

EXAMINING THE EFFECT OF EMERGENCY ASSISTANCE PROGRAMS
ON STUDENT RETENTION IN RURAL COMMUNITY COLLEGES

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ABSTRACT

Community colleges are public educational institutions that are designed to meet students' educational and career goals in an affordable and accessible manner. While community colleges have expanded access to higher education opportunities, serving more than 5.1 million students in 2019, the number of students who complete their educational goal is remarkably low. Numerous studies have been undertaken to determine factors that contribute to student attrition in community colleges. These studies indicate that rural community colleges serve primarily low-income students who demonstrate lower academic high school achievement levels and have lower parental expectations to complete a college degree than their urban and suburban peers. In addition, community colleges often serve rural populations that are challenged by transportation, family, and financial needs. This dissertation examined emergency financial assistance as a strategy to increase student retention rates in the rural community college setting. The goal of this study was to provide evidence to assist community colleges in their efforts to raise retention rates and subsequently increase the number of students graduating with a two-year associate's degree.

DEDICATION

This dissertation is dedicated to my family: my mother and father, who have sacrificed and wanted more for me than I could imagine; my husband, who has been my constant support; and my daughter, my sole purpose in this world and my greatest achievement.

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TABLE OF CONTENTS

ABSTRACT.....	iii
DEDICATION.....	iv
ACKNOWLEDGEMENTS.....	v
LIST OF TABLES.....	viii
CHAPTER	
I. INTRODUCTION.....	1
Background.....	2
Statement of the Problem.....	6
Purpose of the Study.....	7
Theoretical/Conceptual Framework.....	8
Research Questions/Hypothesis.....	9
Overview of Methodology.....	11
Significance of Study.....	11
Definition of Terms.....	12
II. LITERATURE REVIEW.....	14
Theoretical Research of Student Attrition and Persistence.....	15
Tinto Conceptual Model of Student Attrition.....	16
Bean and Metzner Student Attrition Model.....	18
Bean Conceptual Model of Student Attrition.....	20
Schertzer & Schertzer Conceptual Model of Attrition.....	21
Summary of Theoretical Research.....	22
Review of Empirical Research.....	23
Retention Behavior in the Community College Setting.....	24
Student Retention in the Rural College Setting.....	27
Retention and Financial Need.....	29
The Impact of Emergency Financial Need on College Retention.....	34
III. METHODOLOGY.....	41
Research Questions.....	41
Research Design.....	42

Population and Samples	46
Variables Analysis	51
Data Analysis and Procedures	52
Limitations of the Study.....	52
Delimitations of the Study	53
Summary	53
 IV. RESULTS	 55
Data and Analysis	57
Retention Rates for Four Virginia Rural Community Colleges.....	57
Reasons Students Sought Emergency Financial Aid	58
Comparisons for Student Retention Aid Versus Not Receiving Aid.....	60
Amount of Emergency Aid and Retention.....	66
Emergency Financial Aid Plus Counseling and Retention	68
Loan Versus Grants and Retention	70
Comparison of All Emergency Aid Programs	72
Demographic Breakdown and Retention of Students.....	73
Gender, Emergency Financial Aid and Retention	73
Marital Status, Emergency Financial Aid and Retention.....	74
Traditional Students Versus Nontraditional Students.....	75
Employment, Emergency Aid, and Retention	76
Examination of Hypotheses	77
 V. DISCUSSION AND CONCLUSION	 79
Summary of Results	82
Relationship of Study to Past Research	87
Recommendations for Practice	88
Recommendations for Further Research.....	90
Conclusion	92
 REFERENCES	 95
 APPENDIX	
 A. VARIABLES ANALYSIS	 100
 VITA.....	 104

LIST OF TABLES

3.1 Comparison of Aspects of Emergency Grant Assistance Programs Showing Impact on Retention.....	46
3.2 Comparison of College Enrollment Data.....	51
4.1 Average Retention Rates of Four Rural Virginia Community Colleges Versus All Virginia Community Colleges	58
4.2 Reasons Students Sought Emergency Financial Assistance.....	59
4.3 Retention Rates of Students Receiving Aid Versus Those Not Receiving Aid.....	61
4.4 Lord Fairfax Community College Retention Rates Emergency Aid Versus No Emergency Aid	62
4.5 Mountain Empire Community College Retention Rates Emergency Aid Versus No Emergency Aid	63
4.6 Patrick Henry Community College Retention Rates Emergency Aid Versus No Emergency Aid	64
4.7 Southwest Virginia Community College Retention Rates Emergency Aid Versus No Emergency Aid	65
4.8 Retention of Students Receiving Aid Compared Versus No Aid All Colleges.....	66
4.9 College Retention General Population Vs. Students Receiving Aid ≤ 500 & ≥ 501	68
4.10 Retention Rates for Students Receiving Aid and Counseling Versus Those Receiving Aid and General Population.....	70
4.11 Retention Rates for Students Receiving Aid with Loan Vs. Grant and General Population.....	72
4.12 Comparison of Emergency Financial Assistance Programs	73
4.13 Gender, Emergency Aid and Retention	74
4.14 Marital Status, Emergency Aid and Retention	75

4.15 Traditional Versus Nontraditional Students, Emergency Aid and Retention76

4.16 Employment, Emergency Aid, and Retention77

CHAPTER I

INTRODUCTION

Community colleges are charged with providing affordable, open access to educational opportunities that prepare individuals to enter the workforce or transfer to four-year universities. Rural community colleges face additional challenges in meeting their mission. Often the populations community colleges serve include a majority of low-income students (Byun, Irvin, & Meece, 2012). These students are more likely to demonstrate lower academic high school achievement levels and have lower parental expectations to complete a college degree than their urban and suburban peers (Byun et al., 2012, p. 117). The emergence of a global economy based on high-tech, high-skill jobs demands that today's workforce acquire knowledge and training beyond high school (Russell, 2011). Despite the acknowledged need to increase the number of students graduating with a minimum of a two-year associate's degree, and concentrated efforts to improve access and completion, rural community colleges continue to experience low completion rates (Juszkiewicz, 2017). While numerous studies have explored the influencing factors and predictive indicators leading to a student's decision to leave college, a solution to solving community college retention has yet to be identified (Bailey, Jagers, & Jenkins, 2015; Byun et al., 2012; Pascarella, Duby, & Iverson, 1983; Tinto, 1975; Zhai & Monzon, 2001).

Background

Almost 5.1 million students were enrolled in a two-year, public college in Spring 2019 according to the National Student Clearing House Research Center (2019). These colleges were designed to serve students who may otherwise be limited from obtaining a college degree due to issues of access, financial need, and academic accomplishment (Goldrick-Rab, Harris, Mazzeo, & Kienzl, 2009). Community colleges offer open access to four-year degree transfer and career technical training options with flexible scheduling at an affordable cost (Rini, 2011). The community college model was first promoted in 1946 by the Truman Commission and later established by the Eisenhower Administration's 1957 Committee on Education beyond the High School (Crookston & Hooks, 2012). Community colleges were and still are viewed as a means for the United States to compete globally, especially in vocational fields (Crookston & Hooks, 2012). With more than 1,000 public community colleges now in existence, access to higher education is available to a significant portion of the population (Snyder & Dillow, 2013).

The community college system is the primary resource Virginia residents utilize to obtain a higher education. In fact, three out of five students who enroll in an undergraduate program in Virginia attend a community college. The Virginia Community College System (VCCS) features 23 colleges and 40 campuses that served 234,369 students in 2017-18 (Virginia Community College System, 2019b). While enrollment in community colleges is strong, retention and completion of community college students is not as robust. Only 26.5% of students actually complete their degree program (Virginia Community College System, 2014). Virginia Community Colleges have been challenged to “triple the number of students graduating, transferring, or completing a workforce credential...including tripling the success of students from underserved populations” (Virginia Community College System, 2014, p. 3). Specifically,

tripling the number of credentials that students earn is the single goal of the Virginia Community College System as part of their Complete 2021 Six Year Strategic Plan (Virginia Community College System, 2019a). As a result, Virginia Community Colleges continue to explore strategies to increase completion rates in program delivery as well as to improve the academic and support services offered to students.

Although community colleges strive to provide programs designed to meet the needs of a wide range of students, less than 40% of first time community college freshmen earn a degree or transfer to a four-year institution within six years (Bailey et al., 2015). Since 2010, there has been a dramatic drop in community college enrollment, increasing the pressure for colleges to retain the fewer students that do enroll (Juszkiewicz, 2017). The majority of students who enroll in a community college do not complete a degree program and only slightly more than one-third of community college entrants complete a credential of any kind (Juszkiewicz, 2017). Students often leave college due to a lack of financial resources (Advisory Committee on Student Financial Assistance, 2010). Scholarship America (2013) noted that, “More than 30 percent of college students leave after their first-year and 50 percent never graduate. Many of these students leave because of an unforeseen financial emergency“ (p. 30).

Increasing the proportion of students who graduate from college has long been a national concern (Russell, 2011). In a joint session of Congress on February 24, 2009, President Obama set forth a goal that by “2020, America will once again have the highest proportion of college graduates in the world” (Russell, 2011, p. 2), noting that three-quarters of the fastest-growing occupations now require more than a high school diploma. Between 2011 and 2012, President Obama, along with Vice President Biden, introduced several new initiatives and millions in funding to support the goal of increasing access, affordability, and completion of a college

education, specifically a community college education (Russell, 2011). In fact, Obama proposed that community colleges should produce five million new graduates by 2020 (Russell, 2011). The American Association of Community Colleges (2019) states that since 2012, the “nation’s two-year colleges have had a singular focus on restoring the United States to being first in the world in degree attainment” (p. 1). To do this, the American Association of Community Colleges (AACC) (2019) proposed focusing on three major areas: college access, student success, and completion. Access to college and the financial security of the enrolled are correlated (Advisory Committee on Student Financial Assistance, 2010).

Numerous programs and initiatives have been launched to prevent students from leaving college prior to graduation (Ajose, MacGregor, Yan, & Pih, 2007). One program aimed at improving retention and completion in higher education is the Dreamkeepers Emergency Financial Aid Program. Launched in 2005 by the Lumina Foundation for Education, the Dreamkeepers Emergency Financial Aid Program was created to assist community college students at risk of dropping out due to unexpected financial crises (Scholarship America, 2013). The Dreamkeepers program provides a safety net for students by helping them overcome unforeseen financial needs so they can remain in school to achieve their goals. The program is administered by Scholarship America, with 11 community colleges participating (Scholarship America, 2013). Two community colleges in Virginia, Mountain Empire Community College in Big Stone Gap and Patrick Henry Community College in Martinsville, were selected because of their rural location and high majority low-income population (Scholarship America, 2013). The colleges were responsible for designing the programs, setting grant award criteria, and raising funds to sustain their programs. Generally, students may apply for emergency assistance if they meet specific enrollment and grade point average requirements, and can demonstrate evidence of

their current financial status including a specific emergency financial need. Students are also required to participate in financial counseling by a trained advisor if they accept a Dreamkeepers award (Scholarship America, 2013).

An informal inquiry of Virginia's 23 community college systems, completed by this researcher, revealed that most colleges administer emergency assistance programs. However, the aspects of those programs vary widely, including how aid is distributed, the funding source of emergency aid, and program requirements. Only two colleges administered an emergency assistance program funded in part by the Scholarship America organization (Scholarship America, 2013). Other assistance programs were developed internally by administration as a component of the Student Services division or were administered by the college's foundation. For example, one emergency assistance program was led and funded by the college's student government association. Another college relied on private funds to support students in need of emergency assistance. Furthermore, the method by which students received funds also varied among schools. Some colleges did not require students to pay back emergency assistance funds. Others required students to pay back the full amount and considered the assistance a loan. Several colleges required financial or personal counseling with emergency assistance. With these varying aspects among programs, there is currently little research that examines the effectiveness of emergency aid assistance on retention and no research that points to which aspects of those programs might lead to higher student retention rates among recipients.

Statement of the Problem

Various research studies have introduced a myriad of factors that may influence retention behavior. For instance, academic preparation, family background, socioeconomic history, student-institution fit, social engagement, and relationships with peers, faculty, and staff all contribute to the success of a college student (Bailey et al., 2015; Byun et al., 2012; Goldrick-Rab et al., 2009; Pascarella et al., 1983; Tinto, 1975, 1987; Zhai & Monzon, 2001). Moreover, numerous studies have explored financial need as a factor in a student's decision not only to attend college, but also in the decision to complete their degree program (Advisory Committee on Student Financial Assistance, 2010; Ajose et al., 2007; Alexander, 2002; Geckeler, 2008; Joo, Durband, & Grable, 2009). A high percentage of community college students qualify for financial aid to cover the cost of tuition (Spellings, 2006). However, other factors, such as loss of job, transportation costs, or financial demands to pay for textbooks, housing, or food can create an emergency financial hardship, which may contribute to a student's decision to leave college (Spellings, 2006).

Geckeler (2008) examined the success of the Dreamkeepers program in assisting students with the completion of their degree, comparing the retention rates of emergency aid recipients to the average retention rates at each campus. While the study only examined the rate at which Dreamkeepers recipients chose to reenroll in college for up to two semesters, the study asserted that continuous reenrollment for two semesters at a two-year community college suggested progression to completion of a college degree. Geckeler (2008) noted that research was lacking in determining if colleges that implement emergency aid programs have higher completion rates for their target populations. A research study has yet to be conducted to evaluate the effectiveness of emergency aid assistance programs in terms of the various aspects of those

programs. For example, examining a student's requirement to pay the award back or participation in financial or personal counseling is currently unknown. A comprehensive causal-comparative study is needed to determine if the implementation of emergency aid programs is an effective strategy for raising community college retention rates, specifically within rural community colleges. In addition, further research is needed to determine what aspects of these programs have a greater impact on retention.

Purpose of the Study

This dissertation examined emergency financial assistance as a strategy to increase student retention rates in the rural community college setting. The purpose of this study was to examine if emergency aid assistance programs impact student completion rates at Virginia rural community colleges, and if aspects of those programs, such as counseling or loan versus grant awards, led to higher retention rates. This study was conducted by examining the completion rate of students who received emergency financial assistance while attending a rural Virginia community college. The types of emergency assistance received were examined, ranging from tuition and book assistance, to transportation and housing needs. Additional variables examined included the provision of loans versus grants and other support services provided such as financial counseling. The first chapter of this dissertation includes a background of the study, the problem statement, the significance of the study, an overview of the methodology, limitations and delimitations, and definitions of key terms.

Theoretical/Conceptual Framework

The conceptual framework for this study was based on behavioral models developed by Spady (1970) and Tinto (1975, 1987). These models assert that student attrition is a longitudinal process, influenced by academic and social factors within the individual student's background and experience (Spady, 1970; Tinto, 1975, 1993). There are a host of social and academic factors that can influence a student's decision process, including high school academic success and social integration within the college experience. In addition to Tinto (1975), Bean and Metzner (1985) also provided a conceptual model for attrition behavior in nontraditional college students that builds on past frameworks. The researchers asserted that external factors, such as employment status, family obligations, and finances, are more of an influence within the nontraditional student population as compared to social integration (Bean & Metzner, 1985; Tinto, 1975).

Bean and Metzner (1985) contended that four variables affect student attrition behavior: academic, background, environment, and to a lesser extent, social integration. A student's finances, employment, and family responsibilities are among those environmental factors listed by Bean and Metzner (1985) that relate to financial need. This study expanded on Bean and Metzner's (1985) consideration of financial need in attrition behavior by specifically examining the retention rates of students who indicated emergency financial need during their college experience. For the purposes of this study, the variable of emergency financial need was defined as a student's ability to pay for expenses during college. Emergency financial needs include food, shelter, and transportation within the college experience, however, tuition and book expenses were also a prevalent need for students applying for assistance (Geckeler, 2008). This

study examined the influence of emergency financial need as a significant influence within the conceptual model of student attrition behavior.

