of the process of leaving” (p. 5). Further research could begin to uncover more of the story that completes the picture as to why students who start at the community college do not finish.

Cohen and Brawer (2002) estimate that 25% of the student population is on academic probation while attending college. This statistic points to the need to further study the community college academic standing policy, particularly with regard to its impact on community college students. Though intended to maintain successful academic standards, the current community college policy standards and interventions might be outdated or ineffective because they require a level of academic performance that is, perhaps, a mismatch for today’s community college student readiness. Students are placed on probation or suspension based on their academic performance, and research indicates that academic standing policies may ultimately hinder a student’s

ability to complete. A study conducted by Bailey and Alfonso (2005), *Paths to Persistence: An Analysis of Research on Program Effectiveness at Community Colleges*, points out there is a definite void in community college research and data on institutional policies. This is especially true with regard to how the policies and institutional factors impact retention and completion (Bailey & Alfonso, 2005). The open-door policy supports large numbers of underprepared and at-risk students. Community colleges must consider what it will take to support and help underprepared students to become capable learners who can benefit and successfully complete the certificate and degree requirements for completion. Kelsay and Zamani-Gallaher (2014) mention the issue of challenges for administrators and faculty with the increased number of underprepared students. Further, they state, "Understanding the motivation and persistence of underprepared students is central to understanding their success" (p. 33).

#### **STATEMENT OF THE PROBLEM**

This study examines how Grand Rapids Community College (GRCC), a large urban community college, monitors the number of students that are on probation and those that are placed on probation for the first time for all enrollment periods, as well as how the college engages with this population of students.

#### **PURPOSE OF THE STUDY**

This study explores the student variables and the factors that students perceive to contribute to persistence after a student is placed on academic probation at a large

urban community college. Further, the study looks at the differences and similarities between the persistent and non-persistent student probation groups. An analysis and better understanding of the persistence variables and perceptions of academic probation students will help to determine effective strategies used by probation students and inform the college's policy, processes, and interventions for probation students.

### **RESEARCH QUESTIONS**

The following research questions will guide the study's design, research, and analysis:

1. What factors are associated with persistence for students that have been placed on academic probation?
2. What behaviors mattered for persistence of academic probation students?
3. What are the student perceptions of the college's intervention strategies for student probation?

### **SIGNIFICANCE OF THE PROBLEM**

No formal research has been conducted at this community college to explore the impact that student variables and perceptions might have on the likelihood for probation students to persist at the college. As part of the college's continuous improvement efforts to improve policies, processes, and practices relating to probation students, staff have conducted focus groups, student conversations, and surveys to learn about student satisfaction, perceptions, and needs. However, the perceptions of probation students have not been formally or systematically gathered to better



understand the effectiveness of the academic standing policy. There has been no analysis of required interventions, factors that may have led to academic probation, or the student probation experience at the college. Further, the college has not looked at the differences and similarities between student persistence and non-persistence once a student is placed on academic probation. It is important to point out that there was no consistent monitoring or tracking of the persistence, retention, or completion rate for probation students over time at the college. Further, the college has not looked at the differences and similarities and variable relationships between student persistence and non-persistence once a student is placed on academic probation.

## **RESEARCH CONTEXT**

For the purpose of this study, it was important for the researcher to understand the institutional goals of the institution being studied as these goals drive the actions of the institution with regard to interventions and policies focused on student success, persistence, completion, and retention. One of the three institutional ends for the large urban community college for this study focuses on the student success pathways. The pathway is defined as “a student-centered experience [that] will ensure opportunities for students to learn the skills necessary to achieve their educational goals” (GRCC, 2014). Indicators of success for the student success pathway include persistence, retention, and completion; all are measured to monitor institutional performance and student progress. These outcomes are reported on the college’s dashboard and compared among the current year, prior year, and national benchmarks. As indicated in

Table 1, two of the institutional success indicators show a downward decline, which includes the persistence rate as reported by the college’s institutional research office as of January 1, 2015 (GRCC, 2015).

Table 1: *Student Success Indicator Outcome Measures and Comparison Summary from the Institutional Dashboard*

	PRIOR YEAR	CURRENT YEAR	BENCHMARK	TREND
Persistence (fall to winter, part- and full-time)	73.2%	71.6%	72.0%	Downward
Retention (fall to fall first-time, degree-seeking students)	56.8%	58.1%	56.6%	Upward
Completion (150% graduation rate, first-time/full-time students)	15.1%	12.5%	18.9%	Downward

(GRCC, 2015)

The college’s intentional efforts to impact the success outcomes are guided by the institutional strategic plan, college action projects, department plans, and daily operations. The college is accountable to the Board of Trustees for the success indicators and outcomes. College leaders are paying close attention to these success indicators and have dedicated resources and efforts that align with the national completion agenda best practices promoted by the Achieving the Dream (AtD) and the Higher Learning Commission Academy for Student Persistence and Completion.

Students who are struggling academically find themselves on probation and may decide to voluntarily leave the college, which directly influences persistence, retention, and completion outcomes. Students that end up on probation are not monitored as a specific group on the college’s dashboard; instead they are tracked by semester through

a Teaching and Learning Quality Model Annual Report (TLQM). The TLQM report is reviewed regularly by the Provost and Deans Council and includes the number of students who are placed on probation for the first time, move off probation to good academic standing, and are suspended. On average, 1 out of 10 students is placed on probation for the first time at the end of a fall or winter semester at the college. In the summer session there are fewer students placed on probation with an estimated 1 out of 20. This is due to an overall smaller student population/enrollment in the summer semester. This pattern has remained consistent over multiple academic years. A deeper understanding of the probation group could lead to the development of effective interventions that may also positively impact the percentage of students who return to good academic standing, which would ultimately improve institutional success indicators. This phenomena was represented in a study conducted at a California community college titled *Getting Back on Track: Effects of a Community College Program for Probation Students* (Scrivener, Sommo, & Collado, 2009). This particular study was focused entirely on the persistence success outcome and found that when an intervention was designed specifically for probation students, the college noted an increase in credit hours, GPA, and proportion of students moving off probation.

The academic standing policy sets academic expectations for students. It was revised at the college for fall 2008 with changes to the standards, student monitoring, and requirements. All students enrolled at college are subject to the institution's academic standing policy. The policy and monitoring process impacts all credit students regardless of degree status. Degree status in this context means the policy applies to

students enrolled at the college with a special interest, non-degree, or degree educational intent. These standards are meant to ensure a student is making satisfactory academic progress toward the required 2.0 cumulative GPA, which is one of the requirements for the college to confer a degree. A student must maintain an established minimum cumulative GPA with a coinciding number of attempted credits in order to be considered by the college to be making satisfactory academic progress. The community college consistently monitors a student’s academic progress at the end of each semester and summer session once a student has attempted 12 credit hours. If a student meets the standards set forth in the policy, he or she is considered in good academic standing and avoids being placed on academic probation. Students who fall below the established academic standards are placed in a probationary status with the college. The satisfactory academic progress standards for the college are outlined in the Table 2.

Table 2: *GRCC Academic Standing Progress Standards*

CREDIT HOURS ATTEMPTED	MINIMUM CUMULATIVE CPA REQUIRED
12-14	1.50
15-28	1.75
29 and above	2.00

All students who do not meet academic standing requirements are notified by the college of their probation status at the end of a grading period, placed on academic probation, and informed that they are required to attend an academic success

workshop prior to the fourth week of their next enrollment semester/session. After the fourth week, if a student has not attended the required workshop, a hold is placed on the student's record to prevent him or her from registering until the workshop requirement is met. Students must achieve a minimum term GPA of 2.0 in all subsequent semester/session until they are considered in good academic standing. Failure to achieve a term GPA of 2.0 would place a student on academic suspension. This next step has greater consequences for a student, as it prohibits future enrollment for a period of two subsequent semester/session enrollment periods. A student would have the ability to appeal the suspension status, although it has been the experience at the college that few students take advantage of this process. Once a student is placed on probation, the academic expectations for students are clearly articulated and students must achieve them in order to maintain future enrollment opportunity.

Some students on probation may also be subject to the college's financial aid warning or suspension process concurrently with probation. An estimated 67% of the students attending the college during a semester qualify and take advantage of financial aid. The financial aid standards for academic progress (SAP) require a minimum 2.0 cumulative GPA and 67% successful completion for courses attempted at the end for all enrollment periods. The financial aid SAP standard has a higher expectation than the college's academic standing policy. Although the student financial aid status is considered and communicated as a warning, there can be confusion between the two policies and requirements that may impact students' persistence.

The effectiveness of the academic standing policy, processes, and interventions is important not only to students but also to the institution. Colleges will be judged on how effectively structures and processes have increased student satisfaction and success (Myran, 2009). The probation process is meant to assist students in improving their overall academic performance and return them to good academic standing. It is important that a student stay on a successful academic path that can lead to degree completion and/or transfer to a four-year institution. A student's experience and success are influenced by a college's policies, processes, and interventions.

The college monitors the number of students that are on probation and those that are placed on probation for the first time for all enrollment periods. Over a four-year period of time there were minor differences in the total number of students on probation for winter semester 2010 to winter semester 2013. On average over the four-year period, 8% of the student population at the college was placed on probation for the first time. Increasing the number of students by semester who return to good standing and or reducing the number of students placed on academic probation would have the potential to increase the number of students on a successful academic progress path. Further, increasing the number of students on a successful academic path that would lead to student educational goal attainment and degree completion could influence the college's success indicators.

## **DELIMITATIONS**

The following delimitations have been imposed.

*The population.* The study is restricted to enrolled students at Grand Rapids Community College, a large urban community college. The participants for this study included degree-seeking students who were placed on academic probation for the first time at the conclusion of winter 2012 or summer 2012. The students consisted of a persistence and non-persistence probation group based on their enrollment after being placed on probation at the college. The persistence group was made up of students who enrolled in either fall 2012, winter 2013, or both semesters after being placed on probation for the first time. The non-persistence group was made up of the students from the probation students who did not enroll in either of the two semesters. Students in both groups were placed on probation under the college's academic standing policy winter and summer 2012 for the first time.

## **LIMITATIONS**

The following limitations are inherent in the study.

*Data collection.* It is assumed the data provided by the college are accurate and that student perceptions and factors that lead to academic probation and persistence can be compared and analyzed.

*The population.* It is assumed there will be limits on the generalizability of the findings given the students and data are from one large urban community college.

## DEFINITION OF TERMS

- *Academic Probation* – Students whose end-of-term academic progress is below the minimum cumulative GPA for the specified credit hours attempted are notified and placed on academic probation.
- *Academic Probation Contract* – A required document signed by students at the Academic Success Workshop that outlines the expectations for the academic probation student. It is intended to contribute to the improvement of academic performance and reinstatement to good academic standing.
- *Academic Progression* – A student is making successful academic progress and achievement that is consistent with academic standards of the college.
- *Academic Standing Policy* – An academic policy that requires all students to make satisfactory academic progress according to the standards established by the institution and compliance is checked at the end of each term for all enrolled students.
- *Academic Success Workshop* – A required 1-hour workshop designed and facilitated by a college counselor for students who are placed on academic probation for the first time.
- *Academic Suspension* – Students who fall below the required 2.0 semester grade point average (GPA) requirement while on academic probation are prevented from enrolling the next term. Students can appeal the suspension or wait two semesters.



- *At-Risk Students* – Students whose demographic factors increase their vulnerability to academic difficulties.
- *Community College* – 2-year higher education institution that grants associated degrees and certificates.
- *Completion* – When a community college student meets the academic degree and certificate requirement as established by the institution and is awarded a credential.
- *Engagement* – Time and effort expended by a student toward his or her academic progress, which includes involvement and interaction.
- *Intervention* – Intentional policies and programs designed to increase student success as defined by persistence, retention, and completion.
- *Open Door* – “The devotion to an inclusive campus environment of acceptance, understanding, and caring” and ascribing to “a philosophy founded on the faith that everyone can, through education, achieve their academic, career, and other life goals” (Myran, 2009, p. 2).
- *Persistence* – A student after starting at the college continues to enroll in subsequent terms to advance toward intended education goals.
- *Retention* – This “is usually expressed as a rate or percentage of students who return from one enrollment period to another” (Habley, Bloom, & Robbins, 2012, p. 8).
- *Support Services* – Accessible student support services and programs that are designed to assist students to be academically successful.

- *Underpreparedness* – Students entering the college without adequate academic, social, and cognitive skills.

## **ORGANIZATION OF THE STUDY**

Chapter 1 introduces the research problem and purpose of the study, organization of the study, and operational definitions. Chapter 1 also includes a discussion of relevant background information. Chapter 2 provides a synthesis of persistence and involvement theories and summarizes empirical research on academic probation student variables, intervention, and student perceptions. Chapter 3 presents the methodology of the study and includes the profile of the academically at-risk student population studied. It includes a definition of the mixed-methods design, an explanation of variables and metrics, descriptions of the quantitative and qualitative features, collection and analysis of data, and the clarification of the limitations and delimitations of the design. Chapter 4 details the quantitative and qualitative results and explains the relationship of the findings to the research questions and the purpose of the study. Chapter 5 includes an interpretation of the data and an analysis of the implications for student persistence, academic standing intervention, policy, and practice at the community college.

## **SUMMARY**

Involvement and persistence theory predicts strategies that increase undergraduate student likelihood for engagement and completion. The intention of this study was to corroborate those findings by examining student variables and perceived

factors that contribute to persistence after a student is placed on probation. This was accomplished by compiling demographic, academic, and behavioral data of students placed on probation for the first time and comparing the persistence and non-persistence groups. A deeper understanding of student engagement and academic probation was accomplished via analysis of student perceptions of factors contributing to probation and interventions. The result of this comparative analysis was expected to confirm student persistence and involvement theory.

## CHAPTER 2: REVIEW OF RELATED LITERATURE

### INTRODUCTION

Tinto (2012) points out that of the nearly 2.4 million students who entered higher education in 1993, nearly 65% left without earning a degree. These numbers indicate more students are leaving than staying to complete a degree (p. 1). Further, he mentions the consequences of this continual departure can negatively impact not only the student, but the institution as well. Shrinking enrollment and accountability for student success indicators are two external institutional pressures directly linked to voluntary student departure. In her article "We Can No Longer Love 'em and Leave 'em," Drew (1990) references that it is the responsibility of the institution to address the poor freshmen student persistence rates. For the student, the reasons for leaving can be complex and consequences can vary, depending on individual circumstances, once the student makes the decision to stop out temporarily or permanently.

The purpose of this study is to explore the student variables that contribute to persistence after a student is placed on academic probation, as well as the factors that students perceive contribute to persistence after they have been placed on academic probation at Grand Rapids Community College, a large urban community college. While the academic probation status action and interventions a college takes may, or may not, influence a student's decision to leave college, research indicates that more community

college students decide to leave college than to persist once they are placed on academic probation. Tovar and Simon (2006) point out while some probation students can be successful without the support of others, many “will simply give up, perform poorly, or disappear altogether from our colleges without effective interventions” (p. 559). An analysis and better understanding of this group of students as it relates to persistence and student perceptions may help to inform strategies, processes, and interventions. This study may assist Grand Rapids Community College, and other large urban colleges, in their efforts to retain more students struggling academically and or not meeting satisfactory academic progress, thus improving overall student success and completion rates.

## **THE COMMUNITY COLLEGE CHALLENGES**

The American Association of Community Colleges (AACC, 2012) reported 13 million students attended 1,132 community colleges across the country in 2012. Community colleges serve a significant role in higher education, demonstrated by the fact that 45% of all the undergraduates in the United States come through their doors. Shaped in many ways by the educational and economic needs of their geographic areas, community colleges provide quality and affordable post-secondary opportunities with an open door mission as its foundation. The value proposition of the community college does not start and stop with the learner. Instead, it extends to the community it is expected, and designed, to serve. The community college must maintain a strong focus on meeting the needs of its community and strategically respond to the changing and

growing educational, economic, and workforce demands. Myran, Baker, Simone, and Ziess (2003) further reinforce the value, accountability, and responsiveness of the community college, indicating its connectedness to the economic health of the community. Responsiveness to the community and the learners has always been, and will continue to be, core to the mission of the community college.

When considering the historical expansion of the community college, there have been marked events influencing and shifting the purpose, rise and decline in enrollment, and changes for community colleges. Cohen and Brawer (2008) have identified several reflective reasons, although some may find them arguable, on the development and growth for community colleges. Those cited by the authors include: ability to solve social problems associated with racial integration and unemployment, the increase in high school population and graduation rates, the demand from businesses for trained workers, opportunity for community prestige, and relief for universities on the general education or lower level courses among others (p. 10). The authors speculate the answer may be grounded in the origin of our nation and believe that “individuals should have the opportunity to rise to their greatest potential” (p. 11).

Community colleges serve an increasingly diverse population of students that are looking to explore, establish, and accomplish their goals (personal, educational, and career) that will increase their likelihood for future success. The open door mission and philosophy of the community college provides an opportunity for students who may not otherwise have a chance to pursue higher education and reach their potential. Myran (2009) states,

While community colleges are committed to serving an increasingly diverse student population, the “institutional soul” of these colleges is their calling to play a liberating role in the lives of those who might otherwise be disenfranchised, unconnected, semiliterate, unskilled, and unemployed. It is this sense of calling, of higher purpose, that gives life to the open door of the community college. (p. 1)

The community college design, with its open door mission, has served as an important educational pathway, affording students with varying levels of academic ability and preparation access to higher education. O’Banion (2013) states, “No other nation has ever attempted to make a college education so accessible to so many citizens; the Access Agenda is the primary hallmark of the community college and will stand as its finest achievement in its first 100 years” (p. 1). The open door mission and philosophy of the community college have served to provide educational opportunities for students with varying circumstances, timing, and ages. Stepping through the door of higher education may come directly or shortly after high school or following the completion of a GED, or if there is interest in starting a new career or after being downsized from a career job. Community college provides the access necessary for students to achieve any academic goal, regardless of their circumstances.