Research Questions/Hypothesis

The hypothesis for this study was rural community colleges that implement emergency grant assistance programs have higher retention rates within the population of students receiving emergency aid assistance as compared to the general population of students. The study investigated the hypothesis that students who received financial and/or personal counseling as a component of emergency aid assistance demonstrated a greater level of retention. The study also predicted students who were required to pay back their emergency assistance were more likely to remain in college.

The following research questions were posed:

1. Do first-time, full-time college students who received emergency financial assistance have a higher retention rate compared to the general population of students who do not receive emergency assistance?
2. Are students who received financial and/or personal counseling as a supplemental component of emergency financial aid assistance retained at a higher rate than students who do not receive financial and/or personal counseling?
3. Do emergency aid recipients who were required to pay back their emergency aid (loan) have a higher retention percentage rate than those recipients who were not required to pay back the emergency aid?

4. From the four colleges examined, which model of emergency aid assistance contributed to the highest retention percentage rate of students?

The following secondary research questions was posed:

5. What is the relationship between retention rate and the following demographic variables?
 - Gender
 - Marital status
 - Traditional versus nontraditional student
 - Employment status

The following main hypotheses were posed:

1. First-time, full-time community college students who received emergency aid assistance were retained at a higher rate than the general student population in their school.
2. First-time, full-time community college students who received financial counseling were more likely to be retained at a higher rate than students who received emergency assistance alone.
3. First-time, full-time college students who were required to pay back the emergency aid had a higher rate of persistence than those students who were not required to pay back the assistance.
4. First-time, full-time college students who received more than \$500 in emergency assistance were more likely to remain in college than those peers who received less than \$500 in assistance.
5. Emergency financial assistance programs with the provision of a grant and counseling services would reflect the highest retention rate of students.

Overview of Methodology

This study utilized a causal-comparative design. Nonexperimental ex post facto retention data available from the VCCS, along with emergency assistance program recipient retention data from six selected VCCS schools, were examined. Initially, the study included six selected rural VCCS schools. However, two of the schools were unable to provide data needed to complete the study. The final four schools chosen reflected diversity in emergency assistance program aspects. Two colleges offered the Dreamkeepers program, which required counseling as a component of emergency assistance. Two additional rural Virginia colleges that offered emergency assistance as loans versus grants were also selected. Representatives administering emergency grant assistance were asked to complete a survey detailing the aspects of their program. Survey data along with retention rates were compiled and analyzed using Statistical Package for the Social Sciences (SPSS) software. Retention and program data from 2011-2014 was utilized.

Significance of Study

The goal of this study was to contribute to the body of knowledge related to retention behavior in college students, specifically in the community college setting. Although conceptual frameworks of retention behavior outlined financial need as a contributing factor in a student's decision to leave college, the need had historically been associated with a student's ability to pay for tuition and fees. While federal financial aid and scholarships can be applied to the cost of tuition, college students with financial need often face the dilemma of having to pay for transportation, housing, food, and other basic expenses. In other words, paying for gas, medical, housing, and food expenses, or facing an unexpected financial crisis, can lead to a student's

decision to leave college and seek full-time or additional employment. The results of this study may make a case for including emergency financial need as a predictive contributor in the conceptual model of student retention behavior. Colleges may also utilize sound evidence that emergency assistance programs should be considered as a proactive strategy in increasing retention and graduation rates.

Definition of Terms

Dreamkeepers Emergency Grant – The Dreamkeepers Emergency Grant program is defined by Scholarship America (2013) as a program that allows students to receive both financial assistance in an emergency situation, as well as access to additional resources and student services, such as access to financial literacy resources. There are currently 43 colleges nationwide that participate in the Dreamkeepers program (Scholarship America, 2013).

Emergency Financial Aid – Short-term loans or grants designed to help students remain in school when the completion of their college education is threatened by financial circumstances that are out of their control (Scholarship America, 2013).

Emergency Grant – An emergency financial aid award that does not require a student to pay back the amount awarded (Scholarship America, 2013).

Low-Income – For the purpose of this paper, low-income will be defined according to the federal financial aid guidelines for financial need in terms of expected family contribution.

Students whose family income indicates an expected family contribution of \$0 will be considered low-income (United States Department of Education, 2014).

Nontraditional Student – According to Metzner and Bean (1987), a nontraditional student can be defined as a student who delays enrollment or does not enter postsecondary education in the same calendar year that s/he finished high school. The student attends college part

time for at least part of the academic year. The student works full-time, usually 35 hours or more per week, while enrolled. The student is financially independent for purposes of determining eligibility for financial aid. The student more than likely has dependents other than a spouse, usually children. In addition, the student may have obtained a general equivalency diploma rather than a traditional high school diploma. For the purposes of this study, a nontraditional student will be defined as one that is older than age 25; traditional students will be considered as a student who is age 25 and below.

Open Access Admission – For the purposes of this study, colleges that employ open access admission allow all students who meet a set of minimum criteria, high school diploma or General Equivalency Diploma (GED), to enroll in college (Geckeler, 2008).

Rural – For the purpose of this paper, rural will be defined as anything that is not urban in accordance with the United States Census Bureau, which includes urbanized areas of 50,000 or more people and urban clusters of at least 2,500 and less than 50,000 people (United States Department of Health and Human Services, 2015).

Traditional Student – For the purposes of this study, a traditional student will be defined as a student who does not fall under the nontraditional definitions as described above (Metzner & Bean, 1987).

Virginia Community College System (VCCS) – The Virginia Community College System is comprised of 23 colleges and 40 campus locations, serving residents within their community by providing two-year degrees and various specialty training and certifications (Virginia Community College System, 2019b).

CHAPTER II

LITERATURE REVIEW

There are many barriers that may impede students from completing their educational goals. A number of research studies have been conducted to provide a better understanding of student attrition behavior in two-year and four-year colleges (Byun et al., 2012; Pascarella et al., 1983; Tinto, 1975, 1993). Causal factors contributing to the decision to leave college as well as comparisons and predictions of attrition rates within specific demographic populations distinguished by race, gender, income level, high school achievement, and other demographic information have also been considered (Byun et al., 2012; Pascarella et al., 1983; Tinto, 1975, 1987; Zhai & Monzon, 2001).

A recent report by the National Student Clearinghouse (as cited in Shapiro et al., 2015) noted that only 39.1% of students enrolled in a two year program, or community college, actually completed a credential (Shapiro et al., 2015). Numerous factors have been attributed to the significant attrition rate, ranging from the student's individual family educational background and financial situation to the college's policies, resources, and quality of instruction. This chapter reviews the research related to retention in the college setting, beginning with a review of theoretical research in conceptual frameworks related to retention behavior. A thorough examination of empirical research related to retention studies within the community college and rural settings is explored, including financial need and its impact on student retention in the community college setting. Finally, a summary of research on support programs related to financial need in the community college setting is reviewed. The relationship of these studies and their potential influence on emergency financial assistance programs and college retention was

addressed throughout this chapter.

Theoretical Research of Student Attrition and Persistence

This section will review the theoretical research of student attrition and persistence. The conceptual models developed by Tinto (1975, 1987), Bean and Metzner (1985), Bean (1980), and Schertzer and Schertzer (2004) will be reviewed. These models provide a strong argument for separating the retention behavior of community college and residential students, due to the community college student's greater likelihood to be a nontraditional and commuter student.

Tinto Conceptual Model of Student Attrition

In order to determine the influence of emergency financial need in a student's decision to leave or complete college, a review of conceptual models related to student attrition and persistence behavior in higher education must first be examined. The Tinto conceptual model of the behavior process of student attrition is the most commonly cited and widely tested model in college completion studies (Summers, 2003). Tinto (1975) asserts that a student's decision to leave college is made at certain points within the college experience. These points include academic and social factors such as social status, high school experiences, and educational goal commitment within the individual student's background that influence the student's decision. Tinto's (1975) model was the first to integrate social influences on college completion. Past studies focused on academic failure in college or forced withdrawal. Furthermore, Tinto's (1975) model was based on Durkheim's (1974) model of the social factors that influence suicide, which was first utilized by Spady (1970) to examine attrition in higher education. Durkheim's (1974) model suggested that social factors, as opposed to or in combination with insanity or mental illness, influence an individual's decision to take their own life. Social factors may

include genetics, geography, or even climate (Durkheim, 1974).

Tinto (1975) argued that college attrition should be separated into two categories: voluntary or forced withdrawal. The circumstances that may influence a student's voluntary withdrawal from college may be vastly different than the circumstances that forced withdrawal by a student for insufficient academic performance. For those students who chose to leave college voluntarily, Tinto (1975) asserted three main contributors: family background, including social and financial status; individual attributes, such as gender, race, and ethnicity; and high school academic preparation. These three factors directly contribute to the student's commitment to educational and institutional goals, including the sacrifice of time and dedication of financial resources (Tinto, 1975). Tinto (1975) further asserted that given individual characteristics, prior experiences, and commitments, a student's integration into the academic and social systems of the college can predict enrollment and commitment to both individual and institutional goals. Tinto (1975) stated "the higher the degree of integration of the individual into the college systems, the greater will be his commitment to the specific institution and to the goal of college completion" (p. 95).

In developing the conceptual model for student attrition behavior, Tinto (1975) relied on past studies examining academic performance related to commitment, gender, and desire for intellectual development and career placement, as well as studies examining the relationship of social integration and peer support in college persistence. In relaying the connection of social integration as an important component in attrition behavior, Tinto (1975) stated that academically successful students who withdraw from college score significantly lower on measures of social relationships than students who complete college or those students who are academically dismissed from college due to poor grade performance. Spady (1970) stated that

acceptance and support provided by college faculty should also be considered as a component of social integration. Economic status is not specifically defined in the Tinto (1975) model; however, family status, or a family's income and expectations of academic performance, is included as an aspect of persistence. Tinto (1975) argued that family income compared with occupation and educational measures, is the least predictor of student attrition in both two and four-year institutions (Jaffe & Adams, 1970). Research further explored in this study demonstrates economic factors to be a significant predictor of student attrition.

Tinto's (1987) research expanded on his 1975 study with a reexamination of student attrition, proposing that the quality of faculty-student interaction and the student's integration into the school are central factors in student attrition. While this model is not used as a primary framework within this study, it is important to note that faculty-student interaction could be considered as a factor within the counseling requirement within some emergency assistance programs. The importance of Tinto's (1975) model to this study is in the consideration of external factors in the decision making process of the student's choice to leave college. The Tinto (1975) model asserts that a pattern exists in the decision to voluntarily withdraw based on a "lack of congruency between the individual and both the intellectual climate of the institution and the social system composed of his peers or student-institutional fit" (p. 117). Defining these external factors with a predictive model of behavior suggests student attrition can be prevented with the influence of college policies and supportive resources. This predictive model is directly related to the premise of this study. Tinto's (1975) model, however, and the research in which he based the framework, does not address the community college setting and a student's financial resources and/or financial support.

Tinto's (1975) model has been challenged because of its focus on student social behavior

that is more typical in four-year residential institutions (Halpin, 1990). Notably, Pascarella et al. (1983) determined that academic integration was more of an influencer on students attending commuter institutions, including two-year community colleges, as opposed to social integration. With the emergence of nonresidential, two-year community colleges, further research and conceptual models have been developed that integrate financial need as an influencer in attrition behavior. Scholarship America (2013) suggested that more recent conceptual models of attrition point to a myriad of factors:

Student characteristics (age, gender, ethnicity, socio economic status), other student variables (parental education level, employment status, marital status), academic ability (high school grade point average, class rank, admission test scores, first-semester college grades), non-cognitive factors motivation, (social integration, intent to return, and career aspirations) and availability and use of student services. (p. 70)

Student attrition may be attributable to a number of influencing factors. However, colleges must delineate which issue among the many can and should be addressed with monetary and resource support. This includes utilizing emergency financial aid as a defense in preventing a student from leaving college.

Bean and Metzner Student Attrition Model

Bean and Metzner (1985) introduced a conceptual model of student attrition based on a review of empirical research in college retention behavior. The model is considered important in the study of attrition behavior because of its differentiation of the nontraditional student. The Bean and Metzner (1985) model asserts that external factors are more of an influence within the nontraditional student population as compared to social integration. Bean (1980) defines nontraditional students by the following characteristics: commuters or nonresidential students; age, defined as students age 25 and up; and students who are enrolled part-time, meaning they

are enrolled in less than 12 credit hours. These factors, according to Bean and Metzner (1985) lessen the “intensity and duration of their interaction with the primary agents of socialization at the institutions in which they attend” (p. 488). Limiting social interaction as a factor in student attrition enables the conceptual model to focus on external factors. These factors include student’s study habits, advising, course availability, attendance, and other environmental variables. Four background variables, educational goals, high school performance, ethnicity, and gender, are also examined with the expectation that each impacts the way nontraditional students interact within the institution (Bean & Metzner, 1985).

The model’s inclusion of commuter, or nonresident status, and its relationship with a student’s attrition behavior, is of relative importance to this study. Bean and Metzner (1985) explained that nonresident students appeared to be dissimilar from the residential students in their decision making process as social integration provides little, if any, influence in their decision to remain in college. The researchers assert that commuters generally have less contact and therefore fewer established relationships within the college setting; social integration is downplayed while other external factors emerge with greater significance. Indirect variables that impact the nontraditional student in retention behavior consist of academic and environmental variables (Bean & Metzner, 1985). Academic variables impacting nontraditional students include study skills, academic advising, absenteeism, and whether or not the student has chosen an academic major (Bean & Metzner, 1985). Environmental variables that influence nontraditional student behavior include finances, hours of employment, outside encouragement, and family responsibilities. Financial-related issues are also a major consideration within environmental influencers (Bean & Metzner, 1985).

The Bean and Metzner (1985) model places considerable emphasis on financial need and stress as predictors of student attrition behavior, both of which relate to the premise of this study. Community colleges do serve a large body of nontraditional students, and are, by nature, commuter institutions. The Bean and Metzner (1985) study provides a predictive model for student attrition and persistence behavior, highlighting the specialized needs of community college students. Of particular concern is the influence of stress in commuter student behavior. Family and personal debt are included in Bean and Metzner's (1985) list of personal stress indicators. Bean and Metzner (1985) also note that, "outside stress factors have appeared with sufficient frequency to warrant a conclusion that outside stress may significantly affect commuter student attrition" (p. 526). Emergency financial need and the provision of emergency financial assistance can be associated with stress factors that may lead to a student's decision to leave college. As Bean and Metzner (1985) noted, more research is needed in this area to determine the impact stress factors have on behavior.

Bean Conceptual Model of Student Attrition

Prior to the Bean and Metzner (1985) student attrition model, Bean (1980) presented a student attrition model based on turnover in work organizations. The Bean (1980) conceptual model differed from the Tinto (1975) model in that it does not rely on the Durkheim (1974) theory that social factors influence suicide. However, the Bean (1980) conceptual model is similar to the Price (1977) model of employee turnover asserting the reasons students leave college are similar to why employees leave organizations (Seidman, 2012). Bean (1980) also noted that his model, as opposed to Tinto's (1975) model, allows path analysis, or the study of causal patterns using the correlations of several variables. This model provided the ability to

determine if the factor is of greater influence in persistence or attrition (McMillan & Schumacher, 2010). Bean (1980) asserted that, “student attrition...is analogous to turnover in work organizations, that is, students leave...for reasons similar to those that cause employees to leave work organizations” (p. 157). Bean’s (1980) causal model contained three independent variables that may influence the dependent variable of student attrition: institutional commitment, organizational determinants, and background. Bean (1980) noted that within retention behavior models, a student’s background must be considered in order to understand the student’s interaction with the college environment.

While the Bean (1980) causal model is not used as a primary conceptual framework for this study, it is one of the first models to demonstrate that influencing factors within student behavior are interrelated. The significance of the Bean (1980) model is related to institutional commitment, one of the influencing factors of attrition behavior noted by Tinto (1975). Interconnected influencers may determine student attrition behavior as noted in this study’s review of emergency financial need and its potential impact on student attrition behavior.

Schertzer and Schertzer Conceptual Model of Attrition

Schertzer and Schertzer (2004) presented a conceptual model of student retention that focuses on the relationship, or academic fit, between student and faculty values. This conceptual model defined academic fit as relating to the level of student integration in the academic and social components of college (Lamport, 1993). The Schertzer and Schertzer (2004) conceptual model stated that academic fit is influenced by student/institution congruency and student/faculty congruency. Student/institution congruency is defined as the connection between a student’s values and goals and the campus environment, including the student’s relationship to employees

outside of faculty members, such as counselors and other staff. Student/faculty congruency is described as developing personal, positive relationships between the student and faculty members beginning with orientation and including advising sessions (Lampton, 1993; Schertzer & Schertzer, 2004). The model suggested that students with a high academic fit are more likely to be satisfied with their college of attendance and stay in school (Schertzer & Schertzer, 2004).

While this conceptual model demonstrates the importance of student and staff relationships in influencing student retention, it failed to address financial factors that may influence academic fit. Schertzer and Schertzer (2004) rely on Tinto's (1975) model related to goal and institutional commitment as a factor in the decision to stay in school. However, social factors, especially in the establishment of relationships between faculty and staff, are the core of the Schertzer and Schertzer (2004) study. The relationship building between the college counselor and the student is a critical factor in the implementation of the Dreamkeepers program within the community college setting (Scholarship America, 2013).

Summary of Theoretical Research

As noted in the above theoretical research of conceptual models for student attrition behavior, there are a number of influencing factors contributing to a student's decision to leave college. These factors can include a student's family background, such as social and financial status. Individual attributes may also include gender, race, ethnicity, and high school academic preparation. Social integration at the college may also be considered. In addition, the quality of faculty and staff relationships and academic fit to the college institution may influence attrition behavior. These conceptual models provide a strong argument for separating the community college population in considering retention behavior; the populations within community colleges

differ significantly, especially with the larger proportion of nontraditional and commuter students.

While a number of models including Tinto (1975), Bean (1980), Bean and Metzner (1985), and Schertzer and Schertzer (2004) are widely accepted as the leading theories in retention behavior, a majority of the conceptual models of attrition developed thus far present a narrowed view of student retention. The majority are based on the experiences of four-year college students as opposed to the unique experiences of two-year community college students. Although the listed influencing factors above are important in predicting student success in college, the impact of financial need, specifically emergency financial need, in developing a predictive model of student retention behavior, has received the least attention by researchers.

Review of Empirical Research

The following empirical research provides a broad review of studies related to community college retention and the challenges associated with retention in rural community colleges. Research on college student financial needs, financial need and retention, and emergency financial need are also presented. Additional support services and their impact on student retention are explored. The goal of the literature review section will be to demonstrate the strong impact that financial need has on student attrition behavior. The literature review will demonstrate that emergency financial assistance should be studied further to determine its viability in retention efforts within rural community colleges.

Retention Behavior in the Community College Setting

Past research in college retention has produced mixed findings outlining the factors influencing a student's choice to leave college, as well as possible strategies in retaining first-year, full-time college students. A majority of these studies base their work on the Tinto (1975) model for student retention behavior. Bean's (1980) attrition model and the Bean and Metzner (1985) model are also utilized, focusing on nontraditional students in the college setting. This section of the literature review will examine empirical research related to college retention with emphasis on studies examining retention behavior in the community college setting. Several studies examining the predictability of the Tinto (1975) model for student retention are addressed. Retention behaviors in rural settings and in the nontraditional population are also explored.

A study completed by Pascarella et al. (1983) supports Tinto's (1975) predictive model for student retention behavior in the college setting, based on student-institution academic fit, individual characteristics, and social integration. The purpose of the Pascarella et al. (1983) study was to build on the theoretical knowledge of student retention behavior by applying a multi-institutional approach. The importance of the Pascarella et al. (1983) study is the finding that academic factors, as opposed to social integration factors, are more likely to influence students to leave at a two-year institution. However, social influencers are more likely to influence retention behavior at four-year institutions (Pascarella et al., 1983). This assertion provides evidence to distinguish attrition behavior between the two-year and four-year college setting.

The Pascarella et al. (1983) study collected longitudinal data of more than 2,300 full-time freshmen from 11 two-year and four-year colleges within the 1978 to 1980 academic years. Students completed a questionnaire to discern their commitment to complete college and the

level of involvement in a variety of activities. In addition, demographic data including gender, age, socioeconomic status, high-school grades, and personality orientations or affiliation needs were obtained. Institutional commitment was defined as a student's rating of the importance of graduating from the college they attend; commitment to graduate was ascertained by asking students to rate their commitment level to graduating from college (Pascarella et al., 1983).

The findings by Pascarella et al. (1983) suggest that external factors such as social integration do play a role in a student's commitment level to their college and to the goal of graduation. However, Pascarella et al. (1983) found that the level of goal commitment of two-year students more significantly influenced persistence. This finding differed from four-year university students, where institutional commitment was the most influential factor in persistence (Pascarella et al., 1983). Secondly, social integration was less of an impacting factor in institutional and goal commitment in two-year students than four-year students. In addition, Pascarella et al. (1983) found that two-year persistence was strongly influenced by background traits, such as socioeconomic status, gender, and academic history, compared to four-year university students. The assertion that there are other significant influencers in a two-year student's goal and graduation commitment were not defined within the study. Pascarella et al. (1983) states, "an alternative explanation is that at least some important determinants of persistence/withdrawal behavior is so idiosyncratic, in terms of external circumstances and personal propensities, that it is difficult to capture in any rational explanatory model" (p. 99). This statement opens up the possibility of additional influencing factors in predicting student retention behavior.

The Pascarella et al. (1983) study notes that students with higher social integration were more likely to leave their commuter college after the first-year. One possible explanation for this

finding was that commuter colleges typically do not offer the same number of social opportunities as residential colleges and the high social-integrated freshman students tend to have high affiliation needs (Pascarella et al., 1983). The Pascarella et al. (1983) study noted that for these high social-integrated students, several pre-college variables such as sex, academic aptitude, family education, and financial background had a higher degree of influence in the student decision-making process:

Students attending a commuter college are a different population to begin with than students residing on-campus. Such initial differences in student selectivity may be a significant determinant of apparent differences in the patterns of variables directly influencing persistence across commuter and residential institutions. (p. 98)

These students may have exhausted those social or integration opportunities by the end of the first-year and are not as likely to engage in new activities in the second year of their college experience (Pascarella et al., 1983).

Fike and Fike (2008) noted that community colleges often have higher concentrations of students with variables that negatively influence attrition as compared to four-year institutions, including first-generation status, low socioeconomic background, and minimal preparation for college. In their quantitative, retrospective study of 9,200 first-time community college students, Fike and Fike (2008) found there are strong predictors for successful completion of degree programs in community colleges. From strongest to weakest, the Fike and Fike (2008) predictors for study participants are listed below:

- passing a developmental reading course
- taking online courses, not taking a developmental reading course
- participating in the student support services program
- passing a developmental writing course
- passing a developmental mathematics course
- receiving financial aid
- father having some college education
- mother having some college education

- the number of semester hours enrolled in the first Fall semester. (pp. 76-79)

For purposes of this study, the Fike and Fike (2008) research raised two noteworthy issues. First, students who participated in the student support services program providing regular counseling and advising sessions with college staff, were more likely to remain in college. The student support services office administers the Dreamkeepers program, outlined in this study as a source of emergency financial aid in two of the community colleges. Counselors in the student services office provide counseling and regular advising sessions to students within the Dreamkeepers program. Second, students who received financial aid were more likely to graduate. Fike and Fike (2008) pointed out a discrepancy in the finding that can lead to a positive correlation with emergency financial need as a significant contributor to retention. Zhai and Monzon (2001) provided evidence that college students believe financial difficulties are the key reason in their decision to remain in school. However, Fike and Fike (2008) demonstrated that financial aid actually improves retention. Fike and Fike (2008) stated “given the diverse types and levels of financial aid available to students, more research is needed to better explain how financial aid affects student persistence” (p. 82).

Student Retention in the Rural College Setting

The location and geography of a college service area may serve as a barrier to completion (Byun et al., 2012; George, 1971; Zhai & Monzon, 2001). Community colleges are, by nature, colleges that serve their local communities. Currently, a majority of two-year colleges in the United States are located in rural areas. Rural fringe schools are defined as being located in an area less than or equal to five miles from an urbanized area, as well as rural territory that is less than or equal to two and one-half miles from an urban cluster. Rural, distant schools are located

more than five miles but less than or equal to 25 miles from an urbanized area and less than 10 miles from an urban cluster. Rural, remote schools are defined as being “located more than 25 miles from an urbanized area and more than 10 miles from an urban cluster” (Keaton, 2013; National Center for Education Statistics, 2013, pp. 3-6).

Students who reside in rural areas and who attend rural community colleges face unique challenges when trying to complete their educational goals (Byun et al., 2012). In a 2012 review of data from the National Educational Longitudinal Study, Byun et al. (2012) examined the difference in enrollment and degree attainment for rural, suburban, and urban students completing high school in 1992. The study also sought to identify high school factors that might lead to differentiations in degree attainment. Byun et al. (2012) found that rural students are less likely to complete a college degree as compared to urban and suburban students. Factors such as income, education level of parents, and preparation for college, may contribute to the lower completion rate among rural students (Byun et al., 2012). Rural students are also more likely to be classified as low-income than urban and suburban students (Byun et al., 2012). The parents of students residing in rural areas are less likely to have completed a four-year degree program compared to parents of students residing in urban and suburban areas (Byun et al., 2012). Rural parents are less likely to expect their children to complete a four-year degree than urban and suburban parents (Byun et al., 2012). In addition, rural students report lower standardized test scores compared to their urban and suburban peers and are less likely to take more rigorous coursework in high school (Byun et al., 2012). The implications of this research suggest that rural students face complex and homogenous challenges that may impact their success in college as compared to their urban and suburban counterparts. Scaling this study’s focus to rural

community colleges allows for the examination of financial concerns that are related to the distinct characteristics of this student population.

Retention and Financial Need

Research indicates one of the primary factors that impede college completion is cost, especially for low-income students (Long, 2010; Spellings, 2006). Over the last two decades, the annual net cost, defined as work and loan burden, of two-year public colleges rose from \$6,260 to \$8,017 for low-income students and from \$7,020 to \$10,830 for moderate-income students (Advisory Committee on Student Financial Assistance, 2010). In addition, low and moderate income students are less likely than middle and high-income students to complete college, with 49% of low and moderate income students completing an associate degree in three-years, compared to a 63% completion rate for middle and high-income students (Advisory Committee on Student Financial Assistance, 2010). While financial aid does assist with tuition costs, the amount of aid may not cover the full cost of college (Long, 2010). Low-income students, especially adult, nontraditional students, struggle with financial burdens associated with attending college, including a forced reduction in their work hours, if employed, and transportation and family expenses (Ajose et al., 2007).

A student's financial need and the associated cost of college may also serve as significant barriers in the academic preparation of high school students and their motivation to attend college. The Advisory Committee on Student Financial Assistance (2010) noted that financial concerns impact a student and their family's educational expectations, academic preparation, and decision to enroll in a four-year college. The report demonstrated that only 64% of students whose parents indicated they were very concerned with the financial aspect of attending college enrolled in a four-year school compared to 89% of their peers whose parents were not concerned

about finances related to college (Advisory Committee on Student Financial Assistance, 2010). The study also noted that a high number of those students whose parents indicated significant financial concern in attending college enrolled in a two-year community college (Advisory Committee on Student Financial Assistance, 2010). However, at least one study suggests that the choice to attend a two-year college may also present financial challenges for low-income students. Cohen, Hanleybrown, Pandit, and Tallant (2012) suggested that low-income students are more likely to attend institutions, such as community colleges, where less financial aid is available. However, students attending two-year colleges were the least likely to apply for financial aid, with only 61% having applied for federal financial aid, as compared to 70% of students entering four-year institution (Ma & Baum, 2016).

A recent study of college promise programs, or programs that provide free tuition for students at two-year community colleges, found that financial planning is only one aspect of low-income first generation student success (Millett, Saunders, & Fishstein, 2018). The study noted that although college promise programs are designed to relieve students of the stress of financial instability due to tuition expenses, there was a substantial need to address other costs associated with colleges, especially for low-income students attending community colleges (Millett et al., 2018). This study also cited further research that food insecurity and homelessness were common issues among low-income undergraduate students, especially at the community college level. A national study of more than 33,000 students at 70 community colleges in 24 states found substantially higher rates of food insecurity among two-year community college students (Goldrick-Rab, Richardson, & Hernandez, 2017). Particularly vulnerable were students who were former foster youth and students with children, with an estimated 63% of students with children experiencing food insecurity during enrollment (Goldrick-Rab et al., 2017). The study

calls for improvements in policy and practice to support basic needs for students as part of retention efforts.

The types of aid that are considered most conducive to completion, such as grants, work-study, and emergency aid, are generally the least available to low-income students at community colleges (Cohen et al., 2012). Ishitani and DesJardins (2002) examined attrition rates of low-income students and their peers, asserting that attrition rates varied depending on the amount and timing of financial aid. More specifically, Ishitani and DesJardins (2002) stated that low-income students are more likely to depart from college than their peers in their first-year. Even more concerning was the finding that low-income students were more likely to depart within the second and third year of college as compared to the first-year (Ishitani & DesJardins, 2002).

Financial difficulties are a key reason for the failure of students to graduate from college (Geckeler, 2008; Thayer, 2000; Zhai & Monzon, 2001). Zhai and Monzon (2001) examined the student records of more than 20,000 students at one of three community colleges in the San Diego Community District who either applied but ended up not enrolling in college in the Fall of 2000, dropped out during the Fall semester of 2000, or who did not return in the Spring of 2001. The purpose of the study was to determine the demographic differences among students who withdrew during the three different time frames and what factors influenced the students' decision to withdraw. In addition, a survey was distributed to a random sample of students to assess their reason for leaving. Zhai and Monzon (2001) found that students who withdrew during the semester tended to be older. High school grade point average (GPA) was not a contributing factor to withdrawal, as students withdrawing during the semester had a higher GPA average than the general population (Zhai & Monzon, 2001). A significant percentage of low-income students failed to complete college, 11.1% versus 9.6% in the general population (Zhai &

Monzon, 2001). Students who withdrew or did not persist had slightly higher proportions of students working full-time (Zhai & Monzon, 2001).

These findings demonstrated that students classified as low-income, who were older, and who worked full-time, were more likely to leave college. Within the community college setting and in the colleges included in this study, a significant number of students are low-income and are considered nontraditional students due to their age range of 24-35. Within the survey questionnaire portion of the study, Zhai and Monzon (2001) found that 31% of respondents cited conflicts with work schedule as the main reason that students withdrew during the Fall semester. The second leading reason cited for withdrawing during the Fall semester was personal reasons, at 21%; 16% cited family obligations, which were not a significant factor in withdrawal in the Spring (Zhai & Monzon, 2001).