### **IMPORTANCE OF COMPLETION**

Data show students are accessing and attending four- and two-year colleges and universities in greater numbers. However, over the past 40 years, little to no change has occurred in attrition, retention, and persistence to degree completion (Habley et al., 2012). These results have led the way for national, state, and institutional conversations,

whose primary focus is on improving student persistence, retention, and completion at community colleges.

Byron McClenney (2013) suggested that “nothing short of institutional transformation would be required to move the needle on student success” (p. 7). Exploring effective and intentional actions to transform, redesign, or reinvent for student success has the attention of higher education leadership across the country. In the *Reclaiming the American Dream Community Colleges and the Nation’s Future* report (2012), the American Association of Community Colleges (AACC) outlined recommendations that would support change for community colleges looking to “redesign, reinvent, and reset” themselves for the future. Further, AACC’s 21<sup>st</sup>-Century Commission implemented the following nine teams to address identified areas of reform: (1) completion, (2) reimagining student pathways, (3) community college and K-12 collaboration for college readiness, (4) developmental education, (5) closing the skills gap, (6) setting a new policy and advocacy agenda for reclaiming the American Dream, (7) redefining institutional roles and functions, (8) accountability, and (9) faculty engagement and leadership development (p. 33).

Today more than ever before, there is a greater emphasis and need in higher education to retain and guide students to completion. For this study, the literature review focuses on using the term *persistence*, defined as a student who has started at a college and remains enrolled in subsequent terms to advance toward his or her intended education goals. Literature suggests that a student’s decision-making process around persistence is extremely complex. In the Center for Community College Student



Engagement (CCSSE, 2012) report titled *A Matter of Degrees*, there are a number of promising strategies and practices that cut across multiple student success initiatives believed to impact student success, persistence, and completion. The practices are organized into three student success action-oriented buckets, including the planning, initiating, and sustaining practices that demonstrated student success. Further, within the pages of the report, there are descriptions detailing the redesign of expected community college offerings, such as student assessment, orientation, academic planning, and tutoring. The document has a wealth of qualitative data to consider, compare, and synthesize for initiating change, all of which are meant to add value and increase the impact on student success, persistence, and completion. In order to increase community college persistence and students progressing toward completion, programs and services are required that are designed to support the student's personal and student development. CCSSE data indicate that it is important a student feels connected and engaged while on campus. In addition, the CCSSE data also point to the importance of designing focused interventions outside the classroom to meet student needs, as these interventions can make a difference in student success, persistence, and completion. The student's ability to navigate, engage, and experience success in the college environment can build confidence.

The unprecedented economic and educational challenges facing community colleges and other institutions of higher education have brought to the forefront the need for leadership to focus on making student completion a priority. This is critically important for the students who count on community colleges as their educational

pipeline for upward mobility. In an open letter published by the National Commission on Higher Education Attainment (2013), college and university leaders were called upon to focus on making a commitment to student success and accountability. It was clear that the success and accountability work would not be easy. Further, leadership actions should not limit educational access, and the commission issued the following caution: “The easiest way to boost graduation rates would be to accept only those students with high academic qualifications” (p. 10). This report recognized there could be predicted economic and social risks for not making post-secondary completion a priority, especially during this time when higher education enrollments are at record highs.

Community colleges are in a position to contribute significantly to the bottom line with their affordability and open-door philosophy. Mullin (2012) cautioned that the policies focused on completion in an effort to increase the educated workforce for the world cannot restrict the educational opportunities and access for all the citizens. It is further pointed out that open-door community colleges draw a greater percentage of students with risk factors and provide access to nearly half of the minority undergraduate student population, of which 40% live in poverty (Mullin, 2012). Watson (2009) suggests community colleges need to move away from the historical focus on the deficiencies of a student and toward the potential strengths, skills, and talents in an asset model student approach. This can be done effectively by taking steps to review and revise policies to ensure (1) the curricula meets the changing demographic needs, (2) training and retraining programs are provided, 3) the changing demographics is considered in strategic planning, and 4) faculty are exposed to various learning styles

and alternative learning methods. Several of these strategies could be considered viable options for increasing the success and ultimate completion for probation students.

Measuring student success and setting intended targets for improvement are far easier than determining the needed balance for changes, interventions, and resource investment for community colleges to impact the success and completion outcomes.

According to the American Association of Community Colleges (AACC, 2012), the call to action for community colleges is to redesign, reinvent, and reset as outlined in the recently published report titled *Reclaiming the American Dream: Community Colleges and the Nation's Future*. Marie Foster Gnage, Chair of the AACC Board of Directors, emphasized the report's bold ideas and recommendations, which focused on the student experience, institutional roles, and the community colleges systems in light of the unprecedented economic and educational challenges facing community colleges and the students served.

Habley, Bloom, and Robbins (2012) draw attention and consideration for what they believe to be a paradigm shift in student success accountability with the following statement: "We suggest that student failure to succeed in college was once seen as a student shortcoming that eventually shifted to an institutional responsibility" (p. 3).

The attention nationally for higher education was elevated with a challenge and target from President Obama (2009) to increase the number of college graduates by 10 million by the year 2020. This was motivated by concerns in the country's drop in its standing for the highest proportion of college graduates in the world. Once first in the world, now ranked 16, the United States is no longer viewed as a leader in having a

competitive workforce and global advantage (O'Banion, 2013). Embedded in the challenge is the need to encourage education beyond high school for all Americans. The U.S. Bureau of Labor Statistics (2010) reported an increase in unemployment rates by educational attainment and a decrease in median weekly earnings, which adds to the downward trend and concern. Habley et al. (2012) noted there is a "leaking educational pipeline" that needs to be slowed, or reversed, through significant changes at each level of education (p. 61). The prediction is the United States will continue to lose ground, and those least likely to be successful in the educational system will be 50% of the U.S. population by mid-century. The opportunity to affect this percentage would be to identify and implement the practices and interventions that will increase the likelihood of student success in community college students. When institutions consider student success strategies that require decisions to change policies and practices that could have a potential negative effect on enrollment and the ultimate bottom line, it can be a perceived as too great of a financial risk. This is especially true with the shift in funding for community colleges toward an increased dependency on tuition revenue to balance the institutional budget. O'Banion (2013) states, "If we do not create the systems that will ensure success for our students, the community college we know today may cease to exist, and the community college we dream of for the future may never come to be" (p. 3).

## **THEORETICAL PERSPECTIVE**

Student persistence and retention are integral to a student's pathway to completion. Both play a necessary role in a student's educational path from start to finish. It is important to distinguish the difference between retention and persistence as they are often used together, and interchangeably, in higher education. Retention and persistence are emphasized when reviewing the literature and research on attrition, characteristics, and interventions related to academically struggling students. Reason (2009) explains the difference: student retention is an organizational measure—a college would retain a student from one semester to the next, while persistence is linked to an individual's outcome—a student would persist from one semester to the next. Graduation or completion is considered the end goal a student is striving toward, with persistence being a measure of the student's progress toward reaching his or her end goal. Persistence is a student behavior that leads to a decision to remain at the college from start to finish. This is a behavior that colleges would like to understand better in an effort to predict the likelihood of its occurrence in all students. There are benefits to understanding the student and institutional forces that can influence whether a student persists. A college's ability to identify students at risk and to design interventions that would increase student persistence of this at-risk population would positively impact persistence, retention, and completion rates across the college.

This institutional interest in student persistence and retention has led to the inquiry, investigation, and development of theories in an effort to uncover the theoretical connections that might explain student departure from colleges. Reason

(2009) states, “A substantial empirical and prescriptive literature does exist to guide faculty members, campus administrators, and public policy makers in an attempt to increase student persistence in higher educations” (p. 650).

The Interactionist Departure Theory developed by Tinto (1993) is a retention model that indicates when a student enters college, his or her personal characteristics upon entry into college (e.g., family background, socioeconomic status, high school preparation and achievements, individual attributes) are believed to impact the student’s commitment to the institution and goal to graduation. Further, the level of individual integration into the academics and social systems of the college can be affected by these factors. Tinto hypothesized that the commitment and subsequent integration by a student directly influences the departure process and decision for a student. The more a student is committed to the institution and to the goal of graduating, the greater the likelihood for persistence.

In addition Tinto’s model on retention and departure is Astin’s (1984) theory of involvement. This theory is grounded in the quantity and quality of the physical and psychological effort that a student is investing in the college experience. The basis for the theory is derived from Astin’s (1975) longitudinal study on college dropouts that was designed to identify factors in the college environment that significantly impacted student persistence. The study results indicated the factors that contributed to students staying in college were connected to a student’s involvement in college. Conversely, the factors that contributed to the student’s dropping out implied a lack of college involvement. It is mentioned that student involvement can take many forms, such as

academic work, extra-curricular activities, interaction with faculty, honors program, on-campus employment, and intercollegiate athletics. Further, the theory provides a beneficial perspective when working with students who are struggling academically. Using the involvement approach is an active, instead of passive, assessment on how a student is focusing his or her energy, thereby answering the questions about what is going on with students and what they are doing with their time. Lastly, Astin (1984) states, "The persister-dropout phenomenon provides an ideal paradigm for studying student involvement" (p. 303). The evidence from the research supports involvement as a critical element in the learning and persistence process.

Understanding student departure and persistence can be complex, as noted by Terenzini and Reason (2005), who encouraged researchers to take a broader perspective when examining persistence by considering a comprehensive model of influence on student persistence. Further, they point out that the benefit from their model approach is that it provides a comprehensive map to identify the forces that shape persistence when incorporating four specific constructs: student precollege characteristics and experiences, the organizational context, the peer student environment, and the individual student experience (p. 661).

A study by Glogowska, Young, and Lockyer (2007) of factors influencing a student's decision on early leaving determined that there was an accumulation of complex interactive factors instead of one reason that impacts the staying or leaving decision for a student. The student's decision-making process gained through interviews was presented using a model of push and pull factors. The six push factors included:

(1) challenge of academic work, (2) burden of other demands, (3) financial strain, (4) lack of support, (5) negative early experiences, and (6) illness/injury. The four pull factors included: (1) determination/stubbornness, (2) commitment to chosen profession, (3) informal support, and (4) formal support (pp. 67-72). A finding of the study points to the need for colleges to be comprehensive when considering the complex student factors that can lead to persistence, and to consider the contributing value a student places on them. Tinto (2012) supports the idea that there are many factors that can lead to a student's decision to leave. However, he mentions that "it is quite likely that many such persons will not understand their leaving as representing a form of educational or personal failure" (p. 142).

Braxton's (2000) review of the departure puzzle questions why the voluntary rate of student departure from college and universities has remained unchanged. The voluntary student departure rate continues to be a focus of concern, while the work to decrease this percentage continues to raise the awareness as to how much work still needs to be done to learn more about colleges and universities as organizations (e.g., culture, climate, policies, and practices), the college student experience, and student interpretation of their experiences.

## **CHARACTERISTICS OF COMMUNITY COLLEGE STUDENTS**

A report titled *Data Points: American Association of Community Colleges* states that half of the undergraduate college-bound students in the U.S. are enrolled at community colleges (AACC, 2015). Further, the National Center for Education Statistics



estimates the 2020 enrollment growth in post-secondary degree-granting institutions will be 13% higher than what it was in 2009. According to Wilson (2004), the increasing population to come through the doors of the community college will demonstrate a trend toward a more diverse student population. The community college student profile reported in Keeping America's Promise includes:

- 50% are 18-24 years of age and one third is over 30 years of age;
- There are higher percentages of women compared to men;
- Minority students comprise one third of the population and over 26% of community college students are either Black or Hispanic;
- Almost 15% speak a language other than English in the home;
- 50% of the students are first generation and may require support to be successful;
- 11% of the students reported with a disability;
- 42% of freshman will enroll in at least one developmental course; and
- 85% are employed, of which 53.8% are full time. (pp. 25-27)

These demographical characteristics are critical in understanding the students served by the community college and how to best help them succeed. Wilson (2004) supports this challenge: "If we invite these students to join us, then we are obligated to help them succeed, to do all we can to ensure that they are welcomed and supported as they work to achieve their educational goals" (p. 27).

In addition to demographical characteristics, the Center for Community College Student Engagement (CCCSE) tells community college leaders that understanding individual student aspirations is necessary when studying the students served. Students begin the community college experience with an intention to succeed (McClenney &

Arnsperger, 2012). However, the enrollment numbers show that approximately 45% of the students who enroll at a community college leave during their first year (Braxton, Hirschy, & McClendon, 2004). This percent excludes students who transfer to another post-secondary institution. There are multiple factors that put the students at risk of succeeding and reaching their goals. A community college student profile could include factors such as academic underpreparedness, formal education gaps, minority status, language barriers, lack of support systems, first generations, lack of financial support, learning disabilities, family responsibilities, and employment while attending college. These are at-risk factors and these factors contribute to the complexity of the needs of community college students. These factors will continue to challenge the support and intervention systems that are designed for their success.

The Community College Center for Student Engagement (CCCSE) is an organization that provides information on student engagement, which is a key indicator of learning, and therefore of the quality of community college. Member colleges administer a CCCSE survey to their students to assess institutional practices and student behaviors that are correlated with student learning and retention (CCSSE, 2015). CCSSE analyzed characteristics of community college students and reports that:

- 79% of entering students aspire to earn an associate's degree, but only 45% of full-time students meet that goal within 6 years;
- 59% were attending college part-time;
- 42% of all part-time students were working more than 30 hours a week;
- 37% of all part-time students were caring for dependents 11 or more hours per week;

- 66% who reported placement results needed development coursework in at least one area; and
- 22% had no plans to return or were uncertain about their future. (pp. 6-7)

Further in the report, the data indicate there is a conflict between student and faculty perception. The faculty perceive the likely cause for withdrawing from classes or college is higher in all of the categories when compared to the student percentages.

- Working full-time (38% vs. 81%);
- Caring for dependents (28% vs. 73%);
- Being academically underprepared (19% vs. 78%); and
- Lacking financial resources (49% vs. 73%). (p. 7)

Grimes (1997) conducted a comparative study of 150 community college students to learn about the student characteristics connected with persistence of underprepared and college-ready students. The non-persistent students demonstrated a lower course completion rate, lower GPA, lower passing rate in remedial courses, and higher self-esteem. The researcher did caution that the complexity of self-esteem and self-concept and their situational nature make the relationship between low self-esteem and persistence difficult to interpret. Kelsay and Zamani-Gallaher (2014) indicated, “Regardless of any variable, students with lower skills find themselves placed almost immediately in a higher risk category relative to their chances of persisting and being successful in college” (p. 25).

According to Cohen and Braver (2002), up to 25% of all students may be placed on academic probation at some time while attending college, with the number of students on probation being even higher for community colleges. Some community

college student characteristics have commonality between probationary and at-risk students (Jones & Watson, 1990). There are many barriers and obstacles that can fall in the path of an academically struggling student who is working hard to transition, persist, or complete a credential at the community college. Identifying these barriers, from the student's perspective, can lead to process, program, and intervention improvements.

The literature and extensive research provides insights into the many reasons students voluntarily or involuntarily depart from college during different intervals following their start at a college or university. Educational leaders have a five-decade trend of students who are not persisting or completing that must be reversed. Habley et al. (2012) mention the 50-year trend on student drop-out holds true: "One-third of all students who enter higher education each year will not return to the institution for a second year" (p. 6). This makes for additional pressure for higher education when the emphasis during these current times of declining enrollment is focused on retaining students.

Identifying specific institutional reform areas and establishing the monitoring metrics are critical to addressing the student success and completion challenge; the identification and study of students that are at risk of not succeeding and how community colleges support these students is even more important. CCCSE conducts its research by collecting qualitative data from entering community college students; this data collection is done through surveys and listening to student experiences. Its findings demonstrate that students are goal-oriented, are motivated, and have a belief that they are academically ready when starting at the community college; 90% say they are

motivated to do what is required to be successful; 85% say they are prepared academically to succeed; and 79% say they are there to complete an associate's degree (McClenney & Arnsperger, 2012). Noteworthy in these results is that when students begin at a community college (within their first three weeks of starting), they aspire to be successful. What happens and changes for a student after the first three weeks in the semester is a critical question and one that CCSSE indicates institutions must dedicate time and resources to explore.

Kelsay and Zamani-Gallaher (2014) discuss the changing community college characteristics and specifically the inclusion of more distinct student populations. The hallmark of the community college mission has and continues to appeal to diverse populations for the following reasons: low-cost tuition, various curriculum options, small class size, and expanded support services. According to Kelsay and Zamani-Gallaher, "It is critical for faculty, staff, and administration to embrace the growing diversity on our campuses and thoughtfully approach ways to support the specific needs of each group" (p. 64).

### **ACADEMIC PROBATION STUDENTS INTERVENTIONS**

Developing a deeper understanding for community college academic probation students, along with their likelihood to succeed, can lead to the identification of this at-risk group. Tovar and Simon (2006) mention the benefit to designing probation student interventions by saying, "Return to good standing is thought to decrease the likelihood that probation students will be forced to leave the college due to academic

disqualification, or because their poor academic progress discourages them from pursuing their education” (p. 549). Finding successful interventions to increase the persistence and completion for academic probation students would come at a time when colleges are experiencing declining enrollment, little movement in the student success indicators, and a push for students to finish what they start. Schroeder (2013) mentions that institutions need to consider that there is value in recognizing that “improving a few processes that touch large numbers of students in powerful ways produce the greatest and most beneficial results” (p. 79). According to Schroeder, there are lessons that can be learned to guide college efforts to improve retention, progression, and graduation rates, and three guiding principles to consider include the following:

- Create a compelling aim and champion its attainment;
- Challenge prevailing assumptions, and think and act systematically;
- Foster shared institutional responsibility for educational quality and student success. (p. 79)

Myran (2009) emphasizes that institutions need to recognize student barriers to success: “Community college students are much more likely than those at 4 year colleges and universities to have risk factors as they seek to earn a college certificate or degree” (p. 46). Kuh (2013) reminds us that the work to improve student experiences and outcomes will not be easy and “requires time, focus, and considerable energy expended over an extended period of time” (p. 89). However, institutional accountability for students starts when they enter through the community college doors

to enroll for the first time, and it must follow students through their entire college career.