The survey also asked students to provide their suggestions on how to retain more students. More financial aid was listed as the fourth leading suggestion, at 16.7%. Parking, class schedule, and the need for more online courses topped the list of suggestions (Zhai & Monzon, 2001). The results of the study indicated that students who withdrew during the semester tended to be female, older, and worked part-time or full-time. Students who did not persist in the following semester tended to be younger, worked part or full-time, and had higher incomes (Zhai & Monzon, 2001). Zhai and Monzon (2001) found that work schedule was a primary reason for all groups to not enroll, withdraw, or fail to reenroll. Zhai and Monzon (2001) asserted,

When community college students do decide to leave...it is primarily the result of the student's struggle to maintain a balance between the academic and social demands of the campus and the responsibilities of off campus life...their off-campus life usually wins out in this constant struggle for balance. (p. 19)

The study also supports the notion that community college students are more diverse than university students, especially in age and employment status.

Thayer (2000) examined the relationship between retention and low-income status in community colleges in an empirical review study. Thayer (2000) argued colleges must take action to develop effective strategies that retain low-income and first generation students. Based on Tinto's (1975) conceptual model of student attrition and subsequent research by Tinto calling for the development of supportive learning communities for first-time, first-generation college students, Thayer (2000) suggested that, "Interventions must address the obstacles often associated with low-income and first generation background. These obstacles include lack of financial resources" (p. 5). Strategies that work for first generation and low-income students are more likely to be successful for the general student population (Thayer, 2000). However, strategies that are designed for general campus populations without specialization for low-income and first generation student needs are not as successful for those students (Thayer, 2000).

Anderson et al. (2018) asserts that meeting a student's financial need may not lead to increased persistence. The Anderson et al. (2018) study examined low-income students enrolled in a two-year community college in Wisconsin who received a \$1,800 state grant to cover expenses beyond tuition. The grant was intended to be a supplement to the Pell grant that would allow students to pay for additional expenses and meet their federally estimated financial need. The goal was to lower student borrowing and avert student attrition (Anderson et al., 2018). However, the majority of the grant recipients were found to have lower retention rates than those that did not receive assistance (Anderson et al., 2018). In fact, Anderson et al. (2018) states that research from the study contributes to growing evidence that counseling and support services, such as advising and guidance, produce better retention results for low-income community college students than additional financial aid. The study suggests that additional research is needed to examine the effectiveness of financial aid on preventing student attrition.

The Impact of Emergency Financial Need on College Retention

Little peer-reviewed academic research exists related to emergency financial need as a factor in the attrition behavior of college students. However, Geckeler's (2008) quantitative study of the Dreamkeepers emergency grants assistance program served as this study's primary source of information related to emergency financial need and student assistance in community colleges. To further explore the impact of emergency financial need, this section of the literature review includes research in the social science sector dealing with the needs of low-income families and low-income college students.

The Geckeler (2008) study was developed and funded by a non-profit public policy research organization contracted by Scholarship America, the funders of the Dreamkeepers program. Geckeler (2008) provided substantive research that emergency financial need is one significant factor in a low-income student's decision to remain in college. The Dreamkeepers Emergency Financial Aid Program, as defined in Geckeler (2008), was designed with three goals: to develop infrastructure within participating schools for delivering emergency financial aid, to learn whether the students who receive such aid stay enrolled in college, and to promote long-term sustainability of the program in the participating schools. Selected to participate in the program were 11 community colleges. The schools were also selected to participate in a second program, the Lumina Foundation's Achieving the Dream: Community Colleges Count. This program was a national initiative aimed at promoting success in community college populations that have traditionally faced barriers to achievement, including low-income students and students of color (Geckeler, 2008). Two of the schools in the Geckeler (2008) study, Mountain Empire Community College and Patrick Henry Community College, are also included in this study.

The Geckeler (2008) study also involved evaluation of a sister program to Dreamkeepers, the Scholarship America-supported Angel Fund. This program assists Native American students with emergency financial assistance in colleges that primarily serve Native American populations and are accredited as a Tribal College and University (Geckeler, 2008). For purposes of this study, data related to the Angel Fund program have been omitted as these students are considered a distinct population group with individual challenges.

In evaluating the Dreamkeepers program, the Geckeler (2008) mixed-method study included quantitative data involving aid recipients as well as qualitative and quantitative data retrieved from interviews, surveys, and focus group sessions with program administrators. Program data was collected from 11 community colleges, located in Florida, New Mexico, North Carolina, Texas, and Virginia. The campuses range in size and location, including small, large, urban, and rural. Program data were collected for the first two years of the program, 2005 and 2006, with additional survey data collected in 2007. One aspect of the data collection that may cause an issue with the results of the Geckeler (2008) study is each of the 11 Dreamkeepers programs surveyed varied in their administrative procedures for distributing awards. Several colleges stipulated the emergency financial assistance would be provided as a loan, to be paid back by the student, over a designated period of time. Others only offered grants without the expectation of being paid back. Other colleges offered a hybrid of loans and grants. In addition, the procedure for raising awareness of the emergency assistance program and the eligibility requirements for students receiving awards varied at each college (Geckeler, 2008).

Colleges required a minimum grade point average, a minimum number of credit hours, and full-time enrollment status to be enrolled in this program. The amount of funds available to students was also limited, as well as the number of times a student could receive the award

(Geckeler, 2008). Students were required to apply for the award and list the reason for their application. In most colleges, a panel or a student counselor administered the award distribution. The Dreamkeepers program variances within the colleges surveyed also serve as limitations considered in this study (Geckeler, 2008).

During the 2005-2006 calendar years, more than 1,600 Dreamkeepers awards were distributed in loans or grants to 1,500 students (Geckeler, 2008). Dreamkeepers recipients, according to the study, were more likely to be older students, parents, first-year students, enrolled full-time, enrolled in a vocational program, and were more likely to receive other financial aid. At some colleges, recipients of Dreamkeepers program assistance were more likely to be women and African American (Geckeler, 2008). Requests were received for the following needs: books, child-care, housing, meals, medical expenses, transportation, tuition, utilities, and other. Housing, books, transportation, tuition, and other were among the top reasons students requested emergency financial assistance. The demographics of the aid recipients reflected the make-up of the college population. African American students were more likely to receive aid in colleges with a higher population of African American students, while some colleges had no African American aid recipients (Geckeler, 2008). It is important to note that often the number of minority students receiving aid was disproportionate to the representation in the study body.

In terms of reenrollment rates, the Geckeler (2008) study randomly sampled six of the 11 participating colleges, collecting reenrollment data for the general population and Dreamkeepers aid recipients from term to term over two periods, Fall of 2005 and Spring of 2006. The study found that out of the six colleges, five reported significantly higher reenrollment rates in the Dreamkeepers recipient population compared to the general population, ranging from a 10% to 25% difference. Geckeler (2008) stated:

Dreamkeepers aid recipients are likely to be different from other students at that college in important and meaningful ways, making it impossible to isolate the effect of emergency aid on retention. The eligibility requirements for emergency aid of a certain minimum GPA, for example, or the completion of a certain minimum number of credits, likely select students with more demonstrated success. Also, students who have sought out minimally advertised funds may be more willing to seek help than other students. In other words, while Dreamkeepers aid recipients may appear to persist at higher rates than other students, this success cannot be attributed to having received a Dreamkeepers award. (p. 33)

While the quantitative data cannot directly link retention and emergency aid assistance, the qualitative data collected from aid recipients and administrators does provide further justification that the program is working. Administrators at all of the colleges surveyed believed the Dreamkeepers program was effective in improving student retention (Geckeler, 2008). One student quoted in the Geckeler (2008) study stated “I just received information that I received a full scholarship to go to [a four-year university]... I don’t think this would have been happening if I hadn’t received this award” (p. 34). Geckeler’s (2008) study asserts that student aid recipients may have benefitted from other student support services as a result of the Dreamkeepers program. Staff at six of the 11 colleges surveyed indicated they always or frequently referred aid recipient applicants to other services on campus, including financial aid and counseling services related to financial planning and budgeting skills. In addition, students were also referred to other social service providers within the larger community for assistance (Geckeler, 2008).

In summary, the Geckeler (2008) research is important to this study in several aspects. First, the Geckeler (2008) study included two Dreamkeepers emergency assistance programs in Virginia and compared their program success to other colleges with varying demographics, rural and urban settings, as well as campus size. This study primarily focused on small to mid-size rural schools, with the two Virginia Dreamkeepers colleges included. However, additional emergency assistance programs in existence at two other colleges were also compared. The goal

for this study was to examine the over-arching success of emergency financial assistance with relation to retention as opposed to the success of the Dreamkeepers program alone. Although Geckeler (2008) raised an important point in discussing the difficulty of isolating the success of Dreamkeepers in retention efforts, this study examined populations of emergency assistance recipients and their retention rate at various schools to assess if specific program components impacted the success rate of students who received the award.

Community colleges serve a large proportion of low-income students, many of which would classify under the fragile family descriptor as living in poverty and facing material hardships (Kalil & Ryan, 2010). Kalil and Ryan (2010) defined the fragile family as a family comprised of unmarried parents or single mothers that experience “significantly higher rates of poverty and material hardship than their counterparts” (p. 39). In an empirical review of data and research in low-income, single parent families, Kalil and Ryan (2010) stated most mothers in fragile families depended on public assistance such as food stamps, housing assistance, and Medicaid; however, additional sources of income were needed. A study by Edin and Lein (1997) of 165 working mothers revealed nearly half received cash assistance from family members, or cash loans to pay for basic necessities for the family. Kalil and Ryan (2010) asserted that these cash support options not only helped families pay for basic expenses, but also facilitated employment, stating “assistance from private sources may help mothers cope during stressful times but may not fundamentally improve their economic circumstances unless it is offered consistently and over long periods of time” (p. 56).

Further research suggested that student financial aid increasingly fails to cover the financial needs of college students. This failure created additional stress factors that influenced a student’s decision to enroll and complete college (Case, 2013). Alexander (2002) asserted that

lower-income students attending public community colleges received less direct federal and state grant aid than low-income students attending for-profit colleges. In addition, the Alexander (2002) study stated that students attending public community colleges were also the least likely to receive federal and state direct student aid assistance. Joo et al. (2009) also provided evidence that financial burdens led students to leave college in a study of the academic impact of financial stress on college students. The quantitative study examined students who chose to leave college in 2004 in one large public university in the southwest United States (Joo et al., 2009). A total of 540 students participated in a web-based questionnaire that posed questions regarding their enrollment and financial status (Joo et al., 2009). The questions were designed to measure academic interruption due to financial concerns. Approximately 17% of survey respondents indicated they had either reduced their course load or dropped out of college for a semester to pay for financial burdens (Joo et al., 2009).

In addition, the Joo et al. (2009) study analyzed characteristics of survey respondents who indicated financial stress to be a cause for dropping out or reducing course load. The study found that 62% of all respondents indicated they were experiencing some type of extreme financial stress, with 5% of respondents indicating that the stress had impacted their academic performance in college (Joo et al., 2009). Students indicating they were financially strained tended to be older, working, and more stressed about their personal or parent finances (Joo et al., 2009). This study is important to note because the finding relates directly to a typical community college population. The population is defined as one with a higher number of older, working students compared to the four-year university population, who are independent and low-income or are dependent children of low-income parents. More research is needed to determine if

emergency financial need, or income needed to pay for housing, rent, or transportation, is a barrier to completion in college.

CHAPTER III

METHODOLOGY

This chapter will cover the methods used in conducting the proposed study, including a description of the research perspective, the selection of colleges and students included in the study, and the process for collecting and analyzing data for comparison. The quantitative study employed a causal-comparative design utilizing ex post facto, longitudinal data (Creswell, 2003; McMillan & Schumacher, 2010). This quantitative study examined the relationship between variables in order to test the hypotheses (Creswell, 2003). The research conducted was not experimental in nature, but examined the effect of programs already in place at four community colleges. Therefore, a causal-comparative research design is indicated (McMillan & Schumacher, 2010).

Research Questions

The following research questions are posed:

1. Do first-time, full-time college students who receive emergency financial assistance have a higher retention rate compared to the general population of students who do not receive emergency assistance?
2. Are students who receive financial and/or personal counseling as a supplemental component of emergency financial aid assistance retained at a higher rate than students who do not receive financial counseling?

3. Do emergency aid recipients who are required to pay back their emergency aid (loan) have a higher retention percentage rate than those recipients who are not required to pay back the emergency aid (Powell, Walker, Chang, & Grantham-McGregor, 1998)?
4. From the four colleges examined, which model of emergency aid assistance contributed to the highest retention percentage rate of students?

Research Design

This study was based on a quantitative, causal-comparative design. Following Institutional Review Board (IRB) approval, a survey was distributed to emergency assistance program administrators within the six initial colleges. The purpose of this survey was to collect specific data related to the characteristics of individual emergency assistance programs in the six colleges initially chosen. Survey results were used to distinguish administrative differences within each aid program, including the provision of counseling services, loans versus grants, and funding mechanisms. Survey respondents were asked to answer the following proposed questions:

- What is the retention rate for your student population in 2011-2014?
- What type of emergency assistance do you offer at your college, such as food, housing, transportation, or other?
- What is the funding source for your emergency assistance program, including grant, private, student-led fundraising, foundation, or other funding sources?
- Are students required to complete financial counseling as a component of their

award or loan, yes or no?

- Are students required to complete personal counseling as a component of their award or loan, yes or no?
- Are students required to pay back the award, yes or no?
- Does your college collect retention data for the students who receive emergency grant assistance, yes or no?
- If your college collects retention data, what is the retention rate of students receiving emergency financial assistance in Fall 2011/Spring 2012, Fall 2012/Spring 2013, and Fall 2013/Spring 2014?
- What is the retention rate of students who did not receive emergency financial assistance in Fall 2011/Spring 2012, Fall 2012/Spring 2013, and Fall 2013/Spring 2014?
- Does your college feel emergency financial assistance is a successful strategy in retaining students, yes, no, or not sure?
- Does your college base emergency financial assistance on criteria such as GPA, enrollment status, or degree-program?
- Please list any other requirement of the award.

Surveys were provided for a two-week period, and results were collected electronically. In addition, the six schools were asked to provide the names and/or retention records for students receiving emergency financial aid assistance from Fall 2011 to Spring 2012, Fall 2012 to Spring

2013, and from Fall 2013 to Spring 2014. Although six colleges were initially included in the research proposal, data was not available at two of the schools. Therefore, only four schools were included in the final research study. As an administrator within the Virginia Community College System, the researcher for the proposed study had ready access to the VCCS Student Information System to obtain the retention status of students identified as emergency aid recipients through their college. However, no internal access to the Student Information System was required as data was provided by each college.

A chi-square test was used to address Research Question 1: do first-time, full-time college students who receive emergency financial assistance have a higher retention rate compared to the general population of students who do not receive emergency assistance? In this research question, the retention rate of students (Retained =1, Not Retained = 0) was examined for two categories of students, those who have benefited from emergency assistance funds (Yes=1) and students who have not received funds (No=0). A comparison of the dependent variable of retention rate and the independent variable of received assistance was made. This comparison determined if students who received emergency financial assistance were retained at a higher rate than students who did not receive aid within their college. As both the independent and dependent variables were nominal in nature, McMillan and Schumacher (2010) state the chi-square test is used to answer questions regarding the relationship based on “frequencies of observations in categories” (p. 312). A two-way classification table was developed to compare the nature of the relationship between the variables (McMillan & Schumacher, 2010).

A second chi-square test was utilized to test Research Questions 2: are students who receive financial and/or personal counseling as a supplemental component of emergency financial aid assistance retained at a higher rate than students who do not receive financial and/or

personal counseling? In this research question, the population examined included only students who have received financial assistance. The dependent variable was retention rate. The independent variable included two levels: students who have received financial counseling (Yes=1) and students who did not receive financial counseling as a component of the emergency grant assistance (No=0). The retention rates for both categories of students was compared to determine if a significant difference exists in the retention rates between the two. As the variables were nominal in nature, a chi-square test using a two-way classification table was the most appropriate to compare the relationships among variables (Hatcher & Stepanski, 1994; McMillan & Schumacher, 2010).

A chi-square test was used to address Research Question 3: do emergency aid recipients who are required to pay back their emergency aid (loan) have a higher retention percentage rate than those recipients who are not required to pay back the emergency aid (Powell et al., 1998)? Again, the population for this test only included students who received emergency grant assistance at the four colleges examined within this study. The retention rate of students who were required to pay back emergency assistance (Yes=1) were compared to students who did not have to pay back emergency assistance (No=0). The comparison of retention rates, utilizing a two-way classification table, was used to determine if there was a significant difference in the two methods of distributing emergency assistance to students.

Finally, the fourth research question called for a comparison of the aspects of the varying emergency aid programs at the four colleges examined to determine which model contributed to the highest retention rate. A summary report of data derived from a chi-square test was constructed (Hatcher & Stepanski, 1994). Table 3.1 provides a description.

Table 3.1

Comparison of Aspects of Emergency Grant Assistance Programs
Showing Impact on Retention

	Grant	Loan	Counseling	No Counseling	Retention Rate FS	Retention Rate FF
Lord Fairfax Community College	X	X		X	74.9	45.9
Mountain Empire Community College	X	X	X		71.3	40.3
Patrick Henry Community College	X	X	X		71.2	40.2
Southwest Virginia Community College	X			X	64.4	37.9

Population and Samples

According to McMillan and Schumacher (2010), researchers should define both the target population and sampling frame when conducting research in which the findings will be generalized. In this study, the target population was first-time, full-time rural community college students who received emergency financial assistance, as well as the general population of first-time, full-time students who did not receive emergency financial assistance. The sample frame was selected from a group of first-time, full-time rural Virginia community college students who had received emergency financial assistance.

An initial informal survey of Virginia’s 23 community colleges was conducted to determine which institutions offered emergency aid assistance to students. The survey also detailed what types of emergency aid assistance were available such as housing, transportation, and food. The demographic classification of the college, rural, urban, or both, was collected. In addition, how the emergency assistance was funded, including grants, private funding, or

student-led fundraising, was gathered. The survey had 15 respondents. The results indicated a majority of the campuses did offer some type of emergency assistance to students, but funding for those programs varied. In examining emergency assistance programs in the community college setting, several assistance options emerged. Two community colleges provided emergency assistance programs through the Lumina Foundation's Dreamkeepers Program. The Dreamkeepers program generally does not fund tuition expenses, but provides funds for basic needs, such as food, shelter, and transportation (Scholarship America, 2013). The additional resources and training offered by the Dreamkeepers program, coupled with counseling and support services for the student, created a unique population of students who should be categorized independently of other emergency assistance programs.

Aside from the Dreamkeepers program, other colleges offered emergency financial assistance funded by varying sources. These sources included grants supported by the colleges' foundation. At one college, the Student Government Association funded emergency assistance. The administration of these programs varied widely. Several colleges required personal or financial counseling for students receiving assistance. Others required students to pay back the full amount of assistance received. To fully document program attributes at each school, further research was needed to determine what types of aid are provided at colleges, the selection process for determining aid recipients, and any requirements of aid recipients such as completing financial counseling or paying back the award.

Based on the informal survey results, the study included four rural community colleges within the scope of research. Data collected was limited to full-time, degree seeking students enrolled in Fall 2011 to Spring 2012, Fall 2012 to Spring 2013, and Fall 2013 to Spring 2014 within the four identified colleges. Two colleges administering the Dreamkeepers program,

Mountain Empire Community College and Patrick Henry Community College, were examined. In addition, Lord Fairfax Community College was proposed for inclusion due to a robust assistance program that offered seven types of emergency financial assistance supported by their college's foundation. Finally, Southwest Virginia Community College was chosen for inclusion as the college's emergency assistance was funded through a grant-based program that was not related to the Dreamkeepers program. The Institutional Review Board (IRB) of the University of Tennessee Chattanooga, as well as the IRBs of the four identified colleges, approved the collection of research data prior to the launch of the study. A description of the colleges included in this study is listed below.

Lord Fairfax Community College (LFCC) is a rural comprehensive, multi-campus public institution of higher education with three campuses, Fauquier, Middletown, and Luray-Page County Center. The college serves eight localities in the Shenandoah Valley and Piedmont regions including the counties of Clarke, Fauquier, Frederick, Page, Rappahannock, Shenandoah, and Warren as well as the city of Winchester, Virginia (Lord Fairfax Community College, 2014). In 2011-12, LFCC had a total enrollment of 7,288 students, 65% of which were listed as degree or certificate seeking. An estimated 28% of students were enrolled full-time. Approximately 74% of students were age 24 and under. An estimated 38% of students were male and 62% female. In terms of race, 83% of students were White, 6% Hispanic, 5% Black or African American, 3% listed as two or more races, 2% were Asian, and 1% listed their race/ethnicity as unknown. Approximately 42% of students qualified for federal Pell grants (United States Department of Education, 2014). LFCC offered seven types of emergency grant assistance, several of which included loans. Others awards were grant based and did not require the student to pay back the assistance (Lord Fairfax Community College, 2014).

Mountain Empire Community College (MECC), located in Big Stone Gap, Virginia, is a rural, comprehensive two-year college serving residents of Lee, Scott, Wise, and Dickenson counties, and the City of Norton (Mountain Empire Community College, 2014). In 2011-12, MECC's total enrollment was 3,089 students, 68% of which were enrolled in a degree or certificate program. About 46% of students were enrolled full-time. The majority of 2011-12 students enrolled, 69%, were age 24 and under. In terms of gender, 39% of enrolled students were male, and 61% were female. White students comprised 96% of the student body, 2% were Black or African American, 1% Hispanic, and 1% listed as two or more races (United States Department of Education, 2014). Pell-eligible students comprised 73% of the student body, meaning they were considered for federal grant assistance based on financial need (United States Department of Education, 2014). Mountain Empire Community College offered the Dreamkeepers Emergency Assistance Program, funded by a grant from the Scholarship America Program (Mountain Empire Community College, 2014).

Patrick Henry Community College (PHCC) is a rural, comprehensive two-year college with a main campus in Martinsville, Virginia, with satellite campuses in Rocky Mount and Stuart, Virginia. The college serves residents of the City of Martinsville, and the counties of Henry, Patrick, and a portion of Franklin (Patrick Henry Community College, 2014). In 2011-12, PHCC's total enrollment was 3,079 students, 76% of which were identified as degree or certificate seeking students. Approximately 52% of students were enrolled full-time. The majority of students enrolled, 61%, were age 24 and under. Male students comprised 39% of the student body and 61% of students were female. An estimated 69% of students were White, 25% of students were Black or African American, 3% were Hispanic, 1% Asian, and 1% identified with two or more races (United States Department of Education, 2014). In relating financial

need, 79% of students were eligible for federal Pell grants based on financial need (United States Department of Education, 2014). Patrick Henry Community College offered the Dreamkeepers Emergency Assistance Program funded by the Scholarship America program (Patrick Henry Community College, 2014).

Southwest Virginia Community College (SWVCC) is a rural, comprehensive, two-year college, located in Cedar Bluff, Virginia, serving residents of Tazewell, Buchanan, Russell, and a portion of Dickenson County, Virginia (Southwest Virginia Community College, 2014). In 2011-12, SWCC's total enrollment was 2,766 students, 67% of which were degree or certificate seeking students. Forty-two percent of students were enrolled full-time. The majority of students enrolled, 67%, were age 24 and under. Approximately 40% were male and 60% female. White students comprised 94% of the student body, with Black or African American students at 3%, 1% Hispanic, and 1% defining their ethnicity as two or more races (United States Department of Education, 2014). In terms of financial status, 69% of students were eligible for federal Pell grants based on financial need (United States Department of Education, 2014). SWVCC offered a grant-based emergency assistance program that was not affiliated with the Dreamkeepers programs (Southwest Virginia Community College, 2014).

Table 3.2 compares the total enrollment and enrollment by gender, age, and race of the six colleges included in this study. In addition, the percent of students enrolled full-time and the percent of students enrolled in a degree program were examined. Enrollment varies in these colleges from a low of under 1,000 students at Eastern Shore Community College to more than 7,200 students at Lord Fairfax Community College. A majority of the students in the six colleges are under 24 years of age, are Caucasian, and are enrolled in a degree program.

Table 3.2

Comparison of College Enrollment Data

College	# of Students Enrolled	% M.	% F.	% Age 24 & Under	% Enrolled in Degree Program	% FT.	% W.	% B l.	% His.	% As.	% Ot.
MECC	3,089	49	51	72	60	38	85	5	2	2	3
SVCC	2766	40	60	67	67	42	94	3	1	N/A	1
PHCC	3,079	39	61	61	76	52	69	25	3	1	1
LFCC	7,288	38	62	74	65	28	82	5	6	2	4

Variables Analysis

Several independent and intervening variables were examined within this study:

- Retention rates of students who receive emergency financial assistance and those that do not
- Additional support services administered as a requirement of the emergency financial assistance, such as financial or personal counseling
- Students who receive a loan and were required to pay back the assistance as compared to students who did not have to pay back the award

The dependent variable was the student's retention in school from Fall to Spring 2011-2012, Fall to Spring 2012-2013, and Fall to Spring 2013-2014. Extraneous variables examined will include gender, age, and student classification such as traditional versus nontraditional, first generation status, marital status, dependency status, current housing status, and employment

status. In addition, the type of financial assistance received by the student, such as housing, transportation, and/or food, will also be considered an extraneous variable. Variables included in this study are outlined in Appendix A.

Data Analysis and Procedures

The survey data collection tool used was Qualtrics, the primary survey data collection method for the Virginia Community College System as well as the University of Tennessee system. Analysis of the data was completed utilizing SPSS. Additional data related to general retention rates was collected using the VCCS Student Information System. Data specific to the population of students receiving emergency aid assistance was provided by each college participating in the study.

Limitations of the Study

Research for this study included extant data related to retention rates within the general population of rural Virginia community colleges, retention rates within the general population of students who attended colleges providing emergency assistance, and retention rates for those students who received emergency assistance through Dreamkeepers or other similar emergency assistance programs. While the general retention rate for each college included students of varying incomes, all students applying for emergency financial assistance were deemed low-income by the institution. Due to the quantitative aspect of the study, and the confidentiality of students who have received emergency assistance, the study will be limited in terms of providing a qualitative assessment of factors related to student persistence or factors that contributed to a student's decision to leave college. Individual student data, including external variables that may

influence student attrition behavior such as high school GPA, college preparedness, social interaction and involvement within the college, and the rigor of the program in which the student is involved, was not assessed within the scope of this study.

Delimitations of the Study

To minimize potential threats to validity, this study limited the population to create homogenous comparison groups. Delimitations to the sample included narrowing the focus to rural community college students within Virginia. Students were grouped into cohorts corresponding to the Virginia Community College System's data collection method. These cohorts included students who were, at the time of enrollment, considered first-time college students. Data collected was limited to retention from Fall to Spring within the academic year. The Dreamkeepers program was initiated in 2005 in 11 community colleges and was expanded in 2008 by six additional community colleges (Scholarship America, 2013). Due to the limited number of years the program was in existence in comparison to the most current and available retention data for the sample population, data related to student retention rates and emergency grant assistance was collected for the cohorts entering college in the Fall of 2011, the Fall of 2012, and the Fall of 2013.

Summary

This chapter provided an overview of the research methods used in this study, including a description of the research perspective, the selection of colleges and students included in the study, and the process utilized for collecting and analyzing data for comparison. This study and subsequent data collection was approved by the Institutional Review Boards of University of

Tennessee -- Chattanooga and all participating colleges. This study was conducted using a quantitative, causal-comparative design. The overall retention data for four rural Virginia community colleges for Fall 2011 to Spring 2012, Fall 2012 to Spring 2013, and Fall 2013 to Spring 2014 were compared to the retention data of individuals within those colleges who received emergency financial assistance during the same time frame. In addition, a survey was conducted of each emergency financial aid administrator within the four colleges to access the details of each individual emergency assistance program. Using a Chi-Square test, the retention rates of students who have received emergency financial assistance were compared based on program attributes: participation in financial or personal counseling, funding source of the program, and the amount of emergency aid received. Data collection tools included the Qualtrics survey software system as well as SPSS data analysis software.

The study was limited in terms of qualitative research of determining factors related to student persistence or factors that contributed to a student's decision to leave college. In addition, due to the limitation of individual student data, external variables that may have influenced student attrition behavior, such as high school GPA, college preparedness, social interaction and involvement within the college, and the rigor of the program in which the student was involved, were not assessed within the scope of this study. To minimize potential threats to validity, this study limited the population to create homogenous comparison groups. Delimitations to the sample included narrowing the focus to rural community college students within Virginia and student who were, at the time of enrollment, considered first-time, full-time students. Chapter Four presents the findings of this study.

CHAPTER IV

RESULTS

This chapter contains the results of a nonexperimental, causal comparative study. Retention data were collected from the four rural Virginia community colleges examined, along with emergency assistance program recipient retention data. Data were collected for the four schools chosen, Lord Fairfax Community College, Mountain Empire Community College, Patrick Henry Community College, and Southwest Virginia Community College, for the academic years 2011-2012, 2012-2013, and 2013-2014. The following research questions were posed:

1. Do first-time, full-time college students who receive emergency financial assistance have a higher retention rate compared to the general population of students who do not receive emergency assistance?
2. Are students who receive financial and/or personal counseling as a supplemental component of emergency financial aid assistance retained at a higher rate than students who do not receive financial and/or personal counseling?
3. Do emergency aid recipients who are required to pay back their emergency aid (loan) have a higher retention percentage rate than those recipients who are not required to pay back the emergency aid?
4. From the four colleges examined, which model of emergency aid assistance contributed to the highest retention percentage rate of students?

The following secondary research questions was posed:

5. What is the relationship between retention rate and the following demographic variables?
 - Gender
 - Marital status
 - Traditional versus nontraditional student
 - Employment status

The following main hypotheses are posed:

1. First-time, full-time community college students who receive emergency aid assistance will be retained at a higher rate than the general student population in their school.
2. First-time, full-time community college students who receive financial counseling are more likely to be retained at a higher rate than students who receive emergency assistance alone.
3. First-time, full-time college students who are required to pay back the emergency aid have a higher rate of persistence than those students who are not required to pay back the assistance.
4. First-time, full-time college students who received more than \$500 in emergency assistance were more likely to remain in college than those peers who received less than \$500 in assistance.
5. Emergency financial assistance programs with the provision of a grant and counseling services would reflect the highest retention rate of students.

Data and Analysis

Retention Rates for Four Virginia Rural Community Colleges

Student retention was measured from Fall to Spring (FS) and Fall to Fall (FF) for the periods 2011-2012, 2012-2013, and 2013-2014. Data collected from the four colleges included 29,072 students who were enrolled within the identified time frame. Of those students, 20,937, or 72% were retained FS and 8,135 or 28% were not retained. Lord Fairfax Community College had the highest retention rate for FS, at 74.9% of students retained, followed by Mountain Empire Community College at 71.3%. Southwest Virginia Community College had a 71.2% retention rate for FS. Patrick Henry Community College had the lowest retention rate for FS at 64.4%. As a comparison, the average retention rate for full-time students at all 23 Virginia Community Colleges from Fall 2014 to Spring 2015 was 69.3% (Virginia Community College System, 2019c).