Chaffey College, a two-year institution in California, recognized that the number of academically struggling students was a major concern, as one in every five students ended up on academic probation (Ashburn, 2009). Chaffey College conducted a study titled *Opening Doors* (Weiss, Brock, Sommo, Rudd, & Turner, 2011) with the purpose to assist students in an effort to get them off academic probation. Two hundred twenty-four students were randomly assigned to the college's Enhanced Opening Doors program, and 220 represented the control group. Students assigned to the program were required to take the college-success course. Results from the study's two groups demonstrated a higher number of students (30%) moving off academic probation within two semesters for the program group compared to the control group (16%). In addition, the program participant group earned more credits and a higher grade point average than the control group. The author of the study commented on the believed importance of requiring participation (p. 4). The recently retired director of the Center for Community College Engagement, Kay McClenney (2012), further supports this idea of required interventions, stating that "students don't do optional."

Boretz (2012) conducted a descriptive study to evaluate the persistence and motivation of academic probation students in a state university between 2005 and 2010 who were required to attend a mid-semester student success workshop. Specifically, the study assessed whether identified struggling students at mid-semester could be moved to an academically successful path before the end of the subsequent semester

by requiring the success workshop. Conclusions from the study pointed to the need for the institutions to continue to develop a culture and practice that engages and connects with students in a personalized, individualized, and interactive manner. It was noted that mid-semester grade reporting was a high impact engagement for retaining students. According to O'Banion (2013), "Too many colleges wait until mid-term to give students feedback about their progress, which is too late; by mid-term, many struggling students will have already dropped out" (p. 20).

A promising practice for improving student success and persistence is "the involvement of an interdisciplinary team of college faculty, counselors, and administrators who work closely with at-risk students to identify needs and provide opportunities and connections to campus and community resources that will assist in the students personal and professional development" (Myran, 2009, p. 20). The University of California, San Diego (Nance, 2007) conducted Goals in Action (GIA)—an interdisciplinary research project to study student retention. It was believed that university students lost their sense of self and well-being when at risk of dismissal for low grades. It was through this partnership between the university's academic support office and student health and wellness department that the program was developed and offered to an intervention group of 149 students. The results demonstrated increased GPA in participants from 1.2 at the beginning of the academic year to 2.2 by the start of the winter semester. The comprehensive program design combined health and wellness with academic support while focusing on a student's social, behavioral, and psychological needs in and out of the classroom.



Tovar and Simon (2006) conducted a study of 325 first-semester students on academic probation at a large urban community college who voluntarily participated in an innovative “reorientation” program. The two-hour pilot program was designed to assist the students and understand their personal characteristics and perceptions of the college environment that impacted their academic standing. The researchers found that probation students are receptive to intrusive interventions and believe they will make a difference in their motivation level, personal and self-understanding, and commitment to college. The authors of the study stated, “It is not enough to care, or teach a student how to manage their time, or learn how to study. The ability to assess and meet the multiple and complex needs for these high-risk students is critical for their academic and personal success” (p. 561).

Damashek (2003) describes, for consideration, model support and approaches for students at risk of academic failure and probation. Causes for academic probation and examples cited from Russell (1981) and Silverman and Jahasz (1993) include: (1) mistakes in judgment related to enrollment decisions and not asking for help, (2) distrust and lack of inspiring confidence from college contact, and (3) unmet safety concerns related to money issues. While there is research supporting the causes for academic probation and support approaches, Tinto (2012) mentions that a “coherent framework” to guide institutional thinking on attrition and how institutions should be organized, along with actions to take, has yet to be developed (p. 5). Tinto pointed out that there is an obligation for college and universities to assist and help students stay and graduate once they are admitted. A suggested way to accomplishing retention and

graduation outcomes is by focusing on institutional behavior and the conditions that promote success. Specific institutional conditions believed to increase the likelihood of a student remaining in college include: (1) setting high student expectations; (2) providing support for academic, social, and financial student needs; (3) access to first-year assessment and feedback; and 4) increasing engagement with faculty, staff, and peers (p. 7).

Rockingham Community College commissioned a study conducted by Preuss and Switalski (2008) that involved 62 academic probation students who willingly participated in an advisor–advisee connection intervention program designed to encourage students to persist. The goals of the program were to provide personal advising connections for the probation students, an Academic Success Assessment Contract, planned and sequential student communications, and encouragement to participation in academic support services. The results of the study demonstrated that the students on probation who regularly interacted with their academic assistance advisor were 28% less likely to be suspended and 25% more likely to improve their GPA, did not withdraw from the college, and were slightly more likely move to good standing than students who did not participate in the intervention. Higgins (2003) supports the benefits to the advising intervention by stating,

In an intrusive relationship, an advisor personally reaches out to students, meets with them, helps them identify the issues and situations contributing to their academic difficulty, helps them set short and long term goals, guides them through the development of a plan to accomplish their goals which includes advisor–student follow-up. Through the interactions brought on by intrusive advising the student’s relationship with the advisor, institution and self grows. (p. 10)

Osborne (1997) conducted a study of 169 freshman enrolled in psychology at a rural community college. The goal of the study was to test students' identification with a tool associated with an academic scale. The scale's purpose was to identify students at risk of academic failure as defined by poor grades, withdrawals, placement on academic probation, or dismissal for academic cause. The findings of the study demonstrated that overall the tool was predictive for academic performance up to two years into the future. This research approach is supported by Adelman (1999, 2006, as cited in Spittle, 2013), who suggests the need to collect and analyze student data such as student attendance, credit accumulation patterns, curricular pathways, summer enrollment, grade trends, course withdrawal, and repeats (Spittle, 2013, p. 35). Further, Kalsbeek and Associates (2009) state, "What really counts is academic performance in the first year, and even then only when grades are linked to credit accumulations" (p. 35).

## **STUDENT PERCEPTIONS**

Since 2002, McClenney and Arnsperger (2012) have led a charge to listen to the voices of community college students from across the country. This process has provided the opportunity to develop a deeper understanding of the students' college experiences and to learn what really matters. The authors noted that strong and consistent student voices can help meet the challenge being faced by community colleges. Further, "Students are remarkably savvy about what works for them and what does not" (p. 9).

A report commissioned by the Bill and Melinda Gates Foundation (2012) emphasized that keeping student voices and experiences at the center of change can enhance the legitimacy for the planned changes, their effectiveness, and sustainability. This recommendation comes with a caution: “While qualitative research is a powerful vehicle for generating a deeper understanding of a problem, the conclusions drawn from small-scale research of this kind should be viewed as suggestive rather than definitive” (p. 1). The report identifies the following five emerging themes around student perceptions on what would assist them in being successful on their higher education pathway to completing their degree or transferring: (1) students want more exposure to career possibilities; (2) students believe that developmental education courses were not offered in a way that helped them succeed; (3) clear goals and programs with well-defined pathways improves a student’s chance of persisting, completing, or transferring; (4) accurate and accessible advisors, counselors, and faculty guidance that is tailored to students’ educational and career goals are in high demand and hard to come by; and (5) students report that finding specific information and services they need often requires going on a “wild goose chase” and navigating silos (p. 3-10). It is suggested in the report there may be some disconnect between student expectations and what and how support is provided for students to be successful. Miller, Bender, Schuh and Associates (2005) further support understanding student expectations, perspective, and the connection to student success when stating, “Expectations and experiences individually and together affect key outcomes of college, including academic performance, persistence, and self-reported gains” (p. 39).

The Bill and Melinda Gates Foundation sponsored the The Connections by Design: Students' Perceptions of Their Community College Experience (2012) study, which included 161 community college students who participated in inquiry-designed focus groups. Separate student focus groups were made up of three student specific categories: current, completers, and non-completers. While more alike than different, the group themes related to non-completers included:

- The students at risk of not persisting and completing wanted the college to be more proactive in reaching out.
- Former students who dropped out want the college to be more proactive in inviting them back and explaining how to return. (p. 1)

According to Miller et al. (2005), it is incumbent upon institutions to work with students to increase understanding and establish reasonable expectations of themselves and the institution. Also noted is the institution's responsibility to study the characteristics of its students for the purpose of determining the ones that predict increased persistence or lead to student risk. It is further concluded by Miller et al. that institutions should develop interventions and/or modify circumstances that would increase the chances for students who exhibit risk characteristics. Tinto (1993) also asserts that when students enter college, their individual student characteristics such as family background and pre-college schooling and experiences will influence their commitment to the institution, departure decision, and graduation goal. Tinto further believes that when students voluntarily leave the institution, it can be attributed to their level of academic and social integration at the institution after entering.

## **ACADEMIC STANDING POLICY**

The Higher Learning Commission (HLC, 2015) requires accredited institutions of higher education to have an academic standing policy that is communicated to prospective and enrolled students. The HLC is an independent corporation that was founded in 1895 as one of six regional institutional accreditors in the United States. HLC accredits degree-granting post-secondary educational institutions in the North Central region in 19 states. Accreditation is critically important to the success and persistence of community college students. To further emphasize the importance for institutional academic standards, Cohen and Brawer (2008) indicate that “the legitimacy of a college’s certificates or degrees is grounded in the institutional academic standards which are used to certify that a student has met a level of proficiency or achievement” (p. 301).

Spittle (2013) points out that when considering the focus on student persistence, the research has contributed to a greater understanding about “the complex relationships between student and institutional characteristic, aspirations, experiences, and outcomes” (p. 27). However, institutions are still struggling to develop and establish campuswide retention and engagement efforts that are scalable and sustainable. Further, he mentions that the persistence and retention research has been more descriptive than analytical. This course of action, in Spittle’s opinion, “directs attention more toward interventions to minimize student departure than the policies and structures that might hinder or facilitate student success and degree completion” (p. 27). This is one explanation for the persistence paradox and lack of what Spittle calls

institutional traction. From Spittle's perspective, there are three reasons for disappointing persistence results:

- Student success issues and patterns need reframing with data that provoke answers to deeper questions.
- Student strategies need to go beyond the integration models into the campus culture and community, with attention given to core academic policies, structures, and practices that lead to institutional reinterpretation and restructuring.
- Retention efforts have designed to tackle discrete issues. The design lacks substantive faculty involvement or the building of analytical capacity. (p. 28)

Adelman (1999, 2006, as cited in Spittle, 2013) suggests three additional areas that further support Spittle's notion that educational processes need to be adapted:

- Greater weight should be placed on a student's entering academic profile, which includes his or her curricula and quality of demonstrated effort instead of standardized test scores.
- There should be focus on monitoring and influencing the ways students navigate curriculum pathways as a means of leveraging achievement and progress to degree.
- There should be considerations of policies and arrangements that facilitate and encourage uninterrupted enrollment for students. (Spittle, 2013, pp. 29-31)

The previous suggestions draw attention to institutional academic policies, practices, and processes, along with the idea that organization restructuring might be needed to impact student achievement and progress. Burdman (2009) affirms this course of action and supports improving student success to increase the valuable knowledge that could be shared across colleges and at the state level. Further, according to the William and Flora Hewlett Foundation (2007), "Research and analysis must occur on an ongoing

basis to continually provide evidence that can be used to improve both practice and policy” (p. 37).

## **SUMMARY**

The review of the literature revealed that community colleges continue to face student access, persistence, retention, and completion challenges. Also discussed were national expectations of the community college system and the value placed on the open door mission. The diverse student population, specific characteristics, and their aspirations are connected in different ways to academic success when a student enters college. There are theoretical student experiences, institutional conditions, and strategies that may influence and support a seemingly complex and at-risk start-to-finish academic pathway at the community college. For the students who find themselves on academic probation or identified for not making satisfactory progress, there are interventions and engagements by which colleges could positively impact the student and institutional outcomes.



## CHAPTER 3: RESEARCH METHODOLOGY

### INTRODUCTION

This chapter provides an outline of the research design and methodology that were utilized for this study. The chapter begins with the research questions, followed by the rationale for the mixed-methods approach, the study's hypothesis, the student variables and how they are measured, the validity and reliability of the measures, the sampling technique and procedures, and the instrumentation and data collection process. Lastly, there is a discussion on the strengths and weaknesses of the study.

### RESEARCH QUESTIONS

1. What are the factors associated with persistence of students that have been placed on academic probation?
2. What behaviors mattered for persistence of academic probation students?
3. What are the student perceptions of the college's intervention strategies for student probation?

### STUDY'S RESEARCH DESIGN

The study was conducted using a mixed-methods approach with a quantitative and qualitative design to determine the student variables and perceived factors that contribute to probation student persistence. This approach provided the opportunity to collect and analyze additional and different data for probation students when compared to using only one approach. The quantitative and qualitative methods were emphasized

in the study with equal value. The advantage of using the mixed-methods approach is that it takes into consideration the perceptions and experiences of the persistence and non-persistence student groups while interpreting and analyzing the variable group data. Griffin and Museus (2011) recognize that the mixed-methods approach is underutilized in higher education. However, the technique addresses a researcher's limitations when being reliant on qualitative or quantitative methods alone. According to the authors, the purpose of mixing is determined by the following:

- Use each method to validate the data gathering by the other;
- Use one method to inform another;
- Use one method to expand on the findings of another;
- Seek new paradoxes or new perspectives;
- Maximize the probability of generating useful findings. (p. 22)

Creswell (2007) supports the mixed-methods research design by stating, "It is built on the central premise that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone" (p. 5). Additionally, the quantitative comparative analysis design tests the study's hypothesis that students on probation with independent demographic, academic, and or behavioral variable factors will show differences for the dependent variable of persistence. The qualitative design approach adds more context to the probation student's experiences, actions, and opinions by collecting the student perceptions. The study was designed to collect, analyze, and compare the student data

between the persistence and non-persistence groups and may inform future strategies and interventions for probation students.

Lastly, a monograph disseminated by the MDRC (Scrivener & Coghlan, 2011) titled *Opening Doors to Student Success* recognizes that evaluating educational program effectiveness can be difficult and complex, and descriptive information can be limiting. It is suggested that there is a need to develop a “culture of evidence” in community colleges, which requires thoughtful research. One of the suggestions is the mixed-methods research design: “Projects should combine quantitative research on student outcomes with qualitative research to elicit insights from students about those outcomes” (p. 28). It is further noted that the student perspective is critical for interpreting quantitative findings and gaining student insights.

## **QUANTITATIVE DESIGN**

The quantitative research method was selected for the purpose of this study because the college has the readily available student data, number of students, and behavioral variables associated with the study’s groups. The focused results of a quantitative design can lead to describing and uncovering the distribution of attributes and involvement among a population from numerical data (Merriam, 2009). The selected variables data were studied to determine the significance and impact they may have on a probationary student’s likelihood to persist after being placed on academic probation. The researcher utilized the comparative approach, which is defined as a means of descriptive features that claim to enhance knowledge about politics and

society as a *process* (Ragin, 1987). Using this approach, the researcher looked for the variable differences between, and within, the persistence and non-persistence groups. Significance testing was part of the analysis design comparing the variables between, and within, the persistence and non-persistence groups. The quantitative method served to provide the necessary evidence to associate the differences and similarities between the two probation groups. It also provided the opportunity to determine the effect size between the dependent and independent variables.

The quantitative comparative analysis looked for significant differences and similarities on the selected factors between the groups and for the entire probation group. When examining a study's quantitative data, the use of inferential statistics provides the researcher the ability to draw conclusions and generalize. The researcher has the ability to answer the question of how likely something is to be true of the population under study, or to determine if it is coincidence based on the information from the sample drawn from the population (Vogt, 2007). Further, the inferential statistical method involves:

- making estimates, including margins of error, about populations on the basis of knowledge about the sample (confidence intervals);
- significance or hypothesis testing. (p. 11)

## **QUALITATIVE DESIGN**

A qualitative research method and survey approach were selected to better understand and gain insight into the student-perceived factors that contribute to academic probation, utilization of college support and interventions, and persistence.

According to Merriam's (2009) description of the qualitative approach and design, it can lead to uncovering, understanding, and attributing meaning for a particular phenomenon. The goal of qualitative research is to understand how people make sense of their experience. Further, Yin (2009) states that there are four applications to utilize case studies for evaluative research:

1. To explain presumed causal links in real-life interventions that are too complex for the survey or experimental strategies;
2. To describe an intervention in real-life context in which it occurred;
3. To illustrate certain topics within an evaluation using the descriptive mode;
4. To highlight the situation in which the intervention being evaluated has no clear single set of outcomes. (p. 8)

#### **STUDY'S HYPOTHESIS AND VARIABLES**

Fraenkel and Wallen (2006) report that there are advantages and disadvantages to stating a research hypothesis. The disadvantage in stating a hypothesis includes: (1) it may cause researcher bias, either consciously or unconsciously; (2) it may be unnecessary or inappropriate to make a prediction on the findings; and (3) it may prevent the noticing of other important phenomena (p. 47). For the purpose of this study, the researcher operated from a non-directional hypothesis: for students on probation there will be a difference in the demographic, academic, and or behavioral variable factors for the persistence and non-persistence students. The study is not trying to show causation and make predictions, as there are unknown relationships for the variables of interest and students' perceptions.

The study analyzes selected student demographic, academic, and behavioral characteristics data to determine if there are variable relationships for probation students. Also, the variables are examined between and within the persistence and non-persistence groups to explore the nature of the relationship. While the quantitative approach of the study can establish the significance and strength of the relationship between the variables, the qualitative method can provide an understanding of the relationship from the probation student's perspective.

Limitations of the study are realized in the selected variables, and the subsequent data collected for the study could be misinterpreted. Some student variables have universal as well as different meanings across institutions of higher education. One example to consider as a variable with universal meaning would be cumulative GPA. This calculated average for all the grades recorded on a student's official transcript would be the same across higher education. Some variables draw their meaning from state or federal guidelines such as socioeconomic status, which is measured by Pell eligibility. In this case, the guidelines established by the federal government define what makes a student Pell eligible using universal guidelines. Table 3 outlines the study's variables, brief description, and any unique meaning for the college and study.

Table 3: *Variable Definitions*

VARIABLE	DEFINITION AND/OR EXPLANATION
Age	Age is defined as the length of life for a student based on his or her recorded birth year. A student was assigned to an age category depending on the birth year (18-21 & 22+ years). The college uses these age ranges when conducting surveys to distinguish between the two groups of students.
Sex	The self-reported sex category (male or female) by a student when completing the college application.
Race/Ethnicity	Students voluntarily respond and identify their race/ethnicity on the college's admissions application. The race/ethnicity categories (White, African American, Hispanic, Native American, Asian, International, and Unknown) are in compliance with the Integrated Post-Secondary Educational Data System (IPEDS).
Socioeconomic Status(Pell eligible)	The student's socioeconomic status is a measure of an individual's ability to pay, and he/she may have qualified for need based federal student aid (Pell Grant). The eligibility for Pell is based on a federal formula that is calculated from the Free Application for Federal Student Aid (FAFSA). If a student received a Pell grant at any time while enrolled at the college, he/she would have been recorded as Pell eligible.
High School Grade Point Average (GPA)	A calculated cumulative average for all the grades recorded on a student's official high school transcript.
College-Ready/ Remedial Course Placement	Students are placed into a designated course level for Math, English, and Reading depending on their ACCUPLACER assessment and readiness scores. The ACCUPLACER score range for Math and Reading is 0-120, with placement scores for Math readiness being 76 and higher and Reading 70.5 and higher. The ACCUPLACER English score range is 0-8 and requires a 5 and above to be considered for college-ready course placement. Students who place into remedial or what the colleges calls developmental courses in these three academic discipline areas are required to take and successfully pass the remedial courses before advancing to college credit-bearing courses.
ACT Composite Score	The American College Testing, Inc. (ACT) calculated score (1-36) for a person who takes the standardized college readiness ACT test or assessment. It is considered an all-in-one average score taken from all four subject area assessments (English, Math, Reading, and Science).

VARIABLE	DEFINITION AND/OR EXPLANATION
Transfer Credit	Students who have attended another college or university and/or participated in the military can have their official transcript reviewed for eligible transfer credits. The credits that are deemed equivalent for awarding credit at the college are posted on the student's transcript. For the study, the transfer credits were considered to determine if the student was a native to the college or had attended another college or university.
Advising Contacts	A student has an opportunity to meet with a professional counselor/advisor for academic and personal guidance by making a scheduled appointment or taking advantage of drop-in visits. All student advising contacts are in person and one-on-one with a college professional.
Orientation Attendance	New students attending the college for the first time in a degree-seeking program are encouraged to attend an orientation program. The three-and-a-half-hour program is designed to welcome new students, provide details on what to expect during the first year, meet with a college advisor to discuss an academic plan, share steps to be successful, and overview college services and resources.
First Year Experience (FYE) Course	New students and those attending for the first time are encouraged to take a two-credit college course that is known as a First Year Experience (FYE) course that prepares a student to be successful in college and in life.
Strategies for College and Life Success (PY) 097	A three-credit course that is required for students who place in two or more developmental education courses at the college. It is also recommended to other students as a success-building course and offers tools and techniques intended to improve learning college and life.
Academic Standing Workshop	Students placed on academic probation are required to attend an Academic Success Workshop before enrolling in future classes at the college.



## **MEASUREMENTS**

For this study, there were 15 student variables selected for measurement and analysis to address the research questions. The categorical variables were measured and analyzed at the nominal level. Four of the quantitative study variables (High School GPA, ACT Composite Score, Age, and Transfer Credits) were measured at the interval level.

## **POPULATION**

The population for this study included all degree-seeking students who were placed on academic probation for the first time at the conclusion of winter 2012 or summer 2012. The student persistence ( $n = 285$ ) group registered either for fall 2012 and winter 2013 or at least one of the two semesters after being placed on probation. The non-persistence ( $n = 1,052$ ) group did not enroll in either fall 2012 or winter 2013 semesters after being placed on probation. Students in both groups were placed on probation under the college's academic standing policy for the first time in either winter or summer 2012. The population for the quantitative data included all the students that met these criteria.

An online survey as a data collection technique for the qualitative data was sent to all probation students. To increase the response rate for the online survey, an additional group of students ( $n = 580$ ) who were identified as being placed on probation at the end of fall 2012, and who persisted into winter 2013, were added to the persistence group. The population and sample selection criteria—degree seeking,

placed on probation for the first time, and registered for least one semester after being placed on probation—for this group were the same as the quantitative persistence group. There was no difference in the group other than the semester they were placed on probation and enrolled. By adding the fall 2013 probation students who persisted, the purposive sample increased ( $n = 865$ ) for the persistence group, improving the sample size and bringing it closer to the non-persistent group ( $n = 1,052$ ) for the online survey data collection. No additional sampling procedures were needed since all the possible probation students meeting the criteria were included.

Table 4 presents an overview of the demographic profile for the probation population by providing the frequency on the selected variables. The profile is further broken down to compare the student characteristics within and between the groups.

Table 4: *Student Characteristics*

DEMOGRAPHIC VARIABLES	ALL PROBATION STUDENTS		PERSISTENCE GROUP		NON-PERSISTENCE GROUP	
	<i>n</i>	% of Group	<i>n</i>	% of Group	<i>n</i>	% of Group
Age (18-21)	669	50.0	181	63.5	488	46.4
Age (22 plus)	668	50.0	104	36.5	564	53.6
Male	737	55.0	156	54.7	581	55.2
Female	600	44.9	129	45.3	471	44.8
White	668	50.0	167	59.0	501	48.0
African American	434	32.5	58	20.0	376	35.0
Hispanic	113	8.5	21	7.0	92	9.0
Asian	19	1.0	10	4.0	9	1.0
Native American	12	1.0	2	1.0	10	1.0
International	4	0.0	1	0.0	3	0.0
Unknown	87	7.0	26	9.0	61	6.0
Pell Eligible	867	64.8	112	39.0	755	72.0

DEMOGRAPHIC VARIABLES	ALL PROBATION STUDENTS		PERSISTENCE GROUP		NON-PERSISTENCE GROUP	
No Pell Eligibility	470	35.2	173	61.0	297	28.0

Table 5 presents the selected academic variable data that were labeled in the SPSS software and overviews the frequency for each of the variables within and between the groups.

Table 5: *Academic Student Characteristics*

ACADEMIC VARIABLES	ALL PROBATION STUDENTS		PERSISTENCE GROUP		NON PERSISTENCE GROUP	
	<i>n</i>	% of Group	<i>n</i>	% of Group	<i>n</i>	% of Group
English College Ready	779	58.0	196	68.8	583	55.4
English Remedial Placement	558	41.7	89	31.2	469	44.6
Math College Ready	502	37.5	138	48.4	364	34.6
Math Remedial Placement	835	62.5	147	51.6	688	65.4
Reading College Ready	880	65.0	210	73.7	670	63.7
Reading Remedial Placement	457	34.2	75.0	26.3	382	36.3
ACT Composite Score (1-17)	219	16.4	50.0	17.5	169	16.0
ACT Composite Score (18+)	384	28.7	116	40.7	268	25.5
No ACT Score	734	54.9	119	41.8	615	58.5
Transfer Credits	195	14.6	58	20.4	137	13.0
No Transfer Credits	1142	85.4	227	79.6	915	87.0

Table 6 summarizes the study's five behavior variables that represent the voluntary and/or required interventions probation students may have participated before or after being placed on academic probation.

Table 6: *Behavioral Student Characteristics*

BEHAVIOR VARIABLES	ALL PROBATION STUDENTS		PERSISTENCE GROUP		NON-PERSISTENCE GROUP	
	<i>n</i>	% of Group	<i>n</i>	% of Group	<i>n</i>	% of Group
No Advising Contacts	1060	79.3	153	53.6	907	86.2
One Advising Contacts	166	12.4	66	23.2	100	9.5
Two or More Advising Contacts	111	8.3	66	23.2	45	4.3
Orientation Attendance	356	26.6	94	33.0	262	24.9
No Orientation Attendance	981	73.4	191	67.0	790	75.1
FYE Course Enrollment	430	32.2	77	27.0	353	33.6
No FYE Course Enrollment	907	67.8	208	73.0	699	66.4
Strategies for College and Life Success (PY97) Course Attendance	299	22.4	40	14.0	259	24.6
No Course Attendance for PY097	1038	77.6	245	86.0	793	75.4
Academic Standing Workshop Attendance	339	25.4	201	70.5	138	13.0
No Workshop Attendance	998	74.6	84	29.5	914	87.0

## **INSTRUMENTATION AND DATA COLLECTION**

The college's student information database served as the data source for the study. The data were accessible to the researcher through a request to the GRCC Institutional Research Department Institutional Review Board. Once permission was received, the researcher provided the approved institutional review board application to both the host institution and Ferris State University. The student data received by the researcher were coded in the college's database by a unique identifiable indicator within the software. This unique identifier code is utilized by the Student Records Office when students are placed on probation for the first time. The college's academic standing probation student unique identifier code within the institution's database made it possible for the researcher to request and collect all relevant student data for the study. The variable data were used to develop a probation group profile and compare the persistence and non-persistence groups. The selected student variable data requested and collected for the study were organized under the following three indicator categories:

- *Demographic* – age, sex, race/ethnicity, socioeconomic status (Pell eligible);
- *Academic* – HS GPA, ACCUPLACER ready/remedial course placement for English, math and reading, ACT composite score, transfer credits;
- *Behavioral* – advising contacts, new student orientation attendance, First Year Experience (FYE) course enrollment, Strategies for College and Life Success (PY97) course enrollment, academic standing workshop attendance.

Once the data were received, they were forwarded to the statistical consultant who imported them into Statistical Package Software Systems (SPSS) software. The initial

output was checked for accuracy and validity before moving forward with any analysis. It was apparent following the data collection and initial analysis that two (ACT composite score and HS GPA) of the 15 variables had missing data. The college's admission policy does not require a student to provide these data. Instead, a student can elect to take the ACCUPLACER assessment to complete his or her application process. These scores are used at the college to assess academic readiness and course placement for English, Math, and Reading. The probation population for the study includes students with missing data for the two variables. The survey design accounted for missing data by requiring students to answer all the questions. For the ACT composite score, 16.7% more of the non-persistence group did not take the test as compared to the persistence group. The missing data are contributed to the host college's admission policy; students are not required to take the ACT for admission purposes; instead they can elect to take the ACCUPLACER test to determine placement. The ACT and ACCUPLACER assess student readiness for college-level placement into English, Math, and Reading. For both of these variables, it is understood that the ability to generalize is limited in informing the study due to the missing data.

The qualitative data were collected for the study through the administration of an online survey. The same probation student groups described above were sent an online survey electronically via email by the College's Institutional Research Office. To strengthen the survey response, an additional group of students placed on probation at the end of fall 2012 and who persisted into winter 2013 were brought into the pool for the online survey. This group was placed on probation and had opportunity to persist

under the same conditions. A total of 1,917 probation students were sent the survey with a total of 85 surveys returned, resulting in a 4.43% online survey total response rate. The survey included 11 closed- and open-ended questions that focused on exploring and gaining a better understanding of the student groups' perceived probation factors, behaviors, experiences, and opinions. Seven of the 11 survey questions were open-ended and encouraged students' comments and reactions to their probation experiences. The research survey, as well as two follow-up reminders, were sent to the probation students' college and preferred email addresses found in the college's student information system. The probation student email described the purpose of the survey and the study that was being conducted. The communication explained that the survey was voluntary and withdrawing was an option at any time, and gave the estimated length of time a student might expect to complete the questions. As a precaution, the probation students were alerted that the survey was focused on academic standing probation and not the financial aid warning or suspension requirements. Survey participants were given an online survey participant informed consent form, which included benefits of participating, anonymity/confidentiality, risk of participating in the research, research data, and process for informed consent, at the same time they received the link to the survey. At the host college, the questions were reviewed by the Dean of Institutional Research and Planning to ensure validity of the survey questions. The researcher took care to ensure that students understood they were being asked to focus on academic standing, as it is well known at the college that students can become confused between the financial aid and academic standing policies

and enforced requirements. The host college has two separate policies and both have a GPA and credit assessment requirements. It is not uncommon for a student to be subject to both policies at the same time. In an effort to minimize confusion, the researcher clarified for the survey respondents this difference to ensure the responses and perceptions from students were addressing the academic standing probation.

The electronic tool SurveyMonkey was used to collect the survey responses from the probation groups. The responses to the survey by the probation groups were forwarded to the researcher with no link to identifiable student information. The student survey response data were coded by question, and by persistence and non-persistence probation groups, in order to understand and compare the two groups. Further coding of the qualitative data was conducted based on the development of themes for each group. The percent of comments by themes for open-ended questions and responses for the closed-ended questions was calculated in order to determine the difference between the responses for the persistent and non-persistent groups. A 5% difference in percentages was considered substantially significant for group comments and responses. This process made it possible to analyze the similarities and differences between persistence and non-persistence groups, as well as for the total probation group.

#### **VALIDITY AND RELIABILITY**

There are limits on the external validity and generalizability of the findings for this study given that the data and analysis are from a single case and one large urban



community college. Merriam (2009) points out that there are strengths and limitations to the case study research design. The strengths in understanding the study's phenomenon when using this design include: (1) it is a means to investigate complex social units with multiple variables, (2) it can be a rich and holistic account with its anchor in real-life situation, and (3) it offers insights and adds meaning that can expand the reader's experience and play an expanding additional research (p. 51). Merriam's statement, "Case study has proven particularly useful for studying educational innovations, evaluating programs, and informing policy" demonstrates design value when exploring the topic of probation interventions and policy (p. 51). However, there are concerns of reliability, validity, and generalizability when using a case study. Hamel (1993) mentions, "The case study has basically been faulted for its lack representativeness . . . and its lack of rigor in the collection, construction, and analysis of the empirical materials that give rise to this study" (p. 23).

In the study, the variable data are collected from all the students placed on probation for the first time during the enrollment periods selected. This method provided a representative and a larger sample size for the study. Vogt (2007) points out, "Researchers using large samples are more likely to be able to detect true relationships among variables" (p. 84).

To minimize the threat to internal validity, there was a decision to use specific and appropriate statistics to analyze the study's quantitative data. To determine the difference between the means of the two groups (persistence and non-persistence), the researcher applied an inference technique, the *t* test, to evaluate the significance of the

results. In addition to the *t* test, the researcher utilized the chi-square test to compare the significance of the persistence and non-persistence variables and an analysis of variance (ANOVA) to determine significances between the means of the quantitative student variables. The effect size of the groups was determined by utilizing the Cramer's V statistic.

Trochim and Donnelly (2006) state that survey research is one of the most important areas of measurement in applied social research. The qualitative approach for the collection of the survey data was standardized by using the tool SurveyMonkey. Research survey practices utilized for the study included: question review by an expert for broad coverage and question design, pilot review of the questions by two enrolled students at the institution to check clarity and readability, communicating the student respondent information would remain anonymous, and providing a letter explaining the purpose of the study. Kelley, Clark, Brown, and Sitzia (2003) have identified that it is necessary to have systematic and thoughtful steps when conducting survey research to ensure the project will stand up to academic scrutiny.

The researcher utilized a cross-sectional sample drawn from a predetermined population that was collected at a specific point in time, to get probation student's perspective. The survey was distributed through the college's Institutional Research Office. This qualitative research method minimized researcher influence and bias by eliminating participant contact in the survey distribution and collection.

## **SUMMARY**

Chapter 3 addressed the methodology used to examine the student variables and the factors that students perceive to contribute to persistence after a student is placed on academic probation at a large urban community college. Further, the study looked at the differences and similarities between the persistent and non-persistent student groups. An overview of the mixed-methods approach incorporating both quantitative and qualitative methodology has been specified in addition to the description of the research design used for this study.

Chapter 4 will provide a post-prospectus methodology, including the execution of the study, organization of the data analysis that includes an overview on the variable frequency for probation groups, statistical test findings, as well as the descriptive comparison for the survey respondents. Further, the differences between variables for the persistence and non-persistence group will be discussed.

## CHAPTER 4: DATA ANALYSIS

### **INTRODUCTION**

The purpose of this comparative study was to explore the student variables and the factors that students perceive to contribute to persistence after a student is placed on academic probation at a large urban community college. Further, the study looks at the differences and similarities between the persistence and non-persistence student probation groups. Archival data from the college's database was included for 1,337 probation students for the study. The quantitative and qualitative analysis and findings on the research data collected are presented and organized in three sections, including: (1) an overview of the data collection method and analysis process, (2) population profile and descriptive statistical analysis, and (3) findings from the descriptive statistics, inferential statistics, and themes that address the quantitative and qualitative analysis for the research questions.

### **DATA COLLECTION METHOD AND ANALYSIS PROCESS**

For the purposes of this study, a statistical consultant was used to assist with the analysis of the data and interpreting statistical results using the Statistical Package for the Social Sciences (SPSS) statistical software and tools. A data analysis guide (Table 7) illustrates how the variables were to be studied in relation to each research question.