The retention rates for the four colleges examined were much lower for FF, or within one year of a student's initial enrollment. Of the 29,072 full-time students examined for the periods 2011-2012, 2012-2013, and 2013-2014, 12,395 or 42.6% of students were retained from FF. More than half, or 57.4%, were not retained from FF. Again, Lord Fairfax Community College had the highest retention rate for FF, at 45.9%; 54.1% of students left the college within one year. Mountain Empire Community College retained 40.3% of students; 59.7% of students left the college within one year. Southwest Virginia Community College retained 40.2% of students FF; 59.8% left the college within one year. PHCC also had the lowest retention rate for FF at 37.9%; 62.1% of students left the college within one year of enrolling. The average retention rate for the four colleges examined within this study are similar the average state for two-year community colleges. Within all 23 Virginia Community Colleges, the retention rates average for

full-time students Fall 2014 through Fall 2015 was 41.4% (Virginia Community College System, 2019c). Table 4.1 details the retention rates for each college examined in this study as compared to the average retention rate for all Virginia community colleges.

Table 4.1

Average Retention Rates of Four Rural Virginia Community Colleges Versus All Virginia Community Colleges

	Percent Retained FS	Percent Retained FF
Lord Fairfax Community College	74.9	45.9
Mountain Empire Community College	71.3	40.3
Patrick Henry Community College	64.4	37.9
Southwest Virginia Community College	71.2	40.2
Average of four community colleges examined 2014-2015	72.0	42.6

Reasons Students Sought Emergency Financial Aid

Of the 191 students examined in this study who received emergency financial assistance, there were 28 different variables listed as reasons for the aid request. The main factors driving students to seek aid can be broken into the following categories: books, housing, transportation costs, medical expenses, tuition expenses, utilities, other expenses, and unknown. Many students listed a combination of needs for the emergency aid request, for example food, housing, and utilities. In fact, food was listed as a need in eight different combination categories. The highest

number of students, 45, sought emergency aid to pay for books, followed by transportation needs at 34 students. Thirty-four students identified a combination of needs. Twenty-nine students had unknown reasons for applying for aid. Nineteen students needed assistance with gas to attend school. Sixteen students listed housing needs and 11 students indicated a need for assistance with utility expenses. A breakdown of the seven major categories of assistance provided is listed in Table 4.2.

Table 4.2

Reasons Students Sought Emergency Financial Assistance

Type of Aid	Number of Students Seeking Aid
Books	45
Food	3
Housing	16
Medical	2
Transportation (automobile and gas)	34
Tuition	5
Utilities	11
Combination of Needs	34
Other Expenses	12
Unknown	29
Total	191

Comparisons for Student Retention Aid Versus Not Receiving Aid

This study examined the question whether first-time, full-time college students who received emergency financial assistance had a higher retention rate compared to the general population of students who do not receive emergency assistance. A total of 191 full-time students received emergency financial assistance out of the 29,072 included in this study, or 0.65%. Of the four community colleges examined, students who received aid were less likely to remain in college from FS and FF than their peers who did not receive emergency financial assistance. The retention rate for those students receiving aid from FS was 68.6%; 31.4% of students left college; the retention rate for students not receiving emergency aid in the same period was 72.0%; 28.0% of students who did not receiving aid did not return. There was no statistically significant difference between the FS retention rate of students receiving emergency aid compared to those who did not ($\chi^2(1, N=29,072) = 1.123, p = .29$).

For FF, the retention rate of students receiving emergency assistance was 34%; 66% of students dropped out. The retention rate of students who did not receive emergency aid was 42.7% from FF; 57.3% of students left college. There was a statistically significant difference between the FF retention rate of students receiving emergency aid compared to those who did not ($\chi^2(1, N=29,072) = 5.820, p = .02$), with the percent receiving aid reporting a lower retention rate than those who did not receive aid. Table 4.3 details retention rates for students who received aid versus students who did not receive aid at the four community colleges examined.

Table 4.3

Retention Rates of Students Receiving Aid Versus Those Not Receiving Aid

	Percent Retained FS	Percent Retained FF
Students Receiving Emergency Aid	68.6	34.0
Students Not Receiving Emergency Aid	72.0	42.7

Retention rates for the general population of students at each individual college versus those who received emergency financial assistance were examined. At Lord Fairfax Community College, 13,883 students were enrolled full-time from 2011-2014. Of those students, 54 received aid, or 0.4%. The retention rate from FS for the population of students not receiving emergency aid was 74.8%; 25.2% of students were not retained from FS. The retention rate from FS for the population of students receiving emergency aid was 90.7%; 9.3% of students were not retained from FS. There was a significant difference between the FS retention rate of students receiving aid at Lord Fairfax Community College versus those students who did not receive aid ($\chi^2(1, N=13,883) = 7.24, p = .01$). Students who received emergency aid were more likely to be retained from FS than those not receiving aid at the college.

Fall to Fall retention at Lord Fairfax Community College showed no statistically significant difference for students who received aid and those who did not. For those students receiving assistance, the retention rate from FF at Lord Fairfax Community College was 50.0%. The retention rate for students who did not receive emergency financial assistance was 45.9%; 54.1% of students were not retained from FF ($\chi^2(1, N=13883) = .36, p = .55$). Lord Fairfax was the only college out of the four rural Virginia Community Colleges studied to report higher

retention rates for students receiving emergency aid than students who did not receive aid for FS. However, these retention rate for both populations had no significant difference for FF. Table 4.4 outlines these findings.

Table 4.4

Lord Fairfax Community College Retention Rates Emergency Aid Versus No Emergency Aid

	Percent Retained FS	Percent Retained FF
Students Receiving Aid	90.7	50.0
Students Not Receiving Aid	74.8	45.9

Mountain Empire Community College reported 5,685 students enrolled full-time from 2011-2014; of those students, 96 received emergency aid. The retention rate for students receiving emergency aid from FS was 64.6%; 35.4% were not retained. The retention rate for those students not receiving aid was 71.4% for FS; 28.6% did not reenroll. There was no statistically significant difference between the retention percentages for FS ($\chi^2(1, N=5,685) = 2.14, p = .14$). For FF, the retention rate for those students receiving aid was 27.1%; 72.9% of students receiving aid were not retained. However, 40.5% of students not receiving assistance remained in school from FF; 59.5% did not reenroll FF ($\chi^2(1, N=5,685) = 7.05, p = .01$), a statically significant difference. At Mountain Empire Community College, students receiving emergency assistance were just as likely as their peers to remain in college FS. However, students receiving aid were statistically less likely to remain in college FF. Table 4.5 details the findings.

Table 4.5

Mountain Empire Community College Retention Rates
Emergency Aid Versus No Emergency Aid

	Percent Retained FS	Percent Retained FF
Students Receiving Aid	64.6	27.1
Students Not Receiving Aid	71.4	40.5

Patrick Henry Community College reported 4,099 students enrolled full-time from 2011-2014; of those students, 22 received emergency aid. The retention rate for students receiving emergency aid from FS was 40.9%; 59.1% were not retained. The retention rate for those students not receiving aid was 64.5% for FS; 35.5% did not reenroll ($\chi^2(1, N=4,099) = 5.30, p = .021$), a statistically significant difference between the two populations. For FF however, 31.8% of students receiving remained in college; 68.2% of students receiving aid were not retained. Of those students not receiving aid, 37.9% remained in school from FF; 62.1% did not reenroll ($\chi^2(1, N=4,099) = .35, p = .55$). There was no statistically significant difference in FF retention rates. Table 4.6 details the results.

Table 4.6

Patrick Henry Community College Retention Rates Emergency
Aid Versus No Emergency Aid

	Percent Retained FS	Percent Retained FF
Students Receiving Aid	40.9	31.8
Students Not Receiving Aid	64.5	37.9

Finally, Southwest Virginia Community College reported no statistically significant difference in retention rates for students receiving aid than their peers, both FS and FF in 2011-2014. Data for 5,405 students enrolled full-time was collected; 19 students received emergency assistance. Students who received emergency financial assistance remained in school from FS at a rate of 57.9%; 42.1% did not reenroll for the Spring semester. The retention rate of students who did not receive aid was 71.3%; 28.7% did not reenroll ($\chi^2(1, N=5,405) = 1.65, p = .19$). For FF, students receiving emergency aid had a retention rate of 26.3%; 73.7% of students receiving aid chose not to reenroll. By comparison, the retention rate of students not receiving aid at 40.3%; 59.7% of students chose not to reenroll from FF ($\chi^2(1, N=5,405) = 1.53, p = .22$). Table 4.7 details the findings at Southwest Virginia Community College.

Table 4.7

Southwest Virginia Community College Retention Rates
Emergency Aid Versus No Emergency Aid

	Percent Retained FS	Percent Retained FF
Students Receiving Aid	57.9	26.3
Students Not Receiving Aid	71.3	40.3

In summary, only one rural Virginia community college examined in this study, Lord Fairfax Community College, reported higher retention rates for students receiving aid and only for FS. Overall, retention rates for students receiving emergency aid versus those not receiving emergency financial assistance had no statistically significant difference. One community college, PHCC, reported statistically significant retention rates for students receiving emergency financial assistance FS. Another college, MECC, reported statistically lower retention rates for students receiving emergency aid as compared to their peers FF. This would suggest that while Lord Fairfax Community College had success in its emergency assistance program retention for one semester, most of the rural Virginia community college students who received emergency financial assistance had relatively similar or lower retention rates than their peers. Furthermore, these findings suggest that students may have experienced other factors aside from emergency financial need which led to their decision to leave college within one year of enrollment. Table 4.8 compares retention rates for all four community colleges examined in this study.

Table 4.8

Retention of Students Receiving Aid Compared Versus No Aid All Colleges

	Retained FS w/aid	Retained FS no aid	Retained FF w/aid	Retained FF no aid
LFCC	90.7	74.8	50.0	45.9
MECC	64.6	71.4	27.1	40.5
PHCC	40.9	64.5	31.8	37.9
SWCC	57.9	71.3	26.2	40.3
All Schools Examined	72.0	68.6	34.0	42.7

Amount of Emergency Aid and Retention

The retention rate of those students receiving aid was also examined in relation to the amount of aid the student received. Students who received emergency aid were divided into two categories, those that received less than or equal to \$500 in aid or ≤ 500 and those that received more than \$500, or ≥ 501 . A total of 191 students received emergency financial assistance in the four community colleges examined in this study. A total of 173 students or 90.6%, received less than \$500 in emergency financial assistance and 18 or 9.4% received more than \$500 in emergency assistance.

Of those students receiving less than \$500 in emergency assistance, 125 or 72.3% were retained from FS; 48 students or 27.7% were not retained. Of those students receiving more than \$500 in emergency financial assistance, six students or 33.3% were retained from FS; 12 students or 66.7% were not retained ($\chi^2(2, N=191 = 11.46, p = .001)$), a statistically significant difference. For FF retention, of those students receiving less than \$500 in emergency assistance,

59 students or 34.1% were retained; 114 students or 65.9% were not. Of those students receiving more than \$500 in emergency assistance, six students or 33.3% were retained; 12 students or 66.7% were not ($\chi^2(2, N=191) = .004 p = .95$) There was no statistically significant difference between the retention rates for FF.

There is a higher retention rate from FS for students at the four examined colleges for students receiving less than \$500 in aid as compared to the general population of students; however, the retention rate for students receiving less than \$500 in emergency aid is significantly less, at 34.1% compared to 42.6% for FF. For students receiving more than \$500 in emergency assistance, there is a much lower retention rate for both FS, 33.3% compared to 72%, and FF, 33.3% compared to 42.6%, than the average student population in the four colleges examined. This data finding suggests that students who receive a larger amount of financial assistance were less likely to be retained than students who receive less than \$500 in emergency assistance. Students who received less than \$500 in emergency aid were more likely to remain in college for at least one semester if they had access to emergency assistance. Even so, students who received emergency financial assistance in any amount were as likely if not more likely to leave college within one year of enrollment as their peers.

Another important data point is that students who received more than \$500 in assistance were retained at the same rate for FS and FF. Although the majority of students who received more than \$500 in aid ended up leaving college in less than a year, the students who received funds and chose to remain were persistent through the second year of their college studies. An examination of college retention rates for the general population compared to those students receiving more than \$500 and those receiving less than \$500 is listed in Table 4.9.

Table 4.9

College Retention General Population Vs. Students Receiving Aid ≤ 500 & ≥ 501

	Retained FS	Retained FF
All Students Not Receiving Aid	72.0	42.6
All Students Receiving EFA ≤ 500	72.3	34.1
All Students Receiving EFA ≥ 501	33.3	33.3

Emergency Financial Aid Plus Counseling and Retention

The second question addressed in this study asked if students who received financial and/or personal counseling as a supplemental component of emergency financial aid assistance were retained at a higher rate than students who did not receive financial and/or personal counseling. Only two colleges participating in this study offered financial counseling to students who applied for emergency financial assistance, Mountain Empire Community College and Patrick Henry Community College. At Mountain Empire Community College, 22 students received counseling as a requirement of their emergency assistance; 74 did not receive counseling. At Patrick Henry Community College, seven students received counseling, 15 did not, for a total of 29 students out of a possible 191 received counseling, or 15.1% of the population of those students who received emergency financial assistance.

The retention rate from FS for students receiving emergency financial assistance and counseling was 72.4%; 27.6% of students were not retained ($\chi^2(1, N=191) = .23, p = .63$). Of those students not receiving counseling, 67.9 percent were retained FS. 32.1% were not retained.

There was no statistically significant difference between the two populations for FS. The retention rate from FF for students receiving emergency financial assistance and counseling was 17.2% retained; 82.8% of students were not retained. The percentage of students retained who did not receive counseling FF was 37%; 67.9% were not retained ($\chi^2(1, N=191) = 4.3 p = .04$), which does indicate a statistically significant difference between the two populations. These findings suggest that students who received emergency financial aid, even with additional personal and/or financial counseling as a component or requirement of their aid, had no significant difference in their retention rates than their peers who have received emergency financial aid without counseling and their peers in the general population of students at the four colleges examined. However, students who receive counseling as a component of their emergency financial aid were actually less likely to be retained FF than their peers who received emergency financial without counseling, as well as the general population of students at the four colleges examined. A detailed data set highlighting retention rates for the students who received emergency financial assistance with the addition of counseling as compared to students who did not receive counseling is listed in Table 4.10.

Table 4.10

Retention Rates for Students Receiving Aid and Counseling Versus Those Receiving Aid and General Population

	Retained FS	Retained FF
Students Receiving Aid W/Counseling	72.4	17.2
Students Receiving Aid/Without Counseling	67.9	37.0
General Population	72.0	41.6

Loan Versus Grants and Retention

A third question posed by the study asked if emergency aid recipients who are required to pay back their emergency aid through a loan have a higher retention rate than those recipients who are not required to pay back the emergency aid. Three of the four colleges studied provided students with the option of a loan to repay back their emergency financial aid, Lord Fairfax Community College, with four students receiving a loan, Mountain Empire Community College with 13 students receiving a loan, and Patrick Henry Community College with 15 students receiving a loan, for a total of 32 out of a possible 191 students receiving emergency financial assistance with a requirement to pay back the funds provided. The retention rate for FS for all students receiving emergency financial assistance through a loan was 46.9%, with 53.1% of students not retained from FS. By comparison, the retention rate from FS for students who received emergency financial assistance without the requirement to pay back the aid, or via grant/scholarship, was 73.0%; 27.0% of students were not retained from FS ($\chi^2(1, N=191) = 8.41, p = .004$), a statistically significant difference. This data suggests that students who were required to pay back their emergency aid were far less likely to be retained from FS than their

peers who received an emergency financial aid grant. Furthermore, students who received an emergency financial assistance loan were far less likely to be retained from FS than the general population of students, at a 72.0% retention rate from FS, within the four colleges examined within this study.

In examining FF retention, 31.3% of students who received a loan were retained; 68.8% of students were not retained FF. Among those receiving emergency financial assistance, 34.6% of students who did not have to pay back their emergency financial assistance were retained; 65.4% were not retained FF. By comparison, the percent of students receiving emergency financial aid from FF at the four colleges examined within the study was 42.4% ($\chi^2(1, N=191) = .132, p = .72$). The difference is not statistically significant. The average retention rate for the general population of students enrolled at colleges examined in this study was 42.6%. This data finding suggests students who were required to pay back their emergency financial assistance loan were no less likely to be retained FF their peers who did not have to pay back the aid as well as their peers enrolled in the four colleges examined within this study. An examination of student retention rates for those receiving emergency financial assistance through a loan versus grant or scholarship is described in Table 4.11

Table 4.11

Retention Rates for Students Receiving Aid With Loan Vs. Grant and General Population

	Retained FS	Retained FF
Students Receiving Aid W/Loan	46.9	31.3
Students Receiving Aid/With Grant	73.0	34.6
General Population	72.0	42.4

Comparison of All Emergency Aid Programs

A fourth question was posed by this study: from the four colleges examined, which model of emergency aid assistance contributed to the highest retention rate for students? Among the colleges examined, students who received aid they did not have to pay back were the most likely to be retained from FS and the second most likely to be retained from FF. Students who received aid with counseling were the second most likely to be retained from FS; however, students who receiving counseling as a component of their assistance were the least likely to be retained from FF. Also of note, students receiving emergency financial assistance of less than \$500 were the third most likely to be retained from FS and the second most likely of their peers receiving aid to be retained FF.

Of importance to this studies' hypothesis, data suggested that students who received less than \$500 in aid with the addition of counseling and grant, had a higher likelihood of being retained from FS than the general population of students. However, students who received some type of emergency aid, even with the benefits of counseling and a scholarship without the requirement of repayment, had a much lower chance of being retained from FF than their peers

who did not receive aid. The findings suggest that students who receive emergency financial aid may be retained for the short-term, but circumstances beyond the benefit of a financial aid and counseling may ultimately impact a student’s decision to leave college. The findings are outlined in Table 4.12 below.

Table 4.12
Comparison of Emergency Financial Assistance Programs

	Retained FS	Retained FF
All Students Receiving EFA <=500	72.3	34.1
All Students Receiving EFA >=501	33.3	33.3
Students Receiving Aid W/Counseling	72.4	17.2
Students Receiving Aid/Without Counseling	67.9	37.0
Students Receiving Aid W/Loan	46.9	31.3
Students Receiving Aid/With Grant	73.0	34.6
General Population	72.0	42.4

Demographic Breakdown and Retention of Students

Gender, Emergency Financial Aid and Retention

This study also examined the relationship, if any, between retention rates and gender, marital status, traditional versus nontraditional students, and employment. The 191 students who

received aid included 133 females and 58 males. The retention rate for female students FS was 69.9%; 30.1% were not retained. The retention rate for male students FS was 65.5%; 34.5% were not retained ($\chi^2(1, N=191) = .364 p = .55$). There was no statistically significant difference between the two populations. For FF, 37.6% of females were retained; 62.4% did not stay in college. By comparison, 25.9% of males were retained FF; 74.1% did not remain in college ($\chi^2(1, N=191) = 2.48 p = .12$). There was also no statistically significant difference between the two populations from FF. Males who received emergency financial assistance were more likely than their female peers to leave college from Fall to Fall. A detailed examination of the finding is listed below in Table 4.13.

Table 4.13
Gender, Emergency Aid and Retention

	Retained FS	Retained FF
Female	69.9	37.6
Male	65.5	25.9

Marital Status, Emergency Financial Aid and Retention

Out of the 191 students who received aid, 102 students were single, 45 were married, 24 were divorced or widowed, and 11 were separated. The marital status of nine students was unknown. The retention rate for FS for single students was 71.6%; 28.4% were not retained FS. The retention rate for FS for married students was 64.4%; 35.6% were not retained. The retention rate for divorced or widowed students was 62.5%; 37.5% were not retained FS. The retention

rate for students who identified as separated was 72.7%; 27.3% were not retained ($\chi^2(4, N=191) = 1.295 p = .86$). There was no significant difference between the students observed in terms of marital status. For FF, the retention rate for FF for single students was 37.3%; 62.7% did not remain in college. The retention rate of married students FF was 37.8%; 62.2% were not retained. Students identifying as divorced or widowed had a 25% retention rate FF; 75% dropped out of college FF. Finally, students identifying as separated had an 18.2% retention rate; 81.8% were not retained ($\chi^2(4, N=191) = 3.42 p = .49$). There was no significant difference between the students' retention based on marital status FF. A detailed examination of retention based on marital status is provided in Table 4.14.

Table 4.14

Marital Status, Emergency Aid and Retention

	Retained FS	Retained FF
Single	73.0	37.3
Married	64.4	37.8
Divorced/Widowed	62.5	25.0
Separated	72.7	18.2

Traditional Students Versus Nontraditional Students, Emergency Aid and Retention

Of the 191 students who received emergency financial aid, 96 students were over the age of 25, which is used in this study as the definition of a nontraditional student. Ninety-five students were age 25 and under, which is defined for the purpose of this study as a traditional

student. The retention rate for nontraditional students for FS was 63.5%; 36.5% of students were not retained FS. The retention rate for traditional students FS was 73.7%; 26.3% did not reenroll in college FS ($\chi^2(1, N=191) = 2.28 p = .13$). There was no statistically significant difference between the retention rates for the two populations. The retention rate for nontraditional students from FF was 30.2%; 69.8% of students did not remain in college. The retention rate for traditional students FF was 37.9%; 62.1% of traditional students receiving emergency financial aid did not remain in college from FF ($\chi^2(1, N=191) = 1.26 p = .26$). There was no statistically significant difference between the two populations; therefore, nontraditional students who received emergency financial assistance were as likely to leave college in both FS and FF than their nontraditional peers. An examination of the findings is listed below in Table 4.15.

Table 4.15

Traditional Versus Nontraditional Students, Emergency Aid and Retention

	Retained FS	Retained FF
Nontraditional (Older than Age 25)	63.5	30.2
Traditional (Age 25 and below)	73.7	37.9

Employment, Emergency Aid, and Retention

Of the 191 students who received aid, only 15 were listed as employed. The remaining students were listed as unknown, meaning their employment status was not recorded. Of those students who were employed, 20.0% were retained FS; 80.0% of these students were not retained. By comparison, the remaining students with an unknown employment status were

retained at a rate of 72.7%; only 27.3% were not retained ($\chi^2(1, N=191) = 17.8 p = .00$). There is a statistically significant difference between the two populations. For FF, 33.3% of students who were employed and received emergency financial aid were retained; 66.7% were not retained. By comparison, 34.1% of students with unknown employment status were retained; 63.9% did not remain in school. There is not a statistically significant difference between the two populations FF ($\chi^2(1, N=191) = .004 p = .95$). Students who were employed and received emergency aid were much more likely to leave college than their peers who received aid, at least from FS. An examination of the findings is listed in Table 4.16.

Table 4.16

Employment, Emergency Aid, and Retention

	Retained FS	Retained FF
Employed	20.0	33.3
Unknown Employment Status	72.7	34.1

Examination of Hypotheses

This study predicted the following: that first-time, full-time community college students who received emergency aid assistance would be retained at a higher rate than the general student population in their school; that first-time, full-time community college students who received financial counseling are more likely to be retained at a higher rate than students who receive emergency assistance alone; that first-time, full-time college students who were required to pay back the emergency aid would have a higher rate of persistence than those students who were not required to pay back the assistance; and that students who received a larger amount of

emergency aid were more likely to remain in college than those who received amounts of \$500 or less. The findings indicate that the first hypothesis, which students who received aid would be retained at a higher rate than the general population was true from FS, but not for FF. The second hypothesis, which students who received some type of counseling as a component of their aid would be more likely to be retained was found to be true only for FS retention; for FF, students were actually less likely to remain in college if they did receive counseling as a component of their emergency aid.

The hypothesis that students who had to pay back their emergency aid were more likely to remain in college was found to be the opposite; students were actually less likely to remain in college when they received a loan versus receiving a grant. In addition, the hypothesis that students who received more aid were more likely to remain in college was null; in fact, students who received more aid were more than likely to leave college than their peers who received smaller amounts of aid. Finally, the hypothesis that emergency assistance programs that offered grants and counseling would be the most successful in retaining students was null. In fact, programs that offered counseling had the lowest retention rate for students Fall to Fall. In conclusion, students that received emergency financial aid may benefit from the assistance in the short-term, however, other unknown variables such as family and personal issues, grades, or financial reasons, may influence a student to leave college within a year of enrollment.

CHAPTER V

DISCUSSION AND CONCLUSION

As previously noted, this study examined the relationship between students who received emergency financial assistance and retention while enrolled at a rural Virginia community college. The final chapter of this dissertation is a review of the research problem and the methods utilized to conduct this study. In addition, this chapter includes a summary of results, implications for emergency financial assistance programs and recommendations for future research. The results of this study did not produce the results anticipated within the hypotheses, in so far that there were no clear indicators that aid was a contributing factor in improving retention. However, there was no question that emergency financial assistance programs, as detailed in the data collected, served as lifelines for students in need. Students were able to pay for transportation and book costs, unexpected medical expenses and rent and housing needs. However, this assistance seemed to have little long-term impact on a student's decision to remain in college. The results of the study pose several questions. What would students do without the assistance provided? Would the retention rate at these colleges have been higher if not for these type of stopgap programs? This chapter will review the results of emergency aid programs in four, rural Virginia community colleges and address potential opportunities for both research and program development.

The goal of this study was to contribute to the body of knowledge related to retention behavior in college students, specifically in the community college setting. Although conceptual frameworks of retention behavior outlined financial need as a contributing factor in a student's

decision to leave college, the need has historically been associated with a student's ability to pay for tuition and fees. Although low income students qualify for federal and/or state financial aid and a number of scholarships opportunities exist to support students with identified financial need, these financial aid programs may not cover the unexpected or additional expenses students encounter during their enrollment. College students with financial need can face the dilemma of having to pay for transportation, housing, food, and other basic expenses associated with obtaining a degree. These financial demands may create additional stress that leads or contributes directly to a student's decision to leave college. Colleges that provide emergency assistance programs have developed these programs primarily to keep students in school, enabling them to complete their educational and career goals. But is this strategy effective in increasing retention and ultimately graduation rates?

As explained in Chapter I, a comprehensive causal-comparative study was needed to determine if emergency aid programs are an effective strategy for raising community college retention rates, specifically within rural community colleges. In addition, further research was needed to determine what aspects of these programs have a greater impact on retention. An informal survey of Virginia community colleges revealed that the majority participated in some type of emergency assistance program for students. However, aspects of these programs varied widely. Initially six colleges that offered emergency assistance programs were chosen to participate in the data collection due to their rural location, enrollment similarities, and the fact that each college was unique in its development and implementation of its emergency assistance program. However, data were not available at two of the six schools identified. The four schools included within the study varied in program aspects, with two community colleges offering what was known as the Dreamkeepers Emergency Financial Assistance Program, a national initiative

sponsored by Scholarship America which provided funding for students in emergency situations. Students were required to attend some type of financial counseling as a component of the program. The two others schools not participating in the Dreamkeepers program did not require students to participate in counseling. Three schools offered emergency assistance loans as opposed to grants, meaning that students were required to pay back the emergency assistance provided. Award amounts varied depending on need, with the majority of emergency assistance totaling less than \$500 per student.

To conduct this study, data were collected from the four identified rural Virginia community colleges. These include Lord Fairfax Community College with four campuses located in Luray, Middletown, Vint Hill, and Warrenton, Mountain Empire Community College located in Big Stone Gap, Patrick Henry Community College located in Martinsville, and Southwest Virginia Community College located in Tazewell. Data collected was limited to full-time, degree seeking students enrolled Fall 2011 to Spring 2012, Fall 2012 to Spring 2013, and Fall 2013 to Spring 2014 within the four identified colleges. Chi square tests were performed to compare the retention rates for the general population of students versus those students receiving emergency financial aid, and the retention rates of students who had receiving emergency financial aid with the benefit of counseling. In addition, the study compared the retention rate for students receiving emergency financial assistance by grant versus loan. The variables of gender, employment and marital status, and tradition versus nontraditional student populations was also examined. Data analysis was performed utilizing the SPSS software application.

Summary of Results

This study included 29,072 students from four rural Virginia colleges enrolled within the academic years 2011-2012, 2012-2013 and 2013-2014. Of those students, 191 received emergency financial assistance during their enrollment. To complete this study, a broad examination of retention rates for the four colleges was completed for both Fall to Spring and Fall to Fall within the three academic years. Of the four colleges, only Patrick Henry Community College reported lower retention rates for their overall student population than the state average of all 26 Virginia community colleges for both Fall to Spring and Fall to Fall between 2011 and 2014. The average retention rate for the four community colleges included in the study between 2011 and 2014 was 72% from Fall to Spring and 42.6% from Fall to Fall.

Students identified a wide variety of unexpected or potentially insurmountable expenses in their applications for emergency financial assistance. The 191 students who received emergency assistance reported more than 20 different needs in their application for aid. Tuition expenses were not cited often, rather the supplementary expenses of college attendance. The majority of students applying for emergency aid indicated a need to pay for books or transportation costs. A significant number of students requested assistance for a combination of needs, for example books and gas expenses. Housing and utility expenses were also a frequent issue among students. Other requests were for assistance with medical expenses, food, and testing fees. Students attending these community colleges were faced with homelessness, loss of transportation, and the inability to pay for basic needs such as food during their college experience. Any of these factors could certainly contribute to the decision to leave college.

Next, the study examined the average retention rate of the 191 students receiving aid to the remaining population of their peers for the academic years 2011 to 2014. No significant

difference was found in the retention rate of students receiving aid versus those not receiving aid for students Fall to Fall. However, students who received emergency assistance were more likely than their peers to leave college from Fall to Spring (66% versus 57.3%). This finding suggests that students who received aid were just as likely as their peers to remain in college through one semester. The assistance received may have enabled students to enroll after the first semester in college. However, their ability to persist beyond two terms was significantly less than their peers.

Of the schools examined, only Lord Fairfax Community College reported higher retention percentages for students receiving emergency assistance than those not receiving assistance for both Fall to Spring and Fall to Fall. It is important to note that LFCC did not offer or require counseling for students receiving aid, however, some students at LFCC were required to pay back their emergency assistance (loan versus grant). While there was no statistically significant difference between the retention rates for Fall to Fall at LFCC, the Fall to Spring retention rates varied greatly, with 90.7% of students receiving aid being retained compared to a 74.8% retention rate for their peers. Again, this finding suggests that students receiving aid benefitted in the short term from the assistance. In fact, LFCC students who received emergency aid had a greater likelihood of enrolling for a second term. However, LFCC students receiving emergency aid were just as likely as their peers to leave college in the long term.