Table 7: *Data Analysis Guide*

RESEARCH QUESTIONS	QUANTITATIVE STUDENT VARIABLES	QUALITATIVE SURVEY ITEMS	STATISTICAL APPROACH
<p>Question 1: What factors are associated with persistence for students that have been placed on academic probation?</p>	<p>Demographic</p> <ul style="list-style-type: none"> <li>• Age 18-21 vs 22 and older</li> <li>• Sex</li> <li>• Race/Ethnicity</li> <li>• Socioeconomic status (Pell eligible)</li> </ul> <p>Academic</p> <ul style="list-style-type: none"> <li>• HS GPA</li> <li>• ACCUPLACER – ready and remedial course placement for English, Math, and Reading</li> <li>• ACT composite score</li> <li>• Transfer credits</li> </ul>	<p>Question #2</p>	<p>Inferential Statistical Tests Chi-square One-way ANOVA Cramer’s V</p>
<p>Question 2: What behaviors mattered for persistence of academic probation students?</p>	<p>Behavioral</p> <ul style="list-style-type: none"> <li>• Academic Standing</li> <li>• Workshop attendance</li> <li>• Advising contacts</li> <li>• New student orientation attendance</li> <li>• FYE course enrollment</li> <li>• PY097 course enrollment</li> </ul> <p>Note: There is a mandatory student requirement for attending the workshop and PY097 course with two remedial placements</p>	<p>Questions #1, #6, #7</p>	<p>Chi-square Cramer’s V</p>
<p>Question 3: What are the student perceptions of the college’s intervention strategies for students placed on academic probation?</p>		<p>Questions #3, #4, #5, #8, #9, #10</p>	

This guide provided consistency and served as a checklist for the data analysis process for the study, identifying which variables and survey questions would address specific research questions.

The study's quantitative comparative design analyzed and looked at the 15 independent variables of interest to the dependent variable of persistence. A frequency output was run for all students, as well as the persistence and non-persistence groups, allowing for a better understanding of the percent of distribution and difference for the population and groups. Descriptive statistics were calculated and included the mean, standard deviation, and the range for selected variables. The statistical approach and analysis for the study included chi-square, one-way ANOVA, and Cramer's V. Through the use of these statistical tests, an analysis was done to determine any relationships between the variables and the persistence and non-persistence groups. The student variables were considered to be significant if  $p \leq 0.05$ . Additionally, the Cramer's V statistic was used to calculate the effect size for the different variables on persistence or magnitude of the relationship. The researcher also looked at the correlation, or Cramer's V, and the strength of relationship using the following ranges of magnitude for associations:

<i>Value of Cramer's V</i>	<i>Description</i>
.00 and under .10	Negligible association
.10 and under .20	Weak association
.20 and under .40	Moderate association
.40 and under .60	Relatively strong association

.60 and under .80

Strong association

.80 to 1.00

Very strong association

(Rea & Parker, 1992, p. 203)

This test was used to account for the sensitivity of the study's sample size and to determine substantive strength of relationship for the 15 variables.

For the qualitative data, the college's Institutional Research Office emailed an online survey to the probation students. To strengthen the survey response, an additional group of students placed on probation at the end of fall 2012 and who persisted into winter 2013 were brought into the pool for the online survey. A total of 1,917 probation students, which was not a random sample, were sent the survey with a total of 85 surveys returned, resulting in a 4.43% online survey response rate. The students were assured confidentiality and anonymity when voluntarily responding to the survey. The survey designed for the study included a mix of conditional closed- and open-ended questions. Prior to finalizing the survey for distribution, feedback was gathered from the Dean of Institutional Research and Planning at the host institution to validate question characteristics ensuring relevancy of the questions being asked. The qualitative design collected students' perceived factors that contributed to academic probation, utilization of college support and interventions, and persistence. As part of the review process, the researcher coded survey comments by themes. The percent of comments by themes for open-ended questions and responses for the closed-ended questions were calculated in order to make a comparison between the factors, preferences, similarities, and differences for the groups. A 5% theme variance was

considered substantively significant for comments and responses. This process made it possible to analyze the similarities and differences between persistence and non-persistence groups and for the total respondents.

## **DESCRIPTION OF POPULATION**

Using the SPSS analysis, Table 8 summarizes the overall student frequency and percentage distribution for the selected student variables. Again, the study consisted of two groups of students: persistence group with 285 students (one or two semesters enrolled, 21.3%), and non-persistence group with 1,052 (0 semesters enrolled, 78.7%). The college course placement test results for the entire academic probation group, as determined by the ACCUPLACER placement results, were as follows: English (58.3% college ready, 41.7% remedial placement), Math (35.6% college ready, 62.5% remedial placement), Reading (65.9% college ready, 34.1% remedial placement). It is important to note that the subset group of probation students may have placed in one, or up to a maximum of three, remedial courses when entering the college for their first semester of enrollment; the number of remedial course placements depended on a student's ACCUPLACER score outcome. Two thirds of the students were represented by two race/ethnicity groups: Caucasian (50.0%) and African American (32.5%). Hispanic students made up 8.4% of the probation population. There is a larger percentage of African Americans in the probation groups than found in the overall college population (32.5% vs. 12.7%). A smaller difference exists for Hispanic students when compared to all attending students at the college for winter 2013 (8.4% vs. 7.9%) (Table 8).



Table 8: *Race/Ethnicity Comparison Between All Students at the College and Probation Students*

	ALL ENROLLED STUDENTS WINTER 2013		PROBATION STUDENTS IN STUDY	
	N = 17,040	%	N = 1337	%
Caucasian	11,810	69.3	668	50.0
African American	2,162	12.7	434	32.5
Hispanic	1,340	7.9	113	8.4

Source: IRP Winter 2013 Enrollment Report (GRCC, 2013)

As can be seen in Table 9, the students were split 50.0% between the groups 18-21 years of age and 22 and older, with 81.0% of the population under 30 years of age. Students under 30 years of age for all students attending the college was slightly lower at 77.4%. The percentage of male students was slightly higher (55.1%) than female students (44.9%). When comparing the population to all students at the college for winter 2013, females were slightly higher (52.3%) than male students (47.7%). For the ACT composite score, 54.9% did not take the test and 28.7% had a composite score of 18 points or higher. Of the probation group, 65% were eligible, and accepted, a Pell grant. The majority of the group were native students with 85.4% showing no transfer credits on their transcript.

Table 9: Selected Student Variable Frequency and Percentage Distribution for Population  
(N = 1,337)

VARIABLE	CATEGORY	n	%
Student Groupings	Persistence Group	285	21.3
	Non-Persistence Group	1,052	78.7
English Placement	Remedial	558	41.7
	College Ready	779	58.3
Math Placement	Remedial	835	62.5
	College Ready	502	37.5
Reading Placement	Remedial	457	34.2
	College Ready	880	65.8
Race/Ethnicity	Native American	12	0.9
	Asian	19	1.4
	African American	434	32.5
	Hispanic	113	8.5
	International	4	0.3
	Unknown	87	6.5
	Caucasian	668	50.0
Age (18-21)	No	668	50.0
	Yes	669	50.0
Sex	Female	600	44.9
	Male	737	55.1
ACT Composite	Did Not Take Test	734	54.9
	1–17 points	219	16.4
	18+ points	384	28.7
Pell Grant	No	470	35.2
	Yes	867	64.8
Transfer Credits	No	1,142	85.4
	Yes	195	14.6

## DESCRIPTIVE VARIABLES ANALYSIS

Outlined in Table 10 are the four descriptive student variables that were identified for statistical analysis: age, high school GPA, ACT composite score, and transfer credits. To better understand the range of scores for the population, the results for the descriptive student variables are summarized in Table 10.

Table 10: *Descriptive Statistics for Selected Variables*

VARIABLE	<i>n</i>	<i>M</i>	<i>SD</i>	Low	High
Age	1337	24.77	7.86	18.00	62.00
HS GPA	704	2.46	0.53	0.28	4.16
ACT Composite Score	603	18.98	4.08	0.00	33.00
Transfer Credits	1337	2.47	7.65	0.00	56.00

## STUDENT VARIABLE DISTRIBUTION FOR PERSISTENCE AND NON-PERSISTENCE GROUPS

In Table 11 there is a summary of the variable frequency and percentage distribution for the groups; the persistence group was compared to the non-persistence group for the selected variables. The non-persistence group placed into remedial courses at a higher rate than the persistence probationary group, thus indicating the persistence group had a higher college readiness in the English, Math, and Reading content areas over the non-persistence group. The difference between the two groups was the greatest for math remedial placement with a gap of 13.8% between the persistence and non-persistence groups, which was followed by English (13.4%) and

reading (10.0%). The non-persistence probation group had a higher percentage of African American (35.7%) than the persistence probationary group (20.4%). The persistence group had a higher percentage of Caucasians (58.6%) than the non-persistence group (47.6%). The persistence probation group had a higher percentage of students 21 years of age and under (64%) than the non-persistence probation group (46.4%). The persistence group had a slightly higher percentage of females (45.3%) than the non-persistence group (44.8%). For the ACT composite score, 16.7% more of the non-persistence group did not take the test as compared to the persistence group. The non-persistence group (58.5%) was slightly higher than the persistence group (41.8%) with no ACT score recorded. The ACT composite score variable is one that is recognized as missing data for the probation students. Of the students in the persistence group with ACT scores ( $n = 116$ ), 40.7% scored 18 or higher. Of the students in the non-persistence group with ACT scores ( $n = 268$ ), 25.5% scored 18 or higher. About 39.3% of the persistence group were Pell qualified compared to 71.8% of the non-persistence group. The students who transfer into the college in both the persistence (20.0%) and non-persistence (13%) group were similar, with a slightly higher percentage of students that transfer falling into the persistence group.

Table 11: Student Variable Distribution for the Persistence and Non-Persistence Groups

VARIABLE	CATEGORY	PERSISTENCE GROUPS		NON-PERSISTENCE GROUP	
		<i>n</i> = 285	%	<i>n</i> = 1052	%
English Placement	Remedial	89	31.2	469	44.6
	College Ready	196	68.8	583	55.4
Math Placement	Remedial	147	51.6	688	65.4
	College Ready	138	48.4	364	34.6
Reading Placement	Remedial	75	26.3	382	36.3
	College Ready	210	73.6	670	63.7
Race/Ethnicity	Native American	2	0.7	10	1.0
	Asian	10	3.5	9	0.9
	African American	58	20.4	376	35.7
	Hispanic	21	7.4	92	8.7
	International	1	.4	3	0.3
	Unknown	26	9.1	61	5.8
	Caucasian	167	58.6	501	47.6
Age (18-21)	No	104	36.5	564	53.6
	Yes	181	63.5	488	46.4
Sex	Female	129	45.3	471	44.8
	Male	156	54.7	581	55.2
ACT Composite	Did Not Take Test	119	41.8	615	58.5
	1 – 17 points	50	17.5	169	16.1
	18 + points	116	40.7	268	25.5
Pell Grant	No	173	60.7	297	28.2
	Yes	112	39.3	755	71.8
Transfer Credits	No	227	80	915	87.0
	Yes	58	20	137	13.0

## **FREQUENCY FOR SELECTED BEHAVIOR VARIABLES FOR POPULATION**

Table 12 provides the frequency and percentage distribution for the behavior variables for the probation population. One quarter of the students for the probation group attended the required academic standing workshop. Participation in the workshop is required by the college prior to enrolling in a subsequent term after being placed on probation. The workshop can only be waived by an Academic Advisor/ Counselor following an advising appointment with the student. A scheduling conflict, or other unresolvable timing issue for the student, might warrant a waiver and permission to bypass the workshop in lieu of a one on one advising appointment. Data indicate that 79.0% of the probation population did not have any advising appointment while attending the college, and only 8.3% had two or more appointments. The new student orientation program was attended by 26.6% of the probation population. The college's new student orientation program is strongly encouraged, but not a mandatory requirement, for new students. For first-time enrolling students during academic year 2012-2013, half of the new students attended the new student orientation program (53.0%). Four hundred thirty students (32.2%) enrolled in the optional First Year Experience course (FYE) from the probation population. Additionally, 299 students (22.4%) enrolled in the PY 097 course, Strategies for College and Life Success (Table 2). The PY097 course was required for students who placed into two or more remedial courses as determined by the ACCUPLACER placement assessment for English, Math,

and Reading. Some of the 299 students enrolled in PY097 may have been encouraged to attend by a college faculty/staff member and some may have voluntarily enrolled.

Table 12: *Frequency Counts for Selected Behavior Variables for Population (N = 1,337)*

VARIABLE	CATEGORY	<i>n</i>	%
Workshop Attendance	No	998	74.6
	Yes	339	25.4
Number of Advising Contacts	None	1,060	79.3
	One Appointment	166	12.4
	Two or More	111	8.3
Attended Orientation	No	981	73.4
	Yes	356	26.6
FYE Course Enrollment	No	907	67.8
	Yes	430	32.2
PY 097 Course Enrollment	No	1,038	77.6
	Yes	299	22.4

**FREQUENCY FOR BEHAVIOR VARIABLES FOR PERSISTENCE AND NON PERSISTENCE GROUPS**

In Table 13 there is a comparison in the frequency and percentage distribution between the persistence and non-persistence groups for the selected student behavioral variables; the persistence group (70.5%) were more likely to attend the intervention workshop than the non-persistence group (13.1%). Students were required to attend an intervention workshop in order to re-enroll in a subsequent semester after being placed on probation. The persistence group (46.4%) had a higher rate for making advising/counselor contact for one or more appointments than the non-persistence

group (13.8%). The persistence group (33.0%) had a higher percentage of probation students voluntarily attending orientation than the non-persistence group (24.9%). The non-persistence group (33.6%) was more likely to enroll in the voluntary FYE course than the persistence group (27.0%). The non-persistence group (24.6%) had a higher percentage of enrollment in the PY097 course than the persistence group (14.1%). The PY097 course may have been a requirement for some, or all, of the non-persistence students depending on their college-ready assessment scores on the ACCUPLACER; this would be consistent with the higher rate of non-persistence students placing into remedial courses. A student's participation in four of the five behavioral variables occurred prior to being placed on probation. The only exception was the academic standing workshop.

Table 13: *Frequency Count for Persistence and Non Persistence Group Behavior Variables*

VARIABLE	CATEGORY	PERSISTENCE GROUP		NON-PERSISTENCE GROUP	
		<i>n</i> = 285	%	<i>n</i> = 1052	%
Workshop Attendance	No	84	29.5	914	86.9
	Yes	201	70.5	138	13.1
Number of Advising Appointments	None	153	53.7	907	86.2
	One	66	23.2	100	9.5
	Two or More	66	23.2	45	4.3
Attended Orientation	No	191	67.0	790	75.1
	Yes	94	33.0	262	24.9
FYE Course Enrollment	No	208	73.0	699	66.4
	Yes	77	27.0	353	33.6
	No	245	85.9	793	75.4



VARIABLE	CATEGORY	PERSISTENCE GROUP		NON-PERSISTENCE GROUP	
PY 097 Course Enrollment	No	245	85.9	793	75.4
	Yes	40	14.1	259	24.6

Research Question 1: What factors are associated with persistence for students that have been placed on academic probation?

To answer this question, the quantitative data were analyzed in three ways: chi-square test of significance, Cramer's V statistic (Table 14), and one-way ANOVA tests (Table 15). The chi-square test was used to determine whether there were significant differences between the persistence and non-persistence probation groups on the nine student variables found in Table 3. The Cramer's V statistic test for effect size shows a weak effect of the student variable on persistence grouping, with exception of one variable, Pell eligible. Eight of the nine chi-square tests were significant at the  $p < .05$  level. The student variable sex was not found to be significant. Also, three of the tests had a Cramer's V statistic of less than  $V = .10$ , demonstrating a negligible strength relationship between the variables. Five of the tests had a Cramer's of at least  $V = .10$  and under  $.20$ , demonstrating a weak strength relationship between the variables. One of the tests had a Cramer's of at least  $V = .28$  indicating a moderate strength relationship between the variables; this demonstrates that 28% of the variance of the persistence group is explained by the Pell eligibility variable.

Table 14: *Chi-Square Tests and Cramer's V for Selected Student Variables Based on Group (N = 1,337)*

VARIABLE	PERSISTENCE VS NON-PERSISTENCE SIGNIFICANCE	CRAMER'S V	CORRELATION STRENGTH
English Placement	.000	.111	Weak
Math Placement	.000	.158	Weak
Reading Placement	.003	.094	Negligible
Race/Ethnicity	.000	.167	Weak
Age	.000	.140	Weak
Sex	.882	.004	Negligible
ACT Composite Score	.000	.149	Weak
Pell Eligible	.000	.279	Moderate
Transfer Credits	.002	.085	Negligible

*Note.* Chi-square test  $p < .05$  significance.

Four of the selected variables were measured at the interval level. A second analysis, the one-way ANOVA, was used to test for significance and compare the four variables between the persistence and non-persistence groups. Three of the four relationships were significant at the  $p < .05$  level (Table 15).

Table 15: *One-Way ANOVA Comparisons for Selected Student Variables Based on Groups*

VARIABLE	GROUP	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Age	Persistence	285	23.30	6.873	12.735	.000
	Non-Persistence	1052	25.17	8.062		
HS GPA	Persistence	181	2.52	.50734	3.551	.060
	Non-Persistence	523	2.44	.53975		
ACT Composite	Persistence	166	19.57	4.089	4.731	.030
	Non-Persistence	437	18.76	4.059		
Transfer Credits	Persistence	285	3.43	1.888	231.319	.000
	Non-Persistence	1052	2.21	1.602		

*Note.* Chi-square test  $p < .05$  significance.

From the qualitative results, as shown in Table 16, when asked about the factors that may have contributed to their academic probation, the persistence group pointed to personal factors (46.9%), lack of motivation and focus (20.4%), and academic preparedness (16.3%) as the top three circumstances. The top three factors for the non-persistence group that contributed to academic probation were lack of motivation and focus, personal factors, and college responsible; all were at 23.8%. The next highest contributing factor was that they did not ask for help (19.0%). However, no one in the persistence group mentioned asking for help as a contributing factor. No one in the non-persistence group considered time management to be an issue, and very few considered academic preparedness as a factor. For five of the seven factor categories, there was an 8% difference between what the persistence and non-persistence groups thought

contributed to probation. Two categories demonstrated a similarity between the two groups: lack of motivation and focus (20.4% vs. 23.8%) and other (4.1% vs. 4.8%).