Each individual college examined, aside from LFCC, reported lower retention rates for students receiving emergency financial assistance for both Fall to Spring and Fall to Fall. The retention rates for students at the three remaining schools showed either no statistical significance in the retention rates, or a significantly lower retention rate for those students receiving aid. This finding spurs additional questioning. Would the percentage of students dropping out of college have been even greater without the provision of emergency assistance? If

the college limited the amount of emergency aid a student could receive, did the student have another financial predicament which forced them to leave college within one academic year? Did students experience medical, family, or financial burdens that went beyond the scope of a one-time short term loan or grant? Past research cited in this study points to a myriad of reasons that students leave college. Social integration is a less likely motivator for failure to complete for two-year community college than four-year community colleges (Bailey et al., 2015; Byun et al., 2012; Goldrick-Rab et al., 2009; Pascarella et al., 1983; Tinto, 1975, 1987; Zhai & Monzon, 2001). For community college students, issues such as family and job responsibilities are often cited as the primary reason for failure to complete. Financial obligations are a major obstacle for community colleges students as identified in multiple research studies (Case, 2013; Geckeler, 2008; Joo et al., 2009; Zhai & Monzon, 2001). For the 191 students receiving emergency aid in these four rural Virginia community colleges, other factors beyond a financial emergency may have forced students to make the difficult choice of leaving college and not completing their educational goals.

The amount of emergency aid a student received did not demonstrate as a significant factor in a student's decision to remain in college. Emergency assistance awards or loans varied depending on the need presented and the number of times a student had received assistance. The majority of students, 90.6%, received less than \$500 in emergency assistance, however, some awards totaled more than \$1,000. It would stand to reason that students who received large awards, or assistance of more than \$500, would feel compelled or obligated to remain in college. However, the retention rates for students receiving more than \$500 was only 33.3% FS compared to 72.3% retention percentage for those students receiving less than \$500 in aid FS. The comparison of award amounts and retention, 42.6% for students receiving less than \$500 versus

33.3% for students receiving more than \$500, showed no significant difference for Fall to Fall. This finding suggests that despite colleges' willingness to assist with a student's emergency need, the student ultimately had a higher likelihood than their peers of leaving college, even when they were awarded a significant amount of emergency assistance.

Two out of the four colleges included in the study provided financial or personal counseling to students who received emergency financial assistance. The provision of counseling was a requirement of the Dreamkeepers Emergency Assistance Program. The caveat of required counseling stemmed from the belief that students who received some type of personal coaching or financial education were better able to understand and manage their financial obligations (Geckeler, 2008). However, in terms of retention, counseling had no significant impact in the short term. In fact, students who received counseling as a requirement of their loan or grant were more likely to leave college than their peers who received emergency aid without counseling (17.2% versus 37%). Although well meaning, financial or personal counseling did not necessarily impact a student's long-term success in school. Was the student embarrassed if they experienced another financial emergency after the benefit of counseling? Did students who received counseling implement the strategies presented in counseling and experience other hardships or struggles that propelled them to leave college? These additional questions remain unanswered from the data related to counseling and retention.

Three of the four colleges examined in this study, Lord Fairfax, Mountain Empire, and Patrick Henry Community College, offered the provision of emergency assistance loans to some students as opposed to grants. This study hypothesized that students who were required to pay back all or a portion of their emergency assistance would have a greater likelihood of remaining in college. However, research showed that students with emergency assistance loans were in fact

less likely to retained FS. There was no statically significant difference between retention rates for students receiving emergency assistance loans FF versus those who received a grant. Students who need emergency aid are usually in some type of financial crisis. As the population of students enrolled in community college are often low-income, poverty and financial perils are simply a permanent way of life for many students. Perhaps students who were required to pay back the assistance they received felt even more pressure to leave school or simply were unable to reenroll if they could not pay back the emergency aid.

Finally, the study examined potential differences in retention for students receiving emergency aid based on their gender, marital status, tradition versus nontraditional status, and employment. Research found that there was no statistically significant difference in the retention rate of males and females. The marital status of students receiving emergency assistance also did not influence a student's retention rate, either FS or FF. The age of the student or their classification status, or nontraditional versus traditional, also did not impact retention. While only a small portion of student's employment data was collected, research showed that a student who was employed was significantly less likely to remain in college from Fall to Spring than their peers. There was no statically significant difference between the Fall to Fall retention rate for students receiving aid who were employed versus those with an unknown employment status.

In comparing all emergency assistance program aspects, students who received a grant award, and who did not receive counseling, were the most likely to be retained from Fall to Spring of all students who received aid. However, there was no statically significant difference between the retention rate of the general population of students and the students who received the award. Students who received awards totally more than \$500 were the least likely to remain in college from Fall to Spring, a finding that suggests that large monetary assistance may actually

not be a sound investment by colleges in their attempt to retain students. For Fall to Fall retention, students who received aid without counseling were the most likely to remain in college. However, there was no statistically significant difference between the retention rate of students receiving emergency aid without counseling and the retention rate for the general population of students. Students who received emergency aid with counseling were actually the most likely to leave college from Fall to Fall (17.2%), compared to the general population of students (42.4%). This finding suggests that providing counseling to students, while perhaps a worthy cause, does not guarantee and may even hinder a college's effort to retain students in the long term. Again it is worth noting that students without the provision of emergency assistance, the college's overall retention rate may have been significantly lower. The findings suggest that there were no statistically significant differences in retention between the two populations, students receiving aid and those not receiving aid. Research exhibits that students who received aid were just as likely as their peers to persist. Without aid, they may have dropped out if an emergency financial situation arose during their enrollment.

Relationship of Study to Past Research

As noted in previous research (Case, 2013; Geckeler, 2008; Joo et al., 2009; Zhai & Monzon, 2001), students with financial stress can play a significant role in a student's decision to remain in college. This study found that overall, students who received emergency aid had a myriad of issues that presented issues that may have forced them to leave school including transportation expenses, book costs, and even housing and food. The finding that in the majority of colleges for both FS and FF, there was no significant difference between the retention rate of those receiving aid and the general population of students demonstrates that the provision of

emergency aid may have saved students from dropping out. In fact, students who received aid were just as likely to remain in college as their peers, suggesting other factors may have influenced their decision to leave school. Without emergency assistance, it can only be assumed that more students would have been forced to leave and the overall retention rate for the college would have decreased.

The study however, does conflict with the Geckeler (2008) study, which found that students who received aid as part of the Dreamkeepers program were more likely than their peers to reenroll. In the four rural Virginia community colleges included in this study, students who received aid were generally less likely to remain in college. Only one college, LFCC reported higher retention rates for students receiving emergency aid than their peers and only for the FS semester. Overall, there was no statically significant difference between the retention rates of students receiving aid those not receiving aid. It is important to note however that students who received counseling, those that received loans, and those who received awards of more than \$500 as a component of their emergency assistance award were statistically less likely than their peers to remain in college. These findings suggest best practices in developing and distributing emergency financial assistance to students in community college settings.

Recommendations for Practice

Based on the findings, this study points to potential recommendations for the implementation of and distribution of emergency financial assistance programs within community colleges. First, the study demonstrates that emergency financial assistance may increase the likelihood that students with emergency needs will remain in college, at least at the same rate as their peers. Based upon the research findings, colleges should not expect these

programs to significantly improve retention for students. However, colleges should assume that without an emergency assistance program in place, students may be far more likely to leave college in a crisis situation. With a large percentage of students enrolled in community colleges qualifying for federal and/or state financial aid, it is important to note that students face emergency financial stress beyond regular expected school expenses, which can impact retention and their ability to be successful (Case, 2013; Geckeler, 2008; Joo et al., 2009; Zhai & Monzon, 2001).

In addition, the requirements of loans and counseling as components of emergency financial assistance, as well as the amount of aid provided to students, should also be noted as potential hindrances to retention efforts. This study's finding suggests that requiring students to attend counseling did not have a significant impact on a student's success or retention. If the goal of a college's emergency assistance program is to improve a student's understanding of finances and exhibit better financial planning, perhaps counseling may be beneficial. However, if the goal of the emergency assistance program is to help students remain in college, then counseling should not be a requirement of the program. Colleges may consider offering financial or personal counseling as an external opportunity from their emergency assistance program. Many colleges and high school counseling offices offer financial aid and financial planning workshops prior to and during the school year to help students prepare and anticipate the financial demands of college. These programs are designed to assist students and their families, however, they are usually not a requirement of college entrance (Hillman, Gast, & George-Jackson, 2015). In addition, students from low socioeconomic backgrounds are less likely to participate and benefit from these type of financial planning opportunities (Hillman et al., 2015). This study does not recommend discontinuing counseling programs. Nonetheless, colleges should examine the goals

of the emergency assistance program and if student financial planning can be achieved through other means.

The data collected within this study suggests that students who were required to pay back their emergency financial assistance were more likely to leave college than those who received emergency assistance through a grant or scholarship. In terms of practice, colleges should consider providing grant assistance to students through a donor-supported or college and/or college organization funded source. With more than one million borrowers defaulting on student loans annually, the burden of debt is increasingly troublesome to both students and colleges (Campbell, 2019). Adding increasing debt and stress to students who are already in financial crisis may impact a student's willingness to remain in college. In addition, this study found that students who received awards of more than \$500 were more likely to leave college than those who received awards of less than \$500. While it is not known if students who received the awards of more than \$500 were required to pay back the aid, it is pertinent to note that the amount of aid given may negatively impact a student's stress level in terms of financial stability and future obligations. For the purposes of this study, offering emergency aid to students through a grant without the requirement of counseling seemed to be the option that best related to greater student retention.

Recommendations for Further Research

Recommendations for future research include expansion of the study to include a wider variety of colleges as well as further qualitative study exploring the reasons behind students' emergency financial needs and their decision to persist or leave college. This study was limited to four rural community colleges in Virginia. These community colleges had populations of less

than 10,000 students. There are several community colleges in Virginia that have populations of 20,000 plus students that are located in urban areas. In addition, this study was limited to only community college. There is the potential to explore emergency assistance programs and student retention in four-year universities. A comparison of student emergency financial needs in community colleges versus four-year universities could also be examined to determine if community college students experience unique issues related to financial need. Further research could explore beyond Virginia schools and examine best practices of emergency assistance programs nationwide, including the retention rates of students receiving emergency assistance, and aspects of those programs beyond loan versus grant and counseling options. Replication of the Geckeler (2008) study on the Dreamkeepers program utilizing data within the last decade, and further expansion of emergency assistance programs beyond Dreamkeepers, is needed to acquire a broader understanding of college students and emergency assistance programs in order to justify the existence of these programs as a national movement to impact college retention.

As this study indicated, the retention rate of students who received emergency financial assistance was overall similar to the retention rate for the general population of students. This research calls the question of the potential impact on student retention if students who experience emergency financial need did not have a resource to turn to. Comparisons of the retention rate of four-year universities or community colleges who offer emergency assistance programs and those that do not could be completed in order to better understand if these programs impact overall completion rates at colleges. Although there may be a myriad of factors that lead a student to make the decision to leave college, colleges who implement emergency financial programs do so with the intent to impact retention. Further study is needed to determine if

investment in these programs pays off in terms of student success and ultimately the tuition revenue received from students who reenroll.

This study was limited to quantitative research on emergency assistance programs in rural Virginia community colleges. Qualitative research methods could be utilized to further explore the reasons that community college students experience emergency financial situations and how these situations impact their college experience. Interviews of students who have received emergency financial assistance and who have made the decision to leave college could be pursued in order to better understand the reasons that students left college. Also, students who experienced emergency financial need and who persisted in college and completed their certificate or degree could also be interviewed to explore what factors may have contributed to their decision to remain in college. Identifying aspects of emergency assistance programs that may have contributed to a student's decision to remain in college would certainly contribute to broadening the knowledge base of why colleges should consider implementing emergency assistance programs. In addition, understanding the framework of a student's decision to leave college, in specific regard to financial stress, is needed. Colleges can better serve students and their potential financial needs beyond tuition and book expenses if there is comprehensive research that contributes to a framework model of student retention and financial need.

Conclusion

Community colleges are at the forefront of training and educating the next generation of workers for the high-tech, high-skilled jobs of tomorrow (American Association of Community Colleges, 2019). Undertaking a national effort to increase the education and skill level of students nationwide, community colleges are charged with providing open access and affordable

quality educational opportunities (Russell, 2011). Two-year colleges face unique challenges in serving a distinct population of students who are as a majority low-income, have lower academic achievement levels, increased numbers of nontraditional students and lower parental support (Byun et al., 2012). Despite the acknowledged need to increase the number of students graduating with a minimum of a two-year associate's degree, and concentrated efforts to improve access and completion, rural community colleges continue to experience low completion rates (Juszkiewicz, 2017). Community colleges continue to explore ways to combat student attrition rates. Some colleges have chosen to offer students emergency financial assistance in order to prevent students from dropping out when they experience urgent financial needs such as transportation costs, housing and food.

This study provides information to assist colleges in the development and implementation of emergency assistance programs to benefit student retention efforts. After analyzing the data gathered from four rural Virginia Community Colleges, representing more than 29,000 students of which 191 experienced an emergency financial need, it is evident that emergency assistance programs do have a positive impact on student retention in terms of leveling the ability for students to remain in college both in the short term and long term. While this study found no overwhelming evidence to suggest that emergency assistance programs actually increase retention beyond the retention rate of the college's general population, data revealed that the retention level for students who received emergency assistance was not significantly higher or lower than the general population. Without the provision of this financial assistance, students may have been forced to leave college if an emergency need was presented. In addition, this study provided evidence of aspects of emergency assistance programs that were not necessarily beneficial to students, such as loan repayment and counseling requirements. Colleges

considering implementing such programs should be clear in their expectations and goals in providing assistance. Providing these type of emergency resources could be the lifeline that students need in order to complete their educational and career goals. However, these programs should not be considered as the primary solution in determining student success or solving retention issues.

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APPENDIX A
VARIABLES ANALYSIS

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Variable	Variable Label	Levels of Variable	Scale of Measurement
Dependent Variable	Retention Status	Retained = 1 Not Retained = 0	Nominal
Independent Variable	Students' Participation in Rural Virginia Colleges in Dreamkeepers or Similar Emergency Grant Programs	Yes = 1 No = 0	Nominal
Independent Variable	Did the Student Participate in Personal or Financial Counseling Services Offered through Emergency Grant Assistance?	Yes = 1 No = 0	Nominal
Independent Variable	Is the Student Required to Pay Back the Award? (Loan vs. Grant)	Yes=1 No=0	Nominal
Extraneous Variable	How is the Program Funded?	Dreamkeepers=1 College Foundation =2 Student – Led Fundraising=3 Other Source = 4	Nominal
Extraneous Variable	Low-Income Status	Yes = 1 No = 0	Nominal

Extraneous Variable	Type of Emergency Assistance Received	Housing =1 Transportation=2 Food=3 Other=4	Nominal
Extraneous Variable	Amount of Assistance Received	>500=1 <501=2	Nominal
Extraneous Variable	Gender	Male = 1 Female =2	Nominal
Extraneous Variable	First Generation College Student	Yes = 1 No = 2	Nominal
Extraneous Variable	Marital Status	Married = 1 Single = 2 Widowed = 3	Nominal
Extraneous Variable	Student Age	Age 18-25 = 1 Age 25+ = 2	Nominal
Extraneous Variable	Student Classification	Traditional =1 Nontraditional = 2	Nominal
Extraneous Variable	Student Employment	Yes = 1 No = 2	Nominal

Extraneous Variable	Student Residency Status	Lives with parents = 1 Lives with husband/family = 2 Lives alone = 3 Other = 4	Nominal
Extraneous Variable	Student Housing Status	Rents = 1 Owns = 2 Homeless = 3	Nominal

VITA

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