Additionally, the student comments summarized in Table 10 provide the factors for all the probation respondents as to what they perceived as contributing to their academic probation. The primary circumstance contributing to probation for all respondents was personal factors (37.1%), which was followed by lack of motivation and focus (21.4%) and academic preparedness (12.9%). The comments were similar to the persistence group, with the non-persistent group demonstrating one exception, the college responsible (Table 16).

Table 16: *Student Perceptions on Factors Contributing to Probation*

STUDENT COMMENTS: WHAT WERE THE CIRCUMSTANCES OR FACTORS YOU THINK CONTRIBUTED TO YOUR ACADEMIC PROBATION AT THE COLLEGE?	PERSISTENCE <i>n</i> = 49 COMMENTS		NON-PERSISTENCE <i>n</i> = 21 COMMENTS		TOTAL GROUP <i>N</i> = 70	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Personal Factors	23	46.9	5	23.8	26	37.1
Lack of Motivation and Focus	10	20.4	5	23.8	15	21.4
Did Not Ask for Help	0	0.0	4	19.0	4	5.7
Academic Preparedness	8	16.3	1	4.8	9	12.9
College Responsible	2	4.1	5	23.8	7	10.0
Time Management	4	8.2	0	0.0	4	5.7
Other	2	4.1	1	4.8	3	4.3

Research Question 2: What behaviors mattered for persistence of academic probation students?

The six selected behavioral variables (Table 17) were compared between the persistence and non-persistence student groups by calculating chi-square tests. Five of the six variables were significant at the  $p < .05$  level. The only exception was the FYE course enrollment. Two of the six variables had a Cramer’s V statistic of at least  $V = .30$  or greater that demonstrated moderate and strong strength of relationship for persistence (Table 17). The persistence group is more likely to:

- attend the intervention workshop ( $V = .54, p = .001$ ), and
- attend more advising appointments ( $V = .35, p = .001$ ).

The students placed on probation were required to attend the academic standing intervention workshop in order to re-enroll as required by the college’s academic standing policy. The increased likelihood and strength of relationship for persistent students to attend the intervention workshop would have been an expected outcome.

Table 17: *Chi-Square Test and Cramer’s V for Selected Behavior Variables Based on Group (N = 1,337)*

VARIABLE	PERSISTENCE VS. NON-PERSISTENCE	CRAMER’S V	CORRELATION STRENGTH
Advising Contacts	.000	.346	Moderate
Orientation Attendance	.006	.075	Negligible
FYE Course Enrollment	.491	.058	Negligible
PY097 Course Enrollment	.000	.104	Weak

VARIABLE	PERSISTENCE VS. NON-PERSISTENCE	CRAMER'S V	CORRELATION STRENGTH
Workshop Attendance	.000	.540	Strong

Note. Chi-square test  $p < .05$  significance.

From the qualitative results, Table 18 summarizes the responses when the students were asked if they attended the required Probation Academic Success Workshop; 70.0% of the persistence group and 72.0% of the non-persistence group reported attending the workshop. The academic success workshop was attended by 70.6% of all the respondents completing the survey.

Table 18: *Student Workshop Attendance*

STUDENT RESPONSE: DID YOU ATTEND THE REQUIRED PROBATION ACADEMIC SUCCESS WORKSHOP?	PERSISTENCE GROUP <i>n</i> = 60 RESPONDENTS		NON-PERSISTENCE GROUP <i>n</i> = 25 RESPONDENTS		TOTAL GROUP <i>N</i> = 85 RESPONDENTS	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	42	70.0	18	72.0	60	70.6
No	18	30.0	7	28.0	25	29.4

The student comments are summarized in Table 19 regarding their connections in and out of the classroom and with whom. Both the persistence and non-persistence groups indicated they were more likely to connect with faculty, staff, or students. The persistence and non-persistence groups' second highest response was that they did not connect with anyone at the college. When considering faculty, staff, or student connections, the persistence group was more likely to connect than the non-persistence

group (61.3% vs. 43.8%). The non-persistence group demonstrated lower connections in all categories except “other” when compared to the persistence group. For the total respondents, half of the students commented that they connected with faculty, staff, and students in and out of the classroom. One third of the total group indicated they did not connect in and out of the classroom.

Table 19: *Student Connections While on Probation Summary*

STUDENT COMMENTS: WHILE ON ACADEMIC PROBATION HOW DID YOU CONNECT TO FACULTY, STAFF AND OTHER STUDENTS AT THE COLLEGE IN AND OUT OF THE CLASSROOM?	PERSISTENCE <i>n</i> = 31 COMMENTS		NON-PERSISTENCE <i>n</i> = 16 COMMENTS		TOTAL GROUP <i>N</i> = 47	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Connected with Faculty, Staff and Students	19	61.3	7	43.8	26	55.3
Did Not Connect	9	29.0	5	31.2	14	29.8
Other	3	9.7	4	25.0	7	14.9

Table 20 reports the students’ responses to the campus resources they have utilized while on probation. The persistence group’s top three engaging behaviors included tutoring (24.1%), help from instructor (22.6%), and student life involvement (18.5%). The non-persistence group indicated their top three resources included tutoring (26.1%), help from instructor (23.9%), and financial aid and academic advising/planning (19.6%). When looking at the similarity between the two groups on the top three campus resources utilized, tutoring had the highest utilization indicator for both groups (24.1% and 26.1%). The non-persistence group used financial advising 8.7%

more than the persistence group. The involvement with student life for the persistence group was 14.2% higher than the non-persistence group. Career counseling was a resource with the smallest utilization by both groups (6.1% and 6.5%). The non-persistence group is slightly more likely to use the academic advising planning than the total group (19.6% vs. 18.2%). The non-persistence group is 6.6% more likely to use financial advising than the total group, and 10.8% less likely to get involved in student life than the total group. The persistence group is less likely to use academic advising planning, career counseling, tutoring, help from instructor, and financial advising than the total group, although when making the comparison, all showed a less than 2.1% difference. The top three most utilized campus resources for the total group were tutoring, help from instructor, and academic advising/planning (Table 20).

Table 20: *Student Resources Utilized by Probation Students*

STUDENT RESPONSES: CHECK ALL THE CAMPUS RESOURCES YOU HAVE UTILIZED WHILE ON ACADEMIC PROBATION?	PERSISTENCE GROUP <i>n</i> = 146 RESPONDENTS		NON-PERSISTENCE GROUP <i>n</i> = 46 RESPONDENTS		TOTAL GROUP <i>N</i> = 192 RESPONDENTS	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Tutoring (Peer and Labs)	35	24.1	12	26.1	24	24.4
Help from Instructor	33	22.6	11	23.9	44	22.9
Academic Advising/ Planning	26	17.8	9	19.6	35	18.2
Student Life Involvement	27	18.5	2	4.3	29	15.1
Financial Advising	16	10.9	9	19.6	25	13.0
Career Counseling	9	6.1	3	6.5	12	6.2



Research Question 3: What are the student perceptions of the college’s intervention strategies for students placed on probation?

Table 21 summarizes the responses when students were asked to rate their preparedness to continue their classes and complete educational goals. The persistence group (83.3%) felt less prepared than the non-persistence group (92.0%). The majority of the total group (85.9%) felt prepared to continue their classes and complete their educational goals.

Table 21: *Student Preparedness Rating to Continue Classes and Complete Goals*

STUDENT RESPONSE: HOW WOULD YOU RATE YOUR PREPAREDNESS TO CONTINUE YOUR CLASSES AND COMPLETE YOU EDUCATIONAL GOALS?	PERSISTENCE GROUP <i>n</i> = 60 RESPONDENTS		NON-PERSISTENCE GROUP <i>n</i> = 25 RESPONDENTS		TOTAL GROUP <i>N</i> = 85	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
More prepared	50	83.3	23	92.0	73	85.9
Less prepared	10	16.7	2	8.0	12	14.1

In Table 22, the comments are summarized as to why students felt more or less prepared to continue classes and complete their educational goals. These students’ comments were organized into four categories: they felt more academically prepared, they had developed a higher personal awareness on changes needed to be successful, they considered that they were more focused on their career and/or major, or they felt their personal issues had been resolved. The top two reasons that the persistence group offered to explain why they felt they were better prepared to complete their educational goals were resolution to personal issues (31%) and personal awareness on

changes to be successful (28%). The top two reasons that the non-persistence group offered were personal awareness on changes to be successful (32.6%) and increased focus on career and/or major with 26.3%. The non-persistence group rated their focus on career and/or major 7.5% higher than the persistence group and 8.6% higher in academic preparedness. The persistence group rated their resolution of personal issues 20.7% higher than the non-persistence group. The total group considered their personal awareness on changes to be successful (29.4%) as the highest reason for feeling prepared to continue classes and educational goals. The second highest comment was a focus on career and/or major (21.6%) (Table 22).

Table 22: *Student Perceptions on Preparedness*

STUDENT COMMENTS: HOW WOULD YOU RATE YOUR PREPAREDNESS TO CONTINUE YOUR CLASSES AND EDUCATIONAL GOALS?	PERSISTENCE <i>n</i> = 32 COMMENTS		NON-PERSISTENCE <i>n</i> = 19 COMMENTS		TOTAL GROUP <i>N</i> = 51	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Personal Awareness on Changes to Be Successful	9	28.1	6	32.6	15	29.4
Focused on Career and/or Major	6	18.8	5	26.3	11	21.6
Personal Issues Resolved	10	31.2	2	10.5	12	23.5
More Academically Prepared for Class	4	12.5	4	21.1	8	15.7
Other	3	9.4	2	10.5	5	9.8

In Table 23, a summary is presented on the responses from students when they were asked to rate how beneficial eight different student success support interventions were: academic success workshop, meeting with academic advisor, attending study and skill building session, developing academic goals, learning motivation techniques to

achieve, career planning, self-evaluation on personal academic abilities, and personal contact and follow-up from the college. The persistence group found all the interventions to be very beneficial, including the academic success workshop. Their top four were developing academic goals (54.2%), meeting with academic advisor (51.7%), career planning (46.6%), and learning motivation techniques to achieve (44.8%). The non-persistence group found only four of the eight interventions very beneficial, which were career planning (54.2%), self-evaluation on personal academic abilities (54.2%), developing academic goals (50.0%), and personal contact and follow-up from the college (41.7%). The interventions rated somewhat beneficial were meeting with an academic advisor (56.0%), academic success workshop (52.2%), learning motivational techniques to achieve (50.0%), and attending study and skill building session (41.7%). Both the persistence and non-persistence groups have among their top four only two interventions in common, which are developing academic goals and career planning. Only the persistence group found meeting with an academic advisor among the top four, and neither group considered the workshop in the top four.

Table 23: *Student Ratings on Support Resources*

STUDENT RESPONSE: HOW WOULD YOU RATE THE FOLLOWING ACADEMIC PROBATION SUPPORT?	PERSISTENCE GROUP <i>n</i> = RESPONDENTS		NON-PERSISTENCE GROUP <i>n</i> = RESPONDENTS	
Academic success workshop	<i>n</i> = 58	%	<i>n</i> = 23	%
Not Beneficial	12	20.7	6	26.1
Somewhat Beneficial	21	36.2	12	52.2
Very Beneficial	25	43.1	5	21.7
Meeting with academic advisor	<i>n</i> = 58	%	<i>n</i> = 25	%
Not Beneficial	10	17.2	4	16.0
Somewhat Beneficial	18	31.0	14	56.0
Very Beneficial	30	51.7	7	28.0
Attending study and academic skill building session	<i>n</i> = 58	%	<i>n</i> = 24	%
Not Beneficial	14	24.1	6	25.0
Somewhat Beneficial	19	32.8	10	41.7
Very Beneficial	25	43.1	8	33.3
Developing academic goals	<i>n</i> = 59	%	<i>n</i> = 24	%
Not Beneficial	5	8.5	3	12.5
Somewhat Beneficial	22	37.3	9	37.5
Very Beneficial	32	54.2	12	50.0
Learning motivational techniques to achieve	<i>n</i> = 58	%	<i>n</i> = 24	%
Not Beneficial	12	20.7	4	16.7
Somewhat Beneficial	20	34.5	12	50.0
Very Beneficial	26	44.8	8	33.3
Career planning	<i>n</i> = 58	%	<i>n</i> = 24	%
Not Beneficial	10	17.2	3	12.5
Somewhat Beneficial	21	36.2	8	33.3
Very Beneficial	27	46.6	13	54.2

STUDENT RESPONSE: HOW WOULD YOU RATE THE FOLLOWING ACADEMIC PROBATION SUPPORT?	PERSISTENCE GROUP <i>n</i> = RESPONDENTS		NON-PERSISTENCE GROUP <i>n</i> = RESPONDENTS	
Self-evaluation on personal academic abilities	<i>n</i> = 59	%	<i>n</i> = 24	%
Not Beneficial	11	18.6	3	12.5
Somewhat Beneficial	22	37.3	8	33.3
Very Beneficial	26	44.1	13	54.2
Personal contact and follow-up from the college	<i>n</i> = 58	%	<i>n</i> = 24	%
Not Beneficial	18	31.0	8	33.3
Somewhat Beneficial	17	29.3	6	25.0
Very Beneficial	23	39.7	10	41.7

In Table 24, the total group survey responses were analyzed further by combining the somewhat beneficial with very beneficial rating in order to make a comparison between the benefit and no benefit perceptions for the different probation supports by the probation students. Overall, all respondents considered developing academic goals (90.3%), career planning (84.2%), self-evaluation on personal academic abilities (83.1%), and meeting with an academic advisor (83.1%) to be beneficial. The college's probation supports receiving the least benefit when considering the eight probation supports were personal contact and follow-up from the college and the academic success workshop.

Table 24: *Total Group Perceptions on the Benefit and No Benefit for Academic Probation Support*

STUDENT RESPONSE: HOW WOULD YOU RATE THE FOLLOWING ACADEMIC PROBATION SUPPORT?	TOTAL GROUP <i>n</i> = RESPONDENTS	
Academic success workshop	<i>n</i> = 81	%
Not Beneficial	18	22.2
Beneficial	63	77.8
Meeting with academic advisor	<i>n</i> = 83	%
Not Beneficial	14	16.9
Beneficial	69	83.1
Attending study and academic skill building session	<i>n</i> = 82	%
Not Beneficial	20	24.4
Beneficial	62	75.6
Developing academic goals	<i>n</i> = 83	%
Not Beneficial	8	9.7
Beneficial	75	90.3
Learning motivational techniques to achieve	<i>n</i> = 81	%
Not Beneficial	16	19.8
Beneficial	65	80.2
Career planning	<i>n</i> = 82	%
Not Beneficial	13	15.8
Beneficial	69	84.2
Self-evaluation on personal academic abilities	<i>n</i> = 83	%
Not Beneficial	14	16.9
Beneficial	69	83.1
Personal contact and follow-up from the college	<i>n</i> = 82	%
Not Beneficial	26	31.7
Beneficial	56	68.3

When asked to suggest what the college could have done while students were on probation, the students' comments in Table 25 were organized into six categories: improve communication, improve student support and interventions, modify college policy, faculty flexibility, nothing, and other. The top three suggestions from the persistence group were improve communication (28.6%), improve student support and interventions (22.9%), and modify college policy (20.0%). The top three suggestions from the non-persistence group were improve support and intervention (33.3%), improve communication (25.0%), and nothing (25.0%). More of the non-persistence group felt nothing else should be done by the college while on probation compared to the persistence group (25.0% vs. 11.4%). The total group suggested improving communication as the number one strategy and improving student support/interventions as the second. Only 50.0% of the students that answered the survey provided comments on this particular question.

Table 25: *Student Perceptions on College Assistance*

STUDENT COMMENTS: TELL US ANYTHING ELSE WE COULD HAVE DONE AT THE COLLEGE WHILE YOU WERE ON PROBATION.	PERSISTENCE <i>n</i> = 35 COMMENTS		NON-PERSISTENCE <i>n</i> = 12 COMMENTS		TOTAL GROUP <i>N</i> = 47 COMMENTS
	<i>n</i>	%	<i>n</i>	%	%
Improve Communication	10	28.6	3	25.0	27.7
Improve Student Support and Interventions	8	22.9	4	33.3	25.5
Modify College Policy	7	20.0	1	8.3	17.0
Nothing	4	11.4	3	25.0	14.9
Faculty Flexibility	4	11.4	0	0.0	8.5
Other	2	5.7	1	8.3	6.4

In Table 26, the student perceptions when asked about requiring students to attend the academic success workshop are summarized. The majority in the persistence (55.0%) and non-persistence (56.0%) groups felt the workshop should be required.

Table 26: *Student Perception on Requiring the Workshop Intervention*

STUDENT RESPONSE: DID YOU FEEL THE ACADEMIC SUCCESS WORKSHOP INTERVENTION SHOULD BE REQUIRED FOR STUDENTS ON ACADEMIC PROBATION?	PERSISTENCE GROUP <i>n</i> = 60 RESPONDENTS		NON-PERSISTENCE GROUP <i>n</i> = 25 RESPONDENTS		TOTAL GROUP <i>N</i> = 85
	<i>n</i>	%	<i>n</i>	%	<i>n</i>
Yes	33	55.0	14	56.0	47
No	27	45.0	11	44.0	38



In Table 27, the summary of the responses when students were asked about requiring participation in other interventions are presented. The persistence group was more likely to support this action with 53.3% indicating *yes*. However, the non-persistence group had an opposite feeling, with 64.0% indicating *no* when asked about requiring other interventions for students. The persistence group had a smaller difference between the *yes* and *no* opinions with only a 6.6% difference, while the non-persistence group had a clearer opinion with a 28.0% difference that favor not adding required interventions. The total population slightly favored not requiring students on probation to participate in other interventions (51.7%) compared to requiring other interventions (48.2%).

Table 27: *Student Perceptions on Requiring Other Interventions*

STUDENT RESPONSE: SHOULD WE REQUIRE STUDENTS ON PROBATION TO PARTICIPATE IN OTHER INTERVENTIONS?	PERSISTENCE GROUP <i>n</i> = 60 RESPONDENTS		NON-PERSISTENCE GROUP <i>n</i> = 25 RESPONDENTS		TOTAL GROUP <i>N</i> = 85	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
No	28	46.7	16	64.0	44	51.7
Yes	32	53.3	9	36.0	41	48.2

In Table 28, the persistence and non-persistence student comments on whether the college should require students on probation to participate in other interventions are summarized. There were three categories in the student comments including not require anything, require other interventions, and require workshop only. Half of the comments from the persistence students favored requiring other interventions, while

half of the non-persistence students favored not requiring anything. Requiring the workshop only was the least favored option for both groups (11.5% and 16.7%). For the total group, requiring other interventions (44.7%) was slightly favored over not requiring anything (42.1%).

Table 28: *Student Perceptions on Requiring Interventions*

STUDENT COMMENTS: SHOULD WE REQUIRE STUDENTS ON PROBATION TO PARTICIPATE IN OTHER INTERVENTIONS? WHY OR WHY NOT?	PERSISTENCE <i>n</i> = 26 COMMENTS		NON-PERSISTENCE <i>n</i> = 12 COMMENTS		TOTAL GROUP <i>N</i> = 38	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Require Other Interventions	13	50.0	4	33.3	17	44.7
Do Not Require Anything	10	38.4	6	50.0	16	42.1
Require Workshop Only	3	11.5	2	16.7	5	13.2

Table 29 summarizes the student comments when they were asked to suggest successful techniques, or strategies, for a new student to assist him or her in avoiding academic probation and increasing academic student success. The 85 student comments were organized into seven categories:

1. Focus on school and plan,
2. Stay on top of assignments,
3. Use support services,
4. Other,
5. Change policy,

- 6. Engage with faculty, and
- 7. Attend class.

The persistence group favored the following techniques and strategies for a new student to avoid academic probation and contribute to academic success: focus on school and plan (25.8%), with an equal suggestion given to stay on top of assignments (16.7%); use support services (16.7%); and other (16.7%). The non-persistence group’s top four suggestions to contribute to academic success included staying on top of assignments (31.6%), focusing on school and plan (26.3%), using support services (15.8%), engaging with faculty, and other (10.5%). The same top three techniques and strategies were recommended by the persistence and non-persistence groups.

Table 29: *Student Perceptions on Strategies to Avoid Academic Probation*

STUDENT COMMENTS: WHAT SUCCESSFUL TECHNIQUES OR STRATEGIES WOULD YOU SUGGEST TO A NEW STUDENT TO AVOID ACADEMIC PROBATION OR CONTRIBUTE TO ACADEMIC SUCCESS?	PERSISTENCE <i>n</i> = 66 COMMENTS		NON-PERSISTENCE <i>n</i> = 19 COMMENTS		TOTAL GROUP <i>N</i> = 85	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Focus on School and Plan	17	25.8	5	26.3	22	25.9
Stay on Top of Assignments	11	16.7	6	31.6	17	20.0
Use Support Services	11	16.7	3	15.8	14	16.5
Other	11	16.7	2	10.5	13	15.3
Change Policy	7	10.6	0	0.0	7	8.2
Engage with Faculty	4	6.1	2	10.5	6	7.1
Attend Class	5	7.6	1	5.2	6	7.1

## **SUMMARY**

When considering the findings for research question 1 on the factors associated with persistence for probation students, the data analysis found that 8 of the 10 demographic academic variables were statistically significant with the socioeconomic (Pell eligible) variable, demonstrating a moderate relationship for non-persistence. It also appeared that those in the non-persistence group do not recognize themselves as at-risk for academic success, they indicate the college is responsible or probation is something that has been done to them, and they demonstrate an overconfidence. Those in the persistence group acknowledge academic preparedness may have played a role in their lack of academic progress, they recognize what they could do or take personal accountability, and they see that the factors contributing to academic probation are within their control.

When considering the findings for research question 2 on the behaviors that matter for persistence, the data analysis found that four of the five behavioral variables were statistically significant and the workshop attendance and advising contact variables demonstrated strength of relationship for persistence. Accordingly, the workshop would have been an expected behavior due to the requirement for re-enrollment for a probation student; the overall engagement was higher for the persistence group versus the non-persistence group for advising contacts; orientation; support interventions; tutoring; connection to faculty, staff, and students; and student life.

When considering the findings for research question 3 on the student perceptions on intervention strategies, it appears the persistence group may have moved from awareness on changes to be successful to resolution or action. Also, the group has a higher level of engagement, expressed value in interventions and their college requirement, and utilization of support services. The non-persistence group may still be working through the awareness on changes and may still view that action is out of their control. The non-persistence group seemed to have a higher self-confidence to meet their goals and believed they were academically prepared, even when they had less contact with advisors, faculty, staff, and students; utilization of support interventions; and student life. There is agreement between the groups on college assistance and success advice for other students to avoid academic probation. This included improving communication and student support/interventions, staying on top of assignments, focusing on plan, using support services, and engaging with faculty.

In the final chapter, these findings will be reviewed and compared under each of the research questions. Possible conclusions and implications will be drawn from this discussion. Further research for consideration and study will also be suggested.

## CHAPTER 5: SUMMARY, FINDINGS, AND RECOMMENDATIONS

The study sought to explore the student variables and the factors that students perceive to contribute to persistence after a student is placed on academic probation at a large urban community college. Further, the study looked at the differences and similarities between the persistence and non-persistence student probation groups. To address this issue, the mixed-methods study approach explored the following research questions:

- What factors are associated with persistence of students that have been placed on academic probation?
- What behaviors matter for persistence of academic probation students?
- What are the student perceptions of the college's intervention strategies for student probation?

An analysis and better understanding of the variables and perceptions of academic probation students will help to inform strategies for probation students, college policy, processes, and interventions for probation students. Included in this chapter is a discussion of the limitations of the study, summary of research findings, researcher conclusions and implications, and recommendations for future study.

### **DATA COLLECTION METHOD AND ANALYSIS PROCESS**

For the quantitative analysis, variables were selected from three student characteristic areas: demographic, academic, and behavioral. The population included

1,337 probation students at a large urban community college who were placed on probation during winter and summer session 2013. These students were further separated into persistence ( $n = 285$ ) and non-persistence ( $n = 1,052$ ) groups. The variable data collected were reviewed and analyzed for a frequency and distribution student profile for the persistence, non-persistence, and total group. The statistical tests chi-square, Cramer's V, and one-way ANOVA were used to analyze relationships between the variables. Most all of the variables were significant at the  $p < .05$  level. The Cramer's V test, which accounted for the sensitivity of the study's sample size, and substantive strength of relationship for persistence were reported in the findings in Chapter 4.

Through the study's qualitative method, the perceptions of the persistence and non-persistence groups were captured from responses and comments in an online survey. The survey focused on what students believed may have led to academic probation, their utilization and perceived benefits for the college's support and interventions, their engagement and college connections, preparedness, suggested requirements for probation students, strategies for avoiding probation, and improvements the college could make. The survey was sent to the persistence ( $n = 865$ ) and non-persistence ( $n = 1,052$ ) groups with 85 as the total number of respondents. Those who responded to the survey included 60 from the persistence and 25 from the non-persistence groups, resulting in a 4.43% response rate. The student feedback was sorted for themes and analyzed for similarities and differences between the two groups, within the groups, and for the entire group.

## LIMITATIONS AND ASSUMPTIONS

It is understood the study's probation student population and single case design limit the ability to generalize findings to other colleges and probation student experiences. It is also assumed that there is interest in increasing the persistence rate, understanding probation student perceptions, and determining the effectiveness of the interventions and experiences for probation students at other institutions of higher education.

While there can be advantages to conducting a survey and using an online method, such as time efficiency, minimal cost, ability to reach students, and automatic data collections, there are also disadvantages that were assumed in the study. The online survey results are limited in the ability to make inferences for the probation population. It was not possible to determine who completed the survey, assess characteristics for the probation response group, or rule out self-selection respondent bias. Further, the respondents were promised anonymity in order to get more candid student responses. The survey design also yielded a small response rate of 4.43%. However, the ability to contact and receive a response from probation students was limited due to the fact that one of the research groups, the non-persistence, was no longer enrolled. The online survey procedures and questions were reviewed by the host institution's Dean of Institutional Research for effective approach and question quality. The generalizability of the findings for the study was limited to the college's probation population.



The researcher assumes the probation students and subsequent variable data pulled from the college's database were accurately recorded in the system and pulled according to the request information.

## **SUMMARY OF THE FINDINGS**

Research Question 1: What factors are associated with persistence for students that have been placed on academic probation?

For the quantitative analysis, the chi-square was used to compare the nine student variables with the student groups for persistence and non-persistence. Results indicated through statistical tests that eight of the nine variables were significant at the  $p < .05$  level. The variables race/ethnicity; age; English, Math, and Reading placement; ACT composite score; transfer credits; and Pell eligible were all statistically significant, while sex ( $p = .882$ ) did not prove to be statistically significant. The students who persisted were more likely to be non-minority ( $p = .000$ ); place into college level courses at a higher rate for English ( $p = .000$ ), Reading ( $p = .003$ ), and Math ( $p = .000$ ); be 21 years of age or younger ( $p = .000$ ); have an ACT composite score of 18 or higher ( $p = .000$ ), and not be Pell eligible ( $p = .000$ ). When the Cramer's V statistic was used to calculate the effect size for the different variables or strength of relationship, all eight of the nine variables demonstrated a negligible and or a weak relationship. The Pell eligible variable has a Cramer's V = .279, indicating a moderate strength relationship. The non-persistent students were more likely to be Pell eligible with a strength of relationship for this variable.

The one-way ANOVA tests compared the four interval variables of age, high school GPA, ACT composite score, and transfer credits between the persistence and non-persistence groups. Three of the four were significant at the  $p < .05$  level. Specifically, persistent students were younger ( $p = .000$ ), they had a higher ACT composite score ( $p = .030$ ), and more transfer credits ( $p = .000$ ). The high school GPA ( $p = .060$ ) was not found to be significant. A conclusion from these quantitative findings is that while most of the variables were significant, the demographic socioeconomic (Pell eligible) variable appears to demonstrate the strongest relationship to consider for the association to persistence. If students are struggling financially, this could lead to a student working more or possibly selecting work over school. For the non-persistence group, 71.8% were Pell eligible. Further, when combining financial pressure with a student's need to build and/or catch up on academic skills to meet college level expectations, this might influence a decision between college persistence and non-persistence.

For the qualitative analysis, the study's survey asked students: "What were the circumstances or factors you think contributed to your academic probation at the college?" There were seven student response themes reported for the persistence and non-persistence groups. It was harder for the non-persistent students to identify reasons or factors that contributed to their academic probation status. The factors for the non-persistence group pointed to themselves, as much as the college, as to why they were on probation. The non-persistence group did not identify one overwhelming factor, and the group also did not consider academic readiness as a factor. The

quantitative analysis demonstrates the non-persistent students are not as academically prepared as the persistence group. The non-persistent students demonstrated more at-risk factors, including higher remedial course placement and a lower socioeconomic status as determined by Pell eligibility. When combining the quantitative and qualitative results, it appears the non-persistent students do not recognize themselves as at-risk for academic success. From the responses and comments, students demonstrate an overconfidence in their believed likelihood for academic success. Another consideration is perhaps the students are not aware of the risk factors for academic success at the college level, such as remedial placement. The non-persistence group had a higher remedial placement in English (44.6% vs. 31.2%), Reading (36.3% vs. 26.3%), and Math (65.4% vs. 51.6%) when compared to the persistence group. There was a higher placement in all developmental classes for non-persistent students. Yet, the non-persistent students responding to the survey did not think academic preparedness was a factor. A conclusion may be a lack of connection between placement in developmental classes and academic preparedness. It could be that the students see the college as the reason they are being placed in the developmental classes and not their personal academic preparedness. Requiring developmental courses could be viewed by the student as something that is being done to them instead of seeing the placement as the best step to build academic skills and future academic success.

The persistence group comments included more personal reflection in recognizing why they were on probation than the non-persistence group. The persistence group considered personal factors as the top reason for being on probation.

It was interesting that the group could identify personal reasons as the overwhelming factor and the second highest was the lack of motivation and focus. A conclusion from these findings is that the persistence group acknowledges something they could do, or personal accountability, versus the non-persistence group that indicated it was something that had been done to them, and there was no personal accountability recognized.

*Implications for These Findings and Institutional Consideration*

1. Explore ways the developmental program could increase personal student self-awareness on college preparedness. Consider teaching students not only the skills in the developmental class but also the connection between the classes and their value for a student's future academic success in the next level of college courses. Explore academic strength-building modules into courses with ongoing self-tests for students. The additional learning tool could provide an opportunity for students to accelerate academic skills, personally monitor their progress, and contribute to academic self-awareness.
2. Explore the ability to utilize the variables found to be significant in the study to identify groups of students that the college could develop and promote success-focused engagements. For example, the non-persistence student group was more likely to be Pell eligible (moderate strength) and interested in financial advising. This might be an opportunity to message and/or invite students to programs that focus on budgeting, scholarship opportunities,

financial aid requirements, and academic success strategies. Further, the college could identify the non-persistence probation students and encourage them to re-enter the college by offering a personalized financial and academic planning session.

3. Look for ways to build student awareness and skills in self-reflection and behavioral modification for academic success. The peer student voice could be effective through videos and/or incorporated into the intervention workshop by sharing former probation students' reflective experiences and making a student-to-student connection. The non-persistence student group is more likely to be older and minority. In a peer student recruitment program and development of video tools, the college might consider probation students' ability to connect with someone like themselves who returned to good academic standing.
4. Explore the best practices and successful tools for assessing and strengthening student motivation and focus. Look for opportunities to emphasize how students can increase academic motivation and focus, along with successful techniques that could lead to increased persistence. The college has implemented required engagements with students such as FYE class requirement, PY 097 class requirement for two or more developmental placements, new student orientation, and advising case management for at-risk student groups. Perhaps these channels could be used along with other

technology solutions to send just-in-time messages to students on how to stay motivated and focused.

Research Questions 2: What behaviors mattered for persistence of academic probation students?

From the quantitative analysis, the chi-square tests were used to compare the five behavioral variables with the persistence and non-persistence groups. Results indicated through the chi-square statistical tests that four of the five variables were significant at the  $p < .05$  level. The behavioral variables advising contacts, orientation attendance, PY097 course enrollment, and workshop attendance were all statistically significant, while FYE course enrollment did not prove to be statistically significant. When the Cramer's V statistic was used to calculate the effect size for the different variables or strength of relationship, one of the six variables reflected at least a moderate strength relationship between the variables for persistence. An additional variable reflected at least a strong strength of relationship between the variables for persistence. From the analysis the persistence students were more likely to: (1) attend the intervention workshop ( $V = .54, p = .001$ ), and (2) make advising contacts ( $V = .35, p = .001$ ).

Orientation and a first-year experience course are both promoted as a student success strategy. However, in the probation groups for this study, it was surprising that only the advising appointments and intervention workshop demonstrated the strongest relationship for persistence. Orientation and the First Year Experience (FYE) demonstrated a weak relationship for persistence. Attending the intervention workshop

would have been expected since it is a requirement for a student to continue enrollment after being placed on probation. It would make sense that that the students intending to enroll attended the workshop and therefore the variable would have influenced student persistence. It is noted that a student still could decide to not enroll or persist after attending the workshop. A workshop for students at-risk for academic success could be offered earlier in a semester. Faculty could identify students at-risk in the first four weeks of the semester through the early alert online system. Encouraging and offering an incentive for at-risk students' attendance at workshops could be a proactive step prior to potential probation. In conclusion, it appears that contact with an advisor is a behavioral variable that could help probation students to persist based on the findings. The non-persistent students believed one of the top four factors that contributed to their academic probation was not asking for help. Additionally, they were more likely to have less engagement with faculty, staff, and students when compared to the persistence group. The lack of connection seemed to appear from the beginning for non-persistent probation students with a 24.9% participation in new student orientation. Strengthening and increasing on-campus engagement could play an important role in persistence.

From the qualitative results, almost three quarters of the probation student respondents had attended the intervention workshop. Accordingly, all but one third of the students were free to re-enroll at the college and no enrollment block was placed on their student accounts. The majority of the persistence group connected with faculty, staff, and students. However, there was one quarter of persistence students who did

not connect with anyone. The non-persistence group connected at a lower rate to faculty, staff, and students than the persistence group. Three of the top four support services utilized were the same for both probation groups demonstrating similar behaviors (academic advising/planning, help from instructor, and tutoring). The non-persistence group was more likely than the persistence group to use financial advising. This could be attributed to the higher rate of non-persistent students (71.8%) that were Pell eligible and may have had a greater need for financial assistance. The persistence group involvement, or engagement in campus life, was greater than the non-persistence group. Tutoring was the highest engagement behavior for the non-persistence group. This was the same group that indicated that academic preparedness was not a factor. The non-persistence group engaged in more support resources. A conclusion from the student responses indicated that once students are on probation, whether they are persistent or non-persistent, the only difference in the top four engaging behaviors was the student life involvement for the persistence group and financial advising for the non-persistence group.

#### *Implications for These Findings and Institutional Consideration*

1. The college could consider a mandatory advising model while students are accumulating a designated number of credits (12-14 credits or two semesters) to increase the likelihood of a student avoiding probation and perhaps increasing persistence should a student be placed on probation. The persistence group (46%) had a higher frequency of contact with an advisor



than the non-persistence group (13.8%), which would support a mandatory advising model.

2. The college might consider offering workshops or help sessions that focus on how to stay on top of assignments, ways to best utilize support services for success, developing a successful academic plan, and how to engage with faculty. The student encouragement to participate and timing of the support opportunities could be emphasized early in the semester for students to connect and increase their academic success skills. The student follow-up, offering of incentives for participation, and effective encouragement earlier could impact persistence.
3. The college might explore initiatives that would encourage and increase engagement and connections for students. It would be important to reinforce the value and ways to build effective relationships with faculty. Staying on top of assignments was the number one strategy suggested by the non-persistent group. Active engagement with faculty could contribute to an increased commitment to be prepared and stay on top of assignments.
4. Strategies to promote involvement in student life during the first semester for new students could strengthen relationships and engagement. The college has a well-developed and comprehensive student life program. Learning about the persistence group's type of involvement and what got them involved could inform strategies to increase the involvement levels for students and subsequent persistence.

5. While there were similar engaging behaviors for the persistence and non-persistence groups, the college could consider ways to monitor student engagement. The college's one card system could be explored and leveraged to track the number and types of student engagement and connections. The one card system supports the college's student IDs that are issued to all registered students. The cards have technology capability for individual student tracking and reporting.
6. Designing effective communication methods to reinforce the utilization of support resources, and advising, and to promote engagement could impact student persistence before and after a student is placed on probation, specifically with regard to the availability and scope of tutoring services offered at the college, which was the top service utilized by persistent students.

Research Questions 3: What are the student perceptions of the college's intervention strategies for students placed on probation?

From the qualitative analysis, the non-persistence group felt more prepared to continue and they indicated academic preparedness was not a factor that contributed to their being on probation. However, when asked, this group found only four out of the eight interventions very beneficial: developing academic goals, career planning, self-evaluation on personal and academic abilities, and personal contact from the college.

For the persistence group, 80% believed they were more prepared to continue and complete goals because personal issues have been resolved, the group has personal

awareness on what needs to be changed in order to be successful, and they are more focused on career. The group indicated all interventions the college offers were very beneficial. The most beneficial, in order of ranking, were developing academic goals, meeting with an advisor, career planning, and learning motivational techniques to achieve. When commenting on preparedness to continue classes and educational goals, the persistence and non-persistence group have two common categories in their top three: personal awareness on changes to be successful and focus on career and/or major. However, the highest ranked reason was different for each group. The persistence group believed that personal issues were resolved; for the non-persistence group, the personal awareness on changes to be successful was rated the highest. A conclusion on the differences between the groups suggests the persistence group may have moved from personal awareness on changes to taking action related to resolving personal issues (31.2%). However, the non-persistence group may still be working through the awareness on changes to be successful and are not ready to take any specific action to resolve issues (10.5%).

For the persistence group, meeting with an advisor was the second highest most beneficial intervention. The finding corresponds to the study's statistical analysis that showed the favorable impact of advising contacts on persistence. The non-persistence group believed they were more prepared to be successful because of being more focused and having better personal awareness. Yet, they also do not find that the institutional support strategies are as valuable as the persistence group.

In terms of what the college could have done differently, the top two recommendations for both groups included improving communication and student support/interventions, although the non-persistence group said that one of the factors that contributed to probation was the responsibility of the college. Both groups suggested the college should revise its academic probation policy, one of the categories for what the college could do.

An expected finding was the fact that attending the workshop demonstrated statistical significance and strength of relationship for persistence, yet neither group felt overwhelmingly in favor of requiring it. The persistence group who found all the interventions beneficial was more likely to recommend that the college require participation in other interventions. Not surprisingly, the non-persistence group, who found only half of the interventions beneficial and three somewhat beneficial, did not recommend that they become mandatory. This is the group that also thinks the college needs to improve its interventions. A conclusion to consider is that if a student does not see value in a requirement, this may impact its effectiveness and perceived benefit. The non-persistence group appears to favor no requirements, which could be tied to their perceived value of the interventions and support services. An additional influence could be their lack of engagement, demonstrated by a lower participation in orientation (24.9%) for this group compared to the persistence group (33%). This also held true for advising contacts with the non-persistence group, showing lower advising contact (13.8%) compared to the persistence group (46.4%).

When asked about recommendations for assisting other students to avoid being placed on probation, the non-persistence group said that they would recommend staying on top of assignments and focusing on school and educational plan. The top two that the students mention would require personal intrinsic motivation. The persistence group is the population that shows higher levels of self-confidence and perceived benefit consistently in their answers. They are recommending other students use the support services, whereas the non-persistence students indicated they do not need support services to help them be prepared.

The persistence group mentioned three things the college could do to improve: improve communication, support interventions, and modify college policy. Also, the majority said the workshop and other interventions should be required. The things this group would recommend to other students to avoid landing in academic probation would be to focus on school and the educational plan, stay on top of assignments, and use support services.

It is interesting to note that all probation students considered the workshop the least beneficial of interventions. This response could be viewed as an opportunity to evaluate the workshop design and intended learning outcomes. A focus group with probation students could further inform how students perceive ways for the college to increase the benefit and come closer to meeting their needs.

The non-persistence group said the college should improve support and interventions, improve communication, and/or make no changes. They did say the workshop should be required, but they did not suggest other interventions. Additionally,

the group said they would tell other students to stay on top of assignments, focus on school and plan, use support services, and engage with faculty. The persistence group had similar advice for new students to avoid academic probation.

In conclusion, when looking at the interventions and the impact on persistence, the non-persistence group has a higher level of confidence in themselves to meet their goals, even when they had less contact with advisors, had formed fewer connections with faculty staff and students, were little involved with student life, and had an increased financial advising need than the persistence groups. They also thought what they needed to be successful was completely in their hands, as demonstrated by their choice of having better personal awareness and being focused on their career major when asked why they felt they were better prepared to meet their goals.

#### *Implications for These Findings and Institutional Consideration*

1. The findings of the non-persistence group's higher confidence level, lack of value for support resources, mention of interventions improvement, and lack of support for making student requirements could be an opportunity to consider the workshop intervention content and approach. The intervention workshop is led by a college counselor, and perhaps involvement and engagement with successful peer students who have been on probation and successfully returned to good academic standing could impact expectations and perceived value in the intervention process. A second consideration could be the addition of a peer mentoring program designed for first-year

students to encourage advising contacts, building financial awareness and planning, and utilizing support interventions.

2. Both groups mention personal awareness on changes that need to be made to be successful as a reason they feel prepared. The college might consider conducting focus groups with both groups of students to learn more about these reflective changes and if there is more that can be done to support a student to make the needed changes earlier versus later in an effort to reduce the number of students on probation and increase persistence at the college.
3. The recommendations to avoid academic probation comment categories could be incorporated into messages, assessment, and support material. Although orientation was not mentioned by students as a program to attend, it was found to be statistically significant. Relevant student-focused messages could be incorporated into the mandatory orientation that is being planned at the college. The orientation team could consider ways to increase the awareness for students to staying on top of assignments, increase focus on school, use support services, and engage with faculty.
4. Both groups provided specific improvement ideas that could be explored by the institution. The top two ideas (communication, student support and interventions) may not require increased investment. Instead, the college could consider improving and promoting what is in place to increase the student value and effectiveness. A deeper understanding of what students

want, how often, and by what method in these areas could guide improvements.

5. The number of non-persistence students (87%) who did not attend the intervention workshop is much higher when compared to the persistence students (29%). Further, the statistical analysis supports a strong relationship between attending the workshop and persistence. This is an opportunity for the college to consider effective strategies to increase the participation in the intervention workshop once a student is placed on probation. Currently, the communication approach with students is through a mailed probation notification letter with a short turnaround time between probation notification and the start of next enrollment period. Personalized outreach may yield higher workshop participation, clearer understanding of the academic probation status and college support, and opportunity for students to ask questions, and may identify referral services needed for subsequent persistence for the probation group. A key question to answer would be, “How can communication and outreach be improved once a student is notified he or she has been placed on probation?” The institution could do more to gather data and evaluate communication effectiveness to determine if it is meeting student needs and how those communications might be improved.



## **RECOMMENDATION FOR FUTURE STUDIES**

From this study there are recommendations for future research to further the understanding related to variables and student-perceived factors that may impact persistence for academic probation students, specifically at the community colleges.

1. A study on the utilization and effectiveness of an early alert system to support probation student persistence.
2. A study that would explore the motivation and focus for a probation student to persist and be successful at the community college.
3. A study that would explore the most effective student communication strategies and to increase probation students' persistence.
4. A study to explore how mandatory and/or optional support intervention could increase probation students' success and persistence.
5. A longitudinal study to track the success outcomes for academic probation students who persist and do not persist once they are placed on probation.
6. A benchmark study on community college academic standing policies, practices, and interventions and their effectiveness at community colleges.

## **FINAL SUMMARY**

Once students make the important decision to attend the community college, the college has a responsibility to ensure the policies, processes, and services support student success. A college's academic standing policy and support interventions should demonstrate effectiveness in helping academically struggling students to find their way back to a successful academic path toward persistence and completion. From the researcher's perspective, what is most interesting when considering the quantitative and qualitative findings and how they might play out to increase persistence is the focus on a few impactful practices and the student experience. There seems to be promise in

a mandatory advising model and student contact through intervention workshops when offered earlier. The study provided feedback on student perceptions and the sorting of comments by themes for the persistence and non-persistence groups that created a picture as to how the groups see themselves and the support the college offers to them. This insight could be helpful for refining existing support to increase value and benefit for students. It is also interesting to consider how non-persistent students see themselves as confident and prepared. The college messaging and engaging approaches by staff and faculty could be informed by this information. In order to make meaningful connections with the non-persistence group, it will be important for these students to see the value and benefit for them. The researcher believes that keeping the probation student perspective and perceptions in mind, while considering the variables that demonstrate a moderate and/or strong relationship to persistence, might shape future policy, processes, programs, and interventions for this large urban community college.

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## APPENDIX A: ONLINE SURVEY QUESTIONS

## ONLINE ACADEMIC PROBATION STUDENT SURVEY QUESTIONS

1. Did you attend the required Academic Probation Success Workshop?

Yes \_\_\_\_\_ No \_\_\_\_\_

2. What were the circumstances or personal factors you think contributed to your academic probation at the college?

3. How would you rate your preparedness to continue your classes and complete your educational goals?

- Definitely more prepared
- Somewhat more prepared
- Somewhat less prepared
- Definite less prepared

Why do you think this is true? Explain your answer

4. How would you rate the following academic probation support? ( Options: not beneficial, somewhat beneficial, very beneficial)

- Academic Success Workshop
- Meeting with an academic advisor
- Attending study and academic skill building sessions
- Developing academic goals
- Learning motivation techniques to achieve
- Career Planning
- Self –evaluation on personal academic abilities
- Personal contact and follow-up from the college

5. Tell us about anything else we could have done at the college while you were on probation

6. While on academic probation how did you connect to faculty, staff and other students at the college in and out of the classroom?

7. Check all the campus resources you have utilized while on academic probation?

- Academic Advising/Planning
- Help from Instructor
- Career Counseling
- Peer Tutoring
- Tutoring Labs (e.g. Math, Reading, Business)
- Financial Aid Advising

- Student Life Involvement

8. Do you feel the academic success workshop intervention should be required for students on academic probation?

Yes \_\_\_ No \_\_\_

9. Should we require students on probation to participate in other interventions?

10. What successful techniques or strategies would you suggest to a new student to avoid academic probation or that will contributed to academic success?

11. What else would you like to share about your academic or probation experiences?

APPENDIX B: EMAIL COMMUNICATION FOR  
STUDENT PARTICIPATION REQUEST

## Academic Probation Student Email

**From:** Denyce Bening  
**To:** Student email address  
**Subject:** Your Help is Needed – Student Survey – Group (A, B, C, or D)

Dear Student:

The purpose of this survey is to collect feedback and improvement perspectives from GRCC students who have experienced academic probation. In addition to improving practices at GRCC the survey responses will also fulfill a doctoral candidate's degree requirement at Ferris State University. A study overview and consent description has been provided for your review. The voluntary survey should take about 15 minutes and withdrawing is an option at any time. If you decide to participate in the on-line survey, you must provide a response to all questions. Your responses will remain confidential in the GRCC Institutional Research Office and will be compiled in an anonymous format for the doctoral study. Please click on the link below to access the survey.

NOTE: This survey is solely for academic probation feedback at GRCC, and NOT related to the financial aid warning or suspension requirements

Survey Link:

<http://www.surveymonkey.com/s/82TTQWD>

Thank you for taking the time to provide your voice.

Denyse Bening  
Research Technician  
Institutional Research & Planning  
Grand Rapids Community College  
143 Bostwick  
Grand Rapid, MI 49503  
Voice: 234-3470  
Fax: 234-3929  
dbening@grcc.edu

## APPENDIX C: ONLINE SURVEY INFORMED CONSENT FORM

## ONLINE SURVEY PARTICIPANT INFORMED CONSENT FORM

You are invited to participate in a research study titled: *The Effects of the Mandatory Academic Standing Probation Interventions on Student Persistence at Grand Rapid Community College*. Tina Hoxie, a doctoral student at Ferris State University, is conducting this study. You have been asked to participate in an on-line survey because this study examines student perceptions of the required academic probation interventions and experiences for students who are on probation. The purpose of the study is to explore the questions: What are the student perceived factors that lead to academic probation and persistence? Does required participation in the mandatory academic standing interventions impact student persistence and probation status? What support and engagements do students consider helpful when on probation? Your participation in this research study is completely voluntary. Your decision whether or not to participate will not affect your current or future relations with Grand Rapids Community College. If you decide to participate in the on-line survey, you must provide a response to all questions. You are free to withdraw from the survey at any time.

### Benefits of Participating in this Research

Participation in this research provides an opportunity for students to voice their perceptions of the required academic probation interventions and persistence. Your participation may help improve academic probation interventions, and inform institutional leaders on future decisions and planning to support students on probation and increase persistence at the college. Your participation will provide significant value to the study.

### Anonymity/Confidentiality

Each student's individual comments will be confidential and remain anonymous to the researcher. The community college in this study will be identified. Probation student on-line survey responses, statements and comments will be screened for any sensitive concerns or topics. By administering the survey through the GRCC Institutional Research Office the online survey responses will remain confidential. The researcher will be provided with only the responses which will not be linked to individual respondents.



### Risk of Participating in the Research

The researcher will plan to avoid the use of any sensitive comments that may cause the college and the subjects any concern. The draft study will be reviewed by the GRCC Dean of Institutional Research prior to completion and submittal.

### Research Data

The online survey responses will be collected using the online tool SurveyMonkey. The responses will be confidential and no individual identifiable information will be provided to the researcher. The survey responses will be securely maintained by the researcher for a period of two years following the study, at which time they will be destroyed.

### Informed Consent

A participant who decides to complete the survey is giving their consent to participate in the study; understanding that at any time they can exit the survey, thus withdrawing their consent.

Please contact Donna Kragt, GRCC Institutional Review Board Team Leader at (616) 234-4044 or [dkragt@grcc.edu](mailto:dkragt@grcc.edu) for questions related to the study and or online survey.

Results of the study can be made available by contacting the researcher:

Tina Hoxie  
Grand Rapids Community College  
143 Bostwick NE  
Grand Rapids, MI 49503  
[thoxie@grcc.edu](mailto:thoxie@grcc.edu)  
616-234-3926

## APPENDIX D: GRCC IRB APPROVAL



June 13, 2013

Tina Hoxie  
Dean of Student Affairs  
Grand Rapids Community College  
143 Bostwick Ave NE  
Grand Rapids, MI 49503

Dear Tina:

**TITLE OF PROPOSAL:** The Effects of the Mandatory Academic Standing Probation Interventions on Student Persistence at Grand Rapids Community College (Revised Proposal)

This letter is to officially notify you of the approval of your revised request by the Institutional Review Board (IRB) at Grand Rapids Community College. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study. Your proposal has been classified as "Exempt."

You are responsible for immediately informing the Institutional Review Board of any changes to your protocol, or of any previously unforeseen risks to the research participants.

This approval is good from June 12, 2013 to June 12, 2014. If you wish to continue your research after this date, you must complete and submit an updated protocol

Please let me know if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Donna Kragt".


Donna Kragt  
Dean of Institutional Research & Planning  
Chair of the IRB



143 Bostwick Avenue, NE • Grand Rapids, Michigan 49503-3295 • ph: (616) 234-GRCC • fax: (616) 234-4005 • grcc.edu

VISION • As a college of distinction, GRCC inspires students to meet the needs of the community and the world.  
MISSION • GRCC is an open access college that prepares individuals to attain their goals and contribute to the community.

APPENDIX E: FERRIS STATE UNIVERSITY IRB APPROVAL



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To: Dr. Darby Hiller, Ms. Tina Hoxie  
From: Dr. John Pole, IRB Interim Chair

*Institutional Review Board (FSU - IRB)* Office of Academic Research Ferris State University  
1201 S. State Street-CSS 310 H Big Rapids, MI 49307 (231) 591-2553  
IRB@ferris.edu

Re: IRB Application #121106 (Title: *The Effects of the Mandatory Academic Standing Probation Interventions on Student Persistence at Grand Rapid Community College*)  
Date: June 28, 2013

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, "*The Effects of the Mandatory Academic Standing Probation Interventions on Student Persistence at Grand Rapid Community College*" (#121106) and determined that it is exempt-1C, 1E from full committee review. This approval has an expiration date of three years from the date of this letter. As such, you may collect data according to procedures in your application until *June 28, 2016*. It is your obligation to inform the IRB of any changes in your research protocol that would substantially alter the methods and procedures reviewed and approved by the IRB in this application. Your protocol has been assigned a project number (#121106), which you should refer to in future applications involving the same research procedure.

We also wish to inform researchers that the IRB requires follow-up reports for all research protocols as mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) for using human subjects in research. We will send a one-year reminder to complete the final report or note the continuation of this study. The final-report form is available on the IRB homepage. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let us know if the IRB can be of any future assistance.